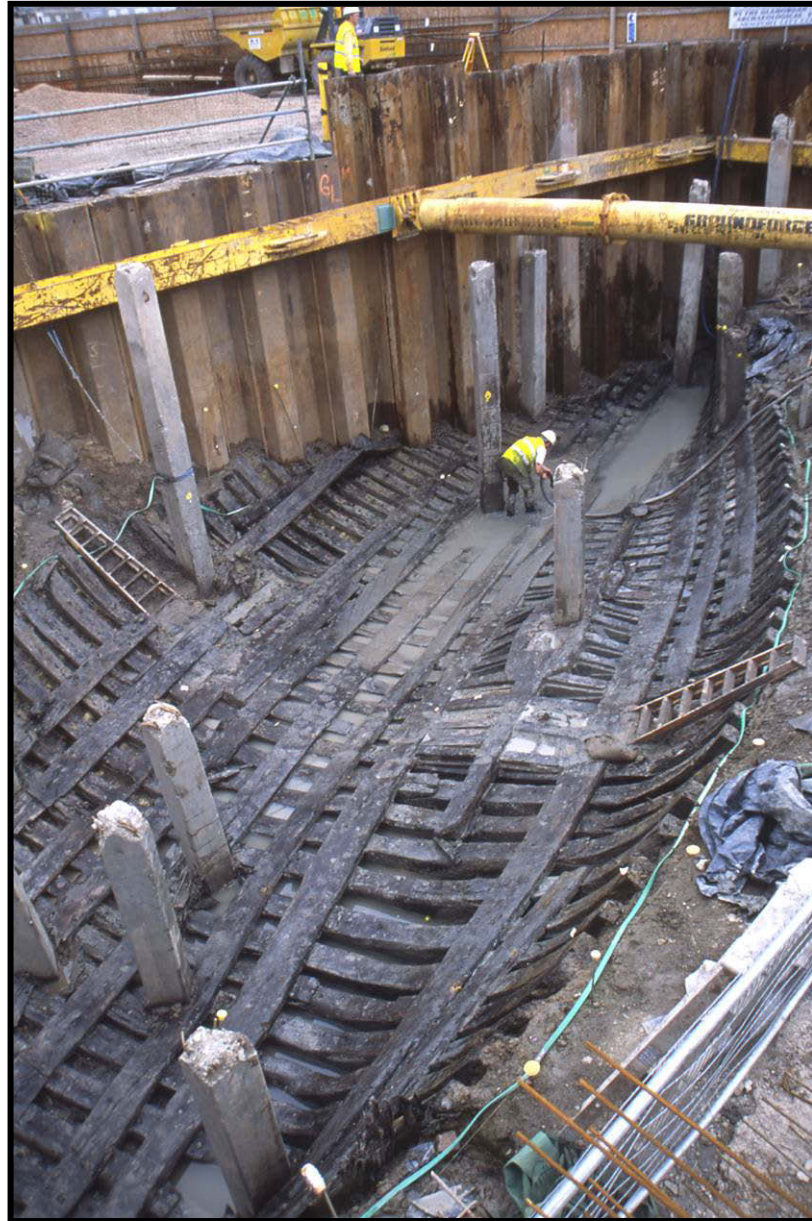


# Newport Medieval Ship Project Specialist Report: Pottery and Tile



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30 January 2017

# **The Newport Ship Project**

## **Introduction**

In 2002, during the construction of the Riverfront Theatre, on the banks of the River Usk in Newport, South Wales, an archaeological find of great significance was unearthed. In the summer of that year, while undertaking the excavations for the theatre's orchestra pit, the well-preserved remains of a 15th century clinker built merchant vessel were discovered.

The site, which was surrounded by a cofferdam, was being monitored by the Glamorgan Gwent Archaeological Trust at the time of discovery. The ship lay in what is locally known as a pill or small inlet, with its stern closest to the river and its bow facing into the inlet. The timbers were covered in thick alluvial mud, which created an ideal anaerobic environment for successful preservation. Seventeen strakes of planking remained on the port side and thirty-five on the starboard side of the ship. The vessel was approximately 30m in length.

A silver French coin was found purposely inserted into the keel of the vessel, dating the ship to after May 1447. Dendrochronological research has shown the hull planking to be from the Basque country and after 1449 in date.

After a much publicised 'Save Our Ship' campaign, it was decided that the ship would not be recorded and discarded but excavated with the aim to conserve. The riders, stringers, braces, mast step, frames and overlapping clinker planks and keel were dismantled one by one and lifted. Almost 2000 ship components as well as hundreds of artefacts were excavated.

This report summarises the pottery and tile analysis that has taken place during the Newport Medieval Ship excavation and post-excavation research phase.

# **THE POTTERY & TILE FOUND DURING THE EXCAVATION OF THE NEWPORT MEDIEVAL SHIP**

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## THE POTTERY AND TILE FOUND DURING THE EXCAVATION OF THE NEWPORT SHIP

by Mark Redknap

The pottery assemblage found on board the Newport Ship is of particular importance because it is one of the best closely-dated assemblages of Iberian wares from south Wales in which we also have a context for its use and discard, both in terms of place and people.

Over 220 fragments of pottery were recovered from deposits associated with the ship. Of these, Most (98%) were from deposits in the lower parts of the hold or bilges (contexts 128, 130, 152, 153, 154, 171), and thought to represent material discarded on board prior to its refit at Newport in the 1460s. The range of fabrics is limited, consisting predominantly of Mérida-type ware (plain and burnished; based on visual identification with 20x binocular microscope). A selection of sherds were thin-sectioned for analysis by Jana Horak (AC-NMW) and submitted to Richard Jones (University of Glasgow) and Tânia Manuel Casimiro for petrological analysis and comment.

Some of the problems of correlating contemporary terms for pottery forms, functions and shapes have been usefully reviewed by Gutiérrez, and for the purposes of this paper her terminology has been adopted (Gutiérrez 1995, 35 ff). The forms include jars (some burnished), standing costrels, dishes, lebrillos and lids (eg Gutiérrez 2000, 76 and fig. 2.53). Most vessels are incomplete and only represented by sherds (unlike cargo), many lack rims or bases, and while as many joins as possible were identified, some future matching is possible. It has therefore been difficult to provide an accurate minimum vessel count, which has included an assessment of whether distinctive body sherds are from separate pots (the estimated minimum vessel count may be on the low side). Only diagnostic sherds have been illustrated. Details of all the pottery from the excavation are summarized in Appendix 1.

### *The fabrics*

*Fabric A:* Mérida type fabric. Oxidised body, with moderate ill sorted rounded and sub-angular clear and opaque ?quartz (0.4-1 mm) and sparse coarse sub-rounded ?granite inclusions (2mm). External surfaces red (Munsell 10R 5/8) to light red (10R 6/8); inner surface and core yellow to very pale brown (Munsell 10YR 8/6 to 8/4). Some mica, and very fine inclusions (<0.1 mm) in clay matrix. Sometimes there are only patches of red on the surface, which is generally very pale brown (with very pale brown margins and light grey core: 5YR 7/1). Jars may have red outer surfaces, and very pale brown inner surfaces; goblets and cups red inner and outer surfaces.

*Fabric B:* fabric above, but different firing regime and resultant colour. Surfaces very pale brown (Munsell 10YR 8/3: no oxidized red patching) with light grey core.

*Fabric C:* Iberian maiolica. Internal white tin—glaze, decorated with single stroke blue designs. Two-tone fabric, with light red inner core and margin (Munsell 2.5YR 6/8); very pale brown outer core and surface (Munsell 10YR 8/4).

## CATALOGUE OF ILLUSTRATED AND THIN-SECTIONED CERAMICS

### FINWARE (minimum vessel count: 1)

#### 1. Fragment of plate (MSG 462; Fig. 1, 1).

*Fabric:* Fabric C, Iberian maiolica. Probably Portuguese.

*Description:* Blue painted design on white tin-glazed slip background, from basal area of plate. Similar examples from Southampton (Brown 2011, fig. 5.5, no. 66), and the Continent (Hurst, Neal and van Beuningen 1986, 67-8).

*Context:* 120 (limber hole F2.0),

### COARSEWARE

#### STORAGE JAR/ *GERRE* (minimum vessel count: 1)

#### 2. Handled jar rim (MSG483/534; Fig. 1, 2)

*Fabric:* Mérida-type fabric B. Slight red patches on predominantly very pale brown surfaces; light grey core. **Thin-sectioned.**

*Description:* wide-mouthed jar, with traces of handle attachment on the left of rimsherd top. External rim diameter about 400mm.

*Context:* 130 (F5-6; US, sump)

#### JAR / *JARRA* (minimum vessel count: 17)

#### 3. Small jar rim (MSG 161 (5 of 8); Fig. 1, 3)

*Fabric:* Fabric A: Mérida-type fabric. Orange micaceous ware; lighter interior

*Description:* everted rim from a small thin-walled jar.

*Context:* 128.

#### 4. Jar rim (MSG 161 (3 of 8); Fig. 1, 4)

*Fabric:* B

*Description:* everted rim from a jar, grey, burnished, some spalling of internal surface. Diameter 190mm

*Context:* 128

#### 5. Jar/cooking pot (MSG 161 (4 of 8); Fig. 1, 5)

*Fabric:* Fabric A.

*Description:* flat topped everted rim from cooking pot or storage jar, with sooted patches on rim. External Diameter 125mm.

*Context:* 128

**6. Shoulder from a jar bearing s'graffito (MSG163; Figs 1, 6; 3, 1)**

*Fabric:* Burnished grey

*Description:* s'graffito Mérida -type on shoulder of a jar.

*Context:* 130 (F 6-9)

**7. Jar body with s'graffito (MSG 166, 170; Figs 1, 7; 3, 2)**

*Fabric:* Mérida-type fabric A. Red external surface, reduced to pale brown towards base. Very pale brown internal surface, darkened by ?residues towards base.

*Description:* Jar with owners s'graffito mark scratched post-firing on the shoulder (eight sherds). Neat vertical burnish strokes, above a horizontal incised girth line at turn of 'linsenboden' base. Base diameter 140mm.

*Context:* MSG 166 is unstratified, but MSG 170 is from Context 128.

**8. Sherd with s'graffito (MSG 592; Fig. 1, 8; 3, 3)**

*Fabric:* Mérida-type fabric A. Burnished light brown Iberian ware

*Description:* s'graffito mark on jar shoulder in form of a square outline terminal (cf example on MSG 485).

*Context:* 130 <153> F5-6

**9. Jar body (MSG 168) (not illustrated)**

*Fabric:* Mérida-type fabric A. Mottled orange external surface; lighter grey core and interior surface.

*Description:* Five adjoining sherds (plus two others) from a large jar. Suggestion of an attachment point for a handle

*Context:* 130

**10. Jar body (MSG 170) (not illustrated)**

*Fabric:* Pale buff micaceous fabric, light grey core and interior surface. **Thin-sectioned.**

*Description:* five wall sherds from a ?jar. Slight sooting on external surface.

*Context:* 128

**11. Jar wall sherds (MSG170) (not illustrated)**

*Fabric:* Mérida-type ware; patchy orange external surface; lighter buff interior.

*Description:* jar wall and base sherds (17); 32 small sherds (some burnished).

*Context:* 128

**12. Jar base (MSG 481; Fig. 1, 12)**

*Fabric:* Mérida-type fabric B; pale brown surfaces and core.

*Description:* light burnished externally; no basal groove. Diameter about 130 mm.

*Context:* 130 (F6-9; 3 of 19)

**13. Jar wall sherd (MSG 505; Fig. 1, 13)**

*Fabric:* Mérida-type fabric A; red external surface (and partially in); inner surface and core very pale brown.

*Description:* Neck wall sherd from a jar, with stepped 'cordon' and vertical burnishing on outside.

*Context:* 130 (F9-10)

**14. Wall sherd from jar (MSG 510) (not illustrated)**

*Fabric:* Mérida-type ware; grey micaceous ware; hard fabric, patchy orange oxidization on external surface. **Thin-sectioned.**

*Description:* wall sherd (large) from jar.

*Context:* 130 (F13-14 Port)

**15. Wide jar rim (MSG 512; Fig. 1, 15)**

*Fabric:* Mérida-type ware; fabric A (very pale brown/cream).

*Description:* rim of square cross-section (very pale brown/cream fabric). Wide rim (diameter uncertain).

*Context:* 130 (F7-8)

**16. Jar base (MSG 530/SF 156; Fig. 1, 16)**

*Fabric:* Mérida-type ware; orange micaceous ware; lighter interior. **Thin-sectioned.**

*Description:* Jar base, slightly sagging with blade trimming.

*Context:* 152 (F45-46)

**17. Rim from small jar (MSG 536; Fig. 1, 17)**

*Fabric:* Mérida-type ware; buff-grey fabric. **Thin-sectioned.**

*Description:* rim from small rib-necked jar. Diameter about 100 mm

*Context:* 130 (F6-9)

**18. Jar rim (MSG 161 (2 of 8), 541; Fig. 1, 18)**

*Fabric:* Mérida-type fabric A, but with red surfaces and reddish brown core.

*Description:* thickened rim from a jar (two conjoining sherds), with single incised groove on rim.

*Context:* 128, 130 (F8-9P)

**19. Small jar rim (MSG 578; Fig. 1, 19)**

*Fabric:* Mérida-type fabric B. Very pale brown surfaces and core **Thin-sectioned.**

*Description:* everted, flat-topped rim from a small jar (diameter about 120 mm).

*Context:* 152

**20. Narrow base from small jar (?or cup) (MSG 518; Fig. 1, 20)**

*Fabric:* Mérida-type fabric A. Red surfaces, very pale brown core..

*Description:* Narrow base (two conjoining sherds) with vertical burnishing above a horizontal incised basal groove. Absence of upper profile makes form uncertain.

Diameter at base 6 mm.

*Context:* 128

**21. Wide base for large ?storage jar or bowl (MSG 542; Fig. 1, 21)**

*Fabric:* Mérida-type fabric B. Light brown surfaces; light grey core. **Thin-sectioned.**

*Description:* base from either a large jar or bowl.

*Context:* US

**GOBLET / COPPA or CUP / TAZZA (minimum vessel count: 2)**

**22. Goblet/cup rim (MSG 170, 491; Fig. 1, 22)**



*Fabric:* Mérida-type ware; patchy orange/red external surface; light grey/very pale brown core and interior. **MSG 491 thin-sectioned.**

*Description:* (ten sherds). Vertical burnishing on outside.

*Context:* 128

### **23. Goblet/cup rim (MSG 519; Fig. 1, 23)**

*Fabric:* Mérida-type fabric A; red outer surface; very pale brown inner surface.

*Description:* plain rim from cup, with vertical external burnish. Diameter 80mm.

*Context:* 149 (F30-F40S)

### **24. Handle from cup (MSG 591; Fig. 1, 24)**

*Fabric:* Mérida-type fabric A; very pale brown core and surfaces.

*Description:* Small handle (very pale brown), possibly from one of above examples.

*Context:* 130 <151> F7-8

## **DISH / PLATO**

### **25. Dish base (MSG 485; Figs 1, 25; 3, 4)**

*Fabric:* Mérida-type fabric A. Red surfaces in and out; very pale brown/light grey core.

*Description:* flat base from a dish of uncertain diameter. S'graffito ownership mark scratched post-firing on inner surface (similar motif to s'graffito sherd 592?).

*Context:* 130 (F44-45) under keelson.

### **26. Small dish (MSG 539; Fig. 1, 26)**

*Fabric:* Mérida-type fabric A. Patch red surfaces, mainly pale brown (and core).

*Description:* small dish with vertical walls and plain rim (three sherds). Single horizontal grooves just below rim and above base.

*Context:* 130 (F2-3P)

## **STANDING COSTRELS (minimum vessel count: 2)**

### **27. Flask or jar rim (MSG 161 (8 of 8), 537, 541; Fig. 1, 27)**

*Fabric:* Mérida-type fabric A. Red external surface; lighter yellow to very pale brown inner surfaces and core.

*Description:* everted rim from narrow necked, thin walled flask or small jar. Diameter 70mm.

*Context:* 128 (SF 143); 130 (F8-9P)

### **28. Costrel rim (MSG 486/SF 143; Fig. 1, 28)**

*Fabric:* Mérida-type fabric A. Red external surface; lighter yellow to very pale brown inner surfaces and core.

*Description:* rounded rim from a narrow-necked standing costrel.

*Context:* 128

**29. Costrel handle (MSG 531; Fig. 1, 29)**

*Fabric:* Mérida-type fabric A. Red external surface; lighter yellow to very pale brown inner surfaces and core.

*Description:* Jar handle. Internal diameter at top of wall sherd about 110mm.

*Context:* 130 (F6-7)

**PITCHER (minimum vessel count: 1)**

**30. Jar handle (MSG 159; Fig. 1, 30)**

*Fabric:* Fabric A: Mérida-type fabric. Orange micaceous ware; lighter interior

*Description:* handle (2 fragments)

*Context:* 128 (under knee (rider?) on F8, associated with base and other ceramics)

**31. ?Pitcher handle (MSG 454; Fig. 1, 31)**

*Fabric:* Mérida-type fabric A; very pale brown surfaces and core.

*Description:* curvature of handle and size very similar to MSG 532, and larger than costrel handles.

*Context:* 130 (F6-8P; 3 of 3)

**32. Pitcher handle (MSG 499; Fig. 1, 32)**

*Fabric:* Mérida-type fabric A. Red external surface; lighter very pale brown core.

**Thin-sectioned.**

*Description:* curvature of handle and size very similar to MSG 532, and larger than costrel handles.

*Context:* 152 (F9-10)

**33. Pitcher handle (MSG 532; Fig. 1, 33)**

*Fabric:* Mérida-type fabric A. Red external surface; lighter reddish yellow inner surface and core.

*Description:* Long handle with upper attachment to a flaring neck. Internal diameter about 120mm.

*Context:* 149

**COOKING POT / OLLA (minimum vessel count: 1)**

**34. Horizontal handle from a wide casserole (MSG 500; Fig. 1, 34)**

*Fabric:* Mérida-type fabric A.

*Description:* vertical walled vessel (external diameter at handle 220mm); heavy sooting on underside of handle.

*Context:* 130 (F25)

**BOWL WITH INTURNED RIM (minimum vessel count: 2)**

**35. Vessel with inturned rim (MSG 161 (6 of 8); Fig. 1, 35)**

*Fabric:* Fabric A.

*Description:* inturned rim. Light grey internal surface. Diameter 130mm.  
*Context:* 128

**36. Bowl with inturned rim. (MSG 488 (2 of 8); Fig. 1, 36)**

*Fabric:* Mérida-type fabric A (pale brown surfaces and core).

*Description:* single groove decorating shoulder. Diameter at shoulder about 220mm.

*Context:* 128 (2 of 8)

**LID (minimum vessel count: 7)**

There appear to be at least two forms of lid: those with countersunk handles, and those which may have had raised handles, characterized by small inturned undercuts on underside. The lack of complete profiles for the latter and resemblance of the rim form to that of a 'carving dish' (*discus/plato tinchero*) as defined and illustrated by Gutiérrez (1995, fig. 5,3) makes identification less clear.

**37. Countersunk lid with knob handle (MSG 158; Fig. 2, 37)**

*Fabric:* Mérida-type fabric A. Orange micaceous ware; lighter interior.

*Description:* lid with central knob handle. Diameter uncertain: about 100mm. Similar examples from Armada wrecks (Martin 1979, fig. 9, nos 52, 53).

*Context:* 152 (F44-45)

**38. Countersunk lid with central knob handle (MSG 157/SF 306; Fig. 2, 38)**

*Fabric:* Mérida-type fabric A (pale brown surfaces and core).

*Description:* lid with central knob handle. Diameter uncertain (rim missing)

*Context:* 1001

**39. Lid with bevelled rim/rim from countersunk lid (MSG 161 (1 of 8); Fig. 2, 39)**

*Fabric:* fabric A

*Description:* sooted both sides around rim edge. External diameter about 150mm.

*Context:* 128

**40. Lid with bevelled rim (MSG 501/SF 144; Fig. 2, 40)**

*Fabric:* Mérida-type fabric A; reddish yellow surface at rim edge, reduced grey patches on top and partially on underside.

*Description:* Lid rim (two sherds); sooting on rim and underside. Diameter 160mm

*Context:* 128

**41. Lid with bevelled (MSG 540; Fig. 2, 41)**

*Fabric:* Mérida-type fabric A; red external surface and partially red on underside, where mainly very pale brown; thin light grey core. **Thin-sectioned.**

*Description:* rim of lid. Slightly larger than 501. External diameter about 180mm.

*Context:* US sump (F5-6)

**42. Plain rounded rim of a ?countersunk lid (MSG 576; Fig. 2, 42)**

*Fabric:* Mérida-type fabric A; red external surface, pale grey inner surface and core.

**Thin-sectioned.**

*Description:* possibly rim lid. Soot patches both sides. Diameter about 150mm

*Context:* 154 (from Oxford Unit Post-ex assessment) ?from sample 68.

**43. Lid with bevelled rim (MSG 520/587; Fig. 2, 43)**

*Fabric:* Mérida-type fabric B.

*Description:* rim of lid, similar to MSG 501 and 540. Diameter 180mm.

*Context:* 149 (cF30-F40 Stbd); 128.

**44. Lid with bevelled rim (MSG 590/603; Fig. 2, 44)**

*Fabric:* Mérida-type ware; orange external surface; lighter buff interior. **Thin-sectioned (590 & 603).**

*Description:* small section of rim with characteristic inturn. Heavily sooted on both sides. Diameter about 180mm

*Context:* 171; <218> (F58-59); 171/180

***OTHER / UNCERTAIN FORMS***

**45. Vessel body (MSG 162) (Not illustrated)**

*Fabric:* Iberian Redware?

*Description:* straight, slightly flared walls and flat base.

*Context:* 1001

**46. Frying pan handle (MSG 513; Fig. 2, 46)**

*Fabric:* Mérida-type fabric A; red surfaces.

*Description:* Turned ring with internal groove, and no scarring. Although it bears some resemblance to the post-medieval costrel rims from Southampton (Gutiérrez 2007, fig. 6, no. 2), this ring would have originally been attached to the hollow handle of a frying pan. External rim Diameter 60mm

*Context:* 128

**47. Small rounded rim of pinch-spouted vessel (MSG 533; not illustrated)**

*Fabric:* Mérida-type fabric A. Red surfaces; very pale brown core.

*Description:* single finger impression from one side of spout.

*Context:* 130 (F6-7)

**48. Vertical walled vessel (MSG 533; Fig. 2, 48)**

*Fabric:* Mérida-type fabric A.

*Description:* lower body with external groove at junction of base. Similar tapering body forms occur on Armada wrecks (Martin 1979), and on wider post-medieval Mérida-type ware storage vessels (eg Kells Priory, Co. Kilkenny: Meenan 2007, fig. 6.71). The Newport profile is also found on glazed chamber pots in Seville coarseware (eg Pleguezuelo-Hernández 1993, fig. 4, nos 19, 20).

*Context:* 130 (F6-7)

***IBERIAN TILE***

**49. Two conjoining fragments of large tile (MSG 164, 165; Fig. 2, 49)**

*Fabric:* oxidized Mérida-type ware. **Thin-sectioned.**

*Description:* Large tile. From galley hearth? Width 282mm; thickness 32mm.  
*Context:* 130 & US (adjoining fragments)

**50. Iberian tile? (Small find number 177) (Not illustrated).**

*Fabric:* thin-sectioned.

*Description:* Small fragment of ?tile

*Context:* 171

## **OTHER WARES FROM POST-SHIP/NON-SHIP CONTEXTS**

### ***GLAZED JUG***

**51. Medieval glazed jug wall sherd (MSG 169; Fig. 2, 51)**

*Fabric:* Bristol glaze ware (Redcliffe?).

*Description:* jug neck fragment; external green glaze with horizontal row of small brown glazed pellets. Late thirteenth-century.

*Context:* US

**52. Tile edge (MSG 497; Fig. 2, 52)**

*Fabric:* red fabric with reddish inclusions (not Mérida); black external glaze (7.5YR 2/0).

*Description:* Tile with bevelled edge. Thickness 220mm. Post-medieval.

*Context:* 2027

**53. Staffordshire ware plate (MSG 538; not illustrated)**

*Fabric:* Staffordshire slipware

*Description:* Staffordshire slipware plate with yellow glazed interior with brown slip decoration, and pie-crust rim. Eighteenth-century.

*Context:* US

## **DISCUSSION**

Most of the pottery examined (over 220 sherds) has been ‘Mérida-type ware’, a term adopted and recommended by John Hurst as a preferred alternative to ‘Iberian Micaceous Redwares’ (Hurst, Neal and van Beuningen 1986, 69), although the term ‘Mérida-type red micaceous wares’ has since been used (eg Gerrard, Giuttiérrez and Vince 1995, 288). The place of origin is now thought to be much broader than the Mérida region, much production being centred on the Alto Alentejo area of southern Portugal inland from Lisbon. Many of the products may have been exported via Lisbon and its neighbouring ports. ‘Mérida-type ware’ is characterised by its highly micaceous fabric; body colour ranges from pale brown to orange to red, and surfaces can be grey to light red, unmodified or burnished. In the late 1970s ‘six quite different fabrics’ were identified among the Mérida-type wares from Armada ships (Martin 1979, 298-9; Vince 1982, 138), and Colin Martin concluded that some of these were probably made at Lisbon, supported by the port’s primacy in supplying the Armada fleet, appeared to be supported by fabric analysis and recognition of a close similarity to glazed Lisbon-type Redwares (Williams 1979;

Martin 1995, 356). Mérida-type ware was common to all its ships, and Lisbon was the only common geographical denominator. Williams identified the main inclusions as grains of potash feldspar (orthoclase and microcline) and plagioclase feldspar, with numerous grains of sub-angular quartz and large flecks of white mica, and brown tourmaline and small fragments of granite in some thin sections. This mineralogy suggested that the inclusions were derived from an area of granitic rocks, pointing to the River Tagus flowing through granite areas in its upper reaches (Williams 1979, 299). The ware was also identified within the ceramic assemblage from the seabed near Kinlochbervie, Scotland (Brown and Curnow 2004, 40-42). Petrological analysis by Rebecca Bridgeman established that they shared a quartz-mica mix (quartz, biotite mica, feldspars) with red iron-rich pellets (*ibid*, 40; Bridgeman 2004, 46-49).

Differences observed in post-medieval costrels from Wales and England have been seen as a consequence of firing regime, the red fabric being remarkably consistent (Gerrard, Gutiérrez and Vince 1995, 288). Most post-medieval examples have a brick-red fabric throughout, tempered with coarse sand (orthoclase feldspar and ‘inclusion less, strain-free quartz’, average grain size about 1mm or more) rather than the ‘dark brown core and irregular surfaces of the medieval pieces’, and Gerrard, Gutiérrez and Hurst advocated that while the standard brick red fabric should still be called ‘Mérida-type Ware’, the smaller number falling outside the standard fabric range should not, in light of the numerous areas of the Iberian peninsula where red micaceous wares were made and used in the medieval period (*ibid*. 288). Ten different red micaceous fabrics were distinguished within the Iberian wares at Southampton, defined by the range and quantity of inclusions and nature of their matrices. As none of these were compared with Portuguese products, the term ‘Iberian Redware’ was preferred, though vessel forms such as bowls, flasks and olive jars regarded as typical of Mérida-type products have been recognised there (Brown 1995, 321).

Since the 1980s, Iberian wares have been studied through comparative chemical analyses on imports and kiln material (Hughes and Vince 1986), in particular neutron activation analysis (Hughes 1995) and petrology (eg Gerrard and Gutiérrez 1991). For the purpose of this report, the term Mérida-type ware has been adopted for the Newport ship ceramics, but acknowledges that manufacture probably involved a number of production centres (pending results of thin-section analysis).

Initial comparison of the fabrics indicates that the fabric from one of the sherds (467/152 F10-11) is quite similar to some late fifteenth/ early sixteenth-century ceramics from Lisbon (Tânia Manuel Casimiro, *in litt.*). The extent to which Lisbon is the main source will become clear with ongoing fabric analysis..

### *Function*

The dominant forms represented within the hull of the Newport ship is the all-purpose jar and lid, but the assemblage includes sherds of upright or standing costrels (one with mark incised on the shoulder; 467/130; CF9-6), various costrel/pitcher handles, small dishes and other forms. Some vessels have burnish-decorated exteriors, similar to a jug from Penhow Castle, Monmouthshire (Lewis and Evans 1982, fig. 4 no. 15a), fragments of storage jar (similar to those from Benton Castle; *ibid*, fig. 4 no. 9e) and ‘reverse lids’ with small central knob handles (467/152; F44-45; similar to those

found in Plymouth and Exeter). A late fifteenth-century example has also been published from Aveiro, Portugal (Barbosa *et al* 2006-8, fig. 5). Some Iberian forms are notable by their absence: the olive jar / *botija*, large vat / *cocci* and carving dish / *discus*.

As Hurst observed in 1986, the presence of Mérida-type Ware in north-west Europe was 'principally a result of it being used in ships' (Hurst, Neal and van Beuningen 1986). Ships rarely contained exclusive cargoes; some plain wares may have been for on board use in the galley or for storage. A similar range of forms has been published from the mid-fifteenth-century Rio de Aveiro A wreck, although the fabrics were not described (Alves, Rieth and Riccardi 2001, 32-34). Martin has noted that most of the Mérida-type Ware found on Armada ships were of 'extraordinarily diverse' forms (as in the case of the Newport Ship assemblage), though most were lidded jars of various types, interpreted as containers for condiments and other luxuries brought on board for individual consumption (Martin 1995, 356). One rounded upright rim from the Newport assemblage, probably from small bowl with fine incised horizontal line decoration, is similar to bowl from *Girona* (no.18; Hurst, Neal and van Beuningen 1986, fig. 31, no. 84).

The s'graffito marks on the shoulders of three Newport Ship pots and on the inside of a dish are probably property or user identification marks, a practice not confined to shipboard equipment such as pottery and treen within settlements and ecclesiastical sites (eg on redwares from Beaulieu Abbey, Petegem; De Groote 2005, 34-35 and fig. 7).

Mérida-type wares from Bristol have been regarded as evidence for souvenir trade rather than extensive trade, some closed forms arriving with contents (in particular the costrels; Ponsford and Burchill 1995, 318). The discovery of a jug and costrel sherds in the same fabric was seen as suggestive of their arrival as 'sets', and the Newport array might be considered in this light. Allan's 1995 survey of Iberian pottery in south-west England observed that Mérida-type Wares of the fourteenth or fifteenth centuries were not at all represented in Exeter, though a few sherds occurred within assemblages at Woolster Street, Plymouth (some in early fourteenth-century contexts; Allan 1995, 300). Forms from Plymouth include reverse lids similar to MSG 158, some from late fifteenth-century contexts (Allan 1995, fig. 22.7, no. 115), and it seems likely that such wares reached Plymouth as shipboard equipment or sealing containers holding imported commodities.

In contrast to the pottery from the Newport Ship, the 373 sherds of Iberian wares found on the Studland Bay wreck are thought to represent no more than a couple of baskets full of pots to be sold on arrival at port, rather than wares used on board (Gutiérrez 2003, 25-33). These included Seville Morisco Ware, making up 68% of the recovered pottery, divided into Seville blue and purple (= Isabella Polychrome) and lustreware vessels, lead-glazed Iberian jars, a Breton jar, an unglazed Saintonge *pégau*, as well as a limited quantity of Mérida-type Ware (three or four costrels, a jar and a small dish; Gutiérrez 2003, 30). The dominance of the 'non-commercial' pottery of Sevillian origin has been used as an argument to confirm the nationality of the ship – items not traded in their own right, but use as containers. The single sherd of refined earthenware maiolica, probably from a plate, from the Newport ship may reflect the private possessions of the officer-class on board.

Mérida-type Ware costrels are as ubiquitous on archaeological sites in Britain as Seville containers, having been identified on over 100 sites (Pleguezuelo and Lafuente 1995, 228). They were imported as containers for foodstuffs and a range of materials such as cinnabar (Evans 1987, 205 and note 24), mercury or treacle (Gutiérrez 2000, 173). One Mérida-type vessel from the excavations at Carmarthen priory is reported to have traces of cinnabar (James and James 1987, 232). Some standing costrels may have been luxury containers; the double-handled example found in the barber-surgeon's cabin on the *Mary Rose* appears to have contained fern oil (*Polypodium vulgare* or Polypody root extract; Castle and Derham 2005, 192, fig. 4.10).

The other Mérida-type Ware vessels represented on the Newport ship – jars, dishes, bowls – have a more limited distribution than the costrels. Some Iberian pottery from terrestrial excavations would have reached Britain as souvenirs, as containers for goods, or part-cargo; some would have been for use on board. In the case of the Newport collection, the small number of individual vessels represented, the lack of repetitive forms, and the evidence of sooting on some jars and lids points to the latter, being used in the ship's galley explanation. None of the rims resemble Armada firepots, made in a soft red glazed earthenware (Martin 1995, fig. 29.5), for which the pinched waist is a key feature.

### *Influences on distribution*

Medieval Iberian pottery has been increasingly recognised on archaeological sites across Europe, and significant advances in understanding the distribution in Britain started with the review by Hurst (1977), and publication of the Spanish imports from Southampton (eg Platt and Coleman-Smith 1975; Brown 1995), and have continued with work by Gutiérrez, Gerrard, the late Alan Vince and others (for example Gerrard, Gutiérrez and Vince 1995; Gutiérrez 2000, 2003, 2007). Trade took place between England and Navarre, Portugal, Valencia, Catalonia and kingdom of Granada. England's main trading partner was Castile, the Anglo-Castilian treaties of 1466 and 1489 repairing the damage of the 100 Years War. With Edward IV's determination for peace, the more stable political situation allowed 8-10 ships a year from Bristol, London and Dartmouth to sail to Andalucia, while scores of Basque ships brought goods to Britain. Portuguese ships came mainly to London, Bristol and Southampton (4-5 a year; Curry 2002). The popularity of Mérida-type red micaceous ware is indicated at medieval Southampton, where most examples have occurred in deposits dating to the period c. AD 1420-1550 (Brown 1995, 325). Fifteenth-century costrels have been noted from Bishop's Waltham (Lewis 1985, 115, fig. 22.17) and the Foundry, Poole (Gutiérrez 2000, 238).

Mérida-type ware has been described as 'ubiquitous in small quantities' in Bristol, from late thirteenth to seventeenth centuries, although it is apparently absent from pre-1350 contexts at Bristol Castle (Ponsford and Burchill 1995, fig. 23.1). Mérida-type wares from Narrow Quay included fragments of costrels and a pan with hollow handle (Good 1987, fig. 8.36), while it was commonest among pottery from 94-102 Temple Street, appearing from c. 1400 (Ponsford 1988). The widespread continental distribution of Mérida-type Ware, which extended as far north as Bergen, Norway, is illustrated by the sixteenth-century costrels from Bergen-op-Zoom (Groeneweg 1984, fig. 8), very similar to those from the Newport ship. Mérida-type



ware is also present at many ecclesiastical sites such as the Carthusian monastery at Delft (Hurst and Neal 1982, 101).

The Newport assemblage therefore falls within the distribution of Iberian wares from late medieval sites in English ports and from around the coast of south Wales (Allan 1995). Close parallels for some forms have been found at Benton Castle, Pembrokeshire (AC-NMW acc. no. 37.6) and the main drain of Tintern Abbey, Monmouthshire, which contained ceramics probably in use during the 1530s before the Dissolution (Lewis 1978, 21; Lewis and Evans 1982, fig. 4 no. 18). Like one Newport piece, the Tintern costrel also bears a post-firing s'graffito merchant's/owner's mark on the shoulder (AC-NMW acc. no. 32.376/102; Lewis and Evans 1982, fig. 4, no. 18). Mérida-type ware has also been recognised in the Wentloog Levels (chafing dish; AC-NMW acc. no. 85.59H), at Kidwelly (AC-NMW 31.121/3), Cilgerran (AC-NMW acc. no. 58.156), Barry (AC-NMW acc. no. 36.202/67), Freshwater West (AC-NMW 30.152/4), One Mérida-type ware costrel in the archaeology collections of Amgueddfa Cymru – National Museum Wales is presumed to have been presented by T. H. Thomas (NMW acc. No. Z33/9).

Customs records provide a guide to what was imported, but are incomplete as personal and royal goods were exempt, and smuggling also took place. The port books show that from the mid fourteenth-century Spanish and Iberian ships were calling at Milford Haven, Carmarthen and Beaumaris. From Castile, the English sought iron, salt and wine from the north, almonds, fruit (oranges), figs, raisins, dates, wine, licorice, Seville oil, grain, Castile soap, wax, saffron, carpets and fine pottery from the south (Childs 1993, 36-7). Jars may have contained produce such as sugar, ginger, marmalade, raisins. There are references of Malaga jars (*olla de Malik*, possibly jars in Malagan style) and *jarres* of oil being imported (Childs 1993, 36). The Iberian wares represented on the vessel indirectly reflect such complex maritime activity between Britain and the Iberian peninsula and directly reflect the numismatic picture from the ship.

## **Acknowledgements**

Mark Redknap would like the contributions of Tony Daly (AC-NMW) for illustrations; Jana Horak in preparation of thin-sections; Victoria Newton, the late Kate Hunter, Toby Jones and Kate Howell for access to the finds and information, and Peter Webster for information.

## **APPENDIX 1**

### **PETROLOGICAL ANALYSIS AND COMPARATIVE ANALYSIS OF THE FABRICS**

by Richard Jones  
(University of Glasgow) and Tânia Manuel Casimiro

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