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# A Functional Analysis of Glass from an Officers' Mess, Malta

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*The nineteenth century witnessed an explosion in the use of glass as a material from which containers and tableware were made. No longer confined to the packaging and consuming of liquids, a wealth of products were packaged in branded and patented containers. This article presents an initial analysis of glass recovered from archaeological investigations at the Inquisitor's Palace, Vittoriosa, which in the second half of the nineteenth century was an army mess house and officers' quarters. Focusing on function, key groups of glass finds are described. Where possible, brands and manufacturers are contextualised through complementary documentary sources, providing a broader focus and relevance to the material. From baby food jars to hard liquor bottles, the glass finds present a picture of daily life that stretches beyond typical views of military life and highlights the importance of glass finds to understanding post-medieval contexts.*

## Introduction

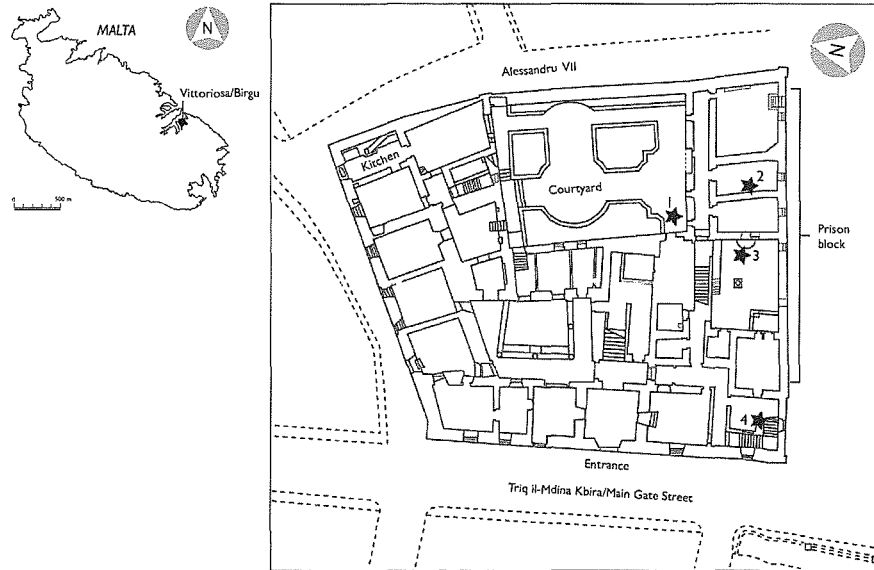
Glass is a key material in later-period archaeology. Not only used for drinking and containing liquids, during the nineteenth century glass became an important container-material for moving food and household products around the globe. It can also provide invaluable information about past eating and drinking habits, as well as trade, supply, and business patterns. In this short article, an overview of the glass recorded from assemblages excavated at the Inquisitor's Palace, Vittoriosa, is presented, thereby contributing to the wider understanding of material culture in and of later historical periods in Malta. While post-medieval sites have been—and continue to be—excavated, there exists a dearth of accompanying literature, grey or published, and it is hoped that this contribution will go some way to start correcting the situation.

The glass finds described and analysed were excavated between 1998 and 2002, under the joint guidance of Kenneth Gambin (Heritage Malta) and Nathaniel Catajar (Superintendence of Cultural Heritage, then Museums Department). The previously unstudied assemblages derive from a cistern commonly referred to as the 'Garden Well' (IPM-GW), a 'cess pit' (IPM-CPMC), and the levelling down of the old 'prison yard' (IPM-MPY; Fig. 1). Material uncovered by an electric company, known as the Enemalta Store

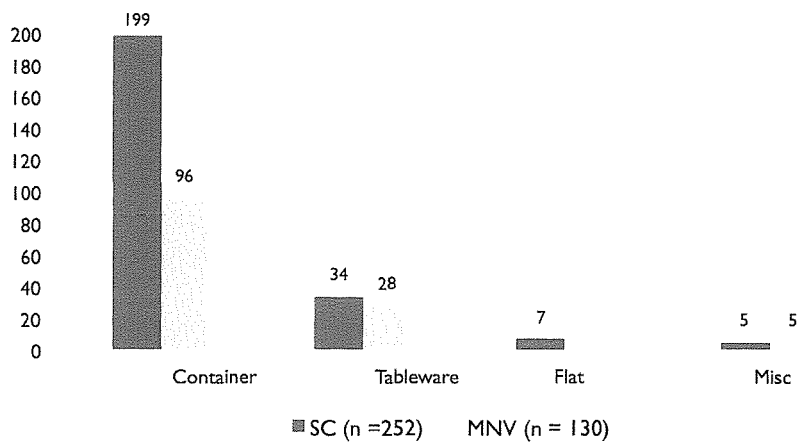
(IPM-ENE), is also included. The assortment of large and conjoining fragments, and complete or near-complete vessels among the glass and pottery suggests that the assemblages are chronologically homogenous and a result of dumping or clearance sometime in the first decade of the twentieth century, with exception of the Enemalta Store, which seems to have a slightly later yet pre-WWI date. Commandeered by the British in the early nineteenth century, the building was used as an infirmary at least until 1826 (T[he] N[ational]A[rchives, Kew, UK] MPH 1/912/6-8). Shortly after the site was taken over by the regiments, comprising by the mid nineteenth century the mess house and quarters of officers whose troops were stationed nearby (Tallack, 1861, 83–84; Badger, 1869, 247). In 1899 it was reported as being disused, in 1900 it was 'temporarily occupied by troops' (TNA WO/33/3237), and in 1904 it was again housing officers (*Portsmouth Evening News* 9 August 1904, 3). In the 1920s it became a museum (Gambin 2003, 27).

## Classification

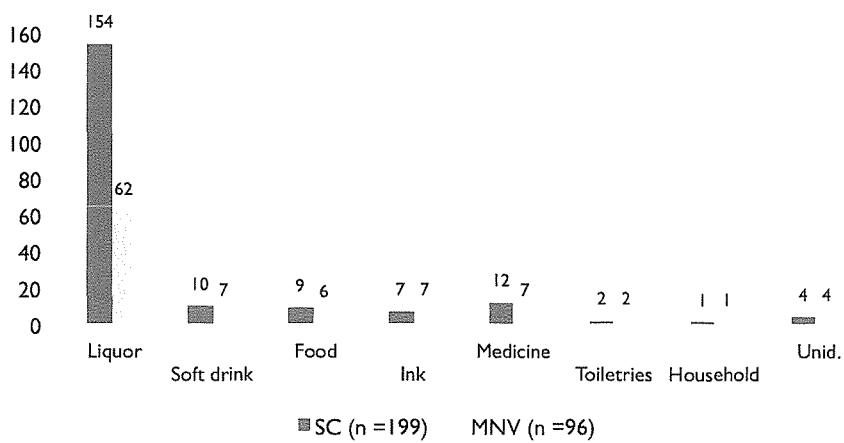
The glass finds have been divided into five main categories (containers, tableware, flat glass, miscellaneous, and unidentified), with functional subdivisions based on those suggested by Jones and



**Figure 1.** Plan of Inquisitor's Palace, Malta, showing locations of excavations: (1) IPM-GW, (2) IPM-CPMC, (3) IPM-MPY, and (4) IPM-ENE. Image: R. Palmer.



**Figure 2.** Breakdown of glass by vessel type (SC = shard count; MNV = mean number of vessels).



**Figure 3.** Breakdown of containers by functional category.

Sullivan (1989). A further resource used throughout the analysis has been the historic bottle website hosted by The Society for Historical Archaeology ([www.sha.org/bottle](http://www.sha.org/bottle)). Minimum Number of Vessels (MNV) values are calculated by counting the number of non-conjoining rim and base shards, and taking the higher of the two values. Of the 252 shards recorded, over three-quarters came from containers (MNV 96), a significant number from tableware (MNV 28), and the remainder comprise shards of flat window and tile glass, along with some miscellaneous and unidentifiable shards (Fig. 2; Table 1).

### Containers

The assemblages exhibit a wide range of bottles (MNV 92), a few jars (MNV 3), three stoppers, and a single vial. Many of the bottle shards are sufficiently diagnostic as to enable identification, which has resulted in a large number of forms for which only one example exists. These bottles were used to package and sell beverage, food, and household products. Containers have been sub-divided into the following functional categories (Jones & Sullivan 1989; Fig. 3; Table 2): liquor/alcohol (MNV 62), soft drinks (MNV 7), food (MNV 6), inks (MNV 7), medicine (MNV 7), household (MNV 1), toiletries (MNV 2), and unidentified (MNV 4).

#### Liquor

The category of liquor (MNV 62), or alcohol, is dominated by olive to dark olive-coloured tall (approx. 27cm), mould-blown cylindrical bottles with cork-closures and push-up bases. Also referred to as 'black glass', these bottles are ubiquitous finds in nineteenth-century contexts and were used for bottling wine, beer, and other products. These bottles exhibit an array of finishes (single or double down-tooled or flattened string rim, champagne), necks (bulged, conical, or cylindrical), and bases (bell-shaped, conical, domed, or rounded). However none of these characteristics are definitive in assessing age or provenance, and as they were commonly reused, it is impossible to specify the exact contents that brought them to the officers' mess. The late nineteenth- to early twentieth-century date of the assemblages may suggest more wine and spirits, as beer was being increasingly bottled in other forms. The only bottle of this category that can be positively identified with respect to its contents and maker has

Vessel type	SC	SC %	MNV	MNV %
Container	199	79.0	96	73.8
Tableware	34	13.5	28	21.5
Flat	7	2.8	0	0.0
Misc.	5	2.0	5	3.8
Unid.	7	2.8	1	0.8
<b>Total</b>	<b>252</b>	<b>100</b>	<b>130</b>	<b>100</b>

**Table 1.** Breakdown of glass from the Inquisitor's Palace site by vessel type.

Functional Category	SC	SC %	MNV	MNV %
<b>Container</b>				
Liquor	154	61.1	62	47.7
Soft drink	10	4	7	5.4
Food	9	3.6	6	4.6
Ink	7	2.8	7	5.4
Medicine	12	4.8	7	5.4
Toiletries	2	0.8	2	1.5
Household	1	0.4	1	0.8
Unid.	4	1.6	4	3.1
<b>Total</b>	<b>199</b>	<b>79</b>	<b>96</b>	<b>73.8</b>
<b>Tableware</b>				
Tumbler	15	6	14	10.8
Stemware	13	5.2	10	7.7
Bowl	3	1.2	2	1.5
Cruet/cas-tor	1	0.4	1	0.8
Vase	1	0.4	1	0.8
Handle	1	0.4	0	0
<b>Total</b>	<b>34</b>	<b>13.5</b>	<b>28</b>	<b>21.5</b>
<b>Flat</b>				
Window	5	2	0	0
Unid.	2	0.8	0	0
<b>Total</b>	<b>7</b>	<b>2.8</b>	<b>0</b>	<b>0</b>
<b>Misc.</b>				
Misc.	4	1.6	4	3.1
Unid.	1	0.4	1	0.8
<b>Total</b>	<b>5</b>	<b>2</b>	<b>5</b>	<b>3.8</b>
<b>Unid.</b>				
Unid.	7	2.8	1	0.8
<b>Total</b>	<b>7</b>	<b>2.8</b>	<b>1</b>	<b>0.8</b>
<b>Total</b>	<b>252</b>	<b>100</b>	<b>130</b>	<b>100</b>

**Table 2.** Breakdown of glass at Inquisitor's Palace site by functional category.

**Figure 4.** (a) Ale or stout bottle embossed with 'Geoghegan and Co' and 'MALTA' (IPM-ENE.1.27); (b) Three Codd-style bottles: left Carmelo Cutajar (IPM-FNF 1 19), centre and right Charles Julious (IPM-ENE.1.16 & IPM-ENE.1.17).; (c) Bottle of Arconaut Straw Hat Dye containing remnants of the dye (IPM.ENE-1.10); (d) Three tumblers with press-moulded fluted panels; (e) Squat ink bottle with burst-off finish, containing remnants of ink (IPM-ENE.1.96). Photographs: R. Palmer.



'Geoghegan and Co' and 'MALTA' embossed on the body (IPM-ENE.1.27; Fig. 4a). Stannus Geoghegan,<sup>1</sup> a brewer in Dublin from at least 1872 (*The London Gazette* 7 May 1872, 2207), had moved to Floriana by 1894 (Mitchel 1904, 165), and in 1895 entered into a partnership with Antonio Despott of Cospicua as brewers of stout and ale (Refalo 2009, 59). Therefore the bottle can be dated after 1895.

Beer bottles were present in the form of lightning closures (Fig. 5a). Lightning finishes were very common for beer and other carbonated drinks in the late nineteenth and early twentieth centuries (Jones & Sullivan 1989, 162), being gradually replaced by the still common crown top finish, of which one example has been recorded.

Many products were sold in large quantities, which inspired the use of standard bottle sizes and shapes. Two square gin 'case' bottles were recorded, so-called because their square body and short restricted neck made them easier to pack into cases. A complete Benedictine bottle was recorded, along with an olive-coloured oval base on which was embossed 'JJW P[eters] H[amburg]'. J.J.W. Peters was a firm shipping schnapps, gin, cordials, and other drinks throughout

the nineteenth and early twentieth centuries (Van Den Bersselaar 2007, 72; *Official Catalogue* 2014, 294).

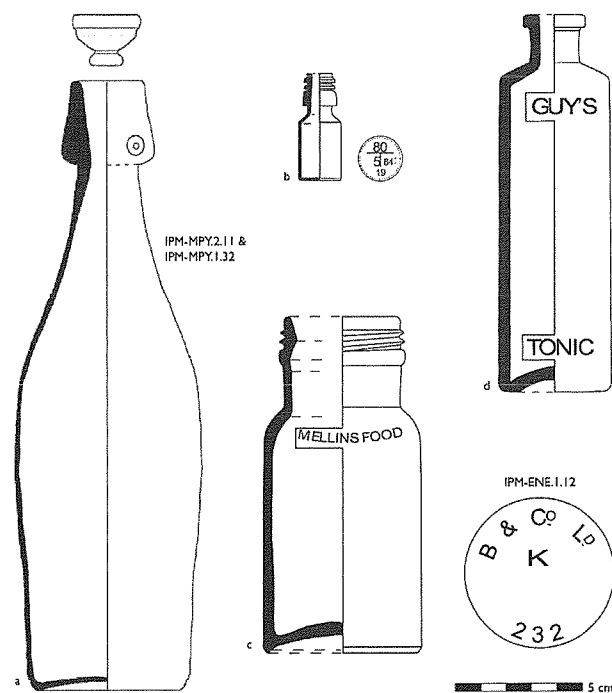
#### Soft drinks

The number of shards identified as soft drink bottles, containing natural and artificial waters, soda, and other non-alcoholic drinks, is relatively low (5.4% of containers by MNV). In part, this is skewed by focusing on one archaeological material, as stoneware ginger beer bottles and earthenware water vessels were present in the assemblages (see Palmer 2014). It is also possible that some of the olive cylindrical bottles discussed above could have contained mineral water. However, two clear forms arise. At least six Codd-style bottles made of aqua-coloured glass were recorded (Fig. 4b). These bottles were popular in Britain and her colonies in the late nineteenth and early twentieth centuries, and were designed to contain carbonated drinks, almost exclusively mineral waters. Codd-style bottles have a complicated neck that contains a 'Codd ball' and an internal rubber ring just below the orifice. The pressure of the carbonated drink forces the ball against the rubber ring, hence forming a closure. Interestingly, not a single Codd-ball has been

recovered, although one neck shard still contains the rubber ring (IPM-GW.6.65). The recorded examples were produced in England for businesses in Malta. Four of the minimum six are embossed on the rear with the name of London bottle manufacturer 'W.M. Barnard & Sons'. William Barnard and Sons, a partnership of glass bottle merchants registered at 66 Fenchurch Street, was dissolved on 25th June 1902, which puts their manufacture before that date (*London Gazette* 3 February 1903, 710). On the front of one of these bottles is the name 'Carmelo Cutajar' along with 'Gudia', suggesting that Cutajar was bottling waters in Gudja. The other two bottles were sold by Charles Julious, based in Valletta in the 1890s and possibly later (*Daily Malta Chronicle* 8 July 1897, 7). Julious appears to have worked with several British bottle producers, including Bratby & Hinchliffe (IPM-ENE.1.18), the Manchester-based 'Aerated Water Engineers and Manufacturing Chemists' (Hart 1898, unpaginated advertisement), who were producing Codd-style bottles from 1885 (Talbot 1974, 50–51). The final soft drinks container was a colourless crown top finished bottle. Clearly visible seams suggest it was blown from a 3-part mould, with the finish and an applied collar added separately (IPM-ENE.1.26).

### Food

While this category is not numerous (MNV 6), several of the containers have clear uses and demonstrate the growing popularity of commercially prepared and branded foodstuffs. Fully identifiable bottles include two sauce bottles. IMP-ENE.1.188 is a colourless bottle, square in cross-section with bevelled corners ('French square'). One of the sides is embossed with 'MASON' and the base with an anchor and '1397', and is similar to that described by Mephram (2012, 20). In 1905, Mason's OK Sauce was advertised as having had '25 years reputation' (*Sheffield Evening Telegraph* 12 April 1905, 2), suggesting a likely turn-of-the-century date of manufacture. A colourless, 8-sided 'octagon catsup' Heinz Ketchup bottle with a simple external screw thread was recorded (IPM-CPMC.1.177). Embossed on the base, this 255-variety was patented in USA in 1893 (Heinz 1893), and likely dates to the first decade of the twentieth century. Two aqua-coloured stoppers are included in this category. In both cases the finial is horizontal with a flat top containing a central depression. There is no neck, and the shank tapers gently towards the point. On the larger (IPM-ENE.1.4; radius 1.4 cm, height 3.8



**Figure 5.** (a) Lightning finished bottles with stopper (IPM-MPY.2.11); (b) Amber machine made pill bottle with external screw thread and embossed-lettered base (IPM-MPY.2.19); (c) Mellins Food bottle (IPM-ENE.1.12); (d) Square-based bottle of Guy's Tonic (IPM-ENE.1.11). Drawings: R. Palmer.

cm), the point is rounded, and on the smaller (IPM-ENE.1.3; radius 1.3 cm, height 3.1 cm), the point is obscured by the pontil scar. Stoppers of this nature were used in conjunction with a sleeve of cork, and are often associated with sauce bottles (Jones & Sullivan 1989, 152–53).

Two food containers are of particular interest. A colourless machine-made, wide-mouthed vessel with the finish and cylindrical neck making up approximately one quarter of the vessel's height (IPM-ENE.1.12; Fig. 5c) has an external screw thread that leads immediately to a moulded collar band, followed by short sloped shoulders, a cylindrical body, chamfered heels with flat resting point, and a shallow concave base. Moulded marks on base ('B & Co L<sup>d</sup> 232') suggest it was made by Bagley and Co. Ltd, a bottle and jar manufacturer based in Yorkshire. The shoulder is embossed with 'MELLINS FOOD', suggesting that the jar originally contained baby food. A further jar made by Bagley and Co. was recorded, and though it was most likely for food it has no further makings. Both jars date to 1895–1920s (Lockhart *et al.* undated). In addition to the jars, a partial jar lid (IPM-CPMC.1.78, radius 4.5 cm) was recorded with



**Figure 6.** Embossed and labelled Florida Water bottle (IPM-ENE.1.80). Drawing and Photograph: R. Palmer.

the letters ‘... ILNER BROTHERS LIMITED’ and ‘ORO’ embossed on its top. Originally it would have belonged to a vessel produced by Kilner Brothers Limited, who had a glass works at Conisbrough, Yorkshire, which was often then written ‘Conisboro’ (*Hull Daily Mail* Thursday 23 May 1935, 7). The jars were sold empty in sets and designed to be closed with a glass lid and rubber band, creating an air-tight closure perfect for preserving fruits (*Kent & Sussex Courier* Friday 17 September 1909, 6).

#### Inks

The ink bottles found can be broadly divided into two types: squat (max. height 6 cm, MNV 5) and tall (max. height 11 cm, MNV 2). All exhibit characteristically jagged and sharp burst-off finishes except IPM-MPY.3.73, which is made of colourless glass, has a flat base, a cylindrical body, sloping shoulders, a cylindrical neck, and a patent finish. A medium-green coloured example (IPM-ENE.1.95) was 3-part mould blown, demonstrated by obvious seams, with a flat base, a squat and slightly carinated body, sloping shoulders separated by a moulded band, a restricted cylindrical neck and a rounded collar approximately 1 cm below the finish. A further two bottles (IPM-ENE.1.96 and IPM-ENE.1.97) have flat bases, slightly tapered cylindrical bodies with the widest point

being at the shoulders, which are rounded and lead to a cylindrical neck (Fig. 4e). The final squat ink is square in cross-section, with plain body panels, and abruptly sloping shoulders leading to a cylindrical neck which makes up one-third of its height. The wider-than-tall squat appearance is common for table use as it positions the bottle’s weight towards the base of the vessel, creating a stable bottle, less likely to spill or overturn. The two taller and larger bottles are both of aqua-coloured glass containing seed-bubbles and displaying mould seams. The 3-part moulded bottles have shallow concave bases, are cylindrical (IPM-ENE.1.79) and oval (IPM-ENE.1.84) in body, with rounded shoulders leading to a cylindrical neck with moulded band collar.

#### Medicine

Only seven vessels and one stopper have been identified as originally containing medicines. These include three aqua-coloured bottles: one barrel-bodied with a concave base, cylindrical neck, and patent finish (IPM-CPMC.1.83, height 6.0 cm); a partial bottle with an applied flared (or wide prescription) finish and sloping shoulders (IPM-GW.6.67); and a square-sectioned bottle, with a cylindrical neck and patent finish, of Guy’s Tonic, which cured ‘habitual weakness of the stomach’ (*Aberdeen People’s Journal* 8 April 1905, 8; Fig. 5d). A dark amber, machine-moulded, cylindrical bottle (IPM-MPY.2.19, height 4.2 cm) with a concave base, pronounced shoulders, cylindrical neck, and external screw thread finish was also recorded. Embossed on the base are numbers suggesting that it was a tablet bottle (Fig. 5b). This is true also of another machine-moulded bottle (IPM-MPY.1.40, height 7.2 cm), colourless and rounded-rectangle in cross-section. It also has an external screw thread finish. The final vessel is a so-called homeopathy vial (IPM-ENE.1.8), a colourless, cylindrical, and flat-based tube. The finish is missing. This group also includes a colourless glass stopper (IPM-ENE.1.5, radius 0.9 cm, height 4.6 cm). The vertical finial is flat, rectangular, and rounds to a very short constricted neck. The top of the square-bottomed tapered shank forms the shoulders. This type of stopper was most frequently used in medicine and druggist bottles (Jones & Sullivan 1989, 153–4).

#### Toiletries

Toiletry bottles are present in the form of an aqua-coloured, cylindrical-bodied bottle with a flat base.

The neck and finish are missing, and embossed on the rear-side is '[F]LORIDA-WATER BEST QUALITY' (Fig. 6). Remnants of a label look very similar to an example made in Germany (see Sullivan 1994, 81). Perhaps the most distinctive container recorded is a tooth powder flask made of opaque white glass (milk glass). Although incomplete (IPM-ENE.1.29), the recti-octagonal body sits on a flat inverted base, with a neck that narrows and bends so as to end in an orifice that is perpendicular to the body. The base is embossed with 'PATENT'.

#### Household

Only one vessel can be reliably categorised as household (IPM-ENE.1.10). It is a bottle that is rectangular in cross-section, with a cylindrical neck leading to a patent finish, with a vessel height of 13.3 cm. The aqua-coloured vessel is moulded in three parts with each of the four body panels depressed. On one of the side panels is embossed 'ARCONAUT', indicating that it was an early twentieth-century bottle of Arconaut Straw Hat Dye, which in 1913 was advertised as costing 3d. (*Derby Daily Telegraph* 20 March 1913, 2). Dried remains of the dye are still visible (Fig. 4c).

#### Tableware

The tableware (MNV 28) was categorised as tumbler (MNV 14), stemware (MNV 10), bowl (MNV 2), cruet/castor (MNV 1), vase (MNV 1), and handle (MNV 0). Descriptive nomenclature is based on Jones & Sullivan (1989, 139–40).

#### Tumblers

The ten tumblers from IPM-ENE are all different, four of them having bowls divided between 11 and 13 pressed panels, and flat bases (Fig. 4d). Two exhibit applied foot rings, and apart from one (IPM-ENE.1.100), which appears to be of cut glass with cut foliage decoration on the bowl, all have funnel-shaped lower bowls (the upper bowls missing). IPM-GW contains a flat-based tumbler with a rounded heel and a bowl comprising pattern-moulded flute panels (GW.6.56) and two with concave bases and unknown bowls.

#### Stemware

The stemware consists broadly of two groups of wine glasses. A group of nine undecorated pressed-moulded drinking glasses (Fig. 7), each missing the uppermost part of the bowl, come from IPM-

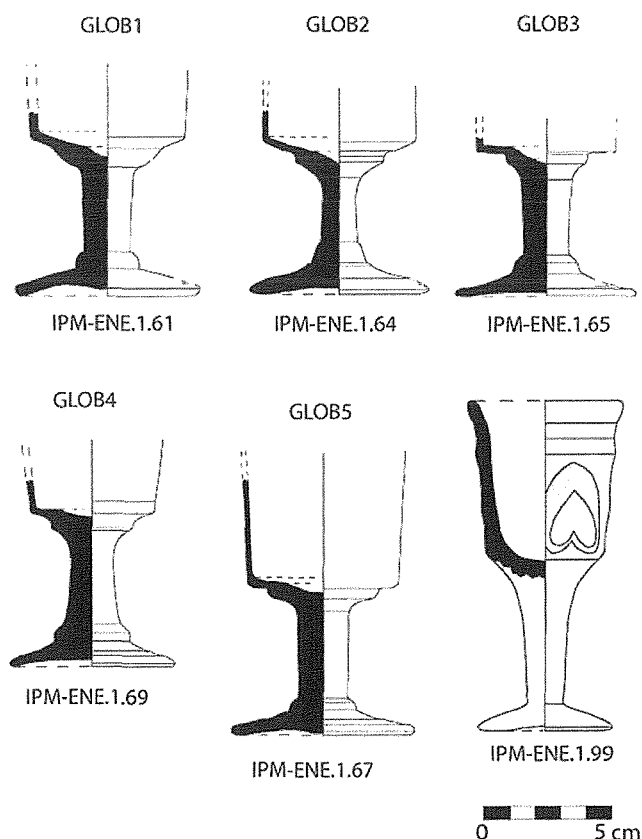


Figure 7. Press-moulded stemmed drinking glasses. Drawings: R. Palmer.

ENE. Plain conical or slightly domed-conical bases culminate in a step or basal knob from which a plain stem leads to a cordoned collar before opening into a bucket-shaped bowl. These have been interpreted as wine glasses and of very early twentieth-century date. They are almost certainly British in origin. The bowl of a further press-moulded vessel (IPM-ENE.1.99) is funnel-shaped and decorated with a moulded motif of inverted hearts surrounded by 'hobnailing' (groups of square, circular, or diamond-shaped bumps [Jones & Sullivan 1989, 58]). Three shards were found in assemblage IPM-GW of cut wine glasses. These are not included in the minimum vessel count as neither rim nor base is present, only part of the stem and lower bowl. Two of the stems are decorated with a central annular knob. The other has an angular knob in the central position and another just below the collar which leads to the ogee-shaped bowl. These are likely to date to the 1880s, which saw a revival of cut glass in Britain (Charlton 1984, 229). No two stemmed drinking glasses are exactly the same, suggesting that

complete sets were not discarded, but the presence of wine drinking glasses fits well with the 'black glass' bottles that I have interpreted as representing mostly wine bottles.

#### *Other tableware*

A fancy press-moulded bowl has an oval starburst base and footring, with a rounded profile, flat rim, and a height of 2.7 cm (IPM-ENE.1.75). The bowl is externally decorated with hobnail panels interspersed with smooth vertical band. A square-based cruet or castor (rim missing) is present, which shows the use of table condiments. The tableware is all made of colourless glass with the exception of IPM-ENE.1.9, which is made from opaque turquoise glass and appears to be the central part of some kind of vase. Four playing marbles were also recorded, suggesting gaming and possibly gambling. Such activities may also account for the lack of Codd balls, as they can be used in place of marbles.

#### *Discussion*

The majority of the finds relate to alcohol consumption (Sherd Count 72.2%, MNV 66.2%), notably wine and beer, but also spirits such as gin, schnapps, and whisky. Wine glasses, used perhaps against custom for multiple types of wine and liquor, confirm this, along with tumblers for spirits and cordials. The presence of these drinking glasses contrasts strongly with the paucity of ceramic drinking vessels found at the site: only an isolated example of a teacup stamped with the regiment number of the 53rd and a few other sherds have been found. This contrast, rather than suggesting more alcohol was drunk than tea, coffee or chocolate, is telling of the military practice of moving all regimentally marked and/or owned wares with the company when it moves on, and might reflect the cost of a ceramic service. The higher occurrence of mostly mass-produced and inexpensive glass drinking vessels may also in part be due to their disposability and physical fragility—they are more likely to be broken both in use and transit than ceramic vessels. Together with the range of creamware and whiteware ceramic dinner, side, and soup plates found in the assemblages, the wine glasses and tumblers imply traditions of formal Victorian dining often associated with an officers' mess. The 'ordinariness' of the plates and glasses is in line with Lynne Sussman's assertion that military populations generally use the same wares as their civic counterparts (1978, 93–4), and any mess

silverware or cut glass is unlikely to have been left behind or even broken (breakages were charged and fined by the regiment). The presence of a cruet or castor further conforms to traditions of formal Victorian dining and table decoration, which is suggested by contemporaneous illustrations of army life in Malta (*The Graphic* 25 April 1891). Other items are found in the assemblages that endorse this idea of decorating the formal rooms with contemporaneous decorative material culture, such as the c. 1830s 'Zoological' patterned blue-on-white transfer-printed vase formed in Robinson, Wood and Brownfield's 'Stoneware', which was in fact a refined white earthenware (Coysh and Henrywood 1982, 304, 416).

The presence of domestic and toiletry items is interesting and demonstrates the importance of studying the glass finds, as the ceramics from assemblages are mostly silent on these matters. By the late nineteenth century, officers are likely to have carried some form of toiletry case with them, but it is doubtful that these would have accommodated bulkier items such as tooth powder flasks, which explain their discard. The Florida Water bottle provides a pivot for some speculation. While colognes were used by men (especially of the officer rank), such products could equally have been used by women (Sullivan 1994, 84). The same is true also of the hat dye, and the jar of Masons baby food may suggest the presence of young children. Newspaper reports testify to the presence of women and children at the site through the birth of a son to Jeanette and Captain Arthur Richard Cole-Hamilton on 3 April, 1883 (*Leamington Spa Courier*, 7 April 1883, 5), and further material evidence for women and children at the site can be found in the shoes recovered. While the army was building more married quarters, there were not enough and these finds remind us that a too-overt focus on military life can overlook the wives, children, and followers of armies.

An officers' mess was also a place of work and the many administrative tasks, as well as a well-developed letter-writing culture (Lyons 2012), accounts for the presence of ink bottles. While ink bottles were mostly glass, there is an example of a, perhaps older, earthenware ink bottle in the assemblages.

The overwhelming majority of the glass recorded from this site originates from Britain, a fact that is unsurprising in a nineteenth-century British colony. However, many of the finds, particularly the containers, demonstrate far more complex business and trade



patterns than wholesale importation of goods from Britain to Malta. The use of purpose-made British jars and bottles for locally-based producers, sellers and entrepreneurs can be seen in the mineral water bottles of Carmelo Cutajar as well as the colonial (?) settler Charles Julious, whose trade also extended to ginger beer production in Valletta, sold in purpose-made British stoneware bottles. Furthermore, Irish-born Geoghegan's ale bottle provides material evidence of colonial subjects exploiting the imperial networks of the British Empire to their own advantage, as well as the complicated trail of movements to and from Malta in the nineteenth century, of people and things.

## Conclusions

Other appropriately analysed sites are not yet available within Malta, but comparisons with other British colonies within the Mediterranean and farther afield would bring wider context to the assemblages. As in any study of only part of the material assemblage left behind, the picture presented is necessarily incomplete and the glass finds will in due course be integrated into the analysis of the ceramic and other finds from the site. However, it can be seen how important glass finds at archaeological sites are to understanding the lives of those who left them behind, especially in the late nineteenth century, when the glass industry was booming in many parts of the world and an ever increasing array of goods were contained, consumed and transported in glass.

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## References

- Aberdeen People's Journal* 8 April 1905: 8.  
BADGER, G.P. 1869. *Historical Guide to Malta and Gozo*. Malta: P. Calleja.  
CHARLTON, R. J. 1984. *English Glass and the glass used in England, circa 400–1940*. London: Allen and Unwin.  
COYSH, A.W. & R.K. HENRYWOOD 1982. *The Dictionary of Blue and White Printed Pottery, 1780–1880*. Woodbridge, Suffolk: Antique Collector's Club Ltd.  
*Daily Malta Chronicle*. 8 July 1897: 7.  
*Derby Daily Telegraph*. 20 March 1913: 2.  
GAMBIN, K. 2003. *The Inquisitor's Palace, Vittoriosa*. Malta: Heritage Books.  
HART, H. G. 1898. *The New Annual Army List, Militia List, and Yeomanry Cavalry List, for 1898*. London: John Murray.  
HEINZ, H. J. 1893. *Design for a Bottle* (United States Patent Office, No. 22,312). Available at: <http://www.sha.org/bottle/pdffiles/Heinzcatsup1893.pdf> (accessed on 9 February 2015).  
*Hull Daily Mail*. British bottle of all description for British users, 23 May 1935: 7.  
JONES, O. & C. SULLIVAN 1989 [1985]. *The Parks Canada Glass Glossary for the description of containers, tableware, flat glass, and closures*. Ottawa: Minister of Supply and Services Canada.  
*Kent & Sussex Courier*. Trade Notices, 17 September 1909: 6.  
*Leamington Spa Courier*. Births. 7 April 1883: 5.  
LOCKHART, B., B. SCHRIEVER, C. SERR & B. LINDSEY. Undated. Bagley & Co. Available at: <http://www.sha.org/bottle/pdffiles/Bagley&Co.pdf> (accessed on 24 July 2014).  
*London Gazette*. 7 May 1872: 2207.  
*London Gazette*. 12 November 1889: 5988.  
*London Gazette*. 3 February 1903: 710.  
*London Gazette*. 3 November 1911: 7959.  
LYONS, M. 2012. New Directions in the History of Written Culture, *Culture and History Digital Journal* 1.2: 1–9. Available at: <http://dx.doi.org/10.3989/chdj.2012.007> (accessed on 4 February 2015).  
MEPHAM, L. 2012. By River, Fields and Factories The Making of the Lower Lea Valley Archaeological and cultural heritage investigations on the site of the London 2012 Olympic and Paralympic Games (Section 2). Available at: [http://archaeologydataservice.ac.uk/archiveDS/archiveDownload?t=arch-1175-1/dissemination/pdf/PDFA-SpecialistReports/2\\_Olympic\\_Glass-PDFA.pdf](http://archaeologydataservice.ac.uk/archiveDS/archiveDownload?t=arch-1175-1/dissemination/pdf/PDFA-SpecialistReports/2_Olympic_Glass-PDFA.pdf) (accessed on 7 February 2015).

- MITCHEL, A.T. 1904. *Rugby School Register. Vol. III. May 1874 to May 1904*. Rugby: A. J. Lawrence. Available at: <http://www.mocavo.co.uk/Rugby-School-Register-Volume-3/295721/188>, (accessed on 5 February 2015).
- Portsmouth Evening News*. Some Doings at Malta, 9 August 1904: 3.
- PALMER, R. 2014. Maltese Ceramics and Imperial Foodways: An Exploration of Nineteenth-Century Red Wares, *European Journal of Archaeology* 17.4: 678–701.
- REFALO, M. 2009. Commercial Partnerships in Late Nineteenth and Early Twentieth Century Malta. *Journal of Maltese History* 1.2: 54–80. Available at: <http://www.um.edu.mt/arts/history/jmh/docs/2009/refalo-pages-54-82.pdf> (accessed on 5 February 2015).
- Sheffield Evening Telegraph*. 12 April 1905: 2.
- SULLIVAN, C. 1994. Searching for Nineteenth-Century Florida Water Bottles, *Historical Archaeology* 28.1: 78–98.
- SUSSMAN, L. 1978. British Military Tableware, 1760–1830, *Historical Archaeology* 12: 93–104.
- TALBOT, O. 1974. The Evolution of Glass Bottles for Carbonated Drinks, *Post-Medieval Archaeology* 8.1: 29–62.
- TALLACK, W. 1861. *Malta, Under the Phoenicians, Knights, and English*. London: A.W. Bennett.
- The Graphic*. Subalterns First Impressions, Malta, 25 April 1891, unpaginated supplement.
- The National Archives (Kew), Inquisitor's Palace: plan 1 inch to 20 feet [1:240]. MPH 1/912/6-8.
- The National Archives (Kew), Malta: correspondence relating to an exchange of property between the War Department and the Civil Government of Malta. WO 33/3237.
- VAN DEN BERSELAAR, D. 2007. *The King of Drinks: Schnapps Gin from Modernity to Tradition*. Leiden: Brill.

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#### Notes

- 1 Not to be confused with his son, also Stannus Geoghegan, who served with the Royal Irish Regiment (*London Gazette* 12 November 1889: 5988) and later the Indian Army (*London Gazette* 3 November 1911: 7959).