

**A Catalogue of  
the Late Antique  
Gold Glass in the  
British Museum**  
Daniel Thomas Howells



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*A Catalogue of the Late Antique Gold Glass in the British Museum*

Daniel Thomas Howells

With a contribution by Andrew Meek

Edited by Chris Entwistle and Liz James

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Front cover: gilded glass vessel base with Christ, 4th century.  
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# Editors' Preface

Chris Entwistle and Liz James

Daniel Howells completed his PhD thesis on the British Museum's collection of Late Antique gold glass in 2010. He had intended to publish material arising from the thesis, but tragically, only months after the thesis was passed, Dan died suddenly. This volume is an edited version of Dan's thesis in which we have done as little as possible to alter his words and ideas in converting the thesis into a book. Inevitably there will be shortcomings on our part. We are grateful for the help and advice of Dan's examiners, Professor Jennifer Price and Dr Flora Dennis, and for the support and encouragement of Dan's family, his wife Azin and his parents and sister, Ray, Jan and Lizzie. We would like to thank all those who have contributed towards the cost of producing this book: Dan's family, Jan and Ray Howells and Azin Howells; colleagues and students from the Department of Art History at the University of Sussex; colleagues and friends from the British Museum; other friends, including Sarah Paynter, Jennifer Price and Melanie Spencer; and The Glass Association. We also wish to thank Andrew Meek for his contribution to Chapter 3, the Roman Glassmakers, Mark Taylor and David Hill, for Appendix C, Saul Peckham for his excellent photography, Stephen Crummy for the profile illustrations and Wendy Watson for proofreading the text. Final thanks are to our editor Sarah Faulks.

As the thesis was a collaborative project sponsored by the Arts and Humanities Research Council, the catalogue of gold glass in the British Museum originally appeared as an appendix. Our major task has been to integrate the catalogue into the central part of the book and in the process we have altered the order of Dan's catalogue. It was originally compiled by accession date; here, in part to clarify links with other material from the thesis, we have reordered it by iconography. The examiners of Dan's thesis suggested that when converting the thesis into a book, he should add a section on the background to Late Antique gold glass; consider other periods in antiquity when gold leaf decoration between two layers of glass was produced; include more information on the broadly contemporary glass vessels with incised figured decoration known from Rome and the western provinces in the 4th century; and place his discussion of the value of gold glass within a wider economic context, for example through further use of Diocletian's Price Edict. Dan had started this work, but we have not included it here.

The book falls into two sections. The first part provides a discussion of the British Museum's collection of gold glass. It begins with two chapters that set the catalogue into the wider contexts of gold glass studies and the way in which the collection came together. Chapters Three and Four focus more specifically on the gold glass and consider material issues – morphology, the composition of the glass and questions that address how the objects themselves might have been made. Chapter Five concludes this section with a discussion of the distribution of gold glass and its dating and an evaluation of questions about the workshops that produced the glass.

The second part comprises the catalogue of the 64 pieces, 55 Late Antique and 9 replicas, which make up the British Museum's collection. This is the first published catalogue to include every example in the Museum's collection and its arrangement is discussed in detail in its introduction.

*In memory of Dan  
'Leap and sing in all I do'*

# Acknowledgements

*This volume is based on Dan's thesis which was completed between 2007–10 as part of a fully funded AHRC Collaborative Doctoral Studentship at the University of Sussex with the British Museum (Department of Britain, Europe and Prehistory). Below are his acknowledgements to the thesis.*

It is a pleasure to hereby acknowledge my enormous debt of gratitude to my supervisors Professor Liz James (University of Sussex) and Mr Chris Entwistle (British Museum) for their expert advice and guidance given unreservedly throughout the course of the project. I am also extremely grateful to Dr Andrew Meek for a number of very valuable discussions concerning the potential of scientific applications to ancient glass, and ultimately for carrying out the scientific analysis of a very large number of the British Museum gold glasses. Thanks are also due to Professor Julian Henderson for providing unpublished scientific analysis of gold glasses in the Ashmolean Museum collection. Experimental glass-working was undertaken under the highly enthusiastic guidance of Mr Mark Taylor and Mr David Hill, who furthermore provided unreservedly their thoughts and advice, the results of considerable specialist experience. The practical work itself was made possible through a series of generously awarded grants from the Glass Association, the University of Sussex Graduate Centre and the Association for the History of Glass. I would also like to thank Professor Michael McGann for his help in translating some of the more challenging Latin inscriptions, Mr Stephen Crummy for producing the profile illustrations of the gold glass in the British Museum's collection and Dr Eileen Rubery for providing me with photographs of gold glasses from the Vatican Museum. Needless to say, any errors this catalogue contains are entirely my own.

I wish also to gratefully acknowledge the institutions, curators and other staff who gave me generous access to their collections and provided me with necessary photographs. In particular, I would like to thank not only the British Museum, but also the Ashmolean and Victoria & Albert Museums. Furthermore, I would also like to thank the numerous individuals who have contacted me throughout the course of my work regarding examples of gold glass and related items entering the international art market. In addition, I would like to acknowledge the importance of the resources accessed at the British Library, the Warburg Institute, the Institute of Classical Studies, The Society of Antiquaries of London and the National Art Library during my research.

Finally, I would like to extend my gratitude to those who have been most influential in my early studies of Roman archaeology and art history, namely Mr Christopher Forrest, Mr Alan French, Dr Keith Wilkinson, Professor Tony King and lastly Dr Hella Eckardt, who was instrumental in my application for doctoral research at the British Museum. I would also like to thank my parents, Raymond and Janice, and my sister Elizabeth for their support and encouragement given to me throughout my seven years of study. This volume is dedicated to my beautiful wife Azin for her patience and continual support, and without whom nothing would have been worthwhile.



# Introduction

Dating principally to the 4th century and bearing well-preserved depictions of recognizable and often Christian subjects executed in gold leaf, gold glass has attracted the attention of scholars and collectors since the first examples began to be recovered from the catacombs of Rome in the late 16th century. However, gold glass as a medium has never been fully examined or analysed, and the core reference works on it that exist are almost all over 100 years old.<sup>1</sup> The British Museum holds one of the largest and most important collections of Late Antique gold glass in the world, numbering over 50 pieces, and surpassed in size only by the collection of the Vatican Museum in Rome. Although a select number of objects from the British Museum have been exhibited on numerous occasions, the collection as a whole has only been the subject of two catalogues raisonnés: one by O.M. Dalton in 1901, and another by C.R. Morey in 1959,<sup>2</sup> both of which were incomplete. This catalogue, using the British Museum's collection as the basis for an in-depth case study of Late Antique gold glass, provides a detailed examination of the British Museum's collection of gold glass, combined with a considered study of a wide range of scholarship concerning Late Antique images, archaeological sites and cultural expression. It also draws upon the results of the scientific analysis of the British Museum's gold glass collection to give a detailed overview of the medium as a whole.

The opening chapter examines the history of gold glass scholarship from the late 16th century up until the present day. This serves to demonstrate the origin of many of the frequently repeated assumptions regarding gold glass that can be found in the recent literature. The validity of these assumptions is then assessed in later chapters. Chapter Two provides a brief account of the scholarship concerning the British Museum's collection of gold glass. This collection was formed during the second half of the 19th century and the exact dates of acquisition are recorded for the vast majority of the objects. Consequently, it is possible to consider the formation of the collection itself in the context of the changing 19th-century attitudes to Late Antique art.

Chapter Three examines questions of morphology, outlining the various gold glass subtypes and the respective forms recognizable in the British Museum's collection. As a result of my study, I have defined three major forms of gold glass technique:

1. Gold glasses produced in the 'cut and incised technique', often depicting Christian-related imagery, constitute the most numerous and well-known category. In each instance, the image is literally cut and incised into the gold leaf. There are three forms of cut and incised gold glasses. The most common take the form of vessel bases, sandwiching an image cut and incised from a sheet of gold leaf between a glass base-disc and an overlaying colourless layer of glass forming the vessel bowl. These I will refer to as 'cut and incised technique vessel bases'. The second type is referred to as 'diminutive medallions'. Employing the same technique of design incision as the vessel bases, they constitute small coloured glass 'blobs' applied to the wall of a larger vessel sandwiching the design between the coloured backing and the outside of the colourless glass vessel wall, making the design visible

when viewed from the inside. The third and final type are referred to as ‘gilt glass plaques’. Again, the technique of design incision into the gold leaf overlaying a single layer of colourless glass is the same; however, in this instance the image is not overlain by a second protective glass layer and the objects did not constitute vessels in any form.

2. ‘Brushed technique’ gold glasses take the form of highly naturalistic portrait medallions with cobalt blue backings. They are termed as such because the delicate incisions in the gold leaf forming the image that is enclosed between the two layers of glass are produced with the precision of a gem-cutter, apparently simulating brushstrokes.
3. ‘Gilt glass trail technique’ refers to the bases of vessels with a glass trail inscription covered in gold leaf sandwiched between two layers of colourless glass.

Chapter Three also offers a discussion of the large-scale scientific analysis of gold glass by Andrew Meek, which was carried out as part of this project. On the basis of the morphological and compositional overview, Chapter Four examines gold glass production methodology. The evidence of past attempts at gold glass reproductions, including fakes and forgeries from the 18th century onwards, as well as the historicizing reproductions of gold glass produced in the late 19th century in the British Museum’s collection, are looked at in detail. Alongside an analysis of surviving medieval accounts of the simultaneous working of glass and gold leaf, this provides the basis for an extensive examination of gold glass production methodology. The results form the basis of the discussion concerning the perceived material value of gold glass in Late Antiquity.

Based on an extensive review of the literature (the data from which is presented in Appendix A), Part One closes with a discussion of distribution and context, effectively demonstrating that finds of gold glass are in no way restricted to the catacombs of Rome and the environs of Cologne, as is usually stated. All of the preceding analysis will be drawn together in order to analyse the current understanding of gold glass workshop identity and to consider the possible functions of gold glass in Late Antiquity, using the conclusions drawn earlier to assign the various gold glass subtypes to distinct chronological epochs, each lasting perhaps only a generation.

The catalogue forms Part Two of the volume. Objects are presented grouped by iconography and within that categorization in chronological order of acquisition by the British Museum. Throughout the book, specific gold glasses in the collection will be referred to **in bold** by their catalogue number. The catalogue discusses in detail the range of iconography appearing on gold glasses in the Museum’s collection, reflective of the medium as a whole, in the context of other contemporary media. This will cover portraits and portrait-style depictions of secular people and groups, often with Christian connotations, in addition to portrait-style depictions of Christian saints and biblical scenes. Finally, I will look at the lesser known subjects to be depicted in gold glass, including distinctly Jewish and pagan images, inscriptions unaccompanied by visual embellishment and purely secular scenes.

## Notes

- 1 For example, Vopel 1899; Garrucci 1858.
- 2 Dalton 1901a; Morey 1959.



# Chapter 1

## An Overview of Gold Glass Scholarship

Late Antique gold glass began to attract antiquarian attention in the late 16th and early 17th centuries. This coincided with the rediscovery and large-scale exploration of the catacombs of Rome, from where the majority of gold glass was initially recovered. In laying the foundations of Christian archaeology, the Italian aristocrat and antiquary, Antonio Bosio, was the first to apply a scholarly methodology to the study of the Roman catacombs. Published posthumously in 1632–4, Bosio's *Roma Sotterranea*, edited by the Oratorian priest Giovanni Severano, included illustrations of five cut and incised gold leaf gold glasses recovered during his catacomb explorations.<sup>1</sup> He reported that these had been found embedded in the plaster sealing individual *loculi* (tomb niches) and considered them to be grave markers. This interpretation has been repeated almost verbatim by subsequent scholars to the present day.<sup>2</sup> The 1659 publication of *Roma Subterranea Novissima* by the antiquarian Paolo Aringhi included a further two examples of gold glass.<sup>3</sup>

In the latter half of the 17th century, 34 gold glasses were illustrated in colour and to an unparalleled standard in the later folios of the *Museo Cartaceo* ('Paper Museum') of Cassiano dal Pozzo.<sup>4</sup> The Italian priest and scholar Raffaele Fabretti published two further gold glasses from his own collection in *De columna Traiani* in 1683, and in his *Inscriptiones antiquarum* of 1699 he published the inscriptions from three more.<sup>5</sup> Fabretti's 1699 volume was the first published work to recognize that many, if not all, cut and incised gold glasses had once served as vessel bases, rather than as *vetri rotondi*, or roundels purposely made as grave markers as Bosio had initially described them.<sup>6</sup> Two gold glasses were also included in the 1691 publication of the *Sacra historica disquisitio* by Giovanni Giustino Ciampini.<sup>7</sup> Interested primarily in gold glass iconography, however, Ciampini illustrated only the gold leaf depictions and not the surrounding glass fragments.<sup>8</sup> Indeed, generally 17th-century published accounts of individual gold glasses made very few comments regarding the provenance of their subjects. At the most, the catacombs from which they were prised were noted; attention was instead directed towards epigraphy and the identification of the mainly Christian iconographic subject matter.

Whilst published examples of gold glass began to appear in the early 17th century, these accounts inadvertently revealed that the collection of gold glass fragments, principally by papal dignitaries and a small number of Italian aristocrats, had begun in the later years of the preceding century. Among Bosio's published glasses was an example that Cardinal Fulvio Orsini had acquired from the 'Orazio della Valle' collection, reportedly in the later part of the 16th century.<sup>9</sup> Three of the glasses published by Aringhi were purportedly from a collection formed during the same period belonging to the Marchesa Duglioli Cristina Angelelli and said to have been recovered from the Catacomb of Priscilla on the Via Salaria,<sup>10</sup> as indeed was a further example also published by Aringhi in the collection of Francesco Gualdi.<sup>11</sup>

The scholarly approach of Bosio concerning the catacombs and the gold glass found therein was regrettably not followed by his immediate successors. During the latter

half of the 16th century and onwards, the catacombs became the object of systematic plundering by groups known as *corpussantari* who acted principally on commission from members of the papal hierarchy, regulated, but in fact institutionalized, by Pontifical Decree in 1688.<sup>12</sup> In the later 17th century, mainly through one presumes commissions granted to the *corpussantari*, significant gold glass collections were formed by high-ranking papal dignitaries. Cardinal Flavio Chigi expanded the already celebrated gold glass collection started by his uncle Pope Alexander VII (1599–1667). Cardinal Gaspare Carpegna, responsible for relics and catacombs, compiled an even larger collection during his 40 years in office (1674–1714). A small collection was also made by Fabretti, Carpegna's superintendent of catacombs between 1687–9. Valued almost exclusively for the Christian iconography many of the glasses bore (or were mistakenly interpreted as having), few of the pieces in these collections have recorded findspots.<sup>13</sup>

The addition of sizeable numbers of gold glasses to growing private collections, initially still belonging to high-ranking papal officials, continued throughout the 18th century. The sheer number of examples recovered, however, prompted an entire monograph to be published upon the subject. The substantial 1716 volume by the antiquarian Filippo Buonarruoti featured 72 illustrated gold glasses, 14 of which were previously unpublished. These were taken predominantly from the Carpegna Collection, but also included examples from the collections of Marcantonio Boldetti, Carpegna's later superintendent of catacombs, and Fabretti and Chigi, as well as including some in Buonarruoti's own possession. Although gold glasses were still interpreted as grave markers, for the first time Buonarruoti's monograph did not solely concern itself with the translation of inscriptions and simple iconographic identifications. Instead, it provided a comprehensive account of the subject as realized at the time, one which in many respects of description and observation has not been bettered to the present day. Although the majority of gold glasses illustrated bore distinctly Christian iconography, Buonarruoti also included examples with clear Jewish, pagan, mythological and secular sporting imagery.<sup>14</sup> Buonarruoti also illustrated numerous examples of cut and incised gold glass diminutive medallions with green and blue glass backings and he was the first scholar to attempt a definition of the chronological range of gold glass production.<sup>15</sup> Based on his understanding of the repertoire of gold glass imagery and the orthography of the inscriptions, he placed gold glass in the later 3rd century and prior to the persecutions of Diocletian.

In 1720, Marcantonio Boldetti published another monograph with a large section devoted to gold glass that illustrated a further 28 previously unpublished glasses.<sup>16</sup> In contrast to Buonarruoti, Boldetti's work has been branded as comparatively 'naïve'.<sup>17</sup> Nevertheless, he did recognize that the gold glass roundels initially formed the bases of vessels, and he illustrated a near-complete example that took the form of a shallow bowl which, he lamented, was broken in his eagerness to remove it from the catacomb wall.<sup>18</sup> He furthermore suggested that cut and incised gold glass diminutive medallions once formed the bases of very small

vessels. As vessels rather than purposely produced roundels, Boldetti surmised that gold glasses had not been intended to be reduced to their decorated roundels for insertion into the catacomb walls. Instead, based on the prolific occurrence of overtly Christian iconography depicted upon the bases, Boldetti argued that gold glass vessels had a specific sacramental function in the form of the *agape*, the meal taken at the grave of the deceased, after which the used vessel would be secured into the wet plaster of the recently secured *loculus*.<sup>19</sup> Boldetti's work was also the first to provide an interpretive account of the context of other objects found with the deceased such as coins, leaves, toys and items of jewellery.<sup>20</sup> He interpreted these objects, along with the gold glass, as grave ornamentation and signs of affection, rather than as mere grave markers as his predecessors had done.

The most significant change to the formation of private antiquarian collections that included examples of gold glass was made in 1744 by Pope Benedict XIV when he purchased the celebrated gold glass collection of Cardinal Carpegna in its entirety.<sup>21</sup> In transferring the collection to the Vatican Library, Pope Benedict laid the earliest foundations of the Vatican's Museo Cristiano, to which both he and following pontiffs later added further examples of gold glass and other antiquities from the personal collections of other papal dignitaries. The formation of this museum effectively marked the end of the collections of antiquities formed independently by such officials: instead these passed directly into the Museo Cristiano.

During the later part of the 18th century, gold glasses recovered from the catacombs also increasingly began to enter the private collections of Italian and other continental aristocrats. This development coincided with the growing popularity of the Grand Tour and was facilitated by the virtually unregulated activities and dispersal of objects from the catacombs by the *corpussantari*. At this time glasses were published as part of larger works and catalogues of the collections of specific individuals. Notable amongst these non-papal early collectors was the French Comte de Caylus, whose gold glass collection was published in volume three of his six-volume *Recueil d'antiquités* (1756–67).<sup>22</sup> Although aptly demonstrating the interest in gold glass by early aristocratic participants in the Grand Tour, Caylus' account of gold glass differs little in style and content from the accounts published before him. Caylus specifically noted, however, that at the time of publication, dealers in Rome were selling fake gold glass imitations, which they were passing off to tourists as genuine antiquities.<sup>23</sup>

Significantly, in 1764 the first gold glass reported to have been found outside the catacombs was illustrated by D'Orville in his posthumously published account of antiquities from Sicily.<sup>24</sup> Of the eleven pieces presented by D'Orville, ten of them are clear forgeries. However, a single piece, the smallest of those illustrated, is almost certainly genuine. Depicting 'Christ and the Miracle of Cana', and taking the form of a diminutive medallion, it is paralleled nearly exactly in the Vatican collection,<sup>25</sup> as well as on cut and incised vessel bases in the Museo Oliveriano in Pesaro<sup>26</sup> and the Vatican.<sup>27</sup> As it had not been recovered from the catacombs along with all the other known gold glasses of the time, the piece was mistakenly considered as a forgery by

contemporary 18th-century and later scholars alongside those larger, more obvious examples with which it was published. To my knowledge, no forgeries of gold glass diminutive medallions have ever been identified, and the piece was correctly published as a genuine example much later by Dalton in 1901.<sup>28</sup>

In the first half of the 19th century, individual examples of gold glass continued to be published in largely descriptive terms in catalogues of private collections and general accounts of Christian iconography and objects associated with the catacombs. Some of the more notable works include those of Jean Baptiste D'Agincourt and Louis Perret (published in French) and Wilhelm Röstel (published in German), which demonstrate an increasing awareness and interest in gold glass outside of Italy in accordance with the rising popularity of the Grand Tour.<sup>29</sup> However, in 1858 the Jesuit Father, Raffaele Garrucci, published the first major monograph devoted entirely to gold glass since that of Boldetti in 1720. In the same year, a few months prior to the first printing, Cardinal Nicholas Wiseman lectured on gold glass in Ireland. Wiseman drew heavily upon Garrucci's then unpublished notes. The following year, the complete set of Wiseman's sermons appeared in a published volume. The substantial section dedicated to gold glass with the unassuming title of 'Lecture in the rotundo' constituted the first scholarly account of gold glass to appear in English.<sup>30</sup> Subsequently, it has been largely overlooked, both as a result of its inconspicuous title and because it was entirely based on and thus immediately superseded by Garrucci's highly detailed work.

The first edition of Garrucci's *Vetri ornati di figure in oro*, which appeared in 1858, marked the earliest systematic and wide-ranging scholarly account of gold glass to appear in print, illustrating 340 examples in the form of line drawings to a far higher degree of accuracy than had previously been seen. An updated interpretation of the glasses was published in 1862 in response to Celestino Cavedoni's 1859 monograph on the same subject.<sup>31</sup> The volume was greatly expanded in a second edition of 1864 which catalogued a further 40 gold glasses. Each entry was accompanied by all the available contextual information and further arranged into loose groupings of iconographical subject matter.

Garrucci's groupings highlighted the overwhelming Christian nature of the iconography found on the surviving gold glasses. Principal amongst these were the paired portraits of both secular figures and saints crowned simultaneously by a central figure of Christ, and examples of scenes from the Old and New Testaments. However, Garrucci also incorporated a growing number of glasses with unmistakably Jewish and pagan or mythic iconography, as well as comparatively sizeable numbers of glasses with purely secular images. Predominant amongst these were recreational and sporting events, notably victorious charioteers, but also depictions of boxing matches and a single example with a figure interpreted as an actor. Also featured were examples apparently illustrating professions and scenes of domestic life, including breastfeeding and the education of children, albeit to a lesser extent.<sup>32</sup> However, despite the highly diverse nature of gold glass iconography, Garrucci nevertheless concluded that the

production of gold glasses was restricted to solely Christian communities.<sup>33</sup> Although he did not discuss technique specifically, Garrucci did inadvertently provide the first detailed description of brushed technique cobalt blue-backed portrait medallions. However, he dismissed them all as fakes and forgeries of the kind noted in the previous century by Caylus.<sup>34</sup> We now know that this was an error, and the early 20th-century scholarship and archaeological discoveries which established the brushed technique portrait medallions as unequivocally genuine will be discussed below.

Garrucci's account, like those that had preceded it, placed special emphasis upon the description and identification of gold glass iconography. In contrast to those before him, however, he also made some attempt to describe the morphological variations between different gold glass vessel types. For example, Garrucci differentiated between those cut and incised gold glasses that comprised of two layers of glass and those with three.<sup>35</sup> In the case of the latter, the gold leaf appeared fused between the middle and lowermost glass layers in every instance. The lowest glass layer of both the two and three layer examples took the form of a pad base, a disc of glass with manipulated 'downturned' edges forming, in most examples, an extremely low base ring. In addition to his descriptive material, Garrucci included a detailed interpretive account of chronology and function, an account that has been relied upon heavily by all subsequent scholars writing on the subject. Responding to the work of Buonarruoti, Garrucci argued for a 4th-century date with a *terminus ante quem* of around AD 380 for gold glass, a conclusion based, as with all preceding discussions, on iconographic style and orthography.<sup>36</sup> In his short paper of 1862 and the second edition of 1864, he countered the reassignment of a 3rd-century date made by his contemporary Cavedoni, highlighting the depiction of figures on gold glass whom he identified with those martyred during the early 4th-century persecutions of Diocletian.<sup>37</sup>

In 1851, just prior to the publication of Garrucci's volumes, Pope Pius IX established the *Pontificia Commissione di Archeologia Sacra*, charged with the protection of the catacombs and the objects recovered from them.<sup>38</sup> This commission instigated the first real process of scientific catacomb exploration for more than 200 years, bringing the activities of the *corpussantari* to a close. As a result, Giovanni Battista de Rossi's *La Roma sotterranea cristiana*, published in three volumes in 1864, 1867 and 1877, constituted the first methodological survey of the catacombs since that of Bosio.<sup>39</sup> Detailed accounts of cut and incised gold glass discovered by de Rossi were included, importantly described as being *in situ*. De Rossi supplemented these discoveries with a number of scholarly articles concerning gold glass.<sup>40</sup> In contrast to Garrucci, but employing the same evidence, he dated cut and incised gold glasses between the mid-3rd and early 4th centuries. He further argued that those glasses bearing the portraits of saints were used for the commemoration of martyrs, particularly of Sts Peter and Paul whom he described as appearing together most frequently. Garrucci supported this hypothesis by quoting the passage from *The Confessions* of St Augustine in which Augustine stated that his mother, Monica, took the same cup to use at multiple shrines

to different martyrs, implying that some of the faithful took more than one cup. By extension, Garrucci argued that perhaps, like many gold glasses, these cups bore effigies of the particular martyrs to be commemorated.<sup>41</sup> This conclusion has been widely and almost unquestioningly accepted in the subsequent literature.<sup>42</sup>

During the time of Garrucci's and de Rossi's publications in the third quarter of the 19th century, gold glass began for the first time to be excavated in relatively significant numbers outside Rome, principally in Cologne and the Rhine Valley. These pieces were published in a series of articles by Ernst Aus'm Weerth,<sup>43</sup> and included the diminutive medallion-studded bowl known as the St Severin bowl after the cemetery from which it was excavated. The bowl is now part of the British Museum's collection (**cat. no. 16**). Its discovery meant that gold glass diminutive medallions were identified henceforth as individual 'studs' from similar vessels. This repudiated the long-held assumption that they formed the bases of very small vessels, which were not freestanding and were intended to be placed in some sort of hollow base resembling an egg cup.<sup>44</sup> Despite this, Aus'm Weerth challenged the by now accepted notion that the majority of gold glasses were in fact the bases of larger vessels and instead argued that they were produced specifically to be inserted as medallions into cement.<sup>45</sup> His view was not, however, widely adopted by his contemporaries.

In the later years of the 19th century, a series of interpretive summaries appeared as chapters within larger works on the catacombs and their specifically Christian antiquities. Although in many places the authors came to their own conclusions, they still drew principally on the work of Garrucci and de Rossi. They also noted the presence of gold glass in Rhineland contexts. Among the more prominent accounts occurring in English to include substantial sections devoted to gold glass were those of the Reverends J.S. Northcote and W.R. Brownlow in their 1869 *Roma Sotterranea*, updated and expanded in two volumes in 1879, and the Reverend Churchill Babington's summary entry in William Smith and Samuel Cheetham's *Dictionary of Christian Antiquities* in 1876.<sup>46</sup> Between 1872 and 1880, Garrucci also published his lavishly illustrated six-volume *Storia della arte cristiana*, which included 307 gold glasses with overtly Christian iconography and a further eight with Jewish symbols.<sup>47</sup> These took into account gold glass discoveries both in Rome and the Cologne region since the publication of his 1864 monograph, but, crucially, did not include pieces with non-Christian or non-Jewish imagery. The appearance of gold glasses in sales catalogues also began during this period, notable examples being the volumes dealing with the sale of the Castellani and the Tyszkiewicz collections.<sup>48</sup>

Perhaps the most significant publication was Hermann Vopel's concise monograph *Die altchristlichen Goldgläser*, which dealt specifically with gold glass and updated the work of Garrucci.<sup>49</sup> Vopel included an extremely useful catalogue of all the known examples in public and private collections at the time of writing, noting almost 500 pieces and, for the first time, provided a detailed list of known forgeries.<sup>50</sup> Following Garrucci, this list included all identified examples of

brushed technique gold glass medallions. Vopel also attempted to update the distribution of gold glass findspots outside the catacombs of Rome and the environs of Cologne, noting other predominantly Italian contexts.<sup>51</sup> Illustrations in the volume were few, but for the first time took the form of photographs and depicted previously unpublished examples. Along with other gold glass types, Vopel introduced and discussed gilt glass trail gold glass vessels which had been recovered from the catacombs as well.<sup>52</sup> He also provided a short account of possible production methods specific to Late Antique gold glass based on the experiments of other contemporary authors and a highly detailed and scholarly overview of gold glass chronology.<sup>53</sup> Based on inscriptions relating to known 4th-century martyrs and other individuals, together with iconographic elements, Vopel attributed a general 4th-century date to gold glass. He also noted an elusive example 'as yet unpublished', and in fact otherwise unrecorded to this day, in the Museum of the Camposanto Teutonico, which apparently bore the inscription 'JVSTINIANVS SEMPER AVG', seemingly related to the 6th-century Emperor Justinian.<sup>54</sup> On the basis of this fragment, Vopel suggested that gold glass production continued into the 6th century.

In his description of the appearance of gold glass inserted into the walls of the catacombs, Vopel also countered Aus'm Weerth's assertion that gold glasses were produced from the outset as medallions, noting the presence of vessel foot-rings. Following Boldetti's 1720 report that he had found complete vessels affixed to the catacomb walls, Vopel presumed that in most cases, gold glasses were inserted into the catacomb plaster as complete vessels. He suggested that the vessel walls, protruding out from the plaster, had been subsequently and unintentionally broken away by contemporary visitors passing along the narrow passageways. According to Vopel, this explained why only the base-discs remain in fragmentary form, which in the absence of close examination had the appearance of being medallions.

Vopel's 1899 monograph was considered the standard work on gold glass well into the 20th century, and was heavily drawn upon by O.M. Dalton in his 1901 article, 'The gilded glasses of the catacombs'.<sup>55</sup> Based on the repertoire of subjects depicted on gold glasses, Dalton dated those with pagan and mythological images earliest to the 3rd and early 4th centuries, in other words prior to the recognition of the Christian church.<sup>56</sup> Those with Christian iconography he dated to the later 4th century, although following Vopel, he extended the period of gold glass production well into the 6th century. Such a long period of gold glass production enabled him to explain the presence of glasses with distinctly pagan and mythological iconography. These he interpreted as family heirlooms, gifts from pagan friends or the property of those who identified themselves with Christianity for political reasons whilst retaining as much of the old faith as possible.<sup>57</sup> Glasses of this nature had long been acknowledged, but had not been considered in serious discussion. Instead, gold glass had hitherto been given a largely Christian interpretation by scholars who also principally served as church ministers.

The early 20th century saw for the first time the widespread publication of gold glass by people other than



Plate 1 The Brescia medallion, lower arm of the cross of Desiderius, 3rd–4th century. Museo della Città, Santa Giulia, Brescia



Plate 2 A brushed technique medallion still *in situ* in the Catacomb of Panfilo, Rome, 3rd–4th century

those directly connected with the church. Museum catalogues including gold glass collections began to be published by curators and academics such as Dalton and Oliviero Iozzi, as were shorter articles reporting recent gold glass acquisitions by public institutions.<sup>58</sup> Brief catalogues of examples held in sizeable private collections were also produced.<sup>59</sup> Gold glass also appeared in substantial works of archaeology. Principal amongst these was Anton Kisa's posthumously published three-volume *Das Glas im Altertume* which traced glass and glassmaking from the Hellenistic era through to the early medieval period.<sup>60</sup> Kisa provided a detailed overview of gold glass chronology and function based on earlier scholarship, and suggested that separate workshops were responsible for producing gold glasses with Christian, Jewish and pagan subjects.<sup>61</sup> Following Kisa's theory that a Jewish gold glass workshop existed in Rome, M. Schwabe and A. Reifenberg argued for the Jewish interpretation of all gold glasses depicting Old Testament scenes, hitherto described as Christian, which was an interpretation supported by Frederic Neuberger in 1949.<sup>62</sup>

Other important contributions to scholarship included the publication of an extensive summary of gold glass scholarship under the entry 'Fonds de coupes' in Fernand Cabrol and Henri Leclercq's comprehensive *Dictionnaire d'archéologie chrétienne et de liturgie* in 1923.<sup>63</sup> Leclercq updated Vopel's catalogue, recording 512 gold glasses considered to be genuine, and developed a typological series consisting of eleven iconographic subjects: biblical subjects; Christ and the saints; various legends; inscriptions; pagan deities; secular subjects; male portraits; female portraits; portraits of couples and families; animals; and Jewish symbols. In a 1926 article devoted to the brushed technique gold glass known as the Brescia medallion (Pl. 1),<sup>64</sup> Fernand de Mély challenged the deeply ingrained opinion of Garrucci and Vopel that all examples of brushed technique gold glass were in fact forgeries.<sup>65</sup> The following year, de Mély's hypothesis was supported and further elaborated upon in two articles by different scholars.<sup>66</sup> A case for the Brescia medallion's

authenticity was argued for, not on the basis of its iconographic and orthographic similarity with pieces from Rome (a key reason for Garrucci's dismissal), but instead for its close similarity to the Fayoum mummy portraits from Egypt. Indeed, this comparison was given further credence by Walter Crum's assertion that the Greek inscription on the medallion was written in the Alexandrian dialect of Egypt.<sup>67</sup> De Mély noted that the medallion and its inscription had been reported as early as 1725, far too early for the idiosyncrasies of Graeco-Egyptian word endings to have been understood by forgers.<sup>68</sup>

Comparing the iconography of the Brescia medallion with other more closely dated objects from Egypt, Hayford Peirce then proposed that brushed technique medallions were produced in the early 3rd century, whilst de Mély himself advocated a more general 3rd-century date.<sup>69</sup> With the authenticity of the medallion more firmly established, Joseph Breck was prepared to propose a late 3rd to early 4th century date for all of the brushed technique cobalt blue-backed portrait medallions, some of which also had Greek inscriptions in the Alexandrian dialect.<sup>70</sup> Although considered genuine by the majority of scholars by this point, the unequivocal authenticity of these glasses was not fully established until 1941 when Gerhart Ladner discovered and published a photograph of one such medallion still *in situ*, where it remains to this day, impressed into the plaster sealing in an individual *loculus* in the Catacomb of Panfilo in Rome (Pl. 2).<sup>71</sup> Shortly after in 1942, Morey used the phrase 'brushed technique' to categorize this gold glass type, the iconography being produced through a series of small incisions undertaken with a gem cutter's precision and lending themselves to a chiaroscuro-like effect similar to that of a fine steel engraving simulating brush strokes.<sup>72</sup>

Charles Rufus Morey's major catalogue, *The Gold-Glass Collection of the Vatican Library*, recording 470 examples of gold glass in total, was posthumously published in 1959 under the direction of Dom Guy Ferrari, curator of the Vatican Library's copy of the Princeton Art Index.<sup>73</sup> Morey's

untimely death in 1955 had left the work unfinished, but it was decided that even without the general introduction intended to cover the manufacture, chronology, style and provenance of gold glass, the corpus should be published because of its value as source material. Morey's catalogue has formed the basis of every subsequent scholarly account of gold glass.

The catalogue included cut and incised technique vessel bases, diminutive medallions, gilt glass trail vessel bases and brushed technique medallions considered by Morey to be genuine. These glasses came not only from the Vatican collection, but also from 32 other major international museum collections. Each example was illustrated with a black and white photograph and a detailed description as well as identification of the iconography depicted. It is worth noting, however, that in many cases the quality of the photographs was not as good as Garrucci's line drawings. In a number of instances the photographs failed to convey the details of individual pieces, and they gave a very misleading impression of the physical nature of fragmentary gold glass. Furthermore, although this was apparently intentional, not all known gold glasses either from the Vatican collection or other museums were included in the final edited work drawn together from Morey's unfinished notes. Elements of the incomplete manuscript were included in the final publication, attached to the object descriptions prepared by Morey himself.<sup>74</sup> These primarily take the form of a rudimentary workshop categorization, based on both stylistic and physical characteristics, in which glasses with both pagan and Christian iconography were attributed to the same workshop, and a basic chronology. Morey's chronology was based purely on stylistic grounds, ranging from 'early' to 'late', drawn up relative to his highly subjective perception of the competence of the craftsman and the identification of, and increasing deterioration in, artistic quality evident on the later pieces.

Morey's catalogue remains the most comprehensive catalogue of gold glass hitherto published. It caused a huge upsurge in scholarly interest in gold glass. In 1962, Thea Haevernick revived Aus'm Weerth's 1878 hypothesis that all gold glasses were in fact medallions produced solely for insertion into the walls of the catacombs.<sup>75</sup> Haevernick argued that the craftsmen did not take the time to give a regular outer edge to the 'medallions', thus making them appear as broken vessel bases, as she believed that these edges were intended to be completely hidden in the mortar of the enclosing wall of the tomb niche. She also suggested that gold glass vessel foot-rings functioned only as frames for the images, although this was despite her opinion that the foot-rings were destined to be hidden from view once inserted into the plaster.<sup>76</sup> Josef Engemann effectively countered this hypothesis.<sup>77</sup> He argued that many gold glasses, specifically those depicting sports-related iconography, were unsuitable for an intended funerary function. He furthermore drew parallels with the sports-related iconography of contorniate medallions, coin-sized bronze medallions bearing an array of imagery struck by the official mint in Rome.<sup>78</sup> Andreas Alföldi had argued that contorniates were struck so that they could be freely

distributed as New Year gifts.<sup>79</sup> Engemann thus suggested a similar primary function for gold glasses. Based again upon the iconography of the gold glasses, Engemann pointed out some of the flaws in the workshop groups he had gleaned from Morey's manuscript, but did not offer his own classification. He did, however, isolate a distinct group of gold glasses with Jewish and Christian iconography which he regarded as the product of the same workshop on the basis of individual stylistic details including border type. He also refuted the Jewish interpretations of gold glasses with Old Testament iconography by Irmgard Schüller.<sup>80</sup>

In other areas of gold glass scholarship, Helga von Heintze argued on stylistic grounds for a 3rd-century date for gold glasses of the so-called 'brushed technique' in her consideration of the Brescia medallion, whilst she placed the 'cut and incised' type glasses into the first quarter of the 4th century and later.<sup>81</sup> Giuseppe Bovini's brief paper attempting to locate gold glass within a chronological sequence based on aspects of style, costume and hair treatment was updated and expanded upon by Franca Zanchi Roppo, who based her study upon the illustrated pieces in Morey's catalogue.<sup>82</sup> In 1969, she published a catalogue of gold glass in Italian collections, intending to fill some of the gaps in Morey's work including the publication of examples not featured in his catalogue.<sup>83</sup> However, only gold glasses with Christian iconography were included. The catalogue was thus the subject of a crushing review by Friedrich Deichmann, who lambasted Zanchi Roppo for not including gold glasses with non-Christian iconography and, in so doing, for giving a false picture of the gold glass corpus as a whole.<sup>84</sup> A further attempt at defining chronological and workshop groupings, based again upon iconography and perceived stylistic traits, was presented by Lucia Faedo in 1978.<sup>85</sup> Faedo also drew almost exclusively upon the illustrations provided in Morey's catalogue to draw his conclusions. However, neither the chronological or workshop categorization by Zanchi Roppo or Faedo has been accepted as reliable and a general 4th-century date has been applied to all gold glasses in subsequent publications.

From the late 1960s onwards, gold glass appeared increasingly in exhibitions and exhibition catalogues perhaps because of its aesthetically pleasing appearance. The most notable was possibly the *Age of Spirituality* exhibition held at the Metropolitan Museum of Art in New York in 1979, where 20 pieces were displayed and illustrated.<sup>86</sup> Examples have also been included in exhibitions dedicated to Roman glass, including *Glass of the Caesars* in London in 1987.<sup>87</sup> In many instances, the catalogue entries reproduce almost verbatim the descriptions published by Morey in 1959.

The study of late 19th-century gold glass reproductions marketed by Venetian glass workers has also received attention. This was first touched upon by Rosa Barovier and then again by Sidney Goldstein.<sup>88</sup> Later and more substantially, Renate Pillinger devoted an entire monograph to the subject, in which she concluded that the majority of brushed technique medallions were forgeries.<sup>89</sup> Late 19th-century gold glass reproductions were treated most thoroughly by Judy Rudoë, and six examples appeared in the catalogue of the exhibition *Reflecting Antiquity*.<sup>90</sup>



Scholarly articles on gold glass have continued to appear into the first decade of the 21st century. In 2000, Paola Filippini published a short descriptive account of gold glasses found *in situ* in the Catacomb of Novatianus in Rome.<sup>91</sup> However, these were not discussed in relation to other material or inscriptions found on the catacomb walls and her paper thus took the form of a simple catalogue and did not include any substantially new information. In the same year, Umberto Utro devoted a paper to gold glass diminutive medallions and their arrangement upon the walls of vessels to form sequences.<sup>92</sup> These illustrated biblical episodes are composed of a series of individual elements, each separate aspect occurring upon a different medallion. Utro went so far as to suggest possible sequences for a large number of medallions.<sup>93</sup> However, based almost entirely upon the glasses described and illustrated in Morey's catalogue, he misinterpreted the iconography of some medallions, leading to his presentation of incorrect sequences. Furthermore, his comparisons with other media were somewhat superficial, and as a result, episode sequences were not explored to their full extent. In 2004, Lucy Grig sought to link all instances of gold glasses bearing portraits of saints with the promotion of the cult of the saints by Pope Damasus in the later 4th century.<sup>94</sup> Most recently in 2006, Lucina Vattuone provided an additional brief and somewhat superficial overview of gold glass iconographical subjects, and in 2008, Hans-Jörg Nüsse made a further attempt to divide gold glass into workshop groups.<sup>95</sup> Nüsse, like Zanchi Roppo and Faedo before him, based his study upon the illustrations provided in Morey's catalogue, and his workshop groupings depend upon the presence of certain perceived stylistic traits in the iconographic depictions.<sup>96</sup>

From this account of the different types of scholarship involved in the study of gold glass, it is apparent that the term 'gold glass' has been almost universally applied to all objects found principally in the Late Roman catacombs where gold leaf has been sandwiched, or was perceived to have originally been sandwiched, between a double layer of glass. From its inception, gold glass scholarship has focused overwhelmingly upon iconography, with little attention paid to the physical nature of the objects themselves or the contexts from which they were recovered. Up until the early years of the 20th century, accounts of gold glass were almost exclusively compiled by church ministers and, in the majority of cases, those directly associated with the Catholic Church. Although distinctly pagan, mythic, secular and Jewish gold glasses were noted and in most instances meticulously described by these authorities, the vast majority of scholarly attention has been directed at examples with Christian iconography, the largest recorded category. Indeed, Late Antique gold glass is still widely referred to in scholarly circles as 'Early Christian gold glass', implying a faith-based coherence. Despite the appearance of a large number of shorter works concerning gold glass from the 20th century and to the present day, the standard reference works, Dalton's account of 1901 and Morey's catalogue of 1959, from which almost all conclusions appearing in more recent scholarship have unquestioningly originated, derive extensively from conclusions drawn by works of the 18th and 19th centuries. Principal amongst these are the volumes of

the Jesuit Father Raffaele Garrucci, and to a slightly lesser extent, the 1716 monograph of papal official Filippo Buonarruoti.

## Notes

- 1 Bosio 1632–4, 126, 197, 509.
- 2 See for example Stern 2001, 139.
- 3 Aringhi 1659, vol. 2, 377.
- 4 Osborne and Claridge 1998, 10, 199–255. The sections including the gold glasses were compiled by Carlo Antonio in the 1670–80s.
- 5 Fabretti 1683, 340, and *idem* 1699, 593.
- 6 Bosio 1632–4, 126.
- 7 Ciampini 1691, 16–23.
- 8 *Ibid.*, 16.
- 9 Bosio 1632–4, 509, no. VII.
- 10 Aringhi 1659, vol. 2, 122.
- 11 *Ibid.*
- 12 Ferretto 1942, 201–68; Testini 1966, 21–6; De Rossi-Ferrua 1944, XVIII–XIX; Nicolai 2002, 12.
- 13 For mistaken interpretations see for example Ciampini 1691, 16.
- 14 Buonarruoti 1716, pls II.5 and II.1–2 (for Jewish imagery), pl. XXVII.2 (pagan imagery) and pl. XXVII.1 (secular sports).
- 15 *Ibid.*, 14.
- 16 Boldetti 1720, 191–2, 194, 197, 200–2, 205, 208, 212, 216.
- 17 Dalton 1901b, 253; Osborne and Claridge 1998, 199.
- 18 Boldetti 1720, 191, cap. XXXIX; reproduced here as **Pl. 10**.
- 19 *Ibid.*, 188–91.
- 20 For recent accounts of these associated objects see: Salvetti 1978; De Santis 1994.
- 21 Baumgarten 1912.
- 22 Caylus 1759, vol. 3, 193–205.
- 23 *Ibid.*, 195.
- 24 D'Orville 1764, 123A; reproduced by Pillinger 1984, pl. 25, fig. 56.
- 25 Inv. no. 670 (ex-493): illustrated by Morey 1959, pl. XXI, no. 160.
- 26 *Ibid.*, XXVIII, no. 285.
- 27 Inv. no. 446: Morey 1959, pl. XII, no. 73.
- 28 Dalton 1901b, 251.
- 29 D'Agincourt 1823; Perret 1851, vol. 1; Röstell 1830.
- 30 Wiseman 1859, 164–215.
- 31 Cavedoni 1859.
- 32 *Ibid.*, pls XXXII.1 and XXXII.2 respectively.
- 33 Garrucci 1864.
- 34 Including the now-celebrated Brescia medallion: Morey 1959, 42, pl. XXV, no. 237; Caylus 1759, vol. 3, 95.
- 35 See for example: Garrucci 1864, pls 39.8a–b.
- 36 *Ibid.*, 9.
- 37 Garrucci 1862; *idem* 1864, 8–9; Cavedoni 1859, 164.
- 38 Ferrua 1968, 251–78.
- 39 De Rossi 1864–77.
- 40 De Rossi 1882, 121–58; *idem* 1884a, 141–63; *idem* 1884b, 439–55.
- 41 St Augustine, *Confessions* 6.2; Garrucci 1864, XV; de Rossi quoted in Northcote and Brownlow 1879, 309.
- 42 See Auth 1979, 37; Grig 2004, 216.
- 43 Aus'm Weerth 1864, 119–28; *idem* 1878, 99–114; *idem* 1881, 119–33.
- 44 Wiseman 1859, 168.
- 45 Aus'm Weerth 1864, 119.
- 46 Northcote and Brownlow 1879, 275–94, 298–324; Babington 1876, 730–5.
- 47 Garrucci 1876, vol. 3, pls 168–203; Garrucci 1880, vol. 6, pl. 409.
- 48 Hoffmann 1884, 62, pl. 428; Froehner 1898, 35–6, pl. VI, nos 102–5.
- 49 Vopel 1899.
- 50 *Ibid.*, 95–114.
- 51 *Ibid.*, 20.
- 52 *Ibid.*, 85, fig. 9.
- 53 *Ibid.*, 17–32.
- 54 *Ibid.*, 32.
- 55 Dalton 1901b, 225–53.
- 56 *Ibid.*
- 57 *Ibid.*, 235.
- 58 *Ibid.*; Iozzi 1902. See Avery 1921, 170–5; Alexander 1931, 288–9.
- 59 See Webster 1929, 150–4.

- 60 Kisa 1908: the section on gold glass appears in vol. 3 at 867–94.  
 61 *Ibid.*, vol. 3, 807.  
 62 Schwabe and Reifenberg 1935, 341; Neuberger 1949.  
 63 Leclercq 1923, 1819–59.  
 64 Museo Cristiano in Brescia: Morey 1959, 42, pl. XXV, no. 237.  
 65 De Mély 1926, 1–9.  
 66 Peirce 1927, 1–3; Breck 1927, 352–6.  
 67 Breck 1927, 353.  
 68 De Mély 1926, 2; and also see, Breck 1927.  
 69 Peirce 1927, 1–3.  
 70 E.g. Metropolitan Museum of Art, inv. no. 1926, 26.258 (Fletcher Fund); illustrated by Morey 1959, no. 454; Harden 1987, no. 153. Breck 1927, 355.  
 71 Ladner 1941, 19 and 36, no. 27, fig. 5; illustrated by Morey 1959, no. 222.  
 72 Morey 1942, 127.  
 73 Morey 1959.  
 74 The manuscript is still held in the Manuscripts Division of Princeton University Library (ref: Co511).  
 75 Haevernick 1962, 58–61.  
 76 As noted by Harden 1987, 266.  
 77 Engemann 1968–9, 7–25.  
 78 Alföldi 1943, 9.  
 79 *Ibid.*, 12.  
 80 Schüler 1966, 48–61.  
 81 Heintze 1964, 41–52.  
 82 Bovini 1950; Zanchi Roppo 1967.  
 83 Zanchi Roppo 1969.  
 84 Deichmann 1971.  
 85 Faedo 1978.  
 86 Weitzmann 1979, nos 79, 95, 96, 212, 233, 261, 264, 265, 347, 348, 377, 382, 388, 396, 472, 503, 507, 508, 510 and 511.  
 87 Harden 1987, nos 152–61.  
 88 Barovier 1974, 113–15; Goldstein 1977, 59.  
 89 Pillinger 1984.  
 90 Rudoe 2002, 305–14; *eadem* 2003, 220–5; Whitehouse 2007, nos 52–7.  
 91 Filippini 2000, 126–41.  
 92 Utro 2000.  
 93 *Ibid.*, 66–83.  
 94 Grig 2004.  
 95 Vattuone 2006, 749–65; Nüsse 2008.  
 96 Nüsse 2008, 252.



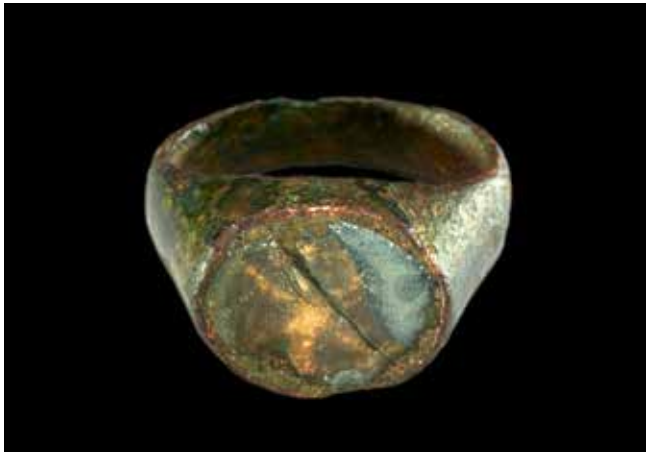
## Chapter 2

# A History of the British Museum's Collection of Gold Glass

The British Museum's collection of gold glass incorporates 55 pieces of Late Antique gold glass, which have previously been included in four catalogues raisonnés of gold glass. The earliest publication was by Garrucci in his 1858 monograph on gold glass, which illustrated pieces both in the collection at that time and some of which were acquired at a later date.<sup>1</sup> More were included in the second edition in 1864, and those of an overtly Christian or Jewish nature were added in Garrucci's 1872–80 work. Iozzi, however, was the first to deal specifically with the gold glass collection of the British Museum, although he certainly never examined the collection first hand.<sup>2</sup> His work is exclusively drawn from that of Garrucci and is therefore incomplete. Although published in 1900, it lists only the 33 pieces specifically stated by Garrucci as being in the Museum's collection, and excludes those recorded by Garrucci as being in other collections at the time of his publication, but which had entered the collection by this later date. Iozzi reproduced both Garrucci's descriptive text and line drawings, the former almost verbatim. To the drawings he added a degree of colour. However, because his illustrations were based upon black and white line drawings and not the original objects, the red and white enamel details often present upon gold glasses were missed by Iozzi and thus not reproduced.<sup>3</sup> Furthermore, in a number of examples, colour intended to represent gold leaf was shown applied to the wrong areas, notably where he took the circular foot-ring visible through the vessel base as forming a part of the gold leaf iconography.<sup>4</sup>

Following Garrucci, Iozzi also mistakenly attributed four diminutive medallions to the British Museum's collection.<sup>5</sup> Garrucci had described a medallion with the figure of Eve as having previously been in Urbania, but was now part of the Museum's collection.<sup>6</sup> The medallion is now in fact in the collection of the Corning Museum of Glass, New York, having previously been in the Sangiorgi Collection.<sup>7</sup> Prior to this it had been part of Count Matarozzi's collection in Urbania, although Matarozzi was not mentioned specifically by Garrucci in this instance, as he was elsewhere in Garrucci's discussion of other pieces formerly in the Count's collection. Knowing that the bulk of the Matarozzi gold glasses were purchased by the British Museum in 1863, Garrucci may have mistakenly assumed that this piece was also part of the transaction and labelled it accordingly. Iozzi also copied Garrucci in attributing a medallion that is actually part of the Vatican Museums collection to the British Museum.<sup>8</sup> Two further medallions were included by Iozzi as part of the Museum's collection, although both are in the Louvre in Paris; in 1825 they were recorded as being in the Durand Collection.<sup>9</sup> As they were not included by Garrucci as part of the British Museum's collection, it is difficult to see why Iozzi should have included them.

The third catalogue is that of O.M. Dalton, included within his larger 1901 volume *Catalogue of Early Christian Antiquities... in the British Museum*.<sup>10</sup> This has remained the standard reference work concerning the Museum's collection. All of the Museum's holdings, bar one brushed technique medallion (**cat. no. 30**), were included in his catalogue. This medallion was acquired in 1890 and initially registered in the Museum's Department of Medieval and



**Plate 3 Copper alloy ring with gilt glass *chi-rho*, 4th century. British Museum, London, BEP 1948,1006.1**

Later Antiquities. However, in the acquisition register, it is accompanied by a handwritten note stating that it had been transferred to the Department of Greek and Roman Antiquities, where it remains today. Although the note is undated, it would appear to date to the turn of the 19th century. It is therefore possible that it had been transferred prior to the writing of Dalton's catalogue and, as such, remained unknown to him. Dalton's descriptive catalogue entries are accompanied in the majority of cases by a clear collotype photograph. The entries are entirely of an art-historical nature, noting only brief details of composition, costume and subject matter and making little or no mention of the physical state of the glass. Inscriptions, where appropriate, are seldom presented as full transcriptions in Latin, and are even less frequently provided in translation. Only sporadic iconographic comparisons with other gold glasses are given and the basic details of object acquisition are absent in the majority of cases.

Dalton's text was repeated almost verbatim in the relevant sections of Morey's 1959 catalogue of gold glass in the Vatican and other collections.<sup>11</sup> Translations of inscriptions into English were again not included, although this may well have been the result of Morey's untimely death. Like Dalton, Morey also excluded the brushed technique medallion in the Department of Greek and Roman Antiquities, despite including all the other brushed technique pieces known to him from other collections. In addition to the gold glass catalogued by Dalton, Morey included a single piece that he described as a 'gold glass gem', set in the bezel of a ring.<sup>12</sup> This ring was acquired by the British Museum in 1948 from the Austrian collector Dr J.H. Jantzen.<sup>13</sup> Upon close examination, presumably not undertaken by Morey, it is clear that the piece does not belong to the sandwich gold glass category. Instead, the *chi-rho* iconography is incised upon the bronze bezel base of the ring, gilded and overlain with a single layer of glass (**Pl. 3**). As a result, it is not discussed further in this catalogue.

The Museum's gold glass pieces have also been included in various exhibition catalogues. In 1968, six of the best preserved gold glasses from the collection were included in the *Masterpieces of Glass* exhibition in London and in the accompanying published catalogue.<sup>14</sup> Like all preceding

scholarship, however, each entry was purely descriptive, although translations of the inscriptions into English were, for the first time, provided. Glasses from the British Museum's collection have since appeared in various exhibitions and catalogues focusing upon Roman glass including *Glass of the Caesars* in 1987, where the Museum's brushed technique medallion was published for the first time.<sup>15</sup> In the majority of cases, the pieces selected for display are the same well-preserved, aesthetically pleasing examples that were included in *Masterpieces of Glass*.

Other than as catalogue entries, the publication of the Museum's gold glasses has been limited. Alan Cameron published a short article focusing on the re-reading of the inscription upon a single example (**cat. no. 35**) and made a convincing case for identifying the male bust depicted as Memmius Vitrasius Orfitus, urban prefect of Rome in the AD 350s.<sup>16</sup> Other British Museum gold glasses have been used more recently to illustrate some of the more general articles noted already,<sup>17</sup> and are often used as 'window dressing' in general volumes focused on Late Antiquity and Early Christianity.<sup>18</sup>

### The British Museum's collection

The Museum's collection of gold glass was principally acquired between 1854 and 1898. Of the 55 genuine examples in the collection, rudimentary details concerning from whom, when and how the Museum acquired them are preserved within the Museum's archives for 46 of the pieces. Substantial archival work in Italy and throughout the rest of Europe looking for details of the Museum benefactors is unfortunately beyond the scope of this study. A comprehensive examination of the relevant aspects of the lives and collecting tendencies of the nine individuals from whom the Museum is recorded to have acquired its gold glass collection is thus impossible. However, the information available from British archives and relevant publications is presented below, chronologically by acquisition, allowing some inferences to be made on where gold glasses were originally procured, what circumstances led to their acquisition by the British Museum and the changing nature of gold glass collectors and collecting in the 19th century.

Each collection is discussed chronologically by date of acquisition under the subheading of each benefactor. Objects registered with the British Museum prefix OA (standing for 'Old Acquisition') have no recorded acquisition details. The provenance of these glasses is, however, speculated upon here. Finally, I discuss the Museum's acquisition of fake and reproduction gold glass.

### The 1854 Bunsen Collection (cat. nos 4, 15, 20, 22, 24, 26, 34, 44, 50–1)

The Bunsen Collection was the first acquired by the British Museum that included examples of Late Antique gold glass.<sup>19</sup> The ten pieces comprise the second largest acquisition of gold glass in the Museum. Reported as 'Lot 5, three cases of Early Christian glass', the objects were purchased for the sum of £30 in July 1854 through George Bunsen. They are recorded in the Museum archive as originating from the collection of 'Chevalier Bunsen'.

Born into relative poverty, Christian Charles Josias, Baron von Bunsen (1791–1860), better known as Chevalier Bunsen in Britain, was a German diplomat and scholar. In 1857 he received a life peerage with the title of Baron in recognition of his diplomatic services to Prussia. Catching the eye of the noted diplomat and classical scholar Barthold George Niebuhr in 1815, Bunsen was made in 1817 Niebuhr's secretary on his appointment as Prussian envoy to the papal court.<sup>20</sup> Aside from his official duties, during his lengthy period in Italy between 1819 and 1838 Bunsen engaged himself feverishly in the study of antiquities and biblical and other literary scholarship. Despite the fact that his memoirs (published posthumously by his wife) made no mention of his collection of gold glass and other objects acquired by the British Museum during his lifetime, Bunsen appears in them as an avid collector of antiquities. Travelling widely throughout Italy in order to acquire them, Bunsen was often under commission from the Prussian Museum in Berlin.<sup>21</sup> It is highly likely that he obtained his entire gold glass collection during his time in Rome and Italy.

In July 1817, Bunsen married Frances Waddington, eldest daughter and co-heiress of Benjamin Waddington of Llanover, Monmouthshire. Following his departure from Rome in 1838, and after a brief spell as the Prussian ambassador to Switzerland from 1839–41, Bunsen came to England where he spent the rest of his official life, becoming well acquainted with the British Museum during the first few months of his residency.<sup>22</sup> Bunsen resigned from his post as Prussian ambassador to Great Britain over Prussia's policy of 'benevolent neutrality' during the Crimean War in April 1854. His memoirs for this year reveal his increasing disillusionment with the intellectual and political state of Germany and it is thus significant in this context that his collection of gold glass and other antiquities was acquired by the British Museum in July of the same year.<sup>23</sup> The artefacts acquired by the British Museum are of a limited value compared with those which Bunsen is recorded to have purchased for the Prussian Museum in Berlin during his travels in Italy; indeed much of the gold glass is fragmentary. It is therefore plausible that they represent a smaller personal collection.

Responsible for selling the collection to the British Museum, George Bunsen (1824–96) was the fourth son of Chevalier Bunsen who, at the time the purchase was made, was in Charlottenberg (near Heidelberg, Germany) engaged upon Christian literary study. The Museum was, however, an obvious choice for the collection because of its long acquaintance with Bunsen, his firmly established English connections and Bunsen's own current disillusionment with Germany. No record of this transaction appears within the memoirs of Bunsen himself. However, contained within the British Museum's central archive is a letter dated 2 June 1854 offering the collection for sale, which clearly declares that George Bunsen was acting under direction from his father. The gold glass fragments are specifically stated as having been retrieved from the Roman catacombs. Unfortunately no further contextual detail is recorded. Further collections of antiquities were offered by Bunsen on two separate occasions during the period of this acquisition but were, in both instances, declined by the Museum.<sup>24</sup>

### The 1856 Hamilton Collection (cat. no. 1)

The Hamilton Collection of 29 Early Christian objects includes a single example of Late Antique gold glass.<sup>25</sup> The collection was purchased in April 1856 from Dr O.M. Markham for the sum of £100 and is clearly recorded in the Museum's acquisition register as having come from the collection of the Abbé Hamilton. In Dalton's 1901 catalogue, the collection was wrongly described as the 'Hamilton Palace Collection', which refers instead to the extensive collection belonging to Abbé Hamilton's namesake, the Scottish politician and collector Alexander Hamilton, 10th Duke of Hamilton, 7th Duke of Brandon, who also donated to the British Museum.<sup>26</sup>

Abbé James Hamilton is an elusive figure amongst 19th-century antiquarians. Jeffrey Spier is of the opinion that Hamilton was one of the foremost gem collectors of the period.<sup>27</sup> However, based on a sizeable collection of letters held in the Scots College archive in Rome, Paul Corby Finney provides the best, although unavoidably incomplete, biography available to date, reaching the rather different conclusion that Hamilton was in fact a relatively 'minor player'.<sup>28</sup> According to Finney, the Hamilton family were prosperous and respected members of Edinburgh's late 18th- and early 19th-century Scottish Anglican middle class. Born in 1816, at the age of 13 James Hamilton was sent to Eton in 1829 by his father who, like his father before him, was Professor of Midwifery at the University of Edinburgh. When he was 16, however, James left Eton and in 1841 at the age of 25 appears to have resurfaced in Rome with the title of 'Abbé'. Finney reasonably speculates that he had converted to Roman Catholicism and was ordained as a priest in Paris, where he is likely to have developed his interest in medieval art.<sup>29</sup>

Hamilton travelled widely throughout Italy and Sicily during his lifetime, but also went as far afield as Timbuktu, Cairo, Damascus, Aleppo, Beirut, Istanbul, Stuttgart, Rattisbon, Munich and Malta. Evidence concerning his collection of antiquities, however, remains extremely thin. Before its entry into the British Museum, the single gold glass fragment was published in Perret's six-volume work on the catacombs of Rome and thus provides a possible provenance.<sup>30</sup> Predominantly a collector of gemstones, it is possible that Hamilton was drawn to purchasing this single example because of its small size and gem-like qualities. It should also be noted that Hamilton was a correspondent of Cardinal Wiseman, who was well acquainted with the gold glass scholar Father Garrucci, and later lectured on the subject during his tour in Ireland.<sup>31</sup>

Hamilton had been in correspondence with and given first refusal to the British Museum concerning a number of antiquities prior to the 1856 acquisition.<sup>32</sup> Finney identifies the Dr Markham recorded in the acquisition records for the 1856 purchase as Dr William Orlando Markham, who had studied French surgical procedures at Edinburgh University with distinction, and who may well have been a student of Abbé Hamilton's father.<sup>33</sup> At the time the purchase was made, Markham was practising medicine in London. Unfortunately no correspondence relating to the acquisition survives within the Museum's archive. Finney, however, conjectures that Markham was on good personal terms with



**Plate 4 Gold glass portrait medallion, 3rd–4th century. Victoria & Albert Museum, London, inv. no. 1052.1868**

the Hamilton family and had either become the owner of these objects (himself possessing more than adequate funds) or was acting on behalf of the females of the Hamilton family after the death of Abbé Hamilton himself, the date of which is unknown.<sup>34</sup>

#### **The 1859 Robinson Collection (cat. nos 14, 32–3, 45, 49)**

The Robinson Collection of five gold glass pieces was the first British Museum acquisition to consist solely of gold glass.<sup>35</sup> The collection is recorded in the British Museum register for 1859 as having been presented by J.C. Robinson Esq. in June 1859 with the information that they had been obtained in Rome from the antiquities dealer Baseggio, also mentioned in Garrucci's entries for some of the objects in this collection.

Born into a middle class family, John Charles Robinson (1824–1913) was first a student of architecture, and his original training undoubtedly contributed to the very broad understanding of the arts that he was to develop.<sup>36</sup> As a young man, Robinson had found that his real interest lay in painting and in 1844 he went to study art in Paris. He continued to paint and exhibit his work as late as 1881, but was soon forced to find other ways of supplementing his income, spending a number of years teaching and producing reports for the Schools of Design in London concerning the teaching of art in Paris. It was as a result of this work that in 1853 Robinson came to be employed by the Museum of Ornamental Art at Marlborough House in London, which would shortly move to South Kensington and is now the Victoria & Albert Museum.

Throughout his time at the South Kensington Museum (1853–67), Robinson was engaged upon the acquisition of antiquities, predominantly under government sponsorship. Multiple trips to Paris and Rome, during which Robinson procured a large number of relatively inexpensive items, are recorded throughout the 1850s. It is not certain exactly when between 1853 and 1859 Robinson acquired the gold glass

now in the British Museum. The Robinson gold glasses are all of a fragmentary nature and not, by the standards of the time, 'inclusive of any remarkable examples'.<sup>37</sup> They were therefore most likely purchased privately by Robinson who, given his background, finances and position within the Museum, did not possess the means to purchase more complete examples in a greater state of preservation.<sup>38</sup> Robinson's apparent deep feeling of resentment over his position in the South Kensington Museum reached a climax in 1860. Refusing to keep an official diary of his activities, he was told he would have to resign. Robinson did not resign, nor did he complete the diary. It is quite possible that this growing antipathy had led a few months earlier to Robinson's decision to make a gift of the gold glass in his possession to the British Museum rather than to the South Kensington Museum. Nevertheless, it is also equally if not more plausible that Robinson's gold glass fragments were not of the artistic standard demanded by the collecting policy of the South Kensington Museum at the time. Indeed, in 1863, the museum acquired an exemplary gold glass diminutive medallion, and in 1868 an extremely fine brushed technique gold glass portrait medallion (Pl. 4).<sup>39</sup>

#### **The 1863 Matarozzi Collection (cat. nos 5, 9–13, 19, 21, 23, 27–9, 35–6, 38–9, 40)**

The Matarozzi Collection consists solely of 17 gold glass pieces, most of which are of the highest state of preservation and include a number bearing rare and occasionally exceptional iconographic elements.<sup>40</sup> The collection was acquired in January 1863, purchased by the Museum for an unknown sum from an individual recorded in the acquisition register as Signor Mosca, and accompanied by the information that they had once belonged to Count Matarozzi of Urbania.

In the absence of archival study, extremely little is known about Matarozzi, including his full name, with the exception that he resided at Castel Durante in Urbania.<sup>41</sup> In A.W. Franks's article relating to the collection's acquisition, no details regarding Matarozzi or the collection history were given; instead, Franks concentrated on a detailed description of each piece.<sup>42</sup> The assumption that Matarozzi and the Matarozzi dynasty were avid collectors of art can, however, be in part deduced from Matarozzi's collection of gold glass being the largest in private hands. By the time Garrucci's initial study was published in 1858, the 'Counts Matarozzi' were recorded as being in possession of 17 pieces, whilst their nearest rival, Francesco Depoletti of Rome, had only four.

The 'Catalogue des Peintures' published in Passavant and Jacob's 1860 monograph *Raphael d'Urbain et son père Giovanni Santi* noted a painting of the Madonna that had been presented to the Matarozzi family by Raphael's father, Giovanni Santi, for the chapel of Castel Durante.<sup>43</sup> The catalogue stated that the death of Count Matarozzi in 1835 led to a dispute between three rival claimants to the title. The painting in question was thus divided into three portions. The middle part was accorded to Madame Maddalena Matarozzi Batelli in Fossombrone, a second piece went to M. Leonardi Matarozzi Secondini in Pesaro and the third was retained in Urbania. The precise spelling of the surname 'Matarozzi' by each of the three reported

claimants differs slightly in the published account. Although the gold glass collection is not mentioned in this passage, the division of the art collection between rival claimants after 1835 could account for its attribution by both Garrucci in 1858 and Franks in 1864 to the 'Counts' Matarozzi. It is interesting to note that the Matarozzi gold glasses were acquired by the British Museum at approximately the same time as the painting of the Virgin was acquired in its entirety by a museum in Berlin in the late 1850s. It is possible that almost 30 years after the original dispute, some sort of agreement had been reached, or perhaps the entire collection for some as yet unknown reason had to be sold.

The memoirs of Count Tyszkiewicz, from whom the British Museum acquired a further two pieces of gold glass in 1898, made a notable mention of the sale of gold glass to England in the 1860s:

... in the Via del Babuino lived old Capobianchi. He never had a large number of works of art at once, but all were good, and therefore sold rapidly. One day, while travelling in Sicily, he had the good fortune to acquire a quantity of glass cups of the Early Christian era, ornamented between two thicknesses of glass with gilded subjects and inscriptions. The descriptions of these glasses were published by Father Garrucci and [the glasses] sent to England, where, considering the period they fetched a good price. Today, glasses so rare and beautiful would have raised thrice the sum, and few museums possess more than a few scattered specimens.<sup>44</sup>

It is tempting to speculate that Tyszkiewicz's story relates to the Matarozzi group.<sup>45</sup> Indeed, the Matarozzi group is the only gold glass collection to number 17 pieces, and to have been acquired by a museum in England in the 1860s. Furthermore, as noted above the gold glasses are in an exceptional state of preservation and were all published by Garrucci.<sup>46</sup> The acquisition of the Matarozzi gold glasses in Sicily is intriguing as all three claimants to the Matarozzi title appear to have resided in northern Italy, within a reasonable distance from Urbina. No trace of Signor Mosca has been recorded other than in the British Museum acquisition register.

### **The 1868 and 1870 Slade Collection (cat. nos 17, 31, 46, 52)**

The Slade Collection of 944 pieces of glass and numerous other items included three gold glasses. It was originally a bequest in 1868 to the British Museum in the will of Sir Felix Slade. In 1870, a further example of gold glass was presented to the Museum by 'the executors of Felix Slade Esq.' as part of an assortment of 13 items purchased by them for the sum of £250 on Slade's death.

Sir Felix Slade (1788–1868) was the youngest son of Robert Slade (d. 1835). His father was a landowner and proctor in Doctors' Commons (a society of lawyers practising civil law in London), later becoming deputy lieutenant for Surrey. His mother Eliza was the daughter of Edward Foxcroft of Halsteads, Thornton-in-Lonsdale, Yorkshire. After the death of his eldest brother in 1858, Felix inherited both Halsteads and the whole of his father's considerable estate. Taking no part in public life, he never married and instead devoted himself to the legal profession and collecting. His wide circle of friends included Sir Augustus Wollaston Franks of the British Museum, whom

he may have met in 1850 when lending items to the Medieval Exhibition at the Society of Arts, of which Franks was secretary.<sup>47</sup>

Slade's predominant collecting interests were prints and glass, apparently spending some £8,000 on the latter. His glass collection was catalogued and lavishly published in 1871.<sup>48</sup> He lent generously to many mid-19th-century exhibitions and gave specific antiquities to the British Museum during his lifetime. These included items such as the 'sword of Tiberius', and were the type of gift available only to a man of very substantial means.<sup>49</sup> The gold glass from the Slade Collection is, in accordance with most 19th-century collections, largely without details of acquisition. The large gilded plaque, more commonly known as the St Ursula bowl (**cat. no. 17**), however, is recorded as having been acquired by Slade from the Herstatt Collection in Germany. Precise details of the acquisition are unrecorded, although the Herstatt Collection itself was described by Düntzer in 1867.<sup>50</sup>

### **The 1878 Meyrick Collection (cat. no. 6)**

The 686 artefacts presented to the British Museum by Major-General Augustus Meyrick, which included the residue of the earlier Meyrick-Douce Collection, include a single gold glass fragment. Meyrick was the second cousin and heir of the antiquary Sir Samuel Rush Meyrick (1783–1848), inheriting the substantial collection of antiquities that had belonged to the latter.

Samuel Rush Meyrick practised as an advocate in the ecclesiastical and admiralty courts until 1823 when he devoted the rest of his life to antiquities and collecting, publishing widely, particularly in the field of arms and armour.<sup>51</sup> In 1834, the antiquary Francis Douce (1757–1834), Keeper of the Department of Manuscripts at the British Museum, bequeathed Meyrick a part of his collection of antiquities, which Meyrick published as 'A Catalogue of the Doucean Museum' in the *Gentleman's Magazine* of 1836.<sup>52</sup> Although the gold glass fragment is not noted specifically, Meyrick does record 'several specimens of Roman glass' in the collection.<sup>53</sup> The gold glass exists only as a small fragment, and therefore may not have warranted detailed mention in the catalogue. The motive behind Douce's various collections was to illustrate the manners, customs and beliefs (especially those of the lower classes) of all periods.<sup>54</sup> In view of Meyrick's primary interest in arms and armour, it is much more likely that the gold glass fragment, now in the British Museum, originated from the collection of Francis Douce.

The South Kensington Museum failed to purchase the entire collection when it was offered to them for £50,000. In 1871, Augustus Meyrick offered the entire collection for auction. The majority of the collection was purchased by the Paris dealer and collector Frederic Spitzer. The items that did not sell, including the gold glass fragment, were later presented to the British Museum.

### **The 1881, 1886 and 1893 Franks Collection (cat. nos 7–8, 16, 53–4)**

The Franks Collection consists of five gold glasses from three separate acquisitions in 1881, 1886 and 1893. The gold glass





**Plate 5 Gold glass portrait medallion, 3rd century. Corning Museum of Glass, New York, inv. no. 90.1.3. Purchased with assistance of the Clara S. Peck Foundation**

from the 1881 acquisition was one of three objects purchased by the British Museum through Augustus Wollaston Franks from the sale of the collection of the German antiquarian Karl Disch in Cologne on 16 May 1881.<sup>55</sup> The glass, more commonly known as the St Severin bowl (**cat. no. 16**), was unique in being a large portion of a vessel wall studded with numerous diminutive medallions. The full amount Franks paid for it is recorded by Aus'm Weerth as the sizeable sum of 6,400 marks.<sup>56</sup>

The 1886 acquisition of 336 assorted objects was presented by Franks to the Museum from the collection formed by his friend and brother-in-law, Alexander Nesbitt (1817–86), who had died childless in the same year.<sup>57</sup> These included three small gold glass fragments (**cat. nos 7, 53–4**). Nesbitt, the heir to a considerable family fortune, was an amateur enthusiast of medieval art and an avid collector of ancient glass.<sup>58</sup> In collaboration with Franks, he published the Slade Collection of ancient glass in 1871 after its entry into the British Museum.<sup>59</sup> Nesbitt's scholarly preoccupations entailed extensive travels abroad. This included a stay of four months in Rome during the winter of 1858–9 for the purposes of study and it is tempting to suggest that it was during this trip that he acquired the gold glass fragments. Indeed, the British Museum acquisition register for this collection notes 'many pieces originally purchased from Rome', although no details of specific objects and prices are given. However, in his catalogue, Dalton illustrated gilded paper mounts, which no longer survive, as surrounding two of the gold glasses (**cat. nos 53–4**).<sup>60</sup> Mounts of this type were used by antiquities dealers in Rome between approximately 1860 and 1920.<sup>61</sup>

The 1893 acquisition of 184 objects was presented to the British Museum by Franks from his own personal collection.<sup>62</sup> This included a single piece of gold glass (**cat. no. 8**) which the British Museum register states as coming from Rome.

Sir Augustus Wollaston Franks (1826–97) became the Museum's Deputy Keeper of Antiquities in 1851. He has often been described as the 'second founder of the British

Museum' and was the best-known antiquary of his day.<sup>63</sup> Although an employee, Franks poured his vast private fortune into the Museum, donating over 7,000 objects in addition to a large number of items bought initially by him and subsequently purchased from him by the Museum itself.<sup>64</sup> Franks also played an instrumental role in the acquisition of medieval antiquities, the category to which Early Christian objects such as gold glasses were deemed to belong, against a backdrop of public opposition to art of this period.<sup>65</sup>

### **The 1890 Carlisle Collection (cat. no. 30)**

The Carlisle Collection consists of a single gold glass brushed technique medallion. The short record in the British Museum acquisitions register states that it was purchased by the Museum from the Earl of Carlisle in 1890 for the substantial sum of £1,200. At a later unrecorded date, but presumably before the publication of Dalton's 1901 catalogue in which it was not included, the glass was transferred to the Department of Greek and Roman Antiquities.

Succeeding to the title of earl on the death of his uncle, the 9th Earl of Carlisle in 1889, George James Howard (1843–1911) was an aristocrat and artist. Of substantial means, he was a notable patron of the Pre-Raphaelite circle.<sup>66</sup> He first visited Italy in 1866 and made numerous return visits in the following years travelling extensively both in Italy and the Mediterranean.<sup>67</sup> Although no record survives, it is likely that the gold glass medallion was acquired during one of these trips.

### **The 1898 Tyszkiewicz Collection (cat. nos 37 and 42)**

The Tyszkiewicz Collection in the British Museum consists of only two pieces of gold glass. These were purchased from the sale of the Tyszkiewicz Collection of various antiquities, which included five gold glasses, through Messrs Rollin and Feuarent, lot 103.<sup>68</sup> No record of the amounts paid for each piece is preserved within the Museum's records; however, a copy of the sale catalogue held in the Rakow Research Library of the Corning Museum of Glass, New York, includes pencil annotations indicating that the glasses were purchased by the British Museum for the substantial sums of 1,030 and 1,380 francs respectively.<sup>69</sup>

The prices realized for the glasses bought by the British Museum were considerably higher than two other examples from the same collection, now in the Corning Museum of Glass<sup>70</sup> and the Musée Archéologique in Lyon respectively,<sup>71</sup> which were purchased for 360 francs each.<sup>72</sup> Whilst the two pieces acquired by the British Museum are of the cut and incised technique, the other two are not. The glass now in the Corning Museum of Glass is a brushed technique medallion (**Pl. 5**), a style at the time of the auction in 1898 considered to be a forgery by the most eminent authorities.<sup>73</sup> The glass now in Lyon is of the gilt glass trail technique, a technique in 1898 still absent from published accounts. As the focus of a growing number of scholarly works, gold glasses of the cut and incised technique were therefore considered to be of a far higher value.

Whilst details of Tyszkiewicz's acquisition of **cat. no. 37** remain unknown, **cat. no. 42** appears in the 1884 sale

catalogue of the collection of Alessandro Castellani (1823–83), in Rome.<sup>74</sup> Castellani was an antiquarian, antiquities dealer and, as a partner in his father's celebrated goldsmithing firm, a man of substantial means. He specialized in the reproduction of antique jewellery and ancient glass. Castellani had his own family collection of ancient glass, which the British Museum example was a part of. Unfortunately no record of how or when the piece was acquired by the Castellani family has survived. This collection became a rich source of inspiration for the Compagnia Venezia Murano, to which Castellani was the artistic advisor, who began to offer reproductions of gold glass for sale in the Paris Exposition Universelle of 1878 and after.<sup>75</sup> It is indeed likely that Tyszkiewicz purchased this glass at the sale of the Castellani Collection in 1884, from which the British Museum also acquired a number of objects. No explicit mention of either gold glass acquisition occurs in Tyszkiewicz's memoirs.

Count Michael Tyszkiewicz (d. 1897) was a lifelong collector of antiquities whom his contemporary, the Louvre curator Wilhelm Froehner, remembered as an inveterate collector for whom acquisition was the consuming passion: once an object had been acquired and initially admired, it was no longer of interest to him.<sup>76</sup> Tyszkiewicz's memoirs, published posthumously, provide a mine of information both about himself and his collecting habits, and about the antiquities trade in the second half of the 19th century.<sup>77</sup> In the book he stated that he spent part of each year in Italy, in Naples from 1862 and from 1865 in Rome. Although tempting, it cannot be said with any conviction that Tyszkiewicz's other gold glass was purchased in Rome.

#### **Old Acquisitions (cat. nos 2, 3, 18, 25, 41, 43, 47–8, 55)**

A total of nine gold glass fragments, some of which are in an excellent state of preservation, are given the prefix 'OA' ('Old Acquisition'), objects for which the acquisition details are unknown. Nevertheless, despite the unfortunate absence of acquisition details, it is possible to speculate on the date that they entered the British Museum's collection and the possible provenance of many of them.

**Cat. nos 3** (a male bust), **18** (Adam), **25** (Jonah under the gourd tree), **41** (Hercules and the Cretan bull) and **43** (coming of age ceremony) are all described as being in the Museum's collection by Garrucci in 1858 in the first edition of his major volume on gold glass.<sup>78</sup> It can therefore confidently be assumed that these gold glasses entered the Museum in the years prior to 1858. Furthermore, **cat. nos 3, 25** and **41** all either have, or were photographed by Dalton as having, gilt-edged paper mounts,<sup>79</sup> which as noted earlier were used by antiquities dealers in Rome in the mid- and late 19th century.<sup>80</sup> These glasses may therefore have been purchased in Rome. Garrucci asserted that **cat. no. 2** (a vessel base showing St Peter) was, at the time of his 1858 publication, in the private collection of Signor Luigi Fould.<sup>81</sup> I have not been able to find any details about this individual; however, in Garrucci's second edition of 1864, the same piece is stated as being within the Museum's collection.<sup>82</sup> Although no record of the acquisition is retained in the Museum's archives, the object was certainly acquired between 1858 and 1864.

**Cat. no. 55** takes the form of a gilt glass trail vessel base with a Latin inscription. It is not recorded in any of Garrucci's volumes, but was first published by Vopel in 1899 where it was explicitly stated as being in the Museum's collection, therefore providing the latest possible date by which it could have been acquired.<sup>83</sup> However, Garrucci did not include gilt glass trail vessels in any of his publications (Vopel was the first to publish this type), so the absence of this piece from Garrucci's volumes does not mean that it was not part of the Museum's collection at the time of his research.

The remaining fragments, **cat. nos 47–8** (both fragments with little decoration remaining), are also not recorded anywhere in Garrucci's work. **Cat. no. 48** is entirely illegible. Indeed, it is not readily apparent that it actually is a genuine gold glass fragment, possibly explaining its exclusion. **Cat. no. 47**, however, although small and fragmentary, is clearly a glass vessel base of the cut and incised technique. It retains only a small portion of the border of its iconography. Despite this, however, if its existence had been made known to Garrucci by Franks, whom Garrucci specifically acknowledges as having provided him with the details of all the glasses in the British Museum's collection, it is strange that he did not publish it.<sup>84</sup> It is highly plausible that this specific fragmentary piece was not part of the Museum's collection in 1864. Included in Dalton's catalogue, both **cat. nos 47–8** were present in the collection by 1901.<sup>85</sup>

#### **Fakes and reproductions (cat. nos 56–64)**

The British Museum's collection contains five gold glass forgeries, although there is a possibility that more as yet unlocated examples may exist in the Museum basements. Entered into the British Museum acquisition register in 1847 and catalogued here as **cat. no. 56**, the faked gold glass portrait medallion of a man is accompanied by the following entry:

Roman Portrait (?) in peculiar costume, on leaf gold between thin plates of glass (usually) but this specimen is between a glass facing and a back of black resin. In an oak frame 3.4 inches diameter. Purchased from Mr. J.G.P. Fisher, 8 shillings. Said to have been found near to lake Perugia.

The immediate indicator that this piece is a fake is that it has a backing of black resin rather than being made of gold leaf fused between two layers of glass. The entry in the acquisitions register offers further clues. The object was purchased by the Museum eight years before its first recorded acquisition of genuine examples of gold glass in the Bunsen Collection in 1854. The alleged findspot, Lake Perugia, is in central Italy, north of Rome and the catacombs. There is no information regarding a Mr J.G.P. Fisher in the British Museum's archives. The fraudulent glass is accompanied by a 19th- or 20th-century object display label, and its British Museum accession number is written in pencil upon the reverse.

The display label reads: 'Two modern imitations of Early Christian glass discs'. It indicates that two discs were on display in the Museum galleries even after they had been identified as forgeries. Although no other accession number has been written upon the label, the second piece is most probably that catalogued here as **cat. no. 57**. Similar in

many ways to **cat. no. 56** (it is another portrait medallion depicting a boy), it takes the form again of a black resin-backed glass disc, rather than a vessel base, and imitates the brushed technique. No acquisition details for it exist. The glass is, however, illustrated and recorded as part of the Museum's collection and was considered to be authentic in 1851, again prior to the Museum's first recorded acquisition of genuine gold glasses.<sup>86</sup> It is not possible to tell when exactly the piece entered the collection or indeed when either glass was first identified as a forgery.

**Cat. nos 58–60** belong to a larger group of well-known forgeries that reused the base fragments of old glasses and added cold-painting decoration. A group of these glasses was offered to the British Museum in 1909. In a letter dated 1 June 1909 to an otherwise unknown Madame M. Eichwede, Dalton described them as 'a collection of gilded glasses having all the appearance of being false'.<sup>87</sup> They were subsequently rejected by the Museum.

In 1927, Gustavus Eisen noted that of the 30 glasses of this type known to him, at least 22 were once part of the collection of the distinguished scholar and art collector Count Bartholomeo Borghesi. According to Borghesi, these glasses were all found in the catacombs of Rome in 1849.<sup>88</sup> After Borghesi's death, the glasses were inherited by his daughter, Countess Giacomo Manzoni, whose husband was also a student and collector of art. They were finally procured by the painter and collector Professor Mariano Rocchi who published two of them shortly afterwards in 1909.<sup>89</sup> This was also the year when some glasses of this type were offered to the British Museum. It is thus certainly possible that Countess Giacomo Manzoni's collection was auctioned after her death, some items of which were acquired by Mariano Rocchi, whilst others were purchased by Madame Eichwede who in turn offered them to the Museum. We might therefore reasonably speculate that **cat. nos 58–60** had previously been in the possession of Countess Giacomo Manzoni and before then in the original collection of Count Bartholomeo Borghesi. The provenance of glasses from this group have been examined in more detail by Whitehouse, who notes that the identification of Borghesi as the first known owner of the group establishes that they were made in or before 1860, the year of his death.<sup>90</sup> There seems little reason to doubt that the glasses were acquired by Borghesi in 1849, as he claimed, and as such manufactured in the first half of the 19th century, probably in the 1840s. Other published examples belonging to this group are now in the Corning Museum of Glass and the Yale University Art Gallery.<sup>91</sup>

**Cat. nos 61–2**, two pieces of decorated sandwich glass, were produced not as fakes intended to deceive, but as experimental reproductions by N.H.J. Westlake, the Gothic revival designer and stained glass maker, in order to demonstrate the possible method of gold glass production.<sup>92</sup> They were all produced in 1901 and were noted briefly in Dalton's article of the same year.<sup>93</sup> One of Westlake's glasses, possibly the more aesthetically pleasing, **cat. no. 62**, depicting Christ, is referred to in an early 20th-century object label, demonstrating that it was once on general display in the Museum galleries. Both of these glasses, **cat. nos 61–2** (**cat. no. 61** contains the image of a woman), are

further mentioned in a handwritten note, probably by Dalton, stating quite explicitly that they were not to be officially registered.<sup>94</sup>

The gold glasses catalogued as **cat. nos 63–4** both belong to the sizeable group of gold glasses produced in Venice as marketed reproductions without the intention to deceive for the 1878 Paris Exhibition and after.

**Cat. no. 63**, a diminutive medallion-studded bowl, was the first of its type to be acquired by the British Museum. It was presented in December 1898 by Charles Hercules Read, who had succeeded Franks as Keeper of the Department of British and Medieval Antiquities and Ethnography shortly before in 1896. It was obtained by him only a few months after he had purchased pieces from the Tyszkiewicz Collection for the Museum. It was entered in the accessions register as 'a reproduction bowl from the catacombs, now in the Vatican'.<sup>95</sup> The arrangement and subjects depicted upon the encircling medallions, however, appear to have been based very firmly upon those of the St Severin bowl (**cat. no. 16**), acquired by the British Museum in 1881 as part of the Franks Collection. The outer edge is decorated with two bands of greenish blue glass. Both Renate Pillinger and Judy Rudoe note this as a feature derived from Roman glass that also appeared on Murano copies of Late Antique gold glasses.<sup>96</sup> Interestingly, however, the bands upon the glass echo the two parallel wheel cut lines in the same position upon the St Severin bowl itself. The British Museum acquisition register includes a sketch of Read's bowl which clearly shows that it was already damaged when it entered the Museum, with a sizeable chunk missing from the upper edge. It is possible to surmise that it was bought by Read who initially mistook it for an original Late Antique example. The vessel was probably, however, acquired by the Museum for purely documentary reasons, as similar vessels were still in commercial production at the time.<sup>97</sup> Nevertheless, it is also plausible that it was acquired by Read because its design was so closely based upon the St Severin bowl. An early 20th-century display label related to the vessel stated: 'Modern dish to illustrate the ancient method or ornamentation, made at Venice'. The manufacturer is not recorded.<sup>98</sup> It is tempting to envisage it as having once been displayed next to the St Severin bowl. At some point since its acquisition by the Museum, the bowl has been damaged further. Indicative of the British Museum's lack of interest in reproductions, this was certainly deemed unimportant as it was not recorded and no attempt to repair the vessel was made until 2011.

A glass goblet (**cat. no. 64**) is the second example of Venetian marketed reproduction gold glass and was acquired very recently in 1998, one hundred years after the first.<sup>99</sup> The glass was acquired by the Museum with the information that it had once borne a label recording its purchase at the Paris Exhibition of 1878 by Lord Pender. As Rudoe surmises, this was presumably Sir John Pender (1816–96).<sup>100</sup> A man of considerable wealth, Pender was the pioneer of submarine telegraphy, director of the first Atlantic cable company and in his later years, an MP and Fellow of the Royal Society of Edinburgh, Royal Geographical Society and Society of Antiquaries of Scotland.<sup>101</sup> The price paid for it by Pender is not recorded; however, the gold leaf



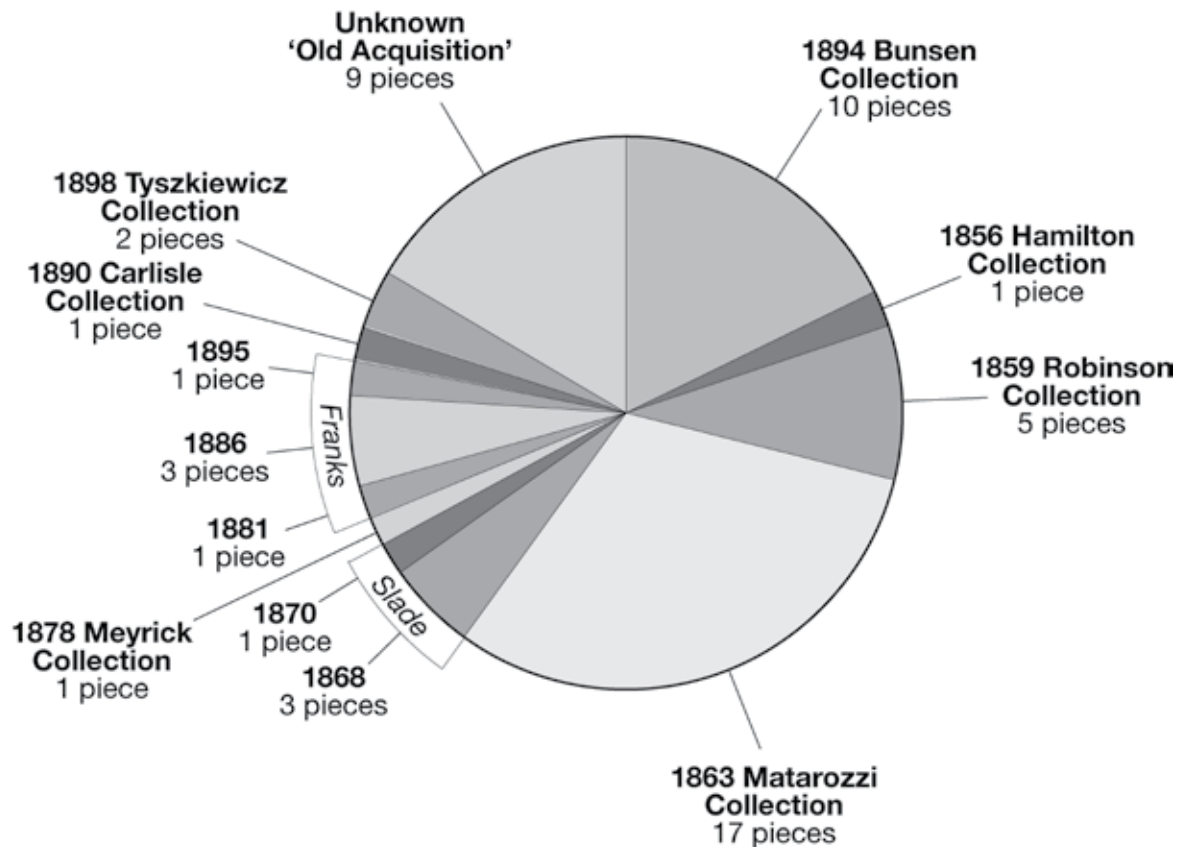


Figure 1 Numbers of Late Antique gold glasses entering the British Museum's collection, represented proportionally by collection and year of acquisition

incised decoration upon the object is of an extremely high standard, greatly superior to that on the Museum's other Venetian reproduction. It may be inferred that an object purchased by a man of Pender's means would have commanded a very substantial sum. The piece takes the form of a Venetian marriage goblet of the 15th century and is best described as having been inspired by the Late Antique gold glass technique, rather than being an imitation of it.<sup>102</sup> The acquisition of this glass by the British Museum in 1998 reflects the desire to represent the taste for historicizing glass in the late 19th century.

### The pattern of British Museum acquisitions

The British Museum's collection of Late Antique gold glass was acquired at a time in the mid-19th century when the official anti-medieval tide in the Museum was beginning to turn, but largely prior to the escalation in their value.<sup>103</sup>

Figure 1 shows the numbers of gold glasses entering the British Museum's collection proportionally by collection and year of acquisition. Multiple donations originating from the same source, notably the collections of Felix Slade and Augustus Franks, are grouped together.

Figure 1 clearly demonstrates that, in the cases where provenance can be precisely ascertained, the vast majority of gold glasses in the collection were acquired prior to the early 1860s. After this date only individual glasses, many of which are of a small and highly fragmentary nature, entered the Museum. The data is highly informative with regard to changing attitudes to the collection of Christian antiquities by 19th-century participants in the Grand Tour, particularly between those of differing social classes.

The Grand Tour introduced members of the aristocracy to the great architectural and artistic monuments of Europe, and in particular those of classical Rome and Italy; it also afforded its participants the opportunity to acquire through purchase or plunder the artefacts they encountered on their travels.<sup>104</sup> Early travellers were of a truly elevated social standing, and a distinct preferential hierarchy can be discerned in terms of the objects they collected. Classical Greek antiquities were preferred over the art and antiquities of classical Rome, which in turn were considered far more desirable than non-classical and prehistoric items. In terms of specific object types, classical sculptures were valued over vases, whilst gems (intaglios and cameos) were deemed preferable to coins. Medieval and Early Christian antiquities, including gold glass, were largely ignored and regarded as being of no real artistic merit. As late as 1901 Dalton, who championed the study of Byzantine and western medieval art in the early 20th century, stated that 'the artistic merit of the glasses was never of a high order; they followed the course of decadence usual in Roman art, and deteriorated with the course of time'.<sup>105</sup>

By the 1840s, the expansion of the railways meant that it was far easier to travel to Rome and Italy. Continental travel became far more widespread, with individuals of less substantial means now able to travel to Rome and Italy in increasing numbers. As a consequence, the range of objects also increased. Whilst the wealthy continued to focus their collecting efforts upon classical objects of a truly outstanding nature, to those of lesser standing, Early Christian and medieval antiquities, previously of interest only to Catholic dignitaries and a few local aristocrats, provided a cheaper

alternative. Like figurative pottery lamps during this period, gold glasses were easily transportable and decorated in the most part with readily identifiable, in most cases biblical, figures and scenes.<sup>106</sup> It is certainly significant that the individuals from whom the Museum acquired its first pieces of gold glass during the 1850s, Bunsen, Hamilton and Robinson, were collectors of somewhat lesser social standing. However, of these collectors, it was only Robinson who did not have direct connections with, or a specific interest in, the Church or biblical scholarship.

The greatest change in the purchase of Early Christian antiquities, and gold glass in particular, occurred in 1851 with the establishment of the *Pontificia Commissione di Archeologia Sacra*.<sup>107</sup> This commission was accompanied by the strictly enforced law that everything recovered from the Roman catacombs, the major findspot of gold glass, was to pass directly into the papal collections.<sup>108</sup> As a result, from 1851 onwards examples of gold glass were available to collectors outside the Vatican only from older private collections, and this resulted in a steady escalation in the price of gold glass.

The purchase of the Matarozzi Collection in 1863 seems to have come directly on the cusp of this dramatic increase in price, as was indeed remarked upon by Tyszkiewicz.<sup>109</sup> From this point onwards, gold glass entering the British Museum did so through benefactors of elevated social status and substantial financial means. Even so, many of the pieces from the collections of these individuals, such as Slade, Franks and Nesbitt, are extremely small and fragmentary. The price rise was further effectively demonstrated by the Museum's purchase of a single gold glass medallion produced in the brushed technique, the most highly prized gold glass subtype owing to its classical style, for a massive £1,200 in 1890 from the Earl of Carlisle (**cat. no. 30**). In 1868, a similar brushed technique gold glass medallion with comparative iconography (**Pl. 4**) had been purchased by the South Kensington Museum for a mere £10 from the collection of the London antiquities dealer John Webb.

By the time of the British Museum's purchase of gold glasses from the Tyszkiewicz Collection in 1898, even cut and incised gold glasses were reaching large sums of money. The gold glasses in the British Museum's collection prefixed as 'Old Acquisitions', but included in Garrucci's 1858 volume (**cat. nos 3, 18, 25, 41, 43**), are all relatively large well-preserved examples. In contrast, the two fragments not included by Garrucci (**cat. nos 47–8**), and by implication not part of the British Museum's collection at the publication of his second edition in 1864, are both extremely small and near illegible. It is therefore most likely that, in line with the glasses from the Slade, Franks and Nesbitt collections, **cat. nos 47–8** entered the Museum in the latter part of the 19th century after the massive increase in price and when large and well-preserved fragments of gold glass were in the most part unavailable even to those of considerable wealth. Indeed, by 1878 even the price of reproduction gold glass appears to have been extremely high, being purchased by very wealthy individuals such as Sir John Pender (**cat. no. 64**).

In summary, the formation of the British Museum's collection aptly demonstrates the changing attitudes to gold

glass in the 19th century, and provides an excellent model for contemporary collecting trends focused on Christian and early medieval antiquities. Often depicting Christian subjects in a style considered to be rather crude when compared to more popular examples of 'classical' art, gold glasses were generally avoided by wealthy participants of the Grand Tour and instead purchased by men of lesser means and by those specifically interested in the development of Early Christianity. This trend changed dramatically in the latter part of the 19th century, when medieval antiquities began to emerge as a popular field of study in its own right. After this, gold glasses could only be purchased by extremely rich individuals and even then most often only as small fragments. Gold glasses were principally valued in terms of their iconography, both by those who initially purchased them and the British Museum which ultimately obtained them.

## Notes

- 1 Garrucci 1858.
- 2 Iozzi 1900.
- 3 *Ibid.*, pl. VI.1 and 3.
- 4 Bunsen 1868, pls II.1 and 6.
- 5 *Ibid.*, pls I.2, II.4–5 and III.3 respectively.
- 6 Garrucci 1872–80, vol. 3, pl. 172.4.
- 7 Corning Museum, inv. no. 1966.1.202; Whitehouse 2002, no. 833; Sangiorgi 1914, 86, no. 309.
- 8 Garrucci 1872–80, vol. 3, pl. 183.7; Vatican Museum, inv. no. 246: Morey 1959, no. 131.
- 9 Louvre, ED 1703 and 1705; Arveiller-Dulong and Nenna 2005, nos 925–6.
- 10 Dalton 1901a, 117–30.
- 11 Morey 1959, nos 296–351, pls XXIX–XXX.
- 12 *Ibid.*, no. 333, pl. XXX.
- 13 BM Reg. no. BEP 1948,1006.1. For the relevant correspondence see British Museum archive dated 25 April; 11 May; 22 May; 15 June; 30 October; and 13 November 1948.
- 14 Harden 1968, nos 88, 89, 90, 91, 92, 93.
- 15 Harden 1987, 276, no. 152.
- 16 Cameron 1996.
- 17 See Utro 2000; Grig 2004.
- 18 See Cameron 1993, fig. 13.
- 19 BM Reg. nos BEP 1854,0722.1–22: the 22 pieces included a basalt statue, a bronze figurine of Mars and assorted pieces of glass.
- 20 For a full account of Niebuhr's life and works see: Hensler 1838–9; Winkworth 1852.
- 21 Bunsen 1868, 331.
- 22 *Ibid.*, 468.
- 23 *Ibid.*, 369.
- 24 BM Committee Minutes: March 1854 BM C.8667 and July 1854 BM C.8712.
- 25 BM Reg. nos BEP 1856,0425.1–29 (predominantly engraved gemstones).
- 26 Dalton 1901a, no. 635.
- 27 Spier 1997, 39.
- 28 Finney 2003, 190–8.
- 29 *Ibid.*, 190.
- 30 Perret 1851–5, vol. 4, pl. XXI.2.
- 31 Wiseman 1859, 164–216.
- 32 Finney 2003, 192; Scots College Archive Rome, Box 21, no. 181.
- 33 *Ibid.*, 193.
- 34 *Ibid.*, 193–4.
- 35 BM Reg. nos BEP 1859,0618.1–5.
- 36 Davies 1998, 170; also Davies 1999, 95–115.
- 37 Franks 1864, 380.
- 38 Davies 1998, 181; V&A Robinson papers 19 December 1853.
- 39 V&A, inv. no. 8990.1863; inv. no. 1052.1868.
- 40 BM Reg. nos BEP 1863,0727.1–17.
- 41 Torr 1898, 1.

- 42 Franks 1864, 378–84.  
 43 Passavant and Jacob 1860, 610.  
 44 Tyszkiewicz 1898, 40–1.  
 45 As stated in Rudoe 2003, 212.  
 46 Garrucci 1858 and 1864.  
 47 *DNB*, <http://www.oxforddnb.com/view/article/25704> [accessed 6th March 2010] (D.M. Wilson).  
 48 Franks and Nesbitt 1871.  
 49 BM Reg. no. GR 1866,0806.1.  
 50 Düntzer 1867, 168–82.  
 51 *DNB*, <http://www.oxforddnb.com/view/article/18644> [accessed 6 March 2010] (S.B. Bailey).  
 52 Meyrick 1836, 598–601.  
 53 *Ibid.*, 600, no. 37.  
 54 *DNB*, <http://www.oxforddnb.com/view/article/7849> [accessed 6 March 2010] (C. Hurst).  
 55 Lot 1357: BM Reg. nos BEP 1881,0624.1-3.  
 56 Aus'm Weerth 1881, 129.  
 57 BM Reg. nos BEP 1886,1117.1-336.  
 58 Stevenson 1999.  
 59 Franks and Nesbitt 1871.  
 60 Dalton 1901a, no. 601, pl. XXI.  
 61 Grose 1989, 243–4.  
 62 BM Reg. nos BEP 1893,0426.1-184.  
 63 Caygill 1997, 76.  
 64 *Ibid.*, 95.  
 65 Stratford 1993, 46–51. The best biography of Franks' life and work is provided in the volume edited by Caygill and Cherry (1997).  
 66 Gibson 1968, no. 789, 720.  
 67 Surtees 1988, 46–8 and 100–7.  
 68 Other than their inclusion in the BM acquisition register, no further information regarding Messrs Rollin and Feuarent has yet come to light.  
 69 Froehner 1898.  
 70 Corning Museum, inv. no. 90.1.3; Whitehouse 2002, no. 828.  
 71 Lyon: inv. no. E.388.c; Filippini 1996, 113–28, no. 9.  
 72 Whitehouse 2002, 242.  
 73 Garrucci 1858 and 1864; Vopel 1899.  
 74 Hoffmann 1884, 62, no. 428.  
 75 Rudoe 2002, 309–12.  
 76 Froehner 1898, 3–4.  
 77 Tyszkiewicz 1898.  
 78 Garrucci 1858, 7, 71, 13 and pls XX.5, XXI.3, II.3, XXXV.3 and IV.4 respectively.  
 79 Dalton 1901a, nos 606, 623, pl. XXXI.  
 80 Grose 1989, 243–4.  
 81 Garrucci 1858, 46, pl. X.1.  
 82 Garrucci 1864, 77, pl. X.1.  
 83 Vopel 1899, 96, no. 22.  
 84 Garrucci 1864, 28.  
 85 Dalton 1901a, nos 648 and 651 respectively.  
 86 Yates 1851, 170.  
 87 Pillinger 1984, 19: however, I have been unable to locate the letter in the British Museum archive.  
 88 Eisen 1927, 573.  
 89 Rocchi 1909, 9–10.  
 90 Whitehouse 1994, 135.  
 91 Corning Museum, inv. nos 76.3.10 and 60.3.7a; Whitehouse 2003, 108–10, nos 1066 and 1067; Yale: inv. nos 1955.6.207-212 (Moore Collection); Matheson 1980, 142–4, nos A13–A18.  
 92 A further piece was also reproduced by Westlake and published by Pillinger (Pillinger 1984, pl. 180), but as I have been unable to study it, I have not included it in the catalogue.  
 93 Dalton 1901b, 252; see also Dillon 1907, 93.  
 94 These have now been registered as Old Acquisitions (OA).  
 95 BM Reg. no. BEP 1898,02-11.1.  
 96 Pillinger 1984, 17; Rudoe 2003, 217.  
 97 Rudoe 2003, 217.  
 98 *Ibid.* Reported by Rudoe, but not located by myself.  
 99 *Ibid.*  
 100 *Ibid.*  
 101 *Ibid.*, 217, n. 3.  
 102 *Ibid.*, 210.  
 103 Stratford 1993, 46–51; Finney 2003, 193.  
 104 Black 1985; Chaney 1998.  
 105 Dalton 1901b, 234.  
 106 Greene 1992, 17.  
 107 Ferrua 1968, 251–78.  
 108 Franks 1864, 380.  
 109 Tyszkiewicz 1898, 40–1.

# Chapter 3

## Material Considerations Morphology (Daniel Howells) and Compositional Analysis (Andrew Meek)

Historically, the principal focus of gold glass studies has tended to be iconographical. Comparatively little, and certainly almost nothing coherent, has been said about material considerations such as the chemical composition of the glass, the recognizable gold glass subtypes and the various forms existing within the corpus of published examples. In recent years, it has been believed that gold glasses, with only minor exceptions, were the bases of larger vessels, the walls of which were broken off.<sup>1</sup> This overview certainly holds true for many of the ‘cut and incised’ gold leaf glasses, but cannot be universally applied. The publication of gold glass profiles is extremely rare and a coherent categorization of recognizable subtypes and an in-depth discussion of gold glass morphology is completely absent from the literature.

The British Museum’s collection contains examples of the majority of known gold glass subtypes, including a number of unique specimens. Furthermore, the presence of a Department of Conservation and Scientific Research at the British Museum has allowed a detailed scientific analysis of a large number of gold glasses from the collection to be carried out. This chapter will begin with an examination of gold glass material considerations and morphology and outline of gold glass profiles by Daniel Howells. A profile of each diagnostic gold glass in the Museum’s collection is presented in Appendix B. The second part of the chapter comprises Andrew Meek’s presentation and discussion of his analyses of the chemical compositions of the British Museum’s gold glasses.

### **Gold glass subtypes and object morphology (Daniel Howells)**

The gold glasses in the Museum’s collection can be subdivided into three distinct types on the basis of their techniques and morphology: cut and incised gold glasses; cobalt blue-backed brushed sandwich-glass portrait medallions; and gilt glass trail colourless sandwich-glass vessel bases. Each subtype is discussed here specifically in the context of the British Museum’s glasses.<sup>2</sup>

#### **1. Cut and incised gold glasses**

‘Cut and incised’ is the term generally applied to glasses upon which the design has quite literally been cut and incised through the gold leaf applied to a base layer of glass and then, in most cases, covered and protected by another layer of glass.<sup>3</sup> Cut and incised glasses in the Museum’s collection can, on the basis of morphology, be further subdivided between sandwich-glass vessel bases, gilded plaques and diminutive medallion-studded vessels. A fourth subdivision of cut and incised gold glasses relates to applied cage cups, referred to here as *kantharoi*, and exemplified by the Disch Kantharos in the Corning Museum of Glass (**Pl. 6**).<sup>4</sup> No examples of the latter, however, are present in the Museum’s collection and so this subtype is not discussed in detail.

##### **a. Cut and incised sandwich-glass vessel bases**

Cut and incised sandwich-glass vessel bases constitute the most numerous gold glass subtype in the Museum’s collection, numbering 35 pieces in total.<sup>5</sup> This is reflective of



Plate 6 The Disch Kantharos, 4th century. Corning Museum of Glass, New York, inv. 66.1.267

the worldwide gold glass corpus, where glasses of this type make up the majority. Indeed, it is most likely glasses of this type that spring to mind when the term ‘gold glass’ is mentioned.<sup>6</sup>

Cut and incised technique sandwich-glass vessel bases are usually between approximately 50 and 120mm in diameter, with the gold leaf iconography sandwiched between two layers of colourless glass with a greenish tint. The gold leaf image is intended to be viewed from above by looking into the vessel, but it can also be viewed in reverse from the underside. In some, but not all, examples, small details of the gold leaf are enhanced with over-painted white and red enamel.<sup>7</sup>

The iconography of cut and incised sandwich-glass vessel bases was often accurately duplicated on 19th-century Venetian reproduction gold glasses. The Venetian pieces, rather than aiming to produce an exact copy of the original, almost exclusively presented the designs upon a blue or green glass backing, making the iconography appear more pronounced and thus more aesthetically pleasing.<sup>8</sup> This appears to have rarely been the case with the original pieces they attempted to imitate, though there is one possible

exception to this in the British Museum’s collection (**cat. no. 42**, depicting a gladiator).

Garrucci published the first cut and incised gold glass vessel profiles in the 1858 first edition of his work on gold glass (**Fig. 2**).<sup>9</sup> In both of Garrucci’s profiles, the lowermost layer of glass takes the form of a circular layer of glass turned down at the edges to form a foot-ring usually only a few millimetres in height. This is known as a pad base.<sup>10</sup> The vast majority of glasses in the known corpus follow this pattern, with only a very small number of pieces in the Museum’s collection having a significantly higher foot-ring (e.g. **cat. no. 19**).<sup>11</sup>

Figure 2 Two and three layer cut and incised colourless gold sandwich-glass vessel bases illustrated by Garrucci

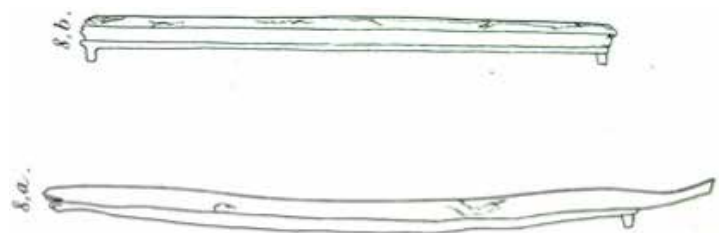






Plate 7 The ground and polished edges of cat. no. 31 (reverse)

The most common cut and incised technique sandwich-glass vessel bases are comprised of two glass layers, with the gold leaf fused between them. Garrucci illustrated this type, but he also provided the profile of less common glasses consisting of three layers.<sup>12</sup> In the three layer examples, the gold leaf is, without exception, fused between the lowermost pad base and the middle glass layer. In no case does the gold leaf occur fused between the middle and upper layers. Cut and incised technique sandwich-glass vessel bases comprising three layers are illustrated in **cat. nos 12** and **32**: the profile of the latter closely follows that of Garrucci, whilst the profile of the former is markedly concave. This piece does not retain its foot-ring, but this would have needed to be of more than average height in order to compensate for the concavity of the base.

Since Garrucci, very few vessel profile illustrations have been published. Few gold glass vessel bases, either in the British Museum or indeed elsewhere, retain substantial traces of vessel walls to give an impression as to what form gold glasses of this type may have taken. This has been largely responsible for the erroneous identification of glasses of this type as medallions, rather than vessel bases by some authors.<sup>13</sup> For example, **cat. no. 31**, a base depicting the image of a man, may on first sight be described as either a medallion or a disc. The edges have been ground and polished to make it perfectly circular and flat upon either side (**Pl. 7**). However, this was not done in antiquity. Upon closer inspection, it is clear that the grinding has removed the outer areas of the gold leaf design and that there is no iridescence or weathering upon the ground edges, despite its being present upon areas of the surface. Therefore it is almost certain that this glass once formed the base of a vessel and was only ground down in relatively recent centuries to form a perfectly circular and thus more aesthetically pleasing piece for collectors only interested in gold glass

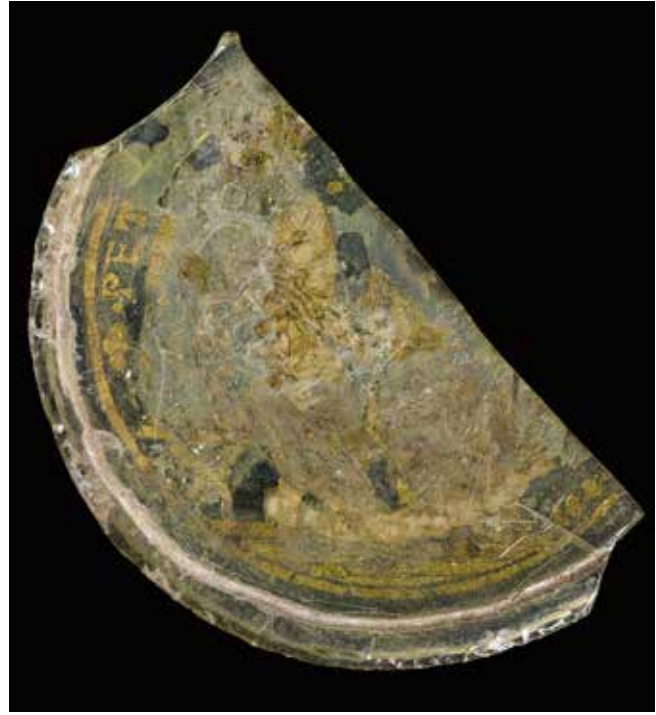


Plate 8 Reverse of cat. no. 15 showing the attempt to remove the foot-ring

iconography. A gold glass vessel base with an almost identical iconographic depiction, but still retaining small portions of its vessel walls, is held in the Vatican Museum.<sup>14</sup>

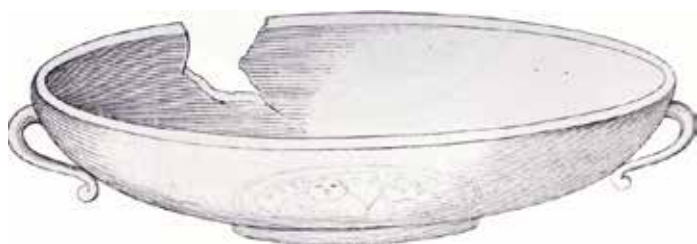
In the case of **cat. no. 15**, a vessel base depicting St Peter and a woman, efforts were made to remove both the fragmentary excess and the foot-ring. A heavy scored groove appears upon both sides of the piece along the inside edge of the foot-ring (**Pl. 8**). However, when the removal of the foot-ring by scoring proved to be of no avail, the piece was grozed (i.e. the edges were trimmed with pliers). The process must have been carried out prior to the accurate illustration of the pieces by Garrucci in 1858 and 1864, perhaps by dealers or even collectors.

Some of the very earliest images of gold glass produced in the 1670s–80s appear in Cassiano dal Pozzo's *Museo Cartaceo*. In each instance, the images show the glass as a whole, including the broken remains of the vessel itself where present and not just the gold leaf iconography. Reproduced here in **Plate 9**, the illustration of an example of gold glass now in the Vatican Museum depicts the piece as still retaining significant portions of its vessel walls, indicative perhaps of it once having been a plate or shallow bowl.<sup>15</sup> A slightly later image of the same piece illustrated in Buonarruoti's 1716 monograph reveals that the fragmentary vessel walls had been grozed along the line of the base-disc during the intervening period and Buonarruoti's depiction illustrates the object close to how it appears today.<sup>16</sup>

However, some gold glasses were certainly inserted into the catacomb wall plaster as closely trimmed vessel bases. In a number of instances, these were set into the wet wall plaster so that the trimmed edges of the base-disc were in part covered by it.<sup>17</sup> Further closely trimmed gold glass vessel bases have been recovered, for example from Aquileia in Italy (see Appendix A). Others seem to have been placed there as more complete vessels. In 1720, Boldetti illustrated



**Plate 10** Boldetti's 1720 illustration of the gold glass vessel he claimed to have found in the catacombs of Rome



**Plate 9** Late 17th-century illustration of gold glass in the Vatican Museum (inv. no. 759 [ex-743]) from the *Museo Cartaceo* of Cassiano dal Pozzo, watercolour, with gold powder in gum arabic, pen and ink (113 x 100mm), and Buonarruoti's 1716 illustration of the same piece

an example which he claimed was one of several to have been found in the Roman catacombs, only to be broken in his enthusiastic attempts to remove it from the plaster (**Pl. 10**).<sup>18</sup> Boldetti's complete vessel illustration has been met with some scepticism in the literature.<sup>19</sup> Nevertheless, whilst the deposition of complete gold glass vessels in the walls of the catacombs certainly may not have occurred in every instance, a rare example of a near-complete vessel approximating to Boldetti's illustration is present in the Vatican Museum collection, still embedded in the plaster.<sup>20</sup> A further example retaining much of its vessel wall in the Vatican Museum was illustrated by Morey.<sup>21</sup> Here, the original shape of the vessel is clearly shown to have been a shallow bowl, similar to that illustrated by Boldetti. Furthermore, Boldetti's illustration is similar to the large but fragmentary piece illustrated above in the *Museo Cartaceo* and to another piece illustrated by Garrucci.<sup>22</sup>

In terms of profile, steep-sided tumbler style drinking vessels are a possibility in a small number of instances. However, the majority of gold glasses, in particular those with images rather than a short inscription alone, are more likely to have taken the form of shallow bowls.<sup>23</sup> Shallow bowl profiles certainly seem most probable based on the few British Museum pieces on which fragments of vessel walls survive (e.g. **cat. nos 5, 10, 13**; see profiles illustrated in Appendix B). In many instances in the Museum's collection, however, the profiles reveal that the concave vessel base is lower than the height of the foot-ring (e.g. **cat. nos 5, 7, 10, 15, 35-6, 39, 46**). This means that the bowl would not have been stable when placed on a flat surface.

### **b. Cut and incised gilt glass plaques**

Although closely akin in style and technique, cut and incised technique gilded-glass plaques should be seen as distinct from sandwich-glass vessel bases. In total, the Museum has four fragmentary examples of gilded-glass plaques (**cat. nos 17** (the St Ursula bowl), **43, 45, 50**). Larger than the vessel bases, in every instance gilded plaques have a diameter exceeding 15cm. Placed on a backing of colourless glass with a slight greenish tint, the gold leaf is not fused below an overlaying protective layer of glass, which is a significant difference. Following Garrucci and Dalton who published examples of these pieces for the first time, these gilded glass plaques have tended to be seen as the bottoms of very large cut and incised technique sandwich-glass vessel bases which had lost their covering layer of glass.<sup>24</sup> This is certainly incorrect, for there is no evidence of the existence of a fused cover layer of glass upon any of the plaques in the Museum's collection. Indeed, although the gold leaf on the majority of cut and incised technique gilded-glass plaques is much abraded, the removal of any fused cover layer of glass would have destroyed the gold leaf entirely. On cut and incised technique sandwich-glass vessel bases where the fused cover layer of glass has been removed, only a fragmentary portion of the upper glass layer has broken away. The gold leaf

**Plate 11** Cut and incised plaque still *in situ* in the Catacomb of Panfilo, Rome, 4th century







Plate 12a–b Obverse of the cut and incised diminutive medallion-studded St Severin bowl (cat. no. 16)

iconography underneath has been rendered completely illegible as a result and is well illustrated by **cat. no. 14**. A similar scenario can be suggested for **cat. nos 33** and **48**. In addition, the British Museum plaques are extremely thin; indeed, the pieces have in each instance fragmented into several pieces. Considering their wide diameter, they are far too thin to have ever served as vessel bases.

Outside the British Museum's collection, cut and incised gilded-glass plaques appear only to exist in the Vatican Museum collection<sup>25</sup> and *in situ* in the Catacomb of Panfilo (**Pl. 11**).<sup>26</sup> No example of cut and incised gilded-glass plaques either in the British Museum's collection or elsewhere today retains its original edge. However, an illustration of one piece in the Vatican Museum appears to show the original edge of the object, now missing from the original glass.<sup>27</sup> The image, published in Garrucci's 1864 volume, appears to show a slight lip; however, this is in no way certain.<sup>28</sup> If a lip is shown, it would indicate that the disc of glass constitutes the flattened base of a blown parison of glass with downturned edges, identical to the pad base-discs of cut and incised technique sandwich-glass vessels. It would furthermore suggest that in this instance, time was not taken to carefully remove this lip and grind the glass down to form a flat plate of glass.

### c. Cut and incised diminutive medallions and diminutive medallion-studded vessels

Cut and incised technique diminutive medallions constitute the second most numerous gold glass subtype after sandwich-glass vessel bases in Morey's 1959 catalogue, a trend reflected in the Museum's collection. Gold glass diminutive medallions, whilst technically and stylistically akin to other cut and incised gold glass types, are distinctly different in form from both sandwich-glass vessel bases and gilded plaques. Generally, these diminutive medallions principally exist as separate individual blobs.

In total, 14 separate individual diminutive medallion blobs exist within the British Museum's collection (**cat. nos**

**1, 3, 18, 20–2, 24–9, 41, 54**), with all of them measuring approximately 20–25mm in diameter. In each piece, the cut and incised gold leaf is sandwiched between a coloured blobbed glass backing layer upon the reverse and an overlaying colourless layer of glass with a greenish tint, through which the image is viewed. Reflective of the published corpus as a whole, diminutive medallions in the Museum's collection most often have a cobalt blue or green glass backing. Other colours, including amber (**cat. no. 20**) and purple (**cat. no. 3**), occur far less frequently. Unlike the cut and incised sandwich-glass vessel bases and gilded plaques discussed above, no gold glass diminutive medallion has over-painted enamel details.

Diminutive medallions originally appeared as studs on vessel walls, as demonstrated by the St Severin bowl (**cat. no. 16, Pl. 12a–b**), rather than as small individual medallions. In almost every example within the Museum's collection, the edges of the colourless cover layer of glass appear jagged where the vessel wall has been grozed or cut away. In one single example, **cat. no. 29**, the edges of the medallion have been carefully ground and polished. In the case of this particular example, this was probably not carried out in antiquity. Like the vessel base (**cat. no. 31**) discussed above, upon closer inspection it is clear that the grinding has unintentionally removed the outer areas of the gold leaf design and was thus most likely carried out comparatively recently.

The *Museo Cartaceo* illustrates a single diminutive medallion from the Vatican Museum still retaining a portion of its vessel wall (**Pl. 13**).<sup>29</sup> However, like the vessel base reproduced here in **Plate 9**, by the time it was illustrated in Buonarruoti's 1716 monograph the excess fragments of the vessel wall surrounding the medallion had been trimmed away.<sup>30</sup> Like many cut and incised technique gold glass vessels, individual diminutive medallions have also been recorded as having been inserted into the walls of the catacombs. This indicates that although the complete



vessel had been broken, some of the individual medallions had nonetheless been retained prior to their deposition.<sup>31</sup>

Cut and incised gold leaf medallion-studded vessels when viewed from the reverse (Pl. 14) constitute a wonderfully innovative reworking of an already popular contemporary glass form commonly referred to as blobbed vessels.

Numerous vessels of this type have been found throughout the Roman Empire and beyond, and were produced in a wide variety of forms including bowls (Pl. 15) and cups but also other shapes, such as double-sided spheroid flasks and drinking horns.<sup>32</sup> As with gold glass diminutive medallions, the blobs are applied to the walls of the vessels, but crucially they do not sandwich gold leaf iconography between the two. As with gold glass examples, most are cobalt blue in colour. However, they also occur in green and, less often, brownish yellow or indeed a combination of colours upon a single vessel. The only near complete cut and incised technique diminutive medallion-studded vessel that has been recorded anywhere is the St Severin bowl (cat. no. 16; Pl. 12a–b). The two preserved fragments of the vessel contain a total of 21 diminutive medallions with cobalt blue and green backings. Twelve of the diminutive medallions are of the most common size, being approximately 20–22mm in diameter, whilst a further nine medallions of a considerably smaller size, approximately 10mm in diameter, appear as spacers between them. In other collections, these smaller spacer medallions can be paralleled in only one individual example in the Vatican Museum.<sup>33</sup> Another excellent example of one of these blobbed vessels, taking the form of a shallow bowl, like the St Severin bowl and indeed most probably the majority of gold glass diminutive medallion-studded vessels, is currently in the collection of the Römisch-Germanisches Museum, Cologne (Pl. 16).<sup>34</sup> As with the St Severin bowl, the applied blobs conform to a specific, and indeed similar, colour-coded pattern upon the



Plate 13 Late 17th-century illustration of a gold glass diminutive medallion with part of its vessel wall in the Vatican Museum (inv. no. 646 [ex-217]) from the *Museo Cartaceo* of Cassiano dal Pozzo, watercolour

walls of the vessel, and effectively demonstrate the relationship of gold glass diminutive medallion-studded vessels to other contemporary forms.

The reconstructed vessel profile of the St Severin bowl was first presented by Dan Barag, who illustrated it as a rather deep flat-bottomed bowl with relatively steep walls turning slightly inwards at the top.<sup>35</sup> Barag's profile was manipulated for the *Glass of the Caesars* exhibition catalogue (Fig. 3), where the bowl was redrawn as the interpretation of minimal wear on the lower surface suggested that this had not been absolutely flat, but rather to have been slightly pushed in.<sup>36</sup> My own careful re-examination of the St Severin bowl leaves me in disagreement with the

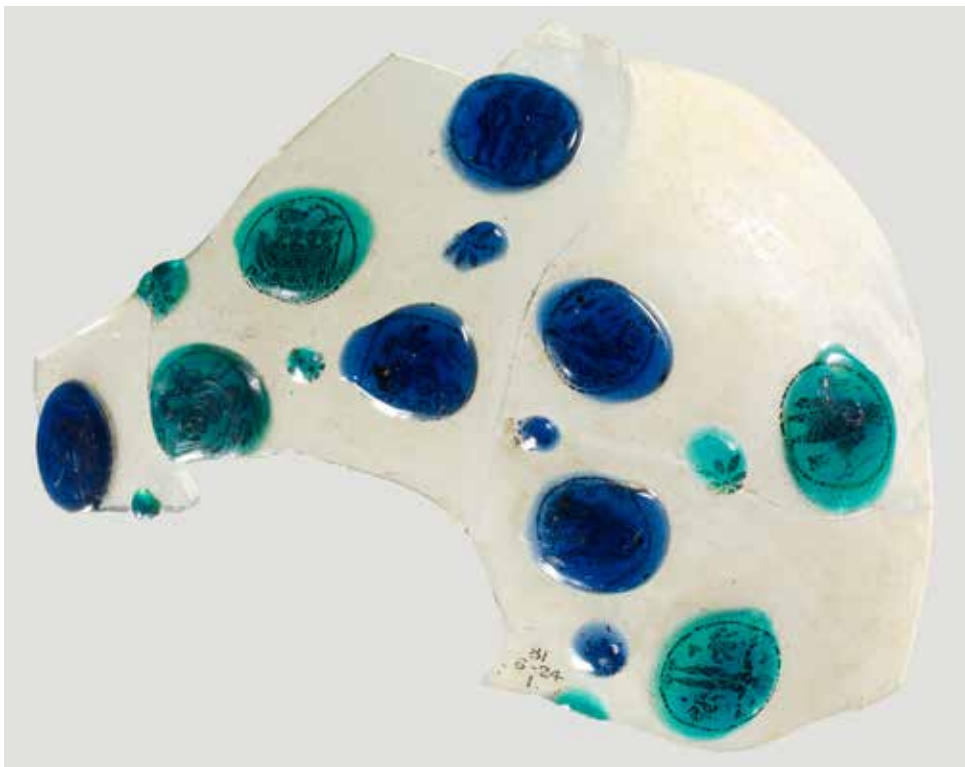


Plate 14 Reverse of the St Severin bowl (cat. no. 16)



Plate 15 Bowl with blobbed decoration, 4th century. British Museum, London, GR 1871,1004.3

interpretation in the *Glass of the Caesars* catalogue of it having an indented vessel base; I think there seems no question that the vessel originally had a flattened base (Fig. 4). However, the parallel wheel-cut linear grooves running around the rim of the vessel, when positioned horizontally, do indicate that the vessel profile was relatively deep and steep sided, akin to the profile given in *Glass of the Caesars*. This is perhaps surprising considering that the iconography was intended to be viewed from the inside.

## 2. Brushed technique cobalt blue-backed sandwich-glass portrait medallions

‘Brushed technique’ is the term now generally applied to cobalt blue-backed sandwich-glass portrait medallions.<sup>38</sup> Essentially, the brushed technique of gold leaf incision differs little from the more common cut and incised technique noted above. The iconography is again produced upon the gold leaf through a series of incisions. In the case of the brushed technique, these are extremely small in size and are undertaken with great precision. These incisions lend themselves to a chiaroscuro, rather like that of a fine steel engraving, and they appear to simulate brush strokes. Because of their classical style, brushed technique portrait medallions received considerable attention from 18th- and

Figure 3 The reconstructed profile of the St Severin bowl from *Glass of the Caesars*<sup>37</sup>

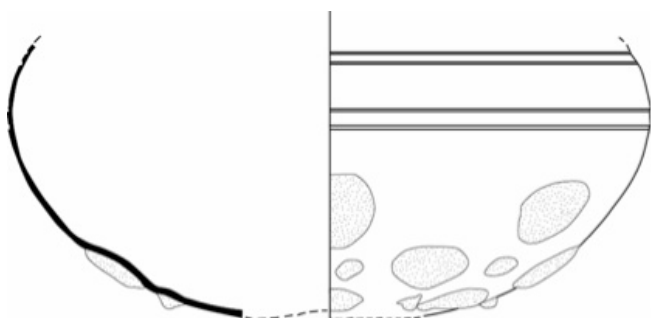


Plate 16 Studded plate, c. 300–50. Römisch-Germanisches Museum, Cologne, inv. no. N150

19th-century forgers and were reproduced by them to varying degrees of excellence in considerable numbers (as for example with **cat. nos 56–7**).

Only one genuine brushed technique cobalt blue-backed sandwich-glass portrait medallion depicting a young man, (**cat. no. 30**) is present in the British Museum’s collection. The gold leaf iconography of this piece appears sandwiched between two fused layers of glass, with the translucency of the cobalt blue lowest layer giving prominence to the image. In the entry in the *Glass of the Caesars* catalogue, the medallion is described as cast and ground.<sup>39</sup> However, my own examination of the piece reveals that slight undulations are present upon the reverse, indicative of the cobalt blue base layer having initially been a blown parison and subsequently flattened as it cooled. Unlike the cut and incised vessel base (**cat. no. 31**), which also depicts a young man (**Pl. 7**), the edges of **cat. no. 30** have been bevelled and ground down in a highly uniform manner (**Pls 17–18**). A significant degree of weathering extends across the reverse of the piece, covering also the bevelled edge, suggesting that this grinding was carried out in antiquity and that the piece was intended from the start to be a medallion.

The morphology of this portrait medallion with its ground and bevelled edge compares closely with the small

Figure 4 The author’s reconstructed profile of the St Severin bowl





**Plate 17** Obverse of the brushed technique portrait medallion (cat. no. 30) illustrating the accurately ground and bevelled edge and the covering iridescence

group of other brushed technique medallions with secure provenances, including the piece still *in situ* in the Catacomb of Panfilo (**Pl. 2**). In each case, the gold leaf image is set within a thin, perfectly circular single line frame and takes the form of a highly naturalistic quarter-length bust portrait of one or more individuals.

### **3. Gilt glass trail inscription sandwich-glass vessel bases**

The term 'gilt glass trail' has been generally applied to vessel bases consisting of two fused layers of colourless green tinted glass, with a cartouche containing an inscription sandwiched between them.<sup>40</sup> Both the cartouche and the inscription are formed of glass threads or trail gilt with gold leaf. The inscriptions were meant to be viewed from above when looking into the vessel and in every instance they take the form of drinking toasts. Where possible these gilt glass trails have been applied in individual short straight sections forming the letters of the inscription. In longer sections, the gilding appears cracked and in some instances has been largely rubbed away where the trail has been bent to a curve. The bottommost line of the cartouche is usually, although not exclusively, formed of a single non-gilded trail of coloured glass. The Museum's collection contains only one fragmentary example (**cat. no. 55; Pl. 19**).

**Plate 19** Gilt glass trail inscription sandwich-glass vessel base reading ANNI BONNI; cat. no. 55

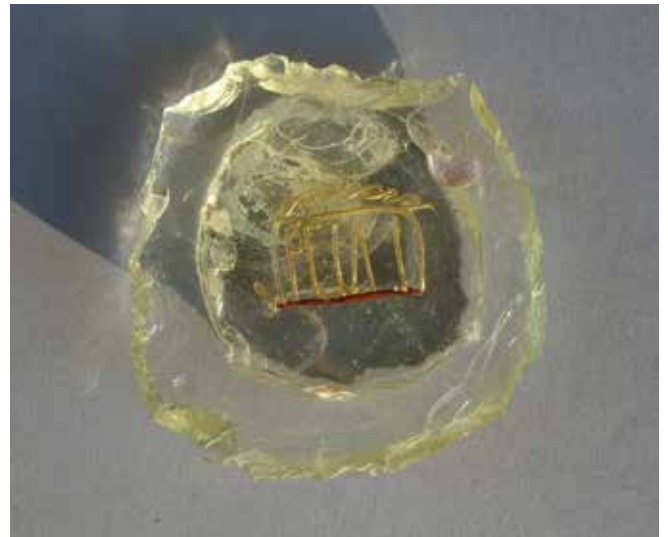


**Plate 18** Reverse of cat. no. 30

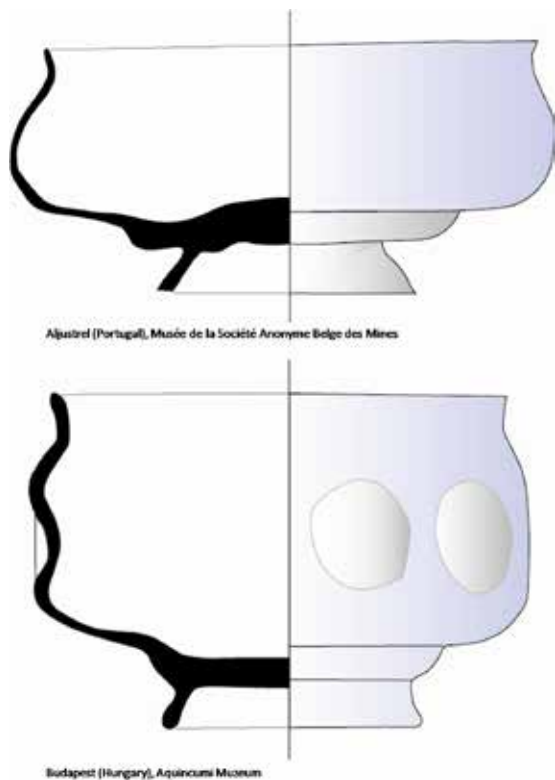
Only around 15 other examples of this type are recorded in museum collections throughout the world, making gilt glass trail inscription sandwich-glass vessel bases a relatively rare gold glass subtype. Of the 15 pieces catalogued by Filippini, the inscriptions and cartouches of five of them are comprised of colourless gilt glass trail only.<sup>41</sup> In the other examples, a coloured glass trail was also included. Blue is recorded only on the British Museum piece. Opaque white is also only recorded in one example.<sup>42</sup> In addition, a further unpublished piece with a single trail of red glass is known to me from a private London collection (**Pl. 20**). Filippini also notes glasses where combinations of two of these colours are present on the same piece.<sup>43</sup>

In contrast to the majority of other gold glass subtypes, a considerable number of gilt glass trail sandwich-glass vessel profiles have been published.<sup>44</sup> A significant number of these vessels have not been grozed. Consequently, sizeable portions of the vessel walls have thus been retained upon many pieces. Two of the gilt glass trail sandwich glasses have survived as complete vessels (**Fig. 5**). One takes the form of a shallow bowl, now in the Musée de la Société Anonyme Belge des Mines in Aljustrel (Portugal), and is of a similar form to that suggested above for cut and incised gold leaf vessels.<sup>45</sup> A somewhat deeper bowl, now in the Aquincumi Múzeum in Budapest, has also survived as a complete vessel.<sup>46</sup> In

**Plate 20** Vessel base with single trail of red glass. Private collection







**Figure 5 Profiles of two gilt glass trail sandwich-glass vessels, one in Aljustrel, the other in Budapest**

contrast, the British Museum example would appear from its surviving vessel wall fragments (for the profile see Appendix B, p. 167, cat. no. 55) to have taken the form of a tumbler style vessel. Other gilt glass trail glasses upon which larger portions of the vessel wall survive, most notably from the Musée du Petit Palais in Paris, take the form of steep sided cups and fluted beakers as opposed to wide bowls.<sup>47</sup>

### The scientific analysis of the British Museum's gold glass collection (Andrew Meek)

An analytical study was carried out on the Late Antique gold glass in the British Museum's collection. Of the 55 objects in the collection, 53 were compositionally analysed.<sup>48</sup> The aim of this project was to compositionally characterize the glasses used in the production of these objects. This information can then be compared with previously published work on glass production during the Late Antique period. The analytical results for a subset of 33 vessel bases have been published previously.<sup>49</sup> The current paper will discuss these results and a further 20 gold glass objects that were also analysed.

### Decorative groups

Before discussing the analytical results it is necessary to define the characteristics used in this section to divide objects into groups. As noted above, the majority of objects in the British Museum's collection are of the cut and incised technique; there is one example of brushed technique (cat. no. 30) and one of gilt glass trail technique (cat. no. 55). However, within the cut and incised technique group, I have made a further subdivision between 'shaded' and 'unshaded' examples. 'Shaded' refers to five examples (cat. nos 17, 42–3, 45, 49) that exhibit hatched shading, normally on the limbs of the individuals depicted on them (see cat. no. 42; Pl. 116).

Morey has commented that this style of decoration is reminiscent of items of the brushed technique.<sup>50</sup> 'Unshaded' refers to the vast majority of objects (see Pl. 50; cat. nos 1–29, 31–40, 44, 46–8, 50, 52). The majority of cut and incised objects in other large collections, for example the Vatican, Louvre, Victoria & Albert Museum, are also of the unshaded style.<sup>51</sup> Those cut and incised objects which are too fragmentary to allow this distinction to be made are defined as 'indeterminate', and have been treated as part of the unshaded subgroup for this study. Plate 124 (cat. no. 50) illustrates an example of a cut and incised single layer gilt glass plaque. There are eight single layered objects in the Museum's collection. Some may have originally been multiple layered objects and subsequently lost their covering glass, while others were purposefully produced as single layer plaques.

Plate 57 (cat. no. 16) and Plate 93 (cat. no. 28) illustrate the final object groups used in this analytical study. Firstly a bowl decorated with diminutive medallions, and secondly one of the diminutive medallions. These objects all have two layers; a thick blob of coloured glass as the backing for the gold design and a thin colourless covering glass layer. They are all of the cut and incised 'unshaded/indeterminate' decorative subgroup.

As far as I am aware, there are only three Late Antique gold sandwich-glasses which have been chemically analysed and previously published, although the glass types of the period are well known from the analysis of other object types. They are in collections in the USA and are all cut and incised vessel bases. Two are of the shaded subgroup (Corning Museum of Glass, no.54.1.83<sup>52</sup> and Cleveland Museum of Art, no.1969.68<sup>53</sup>) and one is unshaded (Corning Museum of Glass, 62.1.20<sup>54</sup>). Table 1 summarizes the object groups which have been examined in this study, and also those previously analysed by Brill from the Corning Museum of Glass<sup>55</sup> and the Cleveland Museum of Art.<sup>56</sup>

### Previous work

This section briefly introduces a summary of previous analytical work and the compositional types used in this study.<sup>57</sup> Scientific analysis has shown that the majority of Roman and Late Antique glasses are characterized by their soda-lime-silica<sup>58</sup> composition.<sup>59</sup> They were produced using a sodium carbonate mineral alkali source called natron and silica-rich sands. This recipe produces a glass with a composition that is low in magnesia (MgO) and potash (K<sub>2</sub>O), relative to that of glasses made using plant and wood ashes. The lime (CaO) content of natron-based glass results from the introduction of limestone or shell with the sand source used. In some cases the quantity of lime and presence of impurities characteristic to particular sand sources, which are reflected in the glass's chemical composition, can be used to suggest a provenance for the glass through comparisons.<sup>60</sup> These variations have been divided into useful categories by a number of authors.<sup>61</sup> Those used by Foster and Jackson will also be employed here (Table 2).<sup>62</sup>

To counteract the blue/green colour caused by iron impurities in the silica sources used, decolourants were purposely added to the glass batch. Those commonly used in Roman glass production were manganese (Type 2a and b) and antimony (Type 1) (Table 2). Manganese is naturally present

Decoration	Form	Layers	No. of objects in this study	Published elsewhere
Gilt glass trail	Vessel base	2	1 (cat. no. 55)	0
Brushed	Medallion	2	1 (cat. no. 30)	0
Cut and incised (U/I)	Vessel base/gilt glass plaque	1	3 (cat. nos 48, 50, 52)	0
Cut and incised (U/I)	Vessel base	2 or 3	29 (cat. nos 2, 4–15, 19, 23, 31–6, 38–40, 44, 46–7, 51, 53)	1 CMOG
Cut and incised (S)	Vessel base/gilt glass plaque	1	4 (cat. nos 17, 43, 45, 49)	0
Cut and incised (S)	Vessel base	2	1 (cat. no. 42)	1 CMA, 1 CMOG
Cut and incised (U)	Diminutive medallion	2	13 (cat. nos 1, 3, 18, 20–2, 24–9, 54)	0
Cut and incised (U)	Diminutive medallion bowl	2	1 (cat. no. 16)	0

**Table 1 Samples analysed for this project and other gold glasses previously analysed by Brill<sup>63</sup> from the Cleveland Museum of Art (CMA) and the Corning Museum of Glass (CMOG) which will be discussed alongside the objects from the British Museum (U=unshaded; I=indeterminate; S=shaded)<sup>64</sup>**

in some sands known to have been used to produce Roman glass. If low levels (<0.2 weight per cent (wt %)) are found they may therefore be due to these impurities.<sup>65</sup> However, antimony is not found as an impurity in sand above the level of a few parts per million (ppm).<sup>66</sup> Therefore if levels of antimony over this amount are found in glasses they are the result of an intentional addition as a decolouring agent. Some colourless glasses contain both antimony and manganese (Type 3). Previous studies have suggested that these colourless glasses are the result of recycling or mixing of glasses.<sup>67</sup> The discovery of this glass composition may be linked to difficulties in obtaining a consistent source of colourless raw glass.

Chronologies based on composition have been suggested by Sayre<sup>68</sup> and Foster and Jackson,<sup>69</sup> among others. They suggest that antimony decoloured Type 1 glasses were an earlier tradition than manganese and mixed decolourant, Types 2 and 3. The first stage of this pattern may see manganese overtaking antimony as the major decolouring ingredient used. This is followed by the use of recycled glass, probably as a result of a dwindling supply of new raw glass. However, there is considerable overlap between the use of each glass type and some periods where all three were certainly employed. Another pattern previously noted is a possible link between high-class vessels and the use of Type 1, antimony decoloured glasses.<sup>70</sup> Rather than these vessels being produced at an earlier stage than manganese decoloured counterparts, as the chronological pattern might suggest, it seems that the glassmakers preferentially chose Type 1 glass to make these high-class vessels.

## Methodology

### Scanning electron microscopy with energy dispersive X-ray spectrometry

To obtain a quantitative compositional data for 18 of the glass objects a small sample (*c.* 1–2mm<sup>2</sup>) was removed from a broken edge, and mounted in a 2.5cm diameter epoxy resin block, polished to a 1µm diamond paste finish, coated with carbon and analysed using scanning electron microscopy with energy dispersive X-ray spectrometry (SEM-EDX). All of the objects sampled have heavily fractured edges and therefore micro-destructive sampling was possible with the minimum impact on the object. Only vessel bases and gilt glass plaques were analysed using this technique.

The samples were examined and analysed in a Hitachi S3700 SEM with attached Oxford Instruments INCA EDX analyser using the following operating conditions: high vacuum mode, 20kV electron beam, 0–10keV spectral range, 2.30nA probe current and a 150 seconds live time. Quantitative analysis was carried out using a calibration produced by using metal, mineral and oxide standards. The Corning A and B glass standards were also analysed to assess that this calibration was producing the correct results. These operating conditions give accuracy levels of better than 20 per cent relative for all oxides and elements measured. Detection limits were calculated using a spectrum synthesis programme on Oxford Instruments INCA Analyser software. This methodology resulted in detection limits for most metal oxides of around 0.1wt%.

The results presented are only for one glass layer of each object. In the one case where both layers of an object (**cat. no. 39; Table 5**) were analysed by SEM-EDX they were found to have essentially the same chemical composition. All X-ray fluorescence (XRF) analysis was carried out on all layers of each object (see below) and intra-object compositional differences for the colourless objects were found to be negligible. Therefore it is believed that the single layer analysis is acceptable as a representation of the composition of each layer of the multi-layered objects.

### Surface X-ray fluorescence

Surface X-ray fluorescence (XRF) was used as a time efficient means of obtaining large quantities of data entirely non-destructively. Thirty-seven unprepared objects were analysed using a Bruker ARTAX spectrometer in a helium atmosphere, with a 50kV voltage, 0.5mA current, 0.65mm diameter collimator and 200 seconds counting time.

The surface analysis of glass objects can provide results which are not consistent with the bulk composition.<sup>71</sup> This is due to the process of weathering that occurs over time. It

**Table 2 Compositional categories of colourless Roman glass<sup>72</sup>**

Type	Description
1	Antimony decoloured
2	a Manganese decoloured (low calcium) b Manganese decoloured (high calcium)
3	Antimony and manganese decoloured

Type	No.	Na <sub>2</sub> O	MgO	Al <sub>2</sub> O <sub>3</sub>	SiO <sub>2</sub>	Cl	K <sub>2</sub> O	CaO	TiO <sub>2</sub>	MnO	FeO	Sb <sub>2</sub> O <sub>5</sub>
1 (cat. nos 17, 33, 43, 45, 48–50, 52, 55)	9	19.47	0.47	1.72	69.48	1.42	0.44	5.90	0.01	0.06	0.33	0.47
2a (cat. nos 6, 32, 39)	3	18.81	0.73	2.36	67.42	1.33	0.53	6.41	0.08	0.97	0.57	-
2b (cat. nos 19, 34, 44, 47)	4	15.90	0.65	3.08	69.94	0.99	0.62	8.31	0.03	1.06	0.38	-
3 (cat. nos 7, 46)	2	20.89	0.93	2.68	65.43	1.24	0.53	6.15	0.15	0.70	0.61	0.15

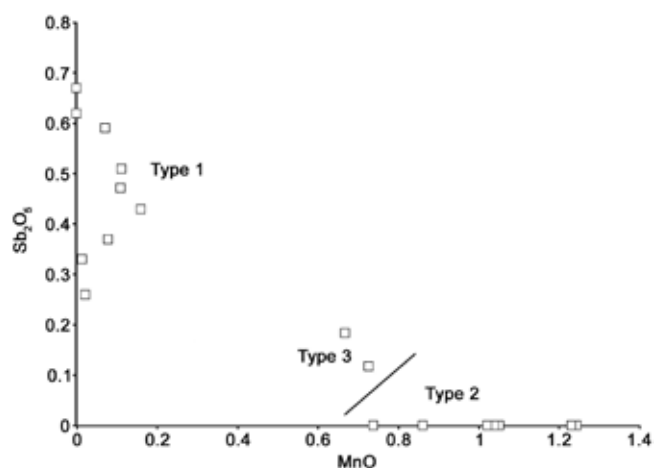
**Table 3** Average values for the four glass (sub)types found by SEM-EDX (wt%)

results in the leaching out of alkali components from the surface and an associated enrichment of silica. However, the glasses analysed for this study were relatively free from weathering. In the few cases where parts of the surface of objects were visibly deteriorated, a non-deteriorated area was chosen for analysis.

Using this methodology, the XRF analysis was able to provide semi-quantitative results, identifying the presence or absence of elements and relative proportions. Elements of lower atomic number than silicon could not be quantifiably detected under the conditions used. A methodology similar to that used by Bayley<sup>73</sup> was employed to provide a means of comparing the spectra obtained by XRF. Bayley divided the peak heights for a selection of significant elements with that found for silicon.<sup>74</sup> In the present study, rather than peak heights, peak areas are used. This provides a larger number of counts, thereby reducing the number of potential errors produced. To produce comparable results this method relies on a relatively consistent level of silicon being present in the objects. The percentage of silica (SiO<sub>2</sub>) in the 18 glass samples analysed by SEM-EDX was consistently between 65 and 72wt%. Assuming that all the glasses analysed by XRF will have similar silica levels to one another, these differences will only have a small effect on the ratios determined by surface XRF. Cobalt is reported, but this is only as a presence or absence (**Table 6**).

Unlike SEM-EDX analysis only a small number of elements of particular interest were selected for study: iron, manganese, antimony, calcium, lead and copper. The peak areas measured were the K<sub>α</sub> peaks apart from lead where the L<sub>α</sub> peak was used. The numbers quoted in the text are ratios of the two peak areas without any conversion factor. They should not be considered quantitative or directly related to percentage compositions.

**Figure 6** Quantitative SEM-EDX results for Sb<sub>2</sub>O<sub>5</sub> and MnO in wt%



## Results and discussion (SEM-EDX)

### Compositional types

All of the objects analysed by SEM-EDX were found to be made from soda-lime-silica glass. Their low magnesium and potassium levels (<1.0wt% MgO and K<sub>2</sub>O) illustrate that they were produced using natron (**Tables 3** and **5**). Natron-based glass is the most common glass type found in the Roman and Late Antique world. It is therefore necessary to look deeper into the results to find characteristic qualities within the compositional data which might be able to tell us something about their production.

Each of the glasses analysed contain significant levels of an intentionally added decolouriser (see **Table 3** and **Fig. 6**).<sup>75</sup> As discussed above, the two decolourants used in the Late Antique period were antimony and manganese. Two samples (**cat. nos 7** and **46**) contain significant manganese levels, but also detectable levels of antimony. They are examples of the third glass type (**Fig. 6**, **Tables 3** and **5**). As discussed previously this third glass type, Type 3, is believed to result from the mixing of antimony (Type 1) and manganese (Type 2) decoloured glasses.

**Figures 7–8** illustrate how the glasses vary in terms of the three oxides added to them as impurities within the silica-rich raw material, believed to be sand. Overall the glasses of Type 1 found by SEM-EDX have the lowest levels of iron, calcium and aluminium suggesting that a low impurity sand source with a low lime content was used in production.<sup>76</sup>

Manganese decoloured Type 2 glasses can be divided further into two subtypes: 2a and 2b (see **Table 3**<sup>77</sup>). Type 2a glasses contain lower levels of calcium oxide, aluminium oxide and higher levels of iron oxide than Type 2b (see **Figs 7–8**). In the SEM-EDX component of this study three glasses with Type 2a glass compositions were found and four with Type 2b composition. These differences suggest that differing sand sources were used in their production.<sup>78</sup>

The Type 3 glasses were found to have similar iron, calcium and aluminium oxide levels to Type 2a glasses.<sup>79</sup> If Type 3 glasses are a mixture of antimony and manganese decoloured glasses, the low iron and high calcium oxide levels in Type 2b glasses (**Fig. 8**) suggest that this compositional subtype is not involved in the mixing process. Furthermore, Type 2a glasses also seem unlikely to be a component in the process as the iron and aluminium levels in the two Type 3 glasses are among the highest of any of the Type 2a glasses analysed here (**Figs 7–8**). It therefore seems likely that there is another high-iron end member for this mixing process, which was not found in this study.

### Decorative groups

All of the 18 glasses analysed by SEM-EDX are vessel bases or gilt glass plaques. Seventeen have cut and incised decoration

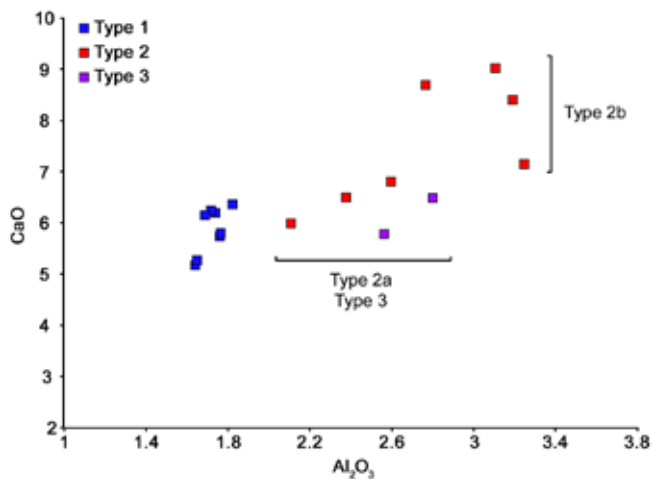


Figure 7 Quantitative SEM-EDX results for CaO and Al<sub>2</sub>O<sub>3</sub> in wt%

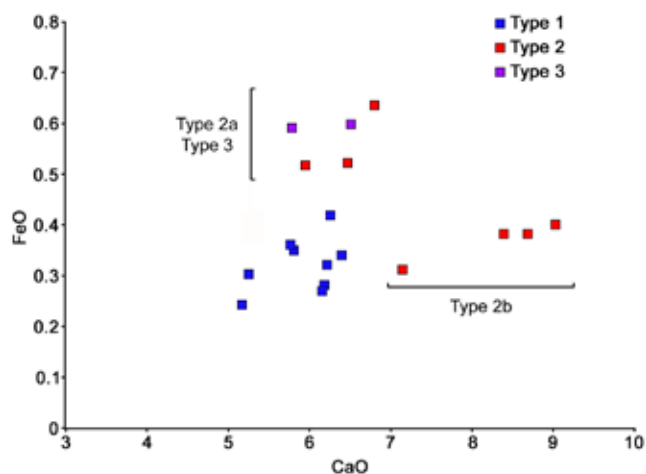


Figure 8 Quantitative SEM-EDX results for FeO and CaO in wt%

and one has gilt glass trail decoration (**cat. no. 55**). Of the 17 cut and incised objects, ten are two-layered vessel bases, four are gilt glass plaques and three are single-layered objects which may be gilt glass plaques or vessel bases.<sup>80</sup> Four (**cat. nos 17, 43, 45, 49**) of the 17 cut and incised objects were decorated in the 'shaded' style. All of these are single-layered objects and all could be gilt glass plaques.

The gilt glass trail vessel base (**cat. no. 55**) was found to have been produced from Type 1 glass. This object is believed to have been produced *c.* AD 300, therefore before cut and incised decorated objects were made (*c.* AD 360–400).<sup>81</sup> The use of Type 1 glass in the production of one of the earliest gold glass objects in this study fits with the chronological patterns for decoloured glass, namely that the use of antimony is an earlier tradition than manganese.<sup>82</sup>

The ten two-layered cut and incised vessel bases were found to have a wide spread of compositions. Glass of all four (sub)types are represented in this group, however seven of the ten were found to be of manganese decoloured glass and only one (**cat. no. 33**) is of Type 1 glass. The fact that manganese decoloured glass is so strongly represented in this group also fits with the earlier suggested chronological patterns. However, the spread of compositions found suggests that the workshop(s) producing these objects were receiving their glass supplies from a variety of sources. This does not necessarily suggest that they were produced over a long period of time or at multiple workshops. A single workshop operating in the period suggested for the production of these objects could have sourced glass of all of these compositional types.<sup>83</sup>

As **Table 5** shows, the glass of the seven single-layered objects are all of Type 1 composition. Four of these objects are gilt glass plaques and the original form of three of them is unknown. All of these objects have cut and incised decoration. Four are of the shaded subgroup, three are indeterminate and one is an unshaded plaque which contains text and no figurative decoration. It is not possible to use this data to suggest that these objects form a distinct compositional and decorative assemblage as Type 1 glass is also found on a two-layered vessel base (**cat. no. 33**). However, it is possible to state that all single-layered objects and all shaded cut and incised objects analysed using SEM-EDX were produced from Type 1 glass.<sup>84</sup> The two

objects analysed previously by Brill<sup>85</sup> and found to have been produced from Type 1 glass are multi-layered vessel bases decorated in the 'shaded' style.

As noted above, this information suggests two possibilities: either that these object groups were produced earlier than the majority of cut and incised glasses, or that the workshop(s) that produced them preferentially used Type 1 glass for single-layered and shaded cut and incised objects. As all of the cut and incised objects are believed to date to *c.* AD 360–400, it seems more likely that the second of these two possibilities is correct. This in turn suggests that gilt glass plaques and shaded objects represent a higher class of gold glass object than the unshaded multiple-layer cut and incised vessel bases.<sup>86</sup>

## Results and discussion (XRF)

### Colourless glasses: compositional types

It is not possible to definitively discern whether the glasses analysed by XRF are natron-based soda-lime-silica glasses due to limitations in this non-destructive methodology. However, this seems most likely based on extensive published literature and the SEM-EDX analysis results presented above.

The colourless glasses analysed using XRF show comparable compositional patterns to those analysed by SEM-EDX (see **Figs 6, 8–10**). **Figure 9** shows that glasses of all three main compositional types described by Foster and Jackson were found.<sup>87</sup> It was also possible to differentiate between subtypes 2a and 2b using XRF analysis (**Fig. 10**).

A far greater number of Type 3 colourless glasses were found using XRF than by SEM-EDX (20 and 2, respectively). There are two possible explanations for this difference. Firstly, the detection limits of the XRF method are lower than that of the SEM-EDX method employed. Therefore, some items which would have been considered Type 2 glasses if analysed by SEM-EDX could in fact be mixed decolourant, Type 3 glasses. Secondly, there is a difference in the assemblages analysed by each technique. The SEM-EDX analysis was only carried out on vessel bases and gilt glass plaques. The XRF analysis was carried out on 14 diminutive medallions, 22 vessel bases/gilt glass plaques and one brushed gold medallion.

Type	No.	Mn/Si	Sb/Si	Ca/Si	Fe/Si	Pb/Si	Cu/Si
1 (cat. nos 30, 42, 45, 49)	4	0.10	0.61	1.54	1.38	0.18	0.03
2a (cat. nos 23–4)	2	2.27	0.09	1.61	2.20	0.10	0.05
2b (cat. nos 5, 8, 9, 11–13, 31, 35, 38, 40, 51)	11	2.55	0.01	2.21	1.26	0.02	0.02
3 (cat. nos 1–4, 10, 14–16, 18, 20–2, 25–9, 36, 53–4)	20	1.45	0.53	1.66	2.02	0.19	0.13

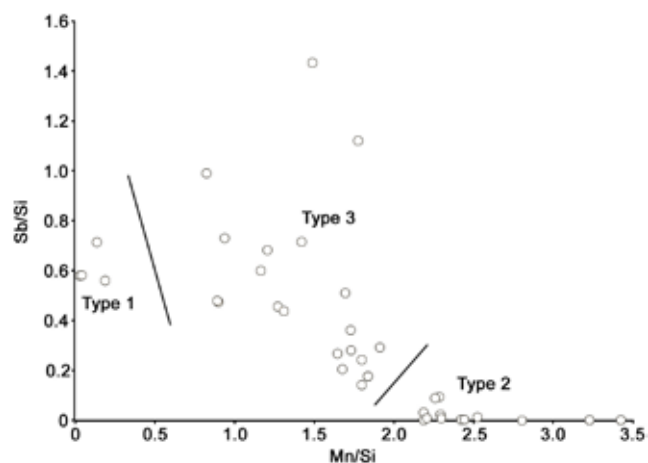
**Table 4** Compositional types found by semi-quantitative XRF analysis for colourless glasses

**Figure 11** illustrates the varying levels of lead and copper in the colourless glasses analysed by XRF.<sup>88</sup> Lead and copper are found at significant levels in some coloured glass and it is believed that during the process of recycling some coloured glass will enter the mixture. If these elements are found in the analytical data for colourless glass objects it suggests that they may have been produced from recycled glass.<sup>89</sup> It is clear from **Figure 11** that, as expected, Type 3 glasses show the strongest signs of recycling. **Figures 10–11** also suggest (as **Figs 7–8** did for the SEM-EDX data) that Type 3 glass is not produced by the mixing of glass of Types 1 and 2.

Some Type 1 glasses contain considerable levels of lead, particularly **cat. no. 30** (**Fig. 11, Table 6**). This may point to a certain level of recycling of Type 1 glasses. However, unlike the recycling which produces Type 3 glass, this recycling appears to have been more selective so that Type 1 glasses were recycled separately to the other glass types. As well as high lead levels, **cat. no. 30** also contains the highest iron oxide levels of a Type 1 glass found in this study. This object is therefore unique in the British Museum's collection in terms of its decoration and chemical composition.

Type 2b glasses show the lowest average levels of copper and lead (**Table 4**). They are also the most distinct compositional (sub)type (see **Figs 7–8, 10–11**), and are therefore likely to have been through the lowest levels of inter-type recycling. All of the objects produced with Type 2b glass are vessel bases of the unshaded/indeterminate cut and incised decorative subgroup and believed to have been produced in the period *c.* AD 360–400.<sup>90</sup> It is the only glass (sub)type to be found in a single decorative category (**Table 7**). It seems likely that this glass type was supplied 'fresh' (i.e. not recycled) to the workshop(s) producing cut and incised vessel bases during this period.

**Figure 9** Semi-quantitative XRF results for Sb/Si and Mn/Si. Colourless glass layers only (see Fig. 6)



## Colourless glasses: decorative groups

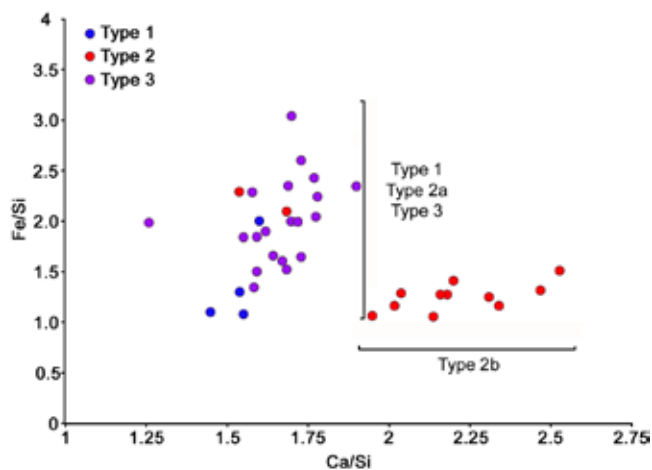
### Vessel bases and gilt glass plaques

The colourless glass of the vessel bases and gilt glass plaques analysed using XRF can be divided into multiple compositional types. A fairly similar pattern to that established using SEM-EDX is found. Of the 22 bases and plaques analysed, 3 were found to be produced from Type 1 glass (**cat. nos 42, 45, 49**), 1 from Type 2a (**cat. no. 23**), 11 from Type 2b (**cat. nos 5, 8–9, 11–13, 31, 35, 38, 40, 51**) and 7 from Type 3 (**cat. nos 2, 4, 10, 14–15, 36, 53**) (**Figs 9–10; Table 6**).

The three Type 1 vessel bases and gilt glass plaques glasses studied by XRF are of the cut and incised shaded subgroup. Two of these objects are the only single layered objects (**cat. nos 45, 49**) analysed by XRF. These two objects were also analysed by SEM-EDX and both techniques have produced correlative data. The third Type 1 object in this category is a vessel base with a blue backing glass (**cat. no. 42**). This object is unique in the British Museum's collection, being the only vessel base with a coloured backing glass layer. The discovery of the use of Type 1 glass on this object suggest that vessel bases with coloured backing glasses may also fit into the category of higher class gold glass objects discussed above. However, with only a single object in this subgroup, it is not possible to state this with any certainty.

All vessel base glasses found to have been produced from Type 2 and 3 are of the cut and incised unshaded/indeterminate subgroup. There are no strong stylistic differences between the cut and incised group objects produced from Type 2 and Type 3 glasses. As noted above, within this group and across both analytical techniques, it was found that all Type 2b glasses are cut and incised unshaded/indeterminate vessel bases.

**Figure 10** Semi-quantitative XRF results for Fe/Si vs. Ca/Si. Colourless glass layers only (see Fig. 8)





Cat. no.	BM Reg. No.	L.	Al.	Form	Decoration	Na <sub>2</sub> O	MgO	Al <sub>2</sub> O <sub>3</sub>	SiO <sub>2</sub>	P <sub>2</sub> O <sub>5</sub>	SO <sub>3</sub>	Cl	K <sub>2</sub> O	CaO	TiO <sub>2</sub>	MnO	FeO	CoO	CuO	ZnO <sub>2</sub>	Sb <sub>2</sub> O <sub>5</sub>	PbO	Type
6	1878,1101.305	2	1	VB	C&(U/I)	18.1	0.76	2.60	67.2	bdl	0.34	1.24	0.59	6.80	0.13	1.04	0.65	bdl	bdl	bdl	bdl	bdl	2a
7	1886,1117.330	2	1	VB	C&(U/I)	21.4	0.92	2.56	65.5	bdl	0.39	1.27	0.45	5.80	0.15	0.73	0.61	bdl	0.10	bdl	0.12	bdl	3
17	S317	1	1	GGP	C&(S)	19.8	0.46	1.76	68.6	bdl	0.54	1.45	0.47	5.75	bdl	0.16	0.37	bdl	bdl	bdl	0.43	bdl	1
19	1863,0727.2	2	1	VB	C&(U/I)	15.4	0.56	3.19	70.5	bdl	0.37	0.86	0.74	8.39	0.12	1.24	0.39	bdl	bdl	bdl	bdl	bdl	2b
32	1859,0618.1	2	1	VB	C&(U/I)	19.6	0.69	2.11	67.6	bdl	0.38	1.36	0.46	5.95	bdl	0.86	0.53	bdl	bdl	bdl	bdl	bdl	2a
33	1859,0618.3	2	1	VB	C&(U/I)	19.3	0.52	1.74	68.7	bdl	0.40	1.36	0.45	6.20	bdl	bdl	0.33	bdl	bdl	0.11	0.37	bdl	1
34	1854,0722.5	2	1	VB	C&(U/I)	16.4	0.73	3.11	68.9	bdl	0.35	1.07	0.71	9.02	bdl	1.23	0.41	bdl	bdl	bdl	bdl	bdl	2b
39	1863,0727.7	2	2	VB	C&(U/I)	18.8	0.73	2.38	67.5	bdl	0.56	1.39	0.53	6.48	0.11	1.02	0.54	bdl	bdl	bdl	bdl	bdl	2a
43	OA867	1	1	GGP	C&(S)	20.0	0.47	1.76	68.5	bdl	0.39	1.49	0.47	5.79	bdl	0.11	0.36	bdl	bdl	bdl	0.47	bdl	1
44	1854,0722.6	2	1	VB	C&(U/I)	15.3	0.67	2.77	70.9	bdl	0.42	1.15	0.57	8.69	bdl	1.05	0.39	bdl	bdl	bdl	bdl	bdl	2b
45	1859,0618.4*	1	1	GGP	C&(S)	19.2	0.51	1.74	70.0	bdl	0.47	1.32	0.40	6.18	bdl	bdl	0.29	bdl	bdl	bdl	0.33	bdl	1
46	S121	2	1	VB	C&(U/I)	20.4	0.95	2.80	65.4	bdl	0.41	1.21	0.61	6.51	0.14	0.67	0.62	bdl	bdl	bdl	0.18	bdl	3
47	OA860	2	1	VB	C&(U/I)	16.6	0.62	3.25	69.5	bdl	0.36	0.89	0.47	7.15	bdl	0.74	0.33	bdl	bdl	bdl	bdl	bdl	2b
48	OA864	1	1	VB/GGP	C&(U/I)	19.7	0.49	1.82	70.2	bdl	0.44	1.38	0.45	6.38	bdl	0.11	0.35	bdl	bdl	bdl	0.51	bdl	1
49	1859,0618.5*	1	1	VB/GGP	C&(S)	18.9	0.50	1.69	69.5	bdl	0.48	1.31	0.37	6.14	bdl	bdl	0.28	bdl	bdl	bdl	0.26	bdl	1
50	1854,0722.8	1	1	GGP	C&(U/I)	19.4	0.45	1.65	69.9	bdl	0.41	1.56	0.33	5.25	0.10	bdl	0.31	bdl	bdl	bdl	0.62	bdl	1
52	S120	1	1	VB/GGP	C&(U/I)	19.6	0.47	1.72	68.1	bdl	0.48	1.38	0.58	6.25	bdl	bdl	0.43	bdl	bdl	bdl	0.59	bdl	1
55	OA858	2	1	VB	T	19.4	0.36	1.64	71.8	bdl	0.36	1.55	0.40	5.17	bdl	bdl	0.25	bdl	bdl	bdl	0.67	bdl	1

**Table 5 Results of SEM-EDX analysis, presented in wt%. All analyses in this table were carried out on colourless glass layers. Where more than one layer has been analysed composition quoted is the average (bdl = below detection limit; \* = also analysed by XRF; L = number of glass layers on the object; Al. = number of layers analysed; VB = vessel base; GGP = gilt glass plaque; C&I = cut and incised; U/I = unshaded/ indeterminate; S = shaded; T = trailed)<sup>91</sup>**

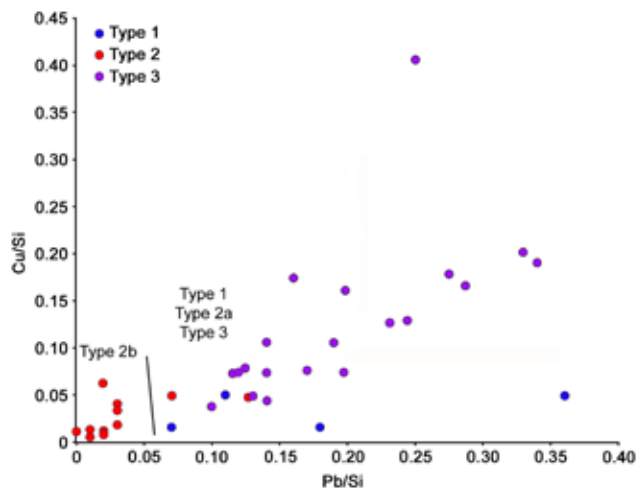


Figure 11 Semi-quantitative XRF results for Cu/Si vs. Pb/Si. Colourless glass layers only

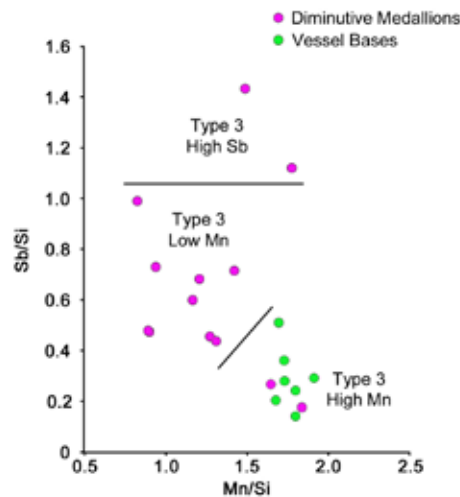


Figure 12 Semi-quantitative XRF results Mn/Si and Sb/Si levels illustrating variations within Type 3 glasses

### Diminutive medallions

The diminutive medallions make up 13 of the 21 objects found to be made from Type 3 glass by SEM-EDX and XRF. Of these 13 medallions, the majority have compositional characteristics which distinguish them from the nine Type 3 vessel base glasses.<sup>92</sup> Within the Type 3 glasses presented in **Fig. 9** there appears to be two or three subtypes (see **Fig. 12**). Firstly, they can be divided between those glasses with Sb/Si values of less or more than 1.1. Only two glasses are of the higher antimony subtype, and they are both diminutive medallions (**cat. nos 1** and **28**). Within the Type 3 glasses with lower Sb/Si levels another division can be seen between those glasses with Mn/Si values of less or more than 1.5. Of these glasses all of those of the lower manganese subtype are diminutive medallions. There are nine Type 3 glasses with Mn/Si values higher than 1.5, seven of which are vessel bases and two diminutive medallions (**cat. nos 3** and **20**). Only one diminutive medallion does not have a colourless layer of Type 3 glass (**cat. no. 24**). It has higher Mn/Si and lower Sb/Si values and is considered to be Type 2a (see **Fig. 10**; **Table 6**).

These subtypes are not linked to any other characteristics of these objects. The two high Sb/Si Type 3 diminutive medallions both have blue glass layers of similar composition, but significantly different gold leaf designs. The two diminutive medallions with high Mn/Si Type 3 glass are the only ones to have purple or brown glass layers and again are stylistically very different from one another. The single Type 2a diminutive medallion (**cat. no. 24**) has no stylistic characteristics which make it particularly distinct from many of the other objects. The compositional differences do not, therefore, appear to be linked to any stylistic or ‘workshop groups’. However, with such a small and varied assemblage of objects this is impossible to prove.

One of the glasses in the low Mn/Si subtype of Type 3 is the St Severin bowl (**Pl. 57**; **cat. no. 16**). **Figure 19** in the catalogue (p. 97) illustrates the areas of this bowl in the British Museum’s collection and a reconstruction of how the complete vessel may have appeared, with suggested positions for the now missing medallions. The colourless glass of one of the diminutive medallions with green backing glass (**cat. no. 27**) analysed by XRF was found to

have almost exactly the same composition as the bowl. It is fairly unlikely that this is one of the missing medallions of the St Severin bowl as its acquisition predates the discovery of the bowl, the decorative style is rather less developed and the compositions of the green backing glasses are different. However, this similarity does suggest that this diminutive medallion and the St Severin bowl were made using decoloured glass from the same primary glassmaking site and that they may have been formed in the same workshop.

The discovery that the vast majority of diminutive medallions were produced from Type 3 glass allows some conclusions to be drawn. As discussed previously, the use of Type 3 glass is believed to be a later tradition in the period under discussion and may have been driven by diminishing supplies of raw colourless glass. Furthermore, the preferential use of Type 1 glass in high class objects, and the lack of Type 1 glass in this group, may suggest that diminutive medallions were not considered by their producers to be high class objects.

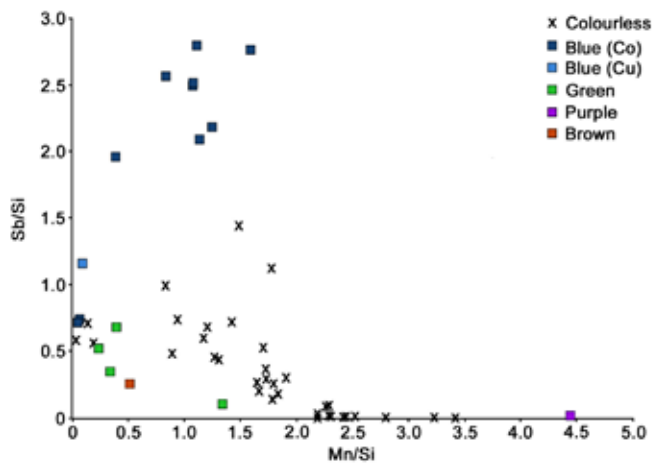
### Brushed gold medallion

The final object to be discussed in this section is the only object in this stylistic group in the Museum’s collection (**cat. no. 30**). This object is decorated with gold powder and its backing glass is blue (**Pl. 95**). As discussed above it can be differentiated from the other Type 1 glasses due to its elevated iron levels that are comparable with Type 2a glasses and high lead levels only otherwise seen in Type 3 glasses. Its colourless glass may have been produced using a sand source similar to those used for Type 2a glasses, but with the addition of antimony rather than manganese, or may be the result of recycling multiple Type 1 glasses. This object is therefore distinct from all others in the British Museum’s collection based on decoration and chemical composition.

**Cat. no. 30** is believed to have been produced around AD 300,<sup>93</sup> approximately 60 years before the cut and incised decorated objects. As with the gilt glass trail object, the use of Type 1 glass in the production of one of the earliest gold glass objects in this study fits with the chronological patterns for decoloured glass discussed earlier in this chapter.<sup>94</sup>

Cat. no.	Reg. No.	Colour	L.	Al.	Form	Decoration	Mn/Si	Sb/Si	Ca/Si	Fe/Si	Pb/Si	Cu/Si	Co(+/-)	Type
1	1856,0425.1	Colourless	2	1	DM	CI(U/I)	1.78	1.12	1.69	2.36	0.12	0.08	-	3
1	1856,0425.1	Blue (Co)	2	1	DM	CI(U/I)	1.07	2.50	1.76	3.51	4.27	1.73	+	coloured
2	OA856	Colourless	3	3	VB	CI(U/I)	1.73	0.37	1.78	2.25	0.14	0.11	-	3
3	OA857	Colourless	2	1	DM	CI(U/I)	1.84	0.17	1.55	1.85	0.14	0.04	-	3
3	OA857	Purple	2	1	DM	CI(U/I)	4.44	0.02	1.80	2.38	0.06	0.09	-	coloured
4	1854,0722.4	Colourless	3	2	VB	CI(U/I)	1.70	0.52	1.73	2.61	0.19	0.11	-	3
5	1863,0727.8	Colourless	2	2	VB	CI(U/I)	3.42	0.00	2.47	1.32	0.01	0.01	-	2b
8	1893,0426.183	Colourless	2	2	VB	CI(U/I)	3.23	0.00	2.53	1.51	0.03	0.04	-	2b
9	1863,0727.12	Colourless	2	2	VB	CI(U/I)	2.30	0.01	2.18	1.28	0.03	0.02	-	2b
10	1863,0727.4	Colourless	2	2	VB	CI(U/I)	1.80	0.14	1.58	1.35	0.10	0.04	-	3
11	1863,0727.6	Colourless	2	2	VB	CI(U/I)	2.42	0.00	2.34	1.17	0.02	0.01	-	2b
12	1863,0727.13	Colourless	3	3	VB	CI(U/I)	2.29	0.02	2.31	1.25	0.02	0.01	-	2b
13	1863,0727.9	Colourless	2	2	VB	CI(U/I)	2.19	0.00	2.04	1.28	0.03	0.04	-	2b
14	1859,0618.2	Colourless	2	2	VB	CI(U/I)	1.67	0.21	1.59	1.51	0.14	0.07	-	3
15	1854,0722.3	Colourless	2	2	VB	CI(U/I)	1.91	0.30	1.70	3.05	0.16	0.17	-	3
16	1881,0624.1	Colourless	2	1	DM bowl	CI(U/I)	0.90	0.48	1.67	1.61	0.28	0.18	-	3
16	1881,0624.1	Blue (Co)	2	1	DM bowl	CI(U/I)	1.25	2.19	1.77	3.80	4.51	2.19	+	coloured
16	1881,0624.1	Green	2	1	DM bowl	CI(U/I)	0.33	0.35	1.60	4.07	0.62	18.36	-	coloured
18	OA4308	Colourless	2	1	DM	CI(U/I)	1.43	0.72	1.90	2.35	0.25	0.41	-	3
18	OA4308	Blue (Co)	2	1	DM	CI(U/I)	0.84	2.56	1.65	3.44	3.55	1.93	+	coloured
20	1854,0722.15	Colourless	2	1	DM	CI(U/I)	1.65	0.27	1.58	2.29	0.12	0.07	-	3
20	1854,0722.15	Brown	2	1	DM	CI(U/I)	0.52	0.25	1.52	4.60	0.14	0.03	-	coloured
21	1863,0727.14	Colourless	2	1	DM	CI(U/I)	1.17	0.60	1.62	1.90	0.17	0.08	-	3
21	1863,0727.14	Blue (Co)	2	1	DM	CI(U/I)	0.07	0.73	1.47	6.20	0.24	3.31	+	coloured
22	1854,0722.17	Colourless	2	1	DM	CI(U/I)	1.21	0.68	1.60	1.85	0.24	0.13	-	3
22	1854,0722.17	Blue (Co)	2	1	DM	CI(U/I)	1.14	2.08	1.86	4.02	2.49	1.79	+	coloured
23	1863,0727.1	Colourless	2	2	VB	CI(U/I)	2.26	0.09	1.54	2.30	0.07	0.05	-	2a
24	1854,0722.16	Colourless	2	1	DM	CI(U/I)	2.29	0.09	1.68	2.09	0.13	0.05	-	2a
24	1854,0722.16	Green	2	1	DM	CI(U/I)	1.34	0.10	1.16	6.18	0.59	6.44	-	coloured
25	OA4310	Colourless	2	1	DM	CI(U/I)	0.94	0.73	1.69	1.54	0.29	0.17	-	3
25	OA4310	Blue (Co)	2	1	DM	CI(U/I)	0.39	1.96	1.70	3.91	1.50	2.39	+	coloured
26	1854,0722.14	Colourless	2	1	DM	CI(U/I)	0.83	0.99	1.65	1.66	0.34	0.19	-	3
26	1854,0722.14	Blue (Co)	2	1	DM	CI(U/I)	1.59	2.76	1.86	3.63	6.05	1.88	+	coloured
27	1863,0727.17	Colourless	2	1	DM	CI(U/I)	0.90	0.48	1.73	1.66	0.33	0.20	-	3
27	1863,0727.17	Green	2	1	DM	CI(U/I)	0.40	0.70	2.12	4.89	2.53	21.18	-	coloured
28	1863,0727.15	Colourless	2	1	DM	CI(U/I)	1.49	1.43	1.78	2.05	0.20	0.07	-	3
28	1863,0727.15	Blue (Co)	2	1	DM	CI(U/I)	1.11	2.79	2.62	3.57	4.70	1.94	+	coloured
29	1863,0727.16	Colourless	2	1	DM	CI(U/I)	1.27	0.46	1.72	2.01	0.20	0.16	-	3
29	1863,0727.16	Blue (Co)	2	1	DM	CI(U/I)	1.08	2.51	1.44	4.56	2.91	1.78	+	coloured
30	1890,0901.1	Colourless	2	1	M	B	0.14	0.71	1.60	2.00	0.36	0.05	-	1
30	1890,0901.1	Blue (Co)	2	1	M	B	0.05	0.72	1.47	6.16	0.23	3.26	+	coloured
31	1870,0606.12	Colourless	2	2	VB	CI(U/I)	2.44	0.00	2.14	1.07	0.00	0.01	-	2b
35	1863,0727.3	Colourless	2	2	VB	CI(U/I)	2.19	0.03	1.95	1.07	0.01	0.01	-	2b
36	1863,0727.11	Colourless	2	2	VB	CI(U/I)	1.73	0.29	1.77	2.44	0.12	0.07	-	3
38	1863,0727.5	Colourless	2	2	VB	CI(U/I)	2.80	0.00	2.20	1.42	0.03	0.04	-	2b
40	1863,0727.10	Colourless	2	2	VB	CI(U/I)	2.21	0.01	2.02	1.17	0.02	0.01	-	2b
42	1898,0719.2	Colourless	2	1	VB	CI(S)	0.19	0.56	1.54	1.31	0.18	0.02	-	1
42	1898,0719.2	Blue (Cu)	2	1	VB	CI(S)	0.09	1.15	1.58	1.95	0.46	13.65	-	coloured
45	1859,0618.4*	Colourless	1	1	GGP	CI(S)	0.04	0.58	1.55	1.08	0.11	0.05	-	1
49	1859,0618.5*	Colourless	1	1	VB/GGP	CI(S)	0.03	0.58	1.45	1.11	0.07	0.02	-	1
51	1854,0722.11	Colourless	2	2	VB	CI(U/I)	2.52	0.01	2.16	1.28	0.02	0.06	-	2b
53	1886,1117.331	Colourless	2	2	VB	CI(U/I)	1.80	0.25	1.26	1.99	0.13	0.05	-	3
54	1886,1117.332	Colourless	2	1	DM	CI(U/I)	1.31	0.44	1.70	2.01	0.23	0.13	-	3
54	1886,1117.332	Green	2	1	DM	CI(U/I)	0.23	0.52	2.12	5.40	0.51	16.57	-	coloured

**Table 6 Results of semi-quantitative XRF analysis. Numbers quoted are ratios of peak areas for the relevant element, divided by that for silica (see Methodology section). Where more than one layer of the same colour on a single object has been analysed, the average composition is quoted (\*=also analysed by SEM-EDX; L. = number of glass layers on the object; Al. = number of layers analysed; VB = vessel base; GGP = gilt glass plaque; DM = diminutive medallion; M = medallion; C&I = cut and incised; U/I = unshaded/indeterminate; S = shaded; B = brushed; + = cobalt detected; - = cobalt not detected)**



**Figure 13** Semi-quantitative XRF results for Sb/Si and Mn/Si. Colourless and coloured glass layers

### Coloured glasses

All diminutive medallions, including those on the St Severin bowl (**cat. no. 16**) are composed of a layer of colourless glass and a layer of coloured glass. There are two further objects, one brushed gold medallion (**cat. no. 30**) and one cut and incised gold vessel base (**cat. no. 42**), which contain coloured glass layers. In total 17 coloured glass layers have been analysed in this study.

There are four different colours of coloured glass present in the British Museum gold glass collection; blue, green, brown and purple. The most prevalent colour is blue (11 objects), followed by green (four objects) and there is only one object each of brown and purple glass. Of the 11 objects containing blue glass, 10 are a deep blue and coloured with the addition of cobalt. The backing glass of **cat. no. 42** is a lighter blue and does not contain cobalt. Its colour is the result of the presence of copper (see **Table 6**). The green glasses are coloured by the addition of copper, brown by iron and purple by manganese. In some cases it has been possible to characterize the base glass type used in the production of these glasses.

The blue glasses coloured with cobalt can be divided into two clusters. Firstly, there are blue glasses from two objects (one brushed gold medallion, **cat. no. 30**, and one diminutive medallion, **cat. no. 21**) which were produced from the Type 1 category of glass (**Fig. 13; Table 6**). The glasses used on these objects seem to have been produced from the addition of a cobalt-rich raw material to an antimony decoloured glass. The colourless layers of the medallion (**cat. no. 30**) and diminutive medallion (**cat. no. 21**) are produced from Type 1 and 3 respectively. Therefore different compositions in the same glass imply that the same workshop was mixing and matching glass.

The second blue glass cluster coloured with cobalt consists of eight (**cat. nos 1, 16, 18, 22, 25–6, 28–9**) blue glasses from diminutive medallions with much higher levels of antimony and some manganese (**Fig. 13; Table 6**). These do not appear to fit with any of the compositional types discussed above and they also contain the highest lead levels of all the glasses in this study.<sup>95</sup> The presence of significant levels of cobalt, lead and antimony are characteristic of Roman opaque blue glasses.<sup>96</sup> It therefore seems likely that these transparent blue glasses were produced by the addition of opaque blue glass to a colourless or lightly coloured base

glass. These characteristics are often found in transparent blue glasses of the post-Roman period.<sup>97</sup> The colourless layers of glass of each of the diminutive medallions in this cluster are produced from glass of Type 3 composition. This may suggest a link between the practice of using opaque blue glasses as colouring materials and the use of Type 3 glass. Further investigation may be able to link this practice to a chronological pattern or particular workshops. However, proving which, if either, of these is the case is beyond the scope of this study.

The single object with a blue glass layer coloured using copper, rather than cobalt, contains significant levels of antimony and only a trace of manganese (**cat. no. 42; Pl. 116**). As with the low lead cobalt blues, this layer appears to have been produced by the addition of copper to a Type 1 glass. This object has cut and incised shaded decoration and its colourless glass layer is also of Type 1 composition.

Copper-coloured green glass layers are found on three diminutive medallions and the St Severin bowl (**Table 6**). The antimony and manganese contents of these green layers are variable and not all of them fall into previously defined types. **Cat. no. 54** is a Type 1 glass and **cat. no. 24** appears to be a Type 2 glass with low manganese levels. **Cat. no. 27** is a Type 1 glass with elevated manganese levels and fairly high lead levels (**Table 6**), similar to the high-antimony blues discussed above. It may therefore have been produced by reusing an opaque green glass as colouring material. **Cat. no. 16** contains low levels of manganese and antimony and may be produced from a mixture of decoloured glass (possibly Type 3) and non-decoloured glass. This last example comes from the St Severin medallion bowl and it is interesting to note that the blue glass analysed from this bowl is not similar in composition, being of the cobalt coloured high lead Type 3 glass.

The final two glass colours, brown and purple, only appear on one object each. The brown glass of **cat. no. 20** contains low levels of both antimony and manganese, similar in composition to the green glass of **cat. no. 16**. This glass was probably also produced from the addition of a colourant, in this case iron, to a glass of mixed composition not easily defined by the types used in the decoloured glass discussion. The purple glass of **cat. no. 3** contains high levels of manganese, added as a colourant, and very low levels of antimony. It is therefore suggested that this colourant was added to either a Type 2 decoloured glass that already contained some manganese or a glass that originally contained no intentionally added decolourants.

### Conclusions<sup>98</sup>

It has been shown that the colourless glasses used to produce Late Antique gold glass objects fit into previously established compositional types. In some cases these compositional types can be linked to the decorative techniques used on the objects (**Table 7**). As discussed above the patterns proposed by Sayre<sup>100</sup> and Foster and Jackson,<sup>101</sup> suggest that Type 1 glasses were an earlier tradition than Types 2 and 3, and that Type 1 glasses were preferentially used for high-class objects.

The chronological pattern of decolourant use suggests that brushed, gold glass trail, multi-layered cut and incised shaded and all single layered objects may have been made

Decoration	Form	Layers	Type 1	Type 2a	Type 2b	Type 3
Gilt glass trail	Vessel base	2	1 (BM)	0	0	0
Brushed	Medallion	2	1 (BM)	0	0	0
	Vessel base/gilt glass plaque	1	3 (BM)	0	0	0
Cut and incised (U/I)	Vessel base	2–3	1 (BM)	4 (BM)	15 (BM) 1 (CMOG)	9 (BM)
	Vessel base/gilt glass plaque	1	4 (BM)	0	0	0
Cut and incised (S)	Vessel base	2	1 (BM) 1 (CMOG) 1 (CMA)	0	0	0
	Diminutive medallion	2	0	1 (BM)	0	12 (BM)
Cut and incised (U)	Diminutive medallion bowl	2	0	0	0	1 (BM)

**Table 7 Summary of SEM-EDX and XRF results for colourless glass layers (BM = British Museum, CMA = Cleveland Museum of Art; CMOG = Corning Museum of Glass; U = unshaded; I = indeterminate; S = shaded)<sup>99</sup>**

before the cut and incised unshaded objects and diminutive medallions (see **Table 6**). The early dates proposed in the catalogue for brushed and gilt glass trail objects (*c.* AD 300 for **cat. nos 30** and **55**) gives the proposed chronology some added credence. However, the similar dating based on stylistic properties for all cut and incised objects suggests that the workshop(s) producing single-layered and shaded cut and incised objects may have preferentially used Type 1 glass and that these two decorative subgroups were of a separate, perhaps higher, class of gold glass object.

If we bear in mind the relative proportions of each of the decorative groups in museum collections<sup>102</sup> (**Table 1**), it is possible to observe a division between a smaller scale production of higher class objects (brushed, gilt glass trail, gilt glass plaques and shaded cut and incised) and large scale production of lower quality items (unshaded cut and incised). Considerable social and cultural changes occurred in Europe during the Late Antique period. These events may have led not only to the chronological alterations in glass compositional types used, as discussed above, but also to the producers of gold glass objects altering their product to suit a greatly changing market. The number of consumers they supplied may have increased in number over time, coinciding with a reduction in the quality of items they consumed. This suggestion concurs with the views expressed in Chapter Five that, contrary to prior opinions, gold glass items were owned by people of modest wealth and status.

The analytical techniques employed in this project were able to create a powerful tool in the identification of glass compositional types and can be used to test pre-established ideas based on the decoration and form of groups of glass objects. The future scientific analysis of similar objects will increase the database of glass compositions and test the suggested conclusions of this work.

## Notes

- 1 See Haevernick 1962.
- 2 They appear in descending order according to the total number of each gold glass type contained in the Museum's collection, representative of the corpus published by Morey in 1959.
- 3 See Harden 1987, 265.
- 4 Corning Museum, inv. no. 66.1.267; Harden 1987, no. 143, 253–4; Whitehouse 2002, no. 867, 275–7.
- 5 **Cat. nos 2, 4, 5–15, 19, 23, 31–40, 42, 44, 46, 47–9, 51–3, 55.**
- 6 Harden 1987, 265; Whitehouse 1996, 12.

- 7 Examples of this in the British Museum's collection are **cat. nos 4, 14–15, 35, 37, 42.**
- 8 See Whitehouse 2007, nos 52–7.
- 9 Garrucci 1858, pl. 39.8a–b.
- 10 Price and Cottam 1998, 29.
- 11 The profile illustration for this piece is reproduced in Appendix B.
- 12 Garrucci 1858, pls 39.8a and 39.8b.
- 13 Aus'm Weerth 1878; Haevernick 1962.
- 14 Vatican Museum, inv. no. 0012; illustrated in Morey 1959, no. 42.
- 15 Vatican Museum, inv. no. 759 (ex-743); see also Osborne and Claridge 1998, nos 249, 252, 265, 269 and 277, where *Museo Cartaceo* illustrations and more recent photographs of such pieces appear juxtaposed, but not remarked upon.
- 16 Buonarruoti 1716, pl. XVIII.3 (Morey 1959, no. 85, pl. XIV).
- 17 Vatican Museum, inv. no. 619 (ex-771); Morey 1959, no. 68, pl. XI.
- 18 Boldetti 1720, 191–2.
- 19 See Barag 1970, 99; Auth 1979, 37, n. 16.
- 20 Vatican Museum, inv. no. 621 (ex-763); Morey 1959, no. 11, pl. II.
- 21 Vatican Museum, inv. no. 775 (ex-735); Morey 1959, no. 71, pl. XIII.
- 22 Garrucci 1872–80, pl. 188.8.
- 23 For steep-sided tumblers see Foy and Nenna 2001, no. 399.
- 24 Dalton 1901a, no. 611, 121.
- 25 Vatican Museum, inv. nos 60788 (ex-345) and 787 (ex-344); Morey 1959, nos 96 and 97, pl. XVI.
- 26 Morey 1959, no. 224, pl. XXIV.
- 27 Vatican Museum, inv. no. 787 (ex-344); Morey 1959, no. 97, pl. XXIV.
- 28 After Garrucci 1864, pl. XXXIII.
- 29 Vatican Museum, inv. no. 646 (ex-217); Morey 1959, no. 133.
- 30 Osborne and Claridge 1998, no. 282, 255, where the *Museo Cartaceo* image is presented alongside a photograph of how the piece appears today.
- 31 Morey 1959, no. 294, 51, pl. XXVIII.
- 32 See Fremersdorf 1962.
- 33 Vatican Museum, inv. no. 688 (ex-206); Morey 1959, no. 174, pl. XXI.
- 34 Römisch-Germanisches Museum, inv. no. RGM N150; Fremersdorf 1962, nos 46–7; Harden 1987, no. 48.
- 35 Barag 1970, fig. 1.
- 36 Harden 1987, nos 154, 279.
- 37 After Harden 1987, fig. 154, 281.
- 38 The term was first applied by Morey: *idem* 1942, at 127.
- 39 Harden 1987, no. 153.
- 40 See Filippini 1996.
- 41 *Ibid.*, 119–25.
- 42 *Ibid.*, 118.
- 43 *Ibid.*
- 44 Many of these profiles are reproduced in Filippini 1996, 119–25.
- 45 Alarcão 1968, fig. 3.
- 46 Barkóczi 1988, no. 26.
- 47 Musée du Petit Palais, inv. no. A.DUT 244 and A.DUT 254.
- 48 Two of the objects (**cat. nos 37, 41**) were unavailable during the analytical project.
- 49 Meek 2013.

- 50 Morey 1959, 5.  
 51 See *ibid.* for images of the objects in these collections.  
 52 Fragment with Avitus: overall width: 6.8cm; decoration diameter: 3.2cm; production: AD 300–99; Brill 1999, 141.  
 53 The Alexander Plate: overall diameter: 25.8cm; production: 3rd century AD; Brill 1999, 141; Cooney 1969.  
 54 Fragment with Sts Peter and Paul: overall diameter: 9.2cm; production: AD 300–399; Brill 1999, 141.  
 55 Brill 1999, 141.  
 56 Cooney 1969.  
 57 Meek 2013.  
 58 Soda is defined here as Na<sub>2</sub>O.  
 59 Healy 1999, 355; Gorin-Rosen 2000; Freestone *et al.* 2000; Degryse and Schneider 2008.  
 60 Freestone 2006.  
 61 For example: Baxter, Cool and Jackson 2005; Jackson 2005; Paynter 2006, 1037–57, fig. 10 provides a useful summary; Silvestri, Molin and Salviulo 2008; Foster and Jackson 2010.  
 62 Foster and Jackson 2010.  
 63 Brill 1999, 141.  
 64 Following Meek 2013, further examination has led to the reclassification of three of the objects which featured in the prior study. Cut and incised vessel bases **cat. no. 17** and **cat. no. 43** were previously listed as unshaded/indeterminate and appear in the shaded category in this study. **Cat. no. 33** was previously listed as a single layer object. However, this object has remnants of a second layer of glass (see the catalogue entry for this object). It is listed in this study as a two layer vessel base.  
 65 Foster and Jackson 2010; Sayre and Smith 1967, 293–4.  
 66 Jackson 2005, 764.  
 67 *Ibid.*; Silvestri, Molin and Salviulo 2008, 337; Foster and Jackson 2010, 3074.  
 68 Sayre 1963.  
 69 Foster and Jackson 2010.  
 70 Jackson 2005, 770; Foster and Jackson 2010, 3071; Silvestri, Molin and Salviulo 2008, 337.  
 71 For a more detailed discussion of this process and its effect on micro-XRF analysis, see Janssens *et al.* 2000.  
 72 See Foster and Jackson 2010, 3070–3, for a more detailed discussion of these groups.  
 73 Bayley 1987.  
 74 *Ibid.*  
 75 Meek 2013, 124–7.  
 76 See Jackson 2005, 767, fig. 1.  
 77 See Foster and Jackson 2010, 3070–3.  
 78 Henderson 2000, 26–9; For a more detailed discussion of these glass types, see Foster and Jackson 2010, 3071–2 and Silvestri, Molin and Salviulo 2008, 337–9.  
 79 Foster and Jackson 2010, 3070; Meek 2013, 127.  
 80 See catalogue entries for a full description of each object.  
 81 See **cat. no. 55**.  
 82 Sayre 1963; Foster and Jackson 2010.  
 83 Suggested dates are *c.* AD 360–400.  
 84 The only two-layered cut and incised decorated object produced from Type 1 glass is **cat. no. 33**. It is not possible to state whether this object is of the shaded or unshaded type as the decoration is very badly damaged and rendered illegible by a layer of deteriorated glass. The other analytical results suggest that this object is of the shaded type, but this is not possible to state with any certainty.  
 85 Brill 1999; Corning Museum of Glass (inv. no. 54.1.83) and Cleveland Museum of Art (inv. no. 1969.68).  
 86 Jackson 2005, 770; Foster and Jackson 2010, 3071; Silvestri, Molin and Salviulo 2008, 337.  
 87 Foster and Jackson 2010.  
 88 It was not possible to produce a figure to illustrate this relationship in the SEM-EDX data as all of the lead oxide and all but one of the copper oxide levels measured were found to be below the detection level of the methodology used. However, it is of interest to note that the only object found to have a copper oxide level detectable by SEM-EDX was produced from Type 3 glass.  
 89 Foster and Jackson 2010, 3074; for a more detailed explanation see Freestone, Hughes and Stapleton 2008, 34.  
 90 See **Table 6** for catalogue numbers.  
 91 See n. 12.  
 92 Two Type 3 vessel bases found by SEM-EDX and seven by XRF.  
 93 See pp. 115–16.  
 94 Sayre 1963; Foster and Jackson 2010.  
 95 The only other example containing similar levels of lead is the green glass from **cat. no. 27**.  
 96 Bimson and Freestone 2000; Henderson 1990.  
 97 See Freestone, Hughes and Stapleton 2008, 41  
 98 Note that many of these conclusions were previously published in Meek 2013. They are represented here for completeness.  
 99 See n. 64.  
 100 Sayre 1963.  
 101 Foster and Jackson 2010.  
 102 See collections in the Victoria & Albert Museum, London, and Vatican Museums, Vatican City, illustrated in Morey 1959.

# Chapter 4

## The Manufacture of Gold Glass

### Past Attempts and New Experimental Reproductions<sup>1</sup>

The production methodology of Late Antique gold glasses has been of considerable interest to scholars, artists and forgers since they were first recovered from the catacombs in the 17th century. Few practical attempts to recreate the conditions of Late Antique gold glass manufacture, however, have met with any real success. Here, I will briefly examine some published past attempts at gold glass reproduction and the results of some of these attempts, with a special emphasis on the objects in the British Museum's collection. This is followed by an examination of the medieval accounts of working with glass and gold leaf, looking at the working practices noted in these medieval accounts, the direct observation undertaken by the author of past experimental attempts at reproducing the gold glass technique and the experiences reported by their makers – all of which formed the basis for my own programme of experimental gold glass reproduction, a discussion of which makes up the remainder of the chapter (see also Appendix C).

#### Reproduction attempts

Attempts to reproduce Late Antique gold glass vessel bases and medallions began in the late 17th century. This was no doubt inspired by the contemporary exploration of the catacombs and the discoveries made there.<sup>2</sup> In 1679, Johann Kunckel reported his unsuccessful attempt to sandwich gold leaf between two fused layers of glass in the style of Late Antique gold glasses.<sup>3</sup> In the following century, the Comte de Caylus noted the rather more successful results obtained by the chemist, Michel Majault, who died however without publishing an account of his methodology.<sup>4</sup>

Late Antique gold glass reproductions were certainly produced by the Vatican in the late 17th century. These pieces have rather misleadingly been termed as 'fakes' in the few instances in which they have been included in scholarly accounts of gold glass.<sup>5</sup> However, they seem to have been made without any intention to deceive, but rather to replace disintegrating originals: Buonarruoti, for instance,

**Plate 21 Late 17th-century replica of a gold glass in the Vatican Museum produced to replace a disintegrating original, watercolour**







Plate 22 Obverse of a fake gold glass portrait medallion (cat. no. 57)



Plate 23 The Ficoroni medallion, early 4th century, now in the Metropolitan Museum of Art, New York, inv. no. 17.190.109a. Gift of J. Pierpont Morgan, 1917

remarked on a gold glass discovered in 1698 and fortunately drawn immediately, 'for after a few days it crumbled to dust'.<sup>6</sup>

One of these reproductions is still held in the reserve collection of the Vatican Museum (**Pl. 21**). Like the original Late Antique glasses, this piece was produced through the proper fusing of two glass layers sandwiching the gold leaf iconography in between. This reproduction is accompanied on the reverse by a note stating that it was 'copied from an ancient gold leaf glass discovered in the suburban cemeteries'.<sup>7</sup> The inscription to the left of the central figure has been reproduced as illegible, as it most probably appeared on the original, without any attempt to reconstruct the phrase. The remainder of the inscription appears to have been produced backwards. This strongly implies an intended faithfulness to the original piece, copied (perhaps inadvertently) from the reverse from where the iconography was most visible. No reference is made to what happened to the original, but it is plausible that it had fallen apart. This particular reproduction glass was included in the *Museo Cartaceo* of Cassiano Dal Pozzo and has been given a late 17th-century date, strongly suggesting that the Vatican was successfully replicating gold glasses by at least 1700.<sup>8</sup> However, in 1759, in contrast to the official replicas intended to replace disintegrating originals, Caylus noted that contemporary dealers in Rome were selling imitations of gold glasses to tourists who believed them to be genuine.<sup>9</sup> This practice was also commented on by Cardinal Wiseman 100 years later.<sup>10</sup>

The earliest two reproductions to enter the British Museum's collection, **cat. nos 56–7**, both acquired prior to 1852, are imitations of brushed technique medallions. **Cat. no. 57**, depicting a young boy (**Pl. 22**), was produced by a highly accomplished artist who was capable of imitating the fine quality of the brushed technique. It is highly probable that the artist copied a single element, the young boy, from a

genuine brushed technique medallion, the so-called Ficoroni medallion, now in the Metropolitan Museum of Art in New York (**Pl. 23**).<sup>11</sup> The producer of the British Museum piece need not have copied it directly from the original Ficoroni medallion, for that was illustrated in a published work as early as 1732.<sup>12</sup>

However, despite the very high quality of the iconography and gold leaf incision on the British Museum example, the artist responsible was certainly not a glassworker. The image was not fused between the two layers of glass in the manner of the originals. Rather, the gold leaf image has been gilded and incised in reverse on the upper covering layer of colourless glass. Instead of then being fused between the colourless glass and a backing layer of cobalt blue glass, the image is sealed at the back with a black resin-like substance. **Cat. no. 56** is also very similar. In this instance, however, the incised portrait of a man has been produced, to a somewhat lesser standard, upon the black resin disc. It has then been loosely affixed between a cover layer of colourless glass and a wooden mounting.

The producers of the three reproduction gold glasses (**cat. nos 58–60**) also did not fuse the images between the two glass layers in the Late Antique manner. Each piece instead reused the base fragments of Roman or other ancient glass vessels. The image on the bases is not executed in gold leaf, but rather appears to be enamel, cold painted upon the surface of the glass.<sup>13</sup> A small disc of thin glass has then been placed over the cold painted decoration and simply glued into place, giving the impression that the imagery is indeed fused between two glass layers as on the original Late Antique pieces.

Further interest in gold glass reproduction was rekindled after the publication of Garrucci's 1858 examination of gold glass iconography. Notes from the lecture of Cardinal Wiseman, focusing on the catacomb glasses, remarked upon a failed attempt to reproduce gold sandwich glass that was



undertaken by an unnamed London glassworks at his instigation.<sup>14</sup> In this instance, the gold leaf was reported to have curled up and turned black as the protecting layer of glass was applied in liquid form. Highly successful reproductions of Late Antique sandwich gold glass were not achieved until the late 19th century when, in an atmosphere of great personal and professional rivalry, the mosaic restorer Antonio Salviati and the glass artists of the Compagnia Venezia Murano with their artistic advisor Alessandro Castellani succeeded in recreating exact copies of many of the Late Antique cut and incised gold sandwich glasses illustrated by Garrucci.<sup>15</sup>

The range of pieces produced by both parties included properly fused cut and incised sandwich-glass vessel bases and diminutive medallion-studded vessels. However, whilst the vast majority of Late Antique cut and incised gold glass vessel bases are sandwiched between two layers of colourless glass, the Venetian reproductions invariably appear upon a coloured base-disc. This was most frequently cobalt blue or green, the two most common colours of Late Antique gold glass diminutive medallion backings.<sup>16</sup> It is certainly possible that it was in part because of the two gold sandwich-glass vessel bases with blue backings in Castellani's own collection, one of which is now in the British Museum's collection (**cat. no. 42**), that he chose to produce many of his reproductions upon coloured backings. Nevertheless, coloured backings add further prominence to the image, and Castellani and Salviati were principally producing aesthetically pleasing historicizing glass for general sale, not exact replicas.

In 1901, experiments in gold glass manufacture were made by the stained-glass maker Nathaniel Westlake at the British Museum. A brief account of his methodology was reported by Dalton in the same year.<sup>17</sup> Unlike the gold glasses which had been successfully reproduced in Venice only a few years before, Westlake's methodology does not appear to have been based upon the reading of any medieval or other related accounts. He applied gold foil to a layer of glass by means of a mordant of sugar and water, the design then being incised upon the gold leaf. The lower gilded layer of glass was then covered by a flux, the details of which are not provided, and overlain with a second colourless layer of glass. Assembled cold, the whole was then subjected to heat sufficient to melt the flux and cause the two glass layers to unite.

The products of Westlake's experiments are still held in the British Museum's collection (**cat. nos 61–2**). Although the gold leaf in these objects is indeed sandwiched between a fused double layer of glass, they do not accurately illustrate the Late Antique gold glass vessels they were intended to reflect. The incised gold leaf used in Westlake's experimental pieces is sandwiched between two flat plates of glass, not a manipulated foot-ring and shallow bowl as with the originals. If a gold glass vessel both with foot-ring and shallow bowl upper layer of glass was assembled cold, according to Westlake's methodology, and heated together causing the two layers to fuse, the heat would cause the shaped glass to sag and become greatly distorted. Westlake's process can thus only be applied to the fusing of gold leaf between two flat, unshaped, plates of glass and not a vessel as in the ancient examples.

Chief amongst the problems encountered by scholars has been the fusing of the gold leaf between two layers of glass. The majority of gold glass producers, although in some instances able to produce near convincing designs in the gold leaf, appear to have been largely ignorant of glass-working techniques (e.g. **cat. nos 56–60**). Indeed the only successful Late Antique style gold glass reproductions (e.g. **cat. no. 64**) were produced by professional glassworkers. The methodologies employed by Castellani and Salviati were unfortunately never published by either party. However, Castellani stated both in his personal papers and to journalists that the inspiration behind the rediscovery of Late Antique gold glass manufacture was the study of the 12th-century treatise of the German monk known as Theophilus.<sup>18</sup> His treatise, *De diversis artibus* ('On Diverse Arts'), instructs craftsmen in the techniques of contemporary painting, glassmaking and metalwork.<sup>19</sup> Chapter 13 of the second book of the treatise, *De vitreis scyphis, quos graecia uro et argento decorant* ('Glass goblets which the Byzantines embellish with gold and silver'), describes the methodology for producing 12th-century vessels, the walls of which were gilded.<sup>20</sup>

Theophilus gives an account of the technique as follows:

They take gold leaf, and from it shape representations of men or birds, or animals or foliage. Then they apply these onto the goblet with water, in whatever place they have selected. This gold leaf must be rather thick. Then they take glass that is very clear, like crystal, which they make up themselves, and which melts soon after it feels the heat of the fire. They grind it carefully on a porphyry stone with water and apply it very thinly over the gold leaf with a brush. When it is dry they put the goblet in the kiln in which painted glass for windows is fired. Underneath they light a fire of beech wood that has been thoroughly dried in smoke; and when they have seen the flame penetrating the goblet long enough for it to take on a slight rendering, they immediately throw out the wood and block up the kiln until it cools by itself. This gold will never come off.<sup>21</sup>

Theophilus' account is useful for the glassworker working with gold leaf, and it is regularly cited in a large number of publications concerning Late Antique gold sandwich glass.<sup>22</sup> However, despite Castellani's claim, Theophilus does not provide an adequate methodology for Late Antique gold sandwich-glass production. His discussion of how the gold leaf itself is initially applied to the glass with nothing more than water is extremely useful. But he does not provide an account of how the leaf is then sandwiched between the two layers of glass. He instead details a procedure for the securing of the gold leaf to the wall of the glass vessel by using a minimal amount of powdered glass.

Who provided the inspiration for Castellani and Salviati if not Theophilus? Interestingly, chapters of the work of the 10th-century Italian monk, Eraclius, are frequently found bound together in other works ascribed to different authors including Theophilus. The part of Eraclius' text specifically concerned with making Late Antique gold sandwich glass is, for example, bound together with the copy of Theophilus' treatise held in the British Library.<sup>23</sup> It is quite possible therefore that the 19th-century Venetian glassworkers had also studied Eraclius' specific account, perhaps unknowingly, as well as gaining information from

Theophilus himself. In his 10th-century treatise, *De coloribus et artibus Romanorum* ('On the Colours and Arts of the Romans'), Eraclius states that:

The Romans made themselves phials of glass, artfully varied with gold, very precious, to which I gave great pains and attention, and had my mind's eye fixed upon them day and night, that I might attain the art by which the phials shone so bright; I at length discovered what I will now explain to you my dearest friend. I found gold leaf carefully enclosed between the double glass. When I had often knowingly looked at it, being more and more troubled about it, I obtained some phials shining with clear glass, which I anointed with the fatness of gum with a paint brush. Having done this, I began to lay leaf-gold upon them, and when they were dry I engraved birds and men and lions upon them, as I thought proper. Having done this, I placed them over glass made thin with fire by skilful blowing. After they had felt the heat thoroughly, the thinned glass adhered properly to the phials.<sup>24</sup>

This brief methodology provided by Eraclius, specifically addressing the production of gold leaf sandwiched between a double layer of glass, is extremely helpful. He first describes the gold leaf being laid on the surface of the lower glass layer and secured there with gum, and when this had been done, the engraving of various depictions upon it, presumably then removing the excess leaf. He next notes the heating of this gilded layer of glass, and then the blowing of a glass bubble over the top effectively fusing the gold leaf between the two. Although very short, the extract provides the most complete account of fusing gold between two layers of glass, although it is not explicit in its methodology. It was Eraclius' methodology, not Theophilus', which formed the basis of my own attempt at experimental reproduction discussed later in this chapter (see also Appendix C).

Although it does not seem to have been used to guide the experimental production of gold sandwich glass, a methodology similar to that given by Theophilus is described in detail by the late 14th-century artist Cennino Cennini. Despite the fact that his method is not directly related to the fusing of gold leaf between a double layer of glass in the style of Late Antique gold glasses, he has been referenced in a number of works as an example of combined gold leaf and glass-working.<sup>25</sup> His writings are extremely valuable when attempting to recreate the method that might have been used. In Chapter 172, focusing on the contemporary adornment of reliquaries from his work *Il Libro dell'Arte o Trattato della Pittura* ('The Craftsman's Handbook'), Cennini stated that:

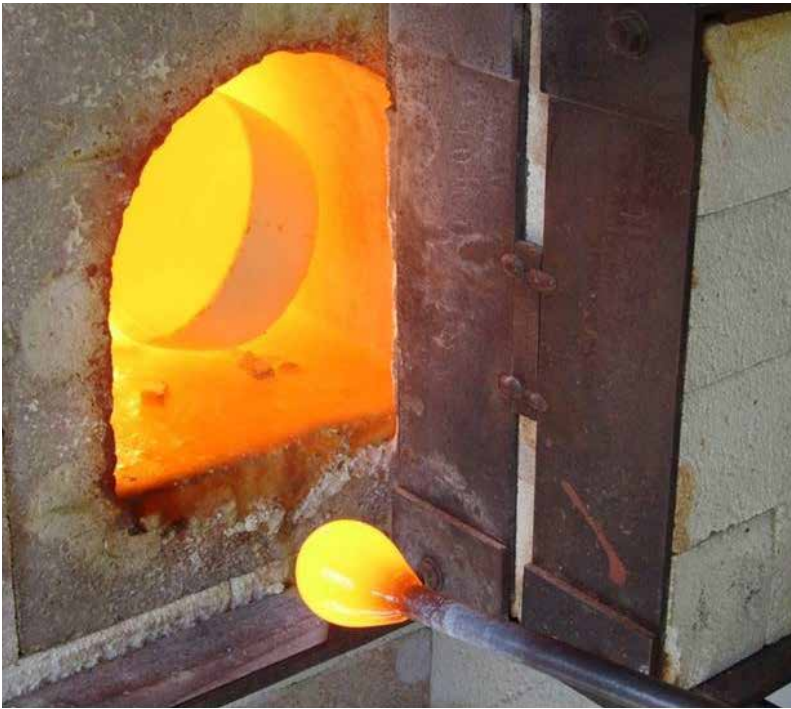
There is another way of working in glass, charming, lovely, and rare as can be imagined, which is a branch of art in devout use for the adornments of holy reliquaries, and it demands sure and ready design; and this is the manner of the work, thus: take a piece of white glass, not greenish, very clear, without bubbles, and wash it with lye and charcoal, rub it and rinse it again with clear water, and leave it alone to dry; but before you wash it cut it to whatever shape you want. Then take the white of a fresh egg; and with a very clean whisk, break it up as you do for laying on gold; let it be well beaten, and let it distil for a night. Then take a minever brush, and with the brush and the egg clear, wet the glass on the back side, and when it is wetted equally take a piece of gold leaf, which must be thick, that is to say, dead gold. Put it on the parchment tray and gently put it on the wetted glass; and with a piece of very clean cotton-wool

press it gently down, not letting the egg-white get over the gold. And in this way gild all the glass. When it is quite dry, take a very flat tablet of wood, lined with black linen or canvas, and go into your little workroom where no one can disturb you at all, and which should only have one linen-covered window. Put your table at this window as if for writing, so that the window is over your head, and stand with your face turned towards the window; the glass being laid out on the before-mentioned black cloth. Then take a needle bound to a small stick, like a little minever brush, which must have a very fine point; and invoking the name of God, begin drawing lightly with this needle the figure which you wish to make; let the first drawing be very faint, for you can efface nothing; so make your drawing light as well as firm; then go on working as if you were drawing with a pen; for the whole work is done with the point; and do you see how you must have a light hand and not tired, for the deepest shade which you can make is only to go with the point of the needle quite down to the glass, and moreover the half shade is just not quite penetrating the gold, which is a delicate matter; and this work must not be done in haste, but with great delight and pleasure. And I give you this advice: that the day before you wish to work at such works, you should hold your hand to your neck and breast, to have it well rested from fatigue, and moderate in blood.<sup>26</sup>

In an earlier passage, Cennini described a slightly different method of applying gold leaf to glass, reporting that:

... You will take your oil, which has been cooked on the fire or in the sun... and grind with this oil a little biacca [lead-white] and verdigris; and when you have ground it like water, put a little varnish [or resin] in it, and let everything boil together for a little while. Then take one of your glazed vessels and put it in and let it rest... take a little in a small vessel, and a minever brush, made in the quill of a pigeon's or hen's feather, and make it stiff and pointed, with the point coming out very little beyond the quill. Then dip the tip of the point into the mordant, and make your ornaments and borders, and, as I tell you, never load the brush too much. The reason is that in this way your work will come like fine hairs, which is very lovely work... wait till the next day; then feel what you have done with the ring finger of the right hand, that is, with the tip of the finger, and if it is only slightly tacky, then take the pincers, cut off half a leaf of fine gold, or alloyed gold, or of silver, though these two do not last, and lay it upon the mordant. Press it with cotton, and with the same finger stroke the piece of gold, putting some over the mordant where there is none... take care that your hands are always clean. I warn you that gold which is laid over mordants, especially in such very fine work, must be the thinnest beaten gold which you can get; for if it is thick you cannot use it so well.<sup>27</sup>

Cennini explains at length the process of adhering gold leaf to the glass layer, including an extensive description of the appropriate mordants best used in this process and how to make them. Perhaps most valuably, he goes on to describe, again in very great detail, the tools and methods best employed for incising various designs upon the gold leaf, and for removing the excess which can then be recycled. Neither the writings of Theophilus nor of Cennini are directly concerned with the sandwiching of gold leaf between glass layers. However, both accounts provide highly detailed and relevant information concerning the appropriate tools and practices for the combined working of gold leaf and glass. These texts, alongside the lessons learned from unsuccessful



**Plate 24a–b** Gathering and initial shaping of the glass parison for the base-disc

past attempts, provided a solid basis for a new in-depth experimental investigation into Late Antique gold glass production.

#### **A new programme of experimental reproduction**

The examination of attempts to reproduce Late Antique style gold sandwich-glass reproduction from the relatively recent past, some of which were based on earlier medieval accounts of working with glass and gold leaf, provided a significant amount of relevant data for my own attempt at experimental reproduction. Drawing upon some of the medieval and other descriptions discussed above, scholars have provided theoretical methodologies based upon their understanding of how glass is worked.<sup>28</sup> These technical processes are often, however, unsuccessful when put to the test. Indeed, the experiences and ultimate failings of past attempts at gold glass reproduction make it clear that any new and *bona fide* attempt at reproducing Late Antique gold glass methodology should be undertaken in connection with professional glassworkers. My own programme of experimental reproduction has been undertaken with the aid and advice of Mark Taylor and David Hill, the ‘Roman Glassmakers’ who specialize in the reproduction of Roman glass for museums, re-enactors, television and cinema.<sup>29</sup>

Based upon the gold glasses in the British Museum and the accounts of medieval and later glassworkers and antiquarians, the following step-by-step approximation of Late Antique gold glass production methods has been produced, using materials, tools and techniques faithful to our current understanding of those used in the 3rd and 4th centuries. Modern raw materials allow the replication of ancient glass recipes very accurately and the detailed compositional analysis data from the British Museum gold glasses was used to provide a recipe for the glass used for these experiments, effectively reproducing the working properties of the glass utilized to produce the original objects.

#### **Making cut and incised technique sandwich-glass vessels and gilded-glass plaques**

Crucial to the Late Antique method of gold sandwich-glass manufacture is the actual fusing of the gold leaf between the two layers of glass. As mentioned above, this has proved to be the most difficult aspect of manufacture in past attempts and has resulted in the gold leaf not being sandwiched between the glass (**cat. nos 56–7**).

Alternatively, a cover layer of glass has simply been glued into place (**cat. nos 58–60**) or, if the glass layers have been properly fused (**cat. nos 61–3**), they take the form of flat plates, not manipulated vessel forms. The process of fusing the gold leaf between layers of glass is best illustrated with regard to producing two-layer cut and incised technique sandwich-glass vessels.

The first stage in the production of a sandwich gold glass vessel base is the creation of the base-disc. In order to produce the base-disc blank, transparent glass is gathered upon the end of the blowpipe (**Pl. 24a**), inflated, and a constriction is formed between the blowpipe and the bubble, known as the parison (**Pl. 24b**). After reheating the parison, making the glass more pliable, the bottom is then flattened and its sides made cylindrical using a hand-held flat wooden surface (**Pl. 25a**). This can also be achieved through centrifugal force. The completed base-disc bubble, resembling an onion its shape, is removed from the blowpipe and is placed in an annealing oven or ‘lehr’ to cool slowly over the course of one night (**Pl. 25b**). If the glass is allowed to cool too quickly it will cool unevenly, and compressive and tensile stresses trapped in the glass can cause it to crack. Once it has cooled, a simple glass-working process known as ‘cracking off’ is employed to separate the flattened end from the rest of the parison (**Pl. 26**). This leaves the level pad base-disc and a down-turned foot-ring of a few millimetres. Only the flattened end is retained, the excess glass, or ‘moil’, indeed most of the original bubble, is recycled.



**Plate 25a–b** Shaping the base-disc parison

The next step is to apply gold leaf to the upper surface of the pad base-disc. Eraclius is quite explicit as to how the gold leaf should be applied: paste the glass surface with gum and lay the gold leaf directly over it. I repeated Eraclius' method, applying the naturally occurring vegetable glue gum arabic in a heavily diluted form to the top of the base-disc with a brush. Any water-soluble adhesive that evaporates completely under intense heat can be employed for this process. An obvious alternative is rabbit-skin glue. Both gum arabic and rabbit-skin glue, as well as a variety of alternatives, were known and used in the Roman world.<sup>30</sup> I also experimented with both of the adhesives described by Cennini. They also proved effective, although the use of just water, as advocated by Theophilus, was less successful as it did not hold the gold leaf to the surface of the glass as securely as the other methods tested. Once the adhesive was applied, the gold leaf was then laid upon the surface of the base-disc. This is a delicate process because of the thinness of gold leaf, which is applied using a fine brush otherwise known as a gilder's tip, as described by Cennini.

Once the gold leaf was properly stuck to the glass, the desired iconographic depiction could then be cut and incised into the leaf. For the purposes of my experiments, the design on **cat. no. 23** was reproduced: a depiction of Daniel slaying the dragon of Babylon, encouraged by a rod-wielding figure with a nimbus. The method is dictated in detail by Cennini, who advocated the use of a needle bound

**Plate 26** The base-disc and moil after the process of cracking off. The disc to the left is retained forming the pad base-disc, whilst the moil, seen to the right and forming the majority of the bubble, is recycled



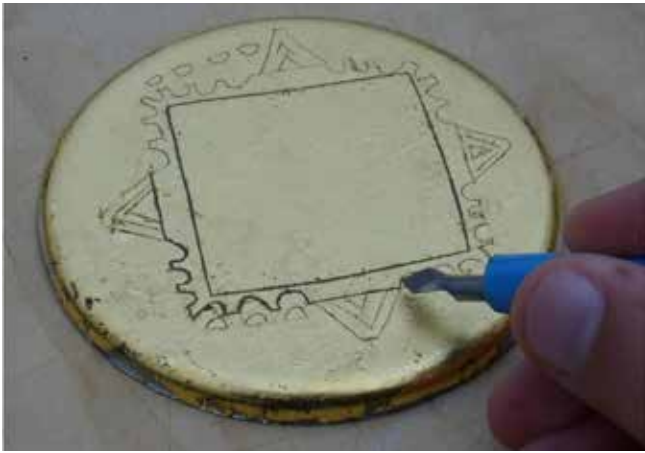
to a stick; the classic Roman stylus would also have proven equally as effective. The tool used, as Cennini notes, must be sharp enough to penetrate the gold leaf. The glass is placed upon a black, or at any rate dark, backing so that the gold leaf can be clearly seen in contrast. The design is then sketched very lightly at first, and then with a heavier hand once the precise details have been defined (**Pl. 27a–b**). Any accompanying inscription is incised in much the same way. The tops and bottoms of letters upon Late Antique gold glasses are almost exclusively straight in appearance, indicating that these were initially laid out within parallel guidelines determining the height of the letters.

At this point, any over-painted enamelled details can be added. The precise method was described by Eraclius, who stated that: 'If anyone wishes to paint vases with glass... let him choose for himself two stones of red marble, between which let him grind the [coloured] Roman glass, and when it is pulverized as fine as the dust of the earth, let him make it liquid with the clear fatness of gum'.<sup>31</sup> This can then be applied to the desired areas with a brush.

In terms of the iconography, almost every image depicted upon cut and incised gold glass vessel bases can be paralleled in other contemporary media. Furthermore, the same all-but-identical image and format occurs time and time again upon individual gold glasses. The classic example is the standard generic paired adult couple, transformed into a family group by the addition of one or more generic children. As a result, the iconography of gold glasses would have been familiar to any artist; it seems plausible that the images and additional composite elements could have been copied from pattern books. The images furthermore could easily have been transcribed onto the gold leaf through the use of an overlying grid, perhaps in some cases consisting of only four squares. A grid of this nature could easily have been applied over the gilded surface of the base-disc, using some kind of water-soluble colour. Both pattern books and/or grids would have enabled a set range of gold glass iconography to be mechanically produced upon multiple vessel bases.

Once the design has been incised upon the gilded base-disc (**Pl. 27c**), the excess gold leaf can be scraped away, retained and then recycled. Whilst this removes the vast





**Plate 27a–c** Incising the design into the gold leaf

majority of the excess gold leaf, a light dusting of very stubborn fleck still remains upon the surface of the glass. The adhesive is water-soluble, and thus these more stubborn gold leaf flecks can be easily removed with a small pointed piece of wood dipped in water. The removal of the excess gold leaf and even the basic iconographic design incision upon significant numbers of Late Antique gold glasses was not, however, carried out with great care and attention. Multiple examples show the signs of what can only be described as rather shoddy workmanship. **Cat. no. 23** for example, displays many traces of this, highlighted in green in **Plate 28** (1–5). Large amounts of excess gold leaf remains



**Plate 28** Gold glass cat. no. 23 highlighting in green (1–5) areas of excess gold leaf which have not been removed; in blue (a) the scored surface of the gold leaf occurring when the glass was removed from the lehr

present between Christ's back (1) and the border and between Christ's hands and Daniel's back (2–3). In addition, Christ's feet have not been incised properly (4–5) and the portion of Daniel's cloak which should be visible between and to the right of his legs has been mistakenly removed. More commonly upon other gold glasses, very small details of the iconography and inscription, often the crossbar of the letter A, have been removed accidentally, the latter most probably while trying to remove the more stubborn flecks of gold leaf with water.

When the gold leaf excess has finally been removed to the satisfaction of the craftsman, the decorated pad base-disc is slowly reheated in the lehr to temperatures approximating 550°C. This prevents a thermal shock and the shattering of the glass when a hot parison is blown directly on top of it to form the actual vessel. If the temperature inside the lehr rises to over 600°C, however, the downturned foot-ring upon the base-disc is in danger of distortion. Slightly distorted foot-rings are relatively common upon Late Antique gold glasses (see, for example, **cat. nos 7** and **40**). Once fully heated, the gilded pad base-disc is removed from the lehr by pushing it onto a wooden paddle with a short stick (**Pl. 29**). If significant care and attention is not taken, the stick may slip and brush across the gilded surface of the disc, causing the glass to rotate and creating a part oval or circular score in the gilding. This feature is present upon a number of Late Antique cut and incised gold glass vessel bases, including **cat. no. 23** in the Museum's collection where it is highlighted in blue in **Plate 28**.

The heated base-disc, now ready for sandwiching as part of a bowl, is next placed upon the floor in a specially created oven-like box. This ensures that it retains its heat and thus prevents a thermal shock and the glass from shattering. The glassworker then stands above it and lowers a large parison of hot glass onto the gilt disc (the parison is much hotter than the base-disc), fusing the gold leaf between the two (**Pl. 30**),



**Plate 29** Removing the heated base-disc from the lehr onto a wooden paddle



**Plate 30** Fusing the gilded base-disc with the parison forming the vessel bowl

as Eraclius implicitly describes. The parison with the base-disc fused to its base is reheated and shaped by gravity and centrifugal force. Further blowing will cause cracking of the gold leaf as it is unable to stretch with the expanding glass (e.g. **cat. no. 10**). The extra heat will also round the downturned foot-ring of the pad base-disc.

Chemical analysis undertaken as part of this experiment showed that the distinctive half circle cracks in the base-disc, but not the upper layer of some gold glasses (see, for example, **cat. nos 15** and **39** and the discussion in Chapter Three), were not the result of slight differences in the glass composition of the two layers. The reason for the half circle cracks in the base-discs but not the upper layer of some gold glasses (**cat. nos 15** and **39**) is unknown. It may be the result of bad annealing or as a consequence of incompatibilities between the two glasses, easily caused by slight differences in composition. The fused whole can, if required, be shaped in the same manner as the base-disc onion parison being formed at the beginning of the process (**Pl. 24a**).

It is notable that no pontil mark is present upon the underside of any of the gold glass vessel bases in the British

Museum. Indeed, if it was present, the iconography would be greatly distorted by it. This mark, common upon the bases of Roman glass vessels, is created by a solid metal rod, known as a pontil, tipped with a wad of hot glass and applied to the base of the piece. This allows the vessel to be inserted into the furnace opening known as the glory-hole for reheating, so that applications such as handles may be attached. If a pair of small handle loops were present upon any gold glass vessel, as suggested in Boldetti's 1720 illustration (illustrated in **Pl. 10**), then these would have needed to be applied to the inflated parison without the use of a pontil and while the vessel was still on the blowpipe. This seems to have been a relatively common Roman practice.<sup>32</sup> Such handles were certainly not present upon each gold glass vessel. Indeed, those illustrated by Boldetti cannot be paralleled in other contemporary glass. Boldetti's handles are classic 18th-century examples and may in fact be an invention of the artist.

Like the base-disc onion bubble, the fused whole vessel is then removed from the blowpipe and slowly cooled in the lehr for the night, leaving an onion-shaped bubble with the

**Plates 31a–b** The vessel and its moil after the process of cracking off. The excess upper portion (the moil) is recycled (a), leaving a shallow bowl shaped vessel (b)







**Plate 32a–b Grozing the vessel walls away to the line of the foot-ring (a) and the final product (b)**

decorated base-disc firmly attached to the bottom. Once cool, the process of cracking off is again employed (**Pl. 31a–b**), removing the excess upper portion of the bubble (**Pl. 31a**), which can then be recycled. This leaves a vessel shaped like a shallow bowl (**Pl. 31b**). The vessel rim cannot have been fire polished as it would involve reheating the vessel in the lehr, then picking it up either on a pontil or using a gripping device (which appears to have fallen out of use by the late Roman period) and reheating at the furnace mouth. This process would be difficult, dangerous to the glass bowl (serious cracking problems due to thermal shock) and time-consuming. It would be far better to finish by cold-working, as were most, if not all, late Roman vessels with no pontil scar.

It is uncertain why some cut and incised technique vessel bases, seemingly identical to two-layer sandwich-glass vessel bases in technique and in a number of instances in iconography as well, should consist of three layers of glass rather than the far more common two-layer examples. As has been noted, the gold leaf upon three-layer glasses exclusively appears sandwiched between the lowermost base-disc layer and the middle layer of glass. This observation is crucial. It is quite probable that upon fusing the iconography between the base-disc and the vessel-bowl layer of glass, the glassworker was not happy with the shape of the bowl created by the upper parison. In response to this, and not wishing to discard the decorated base-disc, the glassworker then removed what was initially intended to form the vessel walls and reheated the now two-layer base-disc again in the lehr. This process would have the effect of smoothing out the jagged edge caused by the removal of the original vessel bowl. The glassworker could then have blown a second parison over the top, forming the new and this time satisfactory vessel bowl and thus resulting in three glass layers.

In this context, it needs to be noted as an aside that Diocletian's Price Edict priced glass vessels according to weight rather than form.<sup>33</sup> The addition of a third layer of glass would certainly have made the finished vessel a heavier object than two-layer examples. However, the small number of gold glass vessels consisting of three layers makes it unlikely that increasing the weight of the vessel in this way functioned to increase the overall value of the object.

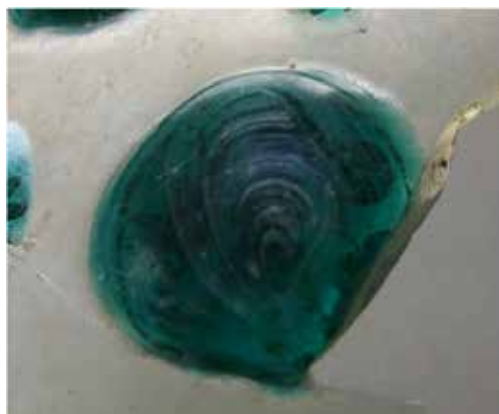
Indeed, there is little evidence that the Edict was widely adopted and is furthermore thought not to have been applied in Rome and the western Roman Empire, where the majority of gold glasses have been discovered.

After the failure of the first attempt at making a bowl, the failed bowl would have been annealed and cooled before removing the unwanted glass surrounding the base disc. Then it could be removed by grozing, but probably would also entail grinding to leave a smooth edge after removing the unwanted glass. The base disc could then be reheated and the sandwiching process repeated, firmly crushing rather than snapping the glass piece by piece between a pair of metal pliers (**Pl. 32a–b**). This process can be carried out to a high degree of accuracy, and was also the method employed by 17th-century and later antiquarians to trim closely the broken vessel walls of gold glasses down to the line of the foot-ring. This method is clearly observable upon almost all the cut and incised gold glass vessel bases in the British Museum's collection, including **cat. no. 23**.

This methodology for the production of sandwich-glass vessel bases can be largely applied to cut and incised gilded-glass plaques. Based upon the methodology provided by Theophilus, rather than reheating the fully decorated disc for fusing, it was instead reheated in the lehr, where temperatures reach no higher than about 550°C. This effectively secures the gold leaf and any enamelled detail to the glass below creating the gilded-glass plaque. The slight down-turned edges of the glass disc, produced in the same way as the pad base-disc illustrated in **Plates 24–6**, were not removed prior to the piece being reheated. The high temperature needed to secure the gold leaf onto the glass would have had the effect of causing the lip of glass to sag completely, creating a slightly thicker and sturdier edge to the large thin plate of glass.

### **Making the St Severin bowl**

The St Severin bowl (**cat. no. 16; Pl. 12a–b**), a fragmentary glass vessel studded with numerous diminutive medallions, shares with other such bowls the same cut and incised technique and an identical iconographic repertoire to the vessel bases. The glass-working processes involved in producing these diminutive medallion-studded vessels are also very similar. The manufacturing process, however, is



**Plate 33a–b** Reverse details of the St Severin bowl (cat. no. 16); (a) the well rounded reverse of a green glass diminutive medallion showing clear traces of casting off marks, and (b) a tooling mark upon the reverse of a blue glass medallion where it has been pushed flat upon the side of the vessel

markedly different. The following discussion focuses on the production of the St Severin bowl.

As with the cut and incised vessel production described above, transparent glass is first gathered upon the end of the blowpipe, inflated, and a constriction formed between the blowpipe and the parison (**Pl. 24**). The parison is then shaped to form a 'proto-bowl', the lower portion approximating to the shape of the vessel ultimately intended. The parison is then detached from the blowpipe and cooled in the lehr. The diminutive medallions applied to the St Severin bowl are not randomly placed, but conform to a highly ordered sequence (see **Fig. 19**). Once the 'proto-bowl' had been removed from the lehr, this ordered sequence could only have been achieved by a careful marking out with a circular 'spiders web' style grid, allowing the gold leaf to be applied to the required areas with precision. The iconography of each medallion could then be cut and incised in exactly the same fashion as the vessel bases described above. The iconography was cut in retrograde, intended to be viewed from the inside of the finished vessel. As a result, the application of over-painted enamelled details is not possible, and indeed, over-painted enamel detail does not occur on any published gold glass diminutive medallion.

The decorated proto-bowl is then reinserted into the lehr and gradually brought back up to about 550°C. Considerable care must be taken that this temperature is not exceeded, otherwise the proto-bowl parison sags and ultimately collapses. Once heated, it must then be reattached to the blowpipe. This is a particularly tricky operation, requiring the proto-bowl to remain hot to prevent a thermal shock, whilst reattaching a blowpipe tipped with a hollow glass gather. Furthermore, the gilded iconography must not be brushed against for fear of scraping away all or part of the design. Once this operation has been completed, however, the decorated proto-bowl will once again take the form of an inflated and, to a certain extent, still inflatable parison upon the end of the blowpipe.

The application of coloured blobs to contemporary glass vessels comparable to gold glass diminutive medallion-studded bowls has in the past invariably been explained as follows.<sup>34</sup> The individual coloured blobs are produced and cooled. They are then laid out upon a slab in the order or pattern that they are intended to appear upon the finished vessel wall. The inflated parison intended to form the vessel itself, still attached to the blowpipe, is then rolled gently over them causing the cold blobs to stick to the hot parison.<sup>35</sup> This

is certainly an error. The application of cold blobbed medallions to a heated glass parison would result instantly in a thermal shock and would shatter both the parison and the blobs themselves. Nor could the cold blobbed medallions have been affixed with a suitable adhesive to the desired areas of the cold parison proto-bowl, before the cold conglomerate whole was inserted into the annealing oven and fused together from cold in the same way that Westlake's 1901 reproductions were produced.<sup>36</sup> The proto-bowl would slump and sag whilst the adhesive securing the blobs to the vessel wall would quickly evaporate causing them to slip out of position. The accuracy with which the coloured blobs are applied upon many such vessels illustrate effectively that they were also placed with far more precision, a point which is far more acute when they are applied precisely over and sandwiching a gold leaf image.

A close examination of the St Severin bowl and other medallion-studded vessels not sandwiching gold leaf between the medallion and the vessel wall provides the answer. The reverse of each coloured glass blob on the St Severin bowl constitutes the back of each diminutive medallion, the gold leaf iconography is sandwiched between it and the colourless vessel wall. On the reverse, spiral patterns in the glass are just visible (**Pl. 33a**). These swirling patterns are known as casting off marks and are created when a small gather of hot glass is applied to the desired surface position of the hot parison proto-vessel, in the case of the St Severin bowl covering the gold leaf roundel, with a rod. The coloured glass-tipped rod is then twisted and rotated as it is gently drawn back, thinning the glass gather and ultimately causing it to detach from the rod altogether, whilst still being attached to the proto-vessel wall.

Some glass colours can be worked at lower temperatures than others. On the St Severin bowl the copper-iron green diminutive medallions are relatively rounded on the reverse. Able to be worked at lower temperatures, they have been easily cast off from the applying rod and settled upon the outside vessel surface with relative ease. The cobalt blue blobs, however, stiffen to cool at a faster rate and are thus less easily worked at such low temperatures. On the St Severin bowl, this has caused problems when casting off. Blue glass gathers will also have been cast off (clearly visible in **Pl. 33b**). At this stage, now at too low a temperature to settle, they have had to be pushed flat on the outer surface of the bowl, leaving traces of tooling marks upon the reverse as a result.



The application of the coloured glass blobs covering the gold leaf images to form diminutive medallions to the hot parison acts to push the walls of the proto-vessel inwards, causing it to collapse. The collapse would be minimal and localized to the area of the application of the hot coloured glass. Another glassblower may have been involved, but it would have been perfectly possible for one glassblower occasionally to blow the bowl out if necessary. Nevertheless, the pressure exerted upon the vessel pushes the walls in slightly where it has been applied. This is visible in the profile illustration of the St Severin bowl (see **Fig. 4**). Once all the blobs have been applied, the whole is removed from the blowpipe and slowly cooled in the lehr. In the same way as the vessels discussed above, the excess upper portion of the parison is removed by the cracking off process and the rim smoothed with a stone to produce the finished bowl.

The St Severin bowl also has a gilded inscription on the upper portion of the vessel wall which may have been gilded and incised at the same time, and by the same method, as the iconography. However, it is also possible that it was applied after the vessel had been finished. This inscription could not have been properly fired into the glass. If it was applied at the same time as the rest of the iconography, the annealing temperature of 550°C would not have been sufficient to adequately secure the unsandwiched gold leaf to the glass. A temperature of 900°C is instead required, following the methodology for the production of gilded-glass plaques noted above. If it had been applied after the vessel had been finished, then the vessel could not have then been inserted cold into the oven in order to secure the gold leaf upon the surface, as at temperatures of 600°C or more the vessel bowl would sag and collapse. It is possible that the inscription was applied after all other glass-working processes had been finished and not fired at all. This would have prevented any distortion of the lettering as the parison was reinflated in the course of applying the blobs. Applied with gum arabic, the gold leaf could only be incised with a very sharp point, making it relatively secure upon the glass unless subjected to heavy abrasion. In the light of this, it is notable that on the St Severin bowl all of the actual gilding of this inscription is no longer present. Traces of the inscription are visible in the weathering of the glass, which appears to have deteriorated to a greater extent on the glass surrounding the now vanished gilding, and thus preserving the trace of the inscription rather than the gilding itself.

### **Making brushed technique sandwich-glass portrait medallions and gilt glass trail sandwich-glass vessels**

Brushed technique sandwich-glass portrait medallions follow an almost identical glass-working procedure to the cut and incised sandwich-glass vessels described above. The incision of the design, however, was completed to a far finer quality. The upper colourless and lower cobalt blue layers of the medallions were not cast and ground glass plates.<sup>37</sup> Nor were they decorated and assembled cold for inserting into the annealing oven.<sup>38</sup> Instead, both layers were blown, as is indicated by slight undulations on the base (see for example **cat. no. 30; Pl. 18**). However, the fact that the methodology for the production of brushed technique medallions was nearly identical to that for the production of cut and incised



**Plate 34** The reverse of the brushed technique gold glass in the Victoria & Albert Museum (inv. no. 1052.1868), illustrating its grozed edges on the lower glass layer

sandwich-glass vessels is better illustrated by a single medallion in the Victoria & Albert Museum.<sup>39</sup>

This medallion (**Pl. 4**) is very closely akin to the British Museum's piece and is stylistically identical to all other gold glasses of this subtype considered to be genuine beyond question. It was also referenced as early as 1732, making it extremely unlikely to be a forgery.<sup>40</sup> In contrast to other brushed technique medallions, however, the Victoria & Albert example does not have a bevelled and ground edge. Instead, both the upper and lower layers of the glass have been closely grozed.

It is extremely unlikely that the piece from the Victoria & Albert Museum ever formed the base of a vessel. The grozed downturned lip of the cobalt blue base layer of glass, forming the foot-ring upon gold sandwich-glass vessels, does not appear to have been manipulated downwards in a uniform manner (**Pl. 34**). It is instead possible that this piece represents an unfinished example, where the piece has been produced and fused in the exact same manner as the cut and incised vessels discussed above. The two glass layers have apparently been grozed ready for the process of grinding to a smooth bevelled edge, which was, however, not carried out.

Gilt glass trail sandwich-glass vessels also follow an almost identical glass-working methodology to the cut and incised sandwich-glass vessels. Rather than gilding the base-disc, however, long thin rods or trails of colourless glass were drawn, and when cold, were rolled in gold leaf. These were then cut into shorter sections to be rearranged as letters or reheated and shaped to form curved lengths. In the case of the latter, the thin roll of gold leaf cracks and in most instances it comes away upon the outer edge of the curve. This is clearly observable upon Late Antique pieces. The finished inscription could then be laid cold upon the base-disc, or perhaps fixed into place with an appropriate adhesive such as gum arabic or rabbit skin glue. The whole is then reheated in the lehr and fused, with the upper parison forming the vessel as detailed above.

### **Conclusions**

Ultimately, the process of fusing gold leaf between two layers of glass, once learned, required no more elementary skill

than that of the very basic glassworker able to blow a simple bubble of glass. Therefore, the production of base-discs and the final fusing of the decorated pieces could have been carried out en masse. Furthermore, the amount of gold required for use in any one piece is minimal and the excess gold leaf scraped away to leave only the desired iconography could easily be caught and recycled, as is also the case with the excess glass. The degree of artistry involved in producing the iconography is certainly not of the highest standard, especially if the images were transferred by way of a grid from pattern books. Imperfections often occur in the finished design (see **Pl. 28**), which can only be attributed to careless workmanship. In addition, Alan Cameron has noted that the ‘vulgar’ orthography of cut and incised gold glass inscriptions suggests an other than upscale market for the objects.<sup>41</sup>

In the section devoted to Late Antique gold glass in the *Glass of the Caesars* exhibition catalogue, vessels are interpreted as having been trinkets owned by those ‘who already may have been so rich that they had everything’.<sup>42</sup> In the light of the possible production methodologies noted above, this seems very unlikely. When compared with contemporary silverware, glass was in no way an expensive or luxury commodity during the Roman era.<sup>43</sup> A lower material cost is particularly likely in the case of the most numerous category of gold glass – cut and incised sandwich-glass vessels and gilt glass plaques. This implies that they could potentially have been purchased by those of a less than aristocratic status. As I will make clear in my discussion of iconography in the catalogue, the depiction on gold glass of well-dressed men and women holding emblems of status further implies that cut and incised gold glass was a costly, but not automatically aristocratic, medium.

Despite this, not every gold glass subtype need necessarily have held a relatively modest cost value in relation to other materials such as silver. A far higher material cost can be reasonably attributed to brushed technique portrait medallions. The highly individualized and naturalistic traits discernible in these glasses does not suggest mass production and they could only have been created by an extremely accomplished artist whose skilled services would certainly have come at a high price. A similar scenario may also be envisaged, although perhaps not to quite the same extent, in the context of the diminutive medallion-studded bowls. The iconography of such vessels, most notably the St Severin bowl, is very finely executed in a relatively small field, requiring perhaps rather a practised hand than inherent skill. However, the ability demanded of a team of glassworkers to create the bowl as an object is of a significantly higher order than that required of all other gold glass subtypes.

## Notes

- 1 A version of part of this chapter discussing the making of Late Antique gold glass was published in Howells 2013. With thanks to the Roman Glassmakers for their assistance with this chapter.
- 2 Dalton 1901b, 251.
- 3 Kunckel 1679, 12; see also Kisa 1908, 99; Pillinger 1984, 63–5.
- 4 Caylus 1759, vol. 3, 195; Pillinger 1984, 66–70.
- 5 See Garrucci 1858; Pillinger 1984.
- 6 Buonarruoti 1716, 218, pl. XXX.
- 7 Osborne and Claridge 1998, no. 251, 206.
- 8 Ibid.
- 9 Caylus 1759, vol. 3, 193–205.
- 10 Wiseman 1859, 209.
- 11 Metropolitan Museum of Art, New York: inv. no. 17.190.109a. Breck 1927.
- 12 Ficoroni 1732, 11.
- 13 Fremersdorf 1967, 219; Goldstein 1977, 59.
- 14 Wiseman 1859, 173.
- 15 Rudoe 2002; *eadem* 2003.
- 16 Blue: Whitehouse 2007, no. 55; or green (e.g. **cat. no. 64**).
- 17 Dalton 1901b, 252; see also Dillon 1907, 93.
- 18 Rudoe 2002, 311; Rudoe 2003, 216.
- 19 Theophilus 1963, 59–60.
- 20 E.g. BMBEP 1977, 0701.1; Buckton 1994, no. 186; Megaw 1980.
- 21 Theophilus 1963, 59–60.
- 22 See Alarcão 1968, 75; Harden 1987, 266–7.
- 23 Eraclius 1849, 167.
- 24 Ibid., part five, *De fialis auro decoratis* (‘Of phials decorated with gold’), 187–8.
- 25 See Dalton 1901b, 250; Pillinger 1984, 57–63.
- 26 Cennini 1899, ch. 172, 154–6.
- 27 Ibid., ch. 151, 130–1.
- 28 D’Escurac-Doisy 1959, 60–2; Pillinger 1984, 59–61.
- 29 See www.romanglassmakers.co.uk.
- 30 Newman and Serpico 2000.
- 31 Eraclius, *Coloribus et artibus Romanorum* I.3, in Fleming 1999, 191.
- 32 Harden 1987, no. 47 (a free-blown two-handled bottle) and no. 113 (a hanging lamp).
- 33 Barag 1987, 116.
- 34 For the comparison, see Fremersdorf 1962, nos 46–7; Harden 1987, no. 48.
- 35 Weinberg 1988, 88, figs 4–45.
- 36 Dalton 1901b, 252; Dillon 1907, 93; **cat. nos 61–2**.
- 37 As suggested by Harden 1987, 276–7.
- 38 As Westlake tried: Dalton 1901b, 252.
- 39 V&A inv. no. 1052.1868.
- 40 Ficoroni 1732, 12.
- 41 Cameron 1996, 298.
- 42 Harden 1987, 268.
- 43 See Stern 1999.

# Chapter 5

## Some Practical Considerations

### Distribution and Context, Workshop Identity and Date, Function and Costs

I concluded the previous chapter on the making of gold glass by suggesting that in terms of their production, gold glasses were not inevitably high-cost, luxury items. In moving to discuss gold glass workshop identity, distribution, context and chronology, this is a theme to which I shall return.

The majority of published works on gold glass by scholars from the 16th century up to the present day have included comments on the distribution and context, the possible identity of workshops and the chronology of Late Antique gold glass. In almost every case, however, scholars have repeated the same set of theories that have been in circulation since at least the mid-19th century and summarized by Vopel in 1899. Here I offer the first in-depth discussion of gold glass distribution and context since Vopel's monograph. Gold glass chronology is discussed in relation to pieces where the original contexts have been recorded as well as the repertoire of images and inscriptions commonly depicted in the medium. The conclusions drawn regarding workshop identity are also taken into account.

#### Distribution and context

As has already been highlighted, gold glass was primarily of interest to the early antiquarians because of its iconography. The findspots of gold glasses were therefore very rarely recorded as they were deemed comparatively unimportant. In the majority of early publications, if an allusion to the findspot is made at all, it is simply stated that the gold glass came 'from a catacomb', in the vicinity of Rome. In some instances, the name of the catacomb has been recorded; however, no details relating to precise location, situation and associated objects are usually preserved. Prior to the 1860s, it was generally stated in all major discussions of the medium that gold glasses were a phenomenon exclusive to Rome and most notably the catacombs, where they were found embedded in the plaster sealing individual *loculi* (tomb niches).<sup>1</sup> In 1864, however, Aus'm Weerth and others published a series of articles detailing a number of gold glasses found during excavations, principally of burial sites, in Cologne and the Rhine Valley.<sup>2</sup> Vopel's work on gold glass context and distribution also identified several fragmentary examples predominantly from funerary monuments other than the catacombs, all in the immediate vicinity of Rome.<sup>3</sup>

The minimal recorded information regarding the findspots of gold glasses in the British Museum's collection indicates that they are likely to have been retrieved from the environs of both Rome and Cologne. The gold glasses from the Bunsen Collection are accompanied by documentation specifically stating that they were recovered in Rome 'from a catacomb'.<sup>4</sup> The catacomb in question, however, is not identified. Details of the purchases and so by extension the findspots of the vast majority of pieces imply that the city of Rome was the original location of these glasses. It is more than likely that the Museum's gold glasses to have a Roman provenance were themselves removed from the catacombs where the majority of gold glasses at the time were being discovered and sold on as the result of uncontrolled exploration in the 18th and 19th centuries.

Only two gold glasses in the British Museum's collection have secure findspots. Both come from excavations in Cologne. The St Ursula bowl (**cat. no. 17**) was recovered



Figure 14 Distribution map of gold glass findspots

from a stone cist containing the burnt bones of an adult female accompanied by a few small objects of glass and jet, in the area of the city known as the Ursulagartenstrasse.<sup>5</sup> The St Severin bowl (**cat. no. 16**) was found deposited in an unspecified burial as an incomplete vessel in the cemetery of St Severinus' church.<sup>6</sup> In both cases, the burials themselves were attributed to the 4th century on the basis of the gold glass found within them. The burials cannot be dated securely, however, and it is quite possible that the gold glass may well have been a treasured family heirloom when it was deposited. Consequently, the burials might be of a later date than the gold glass, but it is not possible to draw any firm conclusions.

In the absence of any detailed archaeological study since that of Vopel, recent scholarship perpetuates the view that gold glass has been exclusively found in the immediate vicinity of Rome (primarily in the catacombs) and from Cologne and its environs.<sup>7</sup> This is not the case. An updated record of all examples of gold glass is presented in the distribution map (**Fig. 14**). This map draws on data from the preliminary list of findspots compiled but not published by Smith, noting eight localities (Map references: 1, 3, 5, 10, 19, 20, 21, 25), and a further 19 plotted as the result of a detailed review of the literature.<sup>8</sup> Glasses have been included regardless of whether their reported findspot occurs in the accounts of early antiquarians or from the publications of more rigorously controlled archaeological excavations and subterranean explorations. A detailed table of glasses with a recorded provenance including details of context and published references is presented in Appendix A. Additional gold glasses from the localities noted by Smith but not included in the dataset are also included.

Gold glass brushed technique portrait medallions are recorded as being recovered exclusively from the city of Rome and its immediate environs. A single example remains *in situ* embedded into the plaster sealing *loculi* in the catacomb of Panfilo (**Pl. 2**).<sup>9</sup> A second piece is recorded as having been removed from the plaster of a *loculus* in the Catacomb of St Callistus,<sup>10</sup> whilst a third, identifiable with the example now in the Victoria & Albert Museum in London, was with less conviction reported in 1732 by Ficoroni to have been excavated in the ruins of Monte Celio, the Celio or Caelian Hill, one of the seven hills on which Rome was built (**Pl. 4**).<sup>11</sup> The specific ruins are, however, not identified. The Caelian Hill was a socially exclusive district during the 3rd and 4th centuries, populated with large villas and gardens owned by rich families such as the patrician ancestors of Pope Gregory the Great.<sup>12</sup> If this attribution is not mistaken, it adds weight to a notion of the comparatively high value of brushed technique gold glass portrait medallions. This value is based not on the material cost of such objects, but rather upon the fee charged by an artist capable of producing such a skilful lifelike image. As mentioned earlier in Chapter One, the Greek inscriptions on brushed technique portrait medallions are accepted as being in the Alexandrian dialect. These inscriptions clearly indicate the Egyptian origin of the craftsmen, as does their affinity with the style of the Egyptian mummy portraits. A distribution restricted to Rome, however, further enhanced by the likelihood that pieces such as the British Museum's

example purchased in the city were actually found there, would strongly suggest that production of these pieces centred on Rome itself, perhaps by a very small number of craftsmen of Egyptian origin.

Gilt glass trail vessels have not been securely provenanced to Rome. However, if all or at least the vast majority of glasses without any recorded provenance in the Vatican Museum and other collections in Rome were also found there, then many are attributable to the city.<sup>13</sup> In her short preliminary study of gilt glass trail gold glass, Filippini suggested on the basis of the history of the Vatican and other Roman collections that the glasses formerly in the Sangiorgi, Morbio, Tyszkiewicz and Dutuit collections were also originally recovered from Rome.<sup>14</sup> A single gilt glass trail gold glass vessel base fragment is reported by Filippini as having been 'found in Ostia'.<sup>15</sup> A significant number of finds in the nearby city of Rome is thus certainly not improbable, and may further point to Rome being the place of manufacture. Indicated on the map (**Fig. 14**) by the inverted white triangles, other gilt glass trail vessels are disparately recorded in Budapest and Aljustrel (Portugal). Including the fragment from Ostia, these three recorded findspots would appear to suggest a wide pattern of distribution. Filippini further suggests that an example now in Ptuj (Slovenia) was also found in that locality.<sup>16</sup> More detailed contextual data is recorded for the two glasses from Budapest and Aljustrel, both of which have survived as complete vessels (see **Fig. 5**). The example from Budapest, held in the Aquincumi Múzeum, was excavated from the piping system of the Legate's Palace in the nearby Roman town of Aquincum.<sup>17</sup> The vessel from Aljustrel was also recovered through controlled archaeological excavation from an inhumation in what was interpreted by the excavator as a family cemetery associated with a nearby villa at Farrobo.<sup>18</sup> Associated grave goods in the burial included unremarkable undecorated *terra sigillata* and glass bottles. Despite the very limited contextual data available for gilt glass trail inscription gold glasses, a status rather more than mundane, but nevertheless far from aristocratic might thus be inferred. Indeed, the example from Aljustrel was certainly treasured enough to be included in a burial.

Cut and incised gold glasses (indicated by the black circles on **Fig. 14**) had a very wide distribution. Multiple finds occur not only in Rome and Cologne, but throughout Italy, southern Gaul, the Rhineland and even the Balkans. Rome again appears to be at the centre of this network. Coupled with the exceedingly large numbers of gold glasses recovered from the city discussed below, it seems likely that Rome was indeed the centre of manufacture. No instances of cut and incised technique gold glass have been reported in Britain, the Iberian peninsula, North Africa or the eastern Roman Empire. Nevertheless, the wide pattern of distribution indicated by the map would suggest that the probability of further finds of gold glass in these areas is indeed high. However, in line with the quantified data presented in Appendix A, smaller numbers found at an increased distance from Rome are to be expected.

The importance of Rome in this context is made clear when the pieces with a recorded provenance are examined

proportionally by findspot locality. Based on the data assembled in Appendix A, many more examples (more than half of all cut and incised technique gold glasses with any record of provenance) have been recovered from Rome itself compared to other sites. Furthermore, given that only a fraction of known gold glasses have any provenance data, if we were to assume the plausible scenario that every gold glass in Roman collections, as well as those securely recorded as having been brought from Rome, was in fact found in the city, Rome's centrality regarding cut and incised gold glass is again massively increased.

In Rome, the vast majority of cut and incised gold glass fragments have been recovered from funerary contexts within the catacombs. Cut and incised gold glasses have been reported from the catacombs of Sts Agnes, Callistus, Commodilla, Domitilla, Hermes, Maximus, Peter and Marcellinus, Pontianus and Priscilla. A number still remain *in situ* in the catacombs of Novatianus and Panfilo.<sup>19</sup> In each instance where details of the context have been recorded, cut and incised gold glass vessels, individual diminutive medallions and plaques have all been reported as having been found inserted into the still wet plaster sealing *loculi*.<sup>20</sup> In his brief study of gold glass contexts within the catacombs, Vopel stated that, in each instance, cut and incised gold glasses were inserted into the catacomb walls as complete outward-facing vessels.<sup>21</sup> The vessel walls had been broken away, he argued, over the course of time by the passage of bodies along the narrow underground galleries so that only the vessel bases, as the majority exist today, were retained. This hypothesis is certainly supported by the presence of a small number of almost complete outward-facing vessels, one of which in the Vatican Museum is still embedded in the plaster of the wall from which it was removed.<sup>22</sup> Indeed, Boldetti also reportedly found a number of complete cut and incised gold glass vessels inserted into the plaster of the catacomb walls (**Pl. 10**).<sup>23</sup>

Vopel's statement cannot, however, be universally applied to every vessel recovered from the catacombs. It is extremely unlikely that gold glasses were always fixed into the plaster as complete vessels therefore meaning that their walls were invariably broken by the movements of passers-by as they would not have protruded very far from the walls. Furthermore, in the Vatican Museum collection, Morey illustrated a single gold glass vessel, inserted face down into the plaster of the catacomb from which it was removed, the iconography visible in reverse through its colourless base. The piece was broken, but nevertheless retained a significant portion of the vessel wall. The fact that it had been inserted face down in the plaster, however, indicates that the object was originally embedded into the wall as a broken but not closely trimmed vessel.<sup>24</sup> Other pieces were certainly inserted into the catacomb wall plaster as closely trimmed vessel bases. In a number of instances, these have been sunk into the wet wall plaster so that the trimmed edges of the base-disc were in part covered by it, demonstrating that the object was indeed adapted in antiquity and not at a later date by antiquarians and collectors.<sup>25</sup> Like many cut and incised technique gold glass vessels, individual diminutive medallions have also been recorded as having been inserted into the walls of the catacombs. This indicates that although

the original vessel had been broken, at least some of the individual medallions had been retained prior to their deposition.<sup>26</sup>

Elsewhere in Rome, instances of cut and incised gold glass have been recovered from contexts other than in the catacombs, again predominantly funerary in nature (detailed in Appendix A). Individual diminutive medallions were reported as excavated from a tomb on the Via Portuensis and, according to Garrucci, from the garden of the Church of St Eusebius.<sup>27</sup> Cut and incised vessel base fragments have been recorded on the Palatine Hill 'close to the so called stadium', although the exact context is not provided, and from a tomb on the Via Appia.<sup>28</sup> Outside Rome, funerary contexts, usually individual inhumations, again predominate as findspots for gold glass. Gold glass fragments occurring in burials are sometimes accompanied by other grave goods, including individual coins and other small items.<sup>29</sup> With the possible exception of the St Ursula bowl (**cat. no. 17**), every example of gold glass known from burial contexts other than the Roman catacombs had been deposited as broken fragments and not complete vessels. Only about three-quarters of the diminutive medallion-studded vessel in the British Museum's collection known as the St Severin bowl (**cat. no. 16**) was ever placed in the burial site in which it was found. In many other burials, only individual diminutive medallions from much larger vessels were included.<sup>30</sup> Cut and incised sandwich-glass vessels mainly appear to have been placed as vessel bases, closely trimmed in antiquity. One such example from Arles was found in a stone urn in the cemetery of Les Alyscamps; other examples come from an inhumation burial and tombs at Dunaújváros and Dunaszekesó respectively.<sup>31</sup> Gold glass vessels may also have been trimmed prior to their eventual deposition either in the catacombs or other burials.<sup>32</sup> Whether carried out after the accidental breakage of the vessel, or the result of a deliberate act, the reduction of the vessel to its decorated base-disc would have transformed the image (almost certainly the source of the object's value to its owner) into a personal and easily transportable medallion. This is certainly the case with regard to a small base fragment deposited with the inhumation of an adult male from the Visigothic cemetery at Estagel in southern France. The fragment depicts a single figure of a saint from what was originally part of a circular border of standing saints surrounding a central bust (similar to **cat. no. 11**). The iconography of the fragment is barely legible, and can only be identified when compared closely with similar images in more complete gold glass vessel bases.<sup>33</sup> It was found contained inside a small leather purse accompanying the burial. As such, even as a small fragment, it was obviously treasured enough by its non-Roman owner to be kept in his purse and eventually deposited as a grave good.

Further to this, one particular diminutive medallion, now in the Vatican Museum, was certainly broken from a larger vessel, but nevertheless retained by its owner perhaps for some considerable time before its insertion into the wall of the catacomb of Priscilla (Appendix A).<sup>34</sup> The medallion depicts a single element from the sequence showing Daniel slaying the dragon of Babylon (paralleled nearly exactly in **cat. no. 23**). It had been inserted into the sealing *loculi*



plaster after it had been set in a bronze ring with an eyelet for suspension as a necklace pendant, clearly indicating that it was still of value to its owner who converted it into a piece of jewellery to wear, even after the original vessel had been broken and the other elements of the scene it depicts had been lost.

In the context of a Roman origin for gold glass, it is also worth noting that, as I shall discuss in more detail in the catalogue, the iconography of cut and incised gold glass is distinctly Roman in nature, relating directly to the artistic language and trends of popular religious thought prevalent in late 4th-century Rome. As the catalogue section will demonstrate, where lay people are depicted, they are invariably dressed in the manner typical of men and women from Rome rather than elsewhere in the Roman Empire (**cat. nos 31–9**). Likewise, almost every saint and martyr depicted in gold glass is specifically associated with the city, and in most instances is known to have had a popular cult in Rome in the late 4th century.

### Gold glass workshop identity

Whilst the distribution of gold glass is not restricted to Rome, it seems plausible that its manufacture was. The style of the glasses enables a case to be made that all gold glass was produced in Rome by a small number of craftsmen.

Prior to the middle of the 20th century, it was assumed that gold glasses with pagan, Jewish and Christian subjects must have been the products of discrete workshops organized on the basis of the religious affiliation of the craftsmen.<sup>35</sup> The publication of Morey's corpus in 1959 led to renewed discussion regarding workshop identity, this time based largely on the division of the corpus into groups of objects sharing perceived stylistic trends. Although his untimely death prevented the inclusion of a full discussion of workshop identity in the published catalogue, Morey himself tentatively identified several ateliers, based on technique and stylistic traits: brushed technique medallions were assigned to one single atelier, whilst cut and incised gold glass vessel bases were divided into separate workshops largely on the basis of their border type and other stylistic details. Importantly, however, gold glasses with Christian, Jewish and pagan iconography were for the first time assigned by Morey to the same workshop group.

Engemann pointed out some of the flaws in the workshop attributions gleaned from the collection of notes included in Morey's manuscript, notably in the context of stylistic traits shared between glasses with different borders, but he did not offer his own groupings.<sup>36</sup> Followed by Rutgers, Engemann isolated a distinct group of gold glasses with both Jewish and Christian iconography which he regarded as the product of the same workshop on the basis of individual details which again included border type.<sup>37</sup> More detailed discussions of gold glass workshop identity based on stylistic features, including for example differences in physiognomy and costume, were published by Zanchi Roppo, Faedo and most recently by Nüsse.<sup>38</sup>

The studies of Zanchi Roppo and Faedo, like Morey, assigned brushed technique medallions to a single workshop. Followed by Nüsse, they did, however, each identify a larger number of far smaller workshop groups making cut and

incised technique gold glasses than Morey, despite only including examples with distinctly Christian iconography in their respective studies. Importantly, Zanchi Roppo and Nüsse for the first time assigned cut and incised gold glass vessel bases and diminutive medallions to common workshops, interpreting both vessel bases and medallion-studded vessels as the product of the same craftsmen. The highly speculative identification of separate gold glass workshops by Morey, Engemann, Zanchi Roppo, Faedo and Nüsse was in each instance based on the same corpus of illustrations, the black and white photographs presented in Morey's catalogue. Despite this shared dataset, however, no definitive set of individual gold glass workshop groups was universally agreed upon, underlining the tenuous nature of these findings.

However, the attribution of all brushed technique portrait medallions to a single workshop by both Morey and Zanchi Roppo appears to be logical. Gold glasses of this type form a small, well-defined group, identical in both morphology and technique. Further to this, each example conforms to the same stylistic conventions: set within a thin perfectly circular single-line border, they constitute highly individualized facial portraits of one or more individuals upon a lifelike, but nonetheless standardized format. Gilt glass trail vessels constitute another discrete group of typologically similar objects, each bearing stylistically similar cartouches containing a brief convivial inscription set across two lines above a single trail of coloured glass. It thus seems plausible that gilt glass trail gold glasses were also the product of a single workshop.

As Morey suggested, it does seem likely that examples of cut and incised gold glass with Christian, Jewish and pagan iconography were produced within the same workshop and probably even by the same craftsmen. In the British Museum's collection alone, the gold glass vessel bases depicting Orfitus and Constantia with a diminutive representation of Hercules and a distinctly pagan inscription (**cat. no. 35**), the labelled portrait busts of Christian saints Peter and Paul (**cat. no. 5**) and the unequivocally Jewish symbolism of the menorah (**cat. no. 40**) all share stylistic traits and feature a wide double-band border enclosed by inscriptions. These similarities suggest that the three gold glass vessel bases could be assigned to the same atelier. The idea that Late Antique artistic production was not separated into religiously delineated areas has already been clearly established for other contemporary media.<sup>39</sup>

Gold glasses produced in the cut and incised technique, regardless of whether they constituted vessel bases, diminutive medallions or gilt glass plaques, all shared a broad set of general iconographic trends. In addition, in every instance of cut and incised gold glass, over-painted enamel is used, if at all, in small quantities to highlight areas of costume with largely idealized connotations of wealth and status. Furthermore, despite slight stylistic differences between glasses, the same narrow range of 'types', often restricted to only one specific representation, are employed to represent particular subjects such as secular people, saints and biblical episodes. In addition, the same narrow range of border types also feature on every gold glass known. This is in direct contrast to the many and varied number of ways

employed for the depiction of the same subject observable in other contemporary media from Rome. Where inscriptions do appear, they are again restricted to a narrow range of standard phrases and occur throughout the corpuses of published cut and incised gold glasses regardless of the iconographic subject matter and the stylistic traits observable in the image.

In light of a shared method of basic production, a case can be made that cut and incised technique gold glasses, of whatever form, were all products of a single workshop or, depending on how much gold glass is thought to have been produced, of a small group of workshops. Such a workshop is likely to have included a number of different glassworkers and craftsmen as well as other individuals responsible for producing cut and incised gold leaf designs. A small group of craftsmen all producing separate gold glasses but based on the same set of pre-prepared pattern-books would unavoidably apply the stylistic traits of their own hand to their rendition of the same basic image. Thus, in this model, groups of glasses were produced by the same hand in a single workshop, rather than by a range of workers in multiple separate workshops.

The same argument about a single workshop can be made in the context of the Disch Kantharos in the Corning Museum of Glass which also incorporates the cut and incised technique of gold leaf incision (**Pl. 6**).<sup>40</sup> The piece was originally one of a pair although the other, known as the Schloss-Goluchow Kantharos, has now been lost.<sup>41</sup> Both were recovered from burials in Cologne, the Disch Kantharos from Ursulagartenstrasse, the findspot of a number of other gold glasses, most notably the St Ursula bowl (**cat. no. 17**). The two gold glass kantharoi take the form of conical cups with unprotected gilding applied to the walls on a stem with a hollow foot. Each is enclosed by an applied cage of glass trails. A gilt glass fragment decorated with Jewish imagery in the Vatican Museum probably constitutes part of the conical cup of a third, now broken kantharos.<sup>42</sup> Although constituting a skilled example of glass-working, applied cage cups of this sort are much quicker and easier to produce than the contemporary cut and polished examples.<sup>43</sup> They could be dubbed the 'poor man's cage cup'.<sup>44</sup> The cut and incised gold leaf designs on each kantharos depict winged cupids and are paralleled closely on a small number of cut and incised technique gold glass vessel bases.<sup>45</sup> Based on the shared technique of gold leaf incision, the iconographic parallels and the contextual association of the Disch and Schloss-Goluchow kantharoi with other cut and incised technique gold glasses, it is plausible to attribute these two vessels to the same Roman workshop or workshops responsible for the production of other cut and incised technique gold glasses. On this basis, a series of gold glass plaques found at Neuss in Germany, identified as adorning the lid and sides of a wooden casket (which have now unfortunately been lost), might also be attributed to this same workshop. Each of the rectangular plaques was produced in the cut and incised technique and depicts Christian subjects paralleled precisely in more common cut and incised technique gold glass vessels.<sup>46</sup>

A case for a second workshop producing gold glass that operated quite distinctly from the one in Rome has been

made for Cologne, already known to be the site of a major Late Roman glassworks.<sup>47</sup> In terms of both style and technique, however, the vast majority of the so-called Rhenish group of gold glasses are identical to the cut and incised technique pieces also found in Rome. Furthermore, the distribution map of cut and incised gold glasses (**Fig. 14**) indicates that gold glass is recorded throughout most of the western Roman Empire. The production of gold glass in the region of Cologne in a separate workshop is therefore highly unlikely. Indeed, in his review of Fremersdorf's scholarly publications, Harden commented on Fremersdorf's tendency to over-emphasize the importance of Cologne in the production of various glass forms and types.<sup>48</sup>

In light of the above, I believe that these cut and incised technique gold glasses are likely to have been produced in a single workshop, or a very small number of workshops, in the environs of Rome. I would also suggest that gold glass workshop attribution should ultimately be viewed in relation to overall technique, rather than on the basis of minor stylistic differences between glasses.

### The date of Late Antique gold glass

Dating gold glass is problematic. Most attempts to place it in a chronological framework have been based largely on the repertoire of illustrated subject matter and inscriptions known to each respective author and, in turn, their own relative understanding of the dates of these images and stylistic traits. In 1716, Buonarruoti, for example, dated the medium to the later 3rd century, up to and during the persecutions of Diocletian.<sup>49</sup> This was based not only on his interpretation of the images depicted, but also on his recognition of 3rd-century martyrs such as St Laurence (d. AD 258) and others martyred during the Diocletianic persecutions, including St Agnes (d. AD 304). Garrucci, however, largely on the basis of his understanding of iconographic style and the orthography of the inscriptions, instead dated gold glass to the 4th century. This was supported by his identification of Pope Damasus (d. AD 384) on several glasses (including **cat. no. 14** in the British Museum's collection).<sup>50</sup>

In 1899, Vopel, followed in 1901 by Dalton, postulated a general 4th-century date for gold glass.<sup>51</sup> His chronology was based largely upon iconographic and orthographic considerations; it also took into account the little contextual data that was available. In his summary of Vopel's work, Dalton noted that no gold glasses were known to have been discovered in the older catacombs of the first two centuries.<sup>52</sup> This was used as evidence to suggest that gold glasses were not likely to have been produced earlier than the 3rd century. Equally, de Rossi had stated that the catacombs, where the majority of gold glasses had been found, ceased to be used after AD 410. This was therefore interpreted by Dalton as a *terminus ante quem* before which the majority of gold glasses should be dated.<sup>53</sup> Vopel also noted an elusive, 'as yet unpublished' gold glass bearing the inscription 'JVSTINIANVS SEMPER AVG', seemingly related to the Emperor Justinian (AD 527–65). Based on this fragment, he suggested that gold glass production, whilst most prevalent in the 4th century, nonetheless continued into the 6th century.<sup>54</sup>

Within this time frame and based upon their understanding of the development of Christianity during this period, both Vopel and Dalton dated gold glasses with pagan iconography to the very late 3rd and early 4th centuries. Ambiguous images, which could be either Christian or pagan such as the Good Shepherd/*kriophoros* (ram-bearer), were attributed to a slightly later period, whilst glasses with explicitly Christian images were dated to the later 4th century.<sup>55</sup> The gold glasses known to both were interpreted in the context of the 19th-century perception that the quality of artistic production in the Late Roman world deteriorated over the course of time. Dalton noted that gold glasses with pagan iconography were the best executed, and that the quality of workmanship gradually declined with overtly Christian glasses bearing the ‘traces of wholesale production’, and as such were of a later date.<sup>56</sup> A general date for gold glass spanning the length of the 4th century, based principally on the evidence presented by Vopel and Dalton, has been widely accepted in the literature. Indeed, Vopel’s account of gold glass chronology is still considered to be the most complete.<sup>57</sup> Following Vopel, both Kisa and Zanchi Roppo cited the Justinianic gold glass in order to justify a date for gold glass extending beyond the 4th century.<sup>58</sup> However, as Auth rightly noted in 1979, the gold glass in question has not been seen since Vopel’s report in 1899, and furthermore is not included in any publications prior to it.<sup>59</sup> The piece should thus be discounted from the evidence, which otherwise all points to an earlier date.

From the notes published with Morey’s catalogue in 1959, it is clear that like Dalton, he also considered gold glasses executed to a higher standard of competence to date from the later 3rd and early 4th centuries. Consequently, Morey preferred an early date for the brushed technique medallions, whilst those of the cut and incised technique he placed throughout the 4th century on the basis of their style, regardless of whether the subjects depicted were pagan or Christian. Zanchi-Roppo dated gold glasses variously to the later 3rd and 4th centuries on the basis of hair style.<sup>60</sup> In a medium that is so generic in nature, however, this method of dating is not very secure.<sup>61</sup>

Gilt glass trail vessels may be dated only tentatively on the basis of context. Just two pieces have been recovered from controlled excavations: one from Aquincum (**Fig. 5**) which has been dated to the late 3rd or early 4th century, whilst the piece from Aljustrel (**Fig. 5**) was dated by contextual association *ante quem* AD 240–60.<sup>62</sup> The only example of gilt glass trail glass in the British Museum’s collection (**cat. no. 55**) is decoloured with antimony, principally used in the 3rd century prior to being superseded by manganese in the 4th century, and this lends further support to suggestions of an earlier date. However, it is unfortunate that samples from more glasses held in other museum collections of this type have not been analysed. If gilt glass trail vessels were the product of a single workshop, in the absence of further data, a concise date range somewhere between the mid-3rd to early 4th century appears to be most likely for this subtype.

A similar date range, advocated by both Morey and Zanchi Roppo, also appears logical in relation to brushed technique portrait medallions. As previously noted, these are stylistically very similar to the painted mummy portrait

panels from the Fayoum oasis in Egypt which are generally dated to the 3rd and very early 4th centuries.<sup>63</sup> Furthermore, the *collegia iuvenum* standard present upon the British Museum example (**cat. no. 30**) can be paralleled by other similar standards all dated to the late 3rd and early 4th centuries.<sup>64</sup> The fact that the only gold glass brushed technique medallion in the British Museum’s collection is decoloured with antimony may again be cited in support of an earlier date. Once again regrettably no compositional data have been published for any other gold glasses in this subtype. The brushed technique medallion still *in situ* in the catacomb of Panfilo implies a 4th-century date.<sup>65</sup> However, the piece may well have been deposited in the catacombs quite some time after its initial manufacture.

This survey of gold glass contexts is not very informative in the dating of cut and incised technique gold glasses. Like those from the catacombs summarized by Vopel and Dalton, only a very broad 4th-century date can be attributed to pieces recovered during excavations carried out in the course of the last century (see Appendix A). Problematically, a single cut and incised gold glass fragment reported from an inhumation burial at Castel Gandolfo was found accompanied by a single coin of Heliogabalus (AD 218–22) next to the deceased.<sup>66</sup> However, the collection of often very old coins by individuals is attested throughout Late Antiquity, as exemplified by an assemblage of coins of different emperors embedded into the sealing plaster of a single *loculus* in the catacomb of Panfilo in Rome.<sup>67</sup> Like ancient coin collecting today, old coins were apparently of significant personal value to those who collected them, and thus would have been deemed suitable grave goods. Therefore, the dating suggested by the coin from Castel Gandolfo, which runs contrary to all of the other evidence that points to a 4th-century date for gold glass, can and should be questioned.

The fact that the indistinguishable cut and incised technique gold glasses in the Museum’s collection appear to have been invariably decoloured with antimony and manganese further indicates a 4th-century date. The composition of the glasses cannot, however, aid us further in attributing a narrower date range to the medium. For the most part, the iconography of cut and incised gold glasses is a reflection of the general artistic language employed throughout the 4th century and as such is of little use in arriving at a more focused date range.

However, the occurrence of saints known to have been martyred in the early 4th century during the persecutions of Diocletian and earlier gives an effective *terminus post quem* for the production of cut and incised gold glass. It is notable, however, that some of these saints, such as Agnes, Timothy, Sixtus, Laurence and Hippolytus, who occur on numerous gold glasses in Morey’s corpus (and on **cat. nos 9, 13–14** in the British Museum’s collection), do not seem to have become the subject of widespread renown in Rome until the later 4th century.<sup>68</sup> The depiction on gold glass of saints who only really became widely popular at this time, accompanied by inscriptions on some examples suggesting that the owner of the glasses belonged to a cult of St Laurence, may reasonably indicate a late 4th century date for the medium itself.<sup>69</sup>

Accepting the likelihood that all cut and incised technique gold glasses were the product of a single workshop or a group of tightly related workshops, a fairly narrow date range might be implied. This can be tied firmly to the later 4th century, particularly the AD 360s to 380s, on the basis of known individuals depicted in gold glass. The most famous is without doubt Memmius Vitrasius Orfitus (**cat. no. 35**), prefect of Rome in every January between AD 354 and 359 (except AD 357). The inscription on this vessel base relates specifically to the wine-producing region of Acerentia (sometimes spelt Acerentia) in southern Italy. Alan Cameron suggests that Orfitus may have owned a vineyard in the area and that this particular glass was produced on behalf of one of Orfitus' clients or dependants to commemorate his wedding in the AD 340s or 350s.<sup>70</sup> However, there is no evidence to prove that gold glasses depicting male and female couples (the so-called 'married couple' category of gold glass – see **cat. nos 34–7**) were produced specifically for weddings, and they may well have been made for a range of other occasions. Consequently, a case can at least be made that it is possible that the piece was produced to commemorate a visit made by Orfitus to his estates at any time.

The presence of the name Amachius on **cat. no. 33** is also suggestive in dating terms. Amachius is identified as Flavius Amachius, governor of Phrygia from AD 361–3 and a known champion of the pagan revival, a fact which further supports a date for cut and incised technique gold glass in the AD 360s. A gold glass diminutive medallion in the Vatican Museum collection bearing the word 'AUSONARIUM' has also been tentatively identified by Dalton and later by Alan Cameron and Lucy Grig as relating to the illustrious 'Ausonii', a family who flourished in late 4th-century Rome.<sup>71</sup> Lay individuals such as these were surely not likely to have been depicted in gold glass after their deaths, as is the case with popular saints and martyrs. Indeed, both examples in the British Museum's collection express wishes of good health and long life to Orfitus and Amachius, implying that the vessels were produced during the lifetime of the subjects. Such inscriptions never appear in gold glass in relation to saints or martyrs.

A number of gold glasses incorporate the portrait-style depiction of a male saint labelled 'DAMAS' (including the vessel base **cat. no. 14**).<sup>72</sup> As no other saint or martyr is known of that name, Damas has almost universally been identified with the eponymous late 4th-century pope, bishop of Rome between AD 366 and 384.<sup>73</sup> Grig suggested that gold glasses depicting Damas alongside other named individuals represent a circle of friends and were produced, either by Damasus himself, notable in his efforts at literary self-promotion, or by one of his circle to advertise their association with the pope.<sup>74</sup> By implication, this would date gold glasses depicting Damas and as such the medium as a whole (being the product of a single workshop) to the period AD 366 to 384.

However, as I suggest in the catalogue (**cat. no. 14**), a case can be made that the image of Pope Damasus on gold glass was not produced at his own instigation or by his circle, but after his death by others who were not his personal acquaintances, but who would have been glad of a bowl depicting his holy image alongside that of other popular

saints and martyrs. This would allow us to date the Damasus vessels to the late AD 380s, shortly after his death. It is a scenario that would enable us to date gold glasses bearing the images of saints labelled as 'IULIUS', identified by Grig as Pope Julius I (AD 337–52), and 'FELIX', identified with Pope Felix I (AD 268–73/4) by Grig, but more likely to represent either Pope Felix II (AD 355–8) or a conflation of the two, to the periods just after their deaths (AD 360s and 370s respectively).<sup>75</sup>

These dates complement those suggested by the presence of the secular Orfitus and Amachius on the Museum's gold glasses discussed above. Based on the evidence of known individuals appearing on gold glass, both lay figures and those venerated as saints after their deaths, the product of a single workshop, cut and incised technique gold glasses could thus be dated to the later 4th century, potentially even to the 30 year period between approximately AD 360 and 390.

### Function and cost

My discussion above has touched on questions about the function and costs of gold glass, two themes that are closely entangled for the way in which the cost of gold glass as a medium has been assumed is influenced by suppositions about function and ownership, and debate about function and ownership has underpinned discussion of costs. The depiction of wealthy and powerful men such as Orfitus, Amachius and Pope Damasus on gold glass has led to an implicit assumption by some that the medium itself was one for the wealthy and powerful. But this need not have been the case.

Although gold glass did – as its use in the catacombs indicates – have a funerary context, this was surely not what it was originally made for. In form, the majority of gold glasses took the shape of vessels and in iconography, gold glasses are not automatically funerary. Rather, if there was an over-arching theme, it was one of commemoration.

In a lovely passage by the Victorian moralist and antiquarian Cardinal Wiseman, it is assumed that gold glasses were indeed tumbler-type drinking vessels. As such, it was implied that because the Christian image could only then be viewed once the cup had been drained, the sight of the holy image would remind the drinker of good Christian morality and in doing so would dissuade him from taking another cup of alcohol!<sup>76</sup> This imaginative interpretation as to the function of gold glasses decorated with Christian scenes was based on a late 4th-century passage from the writings of Paulinus, Bishop of Nola. Paulinus despaired at the drunken revelry into which feasts of the martyrs often descended. In response, he painted the walls of the shrine with holy images to arrest the attention of the revellers, causing them to spend much time in wonder at the images leaving less time for gluttony and the consumption of wine.<sup>77</sup> However, cut and incised technique gold glass vessels originally took the form of wide shallow vessels, not drinking cups. This form functioned primarily to show off the decorative image on the vessel base and was not well suited for drinking purposes. Indeed, that cut and incised gold glass vessels constituted wide shallow bowls was probably largely the result of the manufacturing process and as such is

unlikely to have been dictated by functional need. Unlike cut and incised gold glass, gilt glass trail glasses did often take the form of tumbler-style drinking vessels, and probably functioned as decorated drinking vessels; these examples, however, do not bear the same sort of iconography as the cut and incised examples. The shallow bowl form of the majority of cut and incised gold glasses is likely in the first instance to have been a result of the manufacturing process. It constitutes the easiest way of producing a gold leaf image protected between two layers of glass and enables the design to be highly visible when displayed. However, shallow bowls were a popular practical form in glass as well as other media such as ceramics in the later 4th century. As such, this useful form may well have contributed to making gold glass vessels more saleable, even if the shallow bowl profile did not relate to any practical specific intended function. In the case of almost half of the pieces in the British Museum's collection where the foot-ring or part of the foot-ring is preserved (8 out of 20 pieces), however, the profiles reveal that the concave vessel base is lower than the height of the foot-ring (**cat. nos 5, 7, 10, 15, 35–6, 39, 46**). This means that the bowl could not have been stable when placed on a flat surface, and, ultimately, was unlikely to have been a functional object.

The iconography of gold glass, as the catalogue will illustrate, falls into three major categories: religious imagery (Christian, Jewish or pagan); secular imagery (people and scenes of daily life); and inscriptions only. All three can be said to share a commemorative function, and in all three cases, that function need not have been funerary in the first instance.

Gold glasses bearing the portrait-style depictions of Christian saints and martyrs are unlikely to have been produced to commemorate specific events. The most commonly repeated suggestion as to the function of these vessels is that they were used in the celebration of Christian feast days. Gold glass vessels bearing the portrait-style depictions of saints and martyrs may have been deemed suitable for use in the celebration of Christian feast days by those that owned them. John Chrysostom, Patriarch of Constantinople between *c.* AD 344 and 407, described the practice of depicting the image of the deceased holy man on the personal effects (including vessels) of the laity so that they may be consoled after his departure from life.<sup>78</sup> Meletius was bishop from AD 360–80, contemporary with Damasus. The vast majority of saints depicted in gold glass were of Roman origin and had popular cults in the late 4th-century Rome. Furthermore, the promotion of the cult of Peter and Paul as joint martyrs, joint founders of Christianity in Rome and jointly Rome's first bishops by the Roman church was at its strongest in the late 4th century.<sup>79</sup> As the catalogue section notes, paired portrait-style representations of Peter and Paul are the most common portrayal of saints illustrated in gold glass. Gold glasses bearing the depictions of saints, martyrs and recently deceased bishops such as Damasus (AD 366–84), Julius I (AD 337–52) and Felix II (AD 355–8) (**see cat. no. 14**) might be interpreted as the result of market forces. Produced in Rome, vessels bearing the images of holy men revered by the population may reflect a Roman demand for items bearing the images of local saints, as well as of Christ and the apostles, in affordable media. Furthermore, this

hypothesis need not be restricted to the images of Christian saints in gold glass. It is equally applicable to the depictions of individuals revered by the pagan population of Rome for their attempts at pagan revival hypothesized for **cat. no. 33**, representing Flavius Amachius in the garb of a pagan augur or soothsayer.

The biblical and apocryphal images on cut and incised technique gold glasses present succinct examples of Christian typology and a visual demonstration of the unity of the Old and New Testaments. Many of these episodes appear to parallel verses from the *Commendatio Animae*, an Early Christian prayer for the dead that was popular in the 4th century; despite this, it is highly unlikely that gold glasses with biblical episodes were produced specifically to promote Christian typology or function in the context of this prayer. Official Church involvement in gold glass production has been noted above as extremely unlikely. Furthermore, although many gold glasses illustrating biblical episodes are accompanied by inscriptions, in every instance these constitute simple generic wishes for life and health. On no occasion are the images accompanied by verses from the *Commendatio Animae* and therefore suggestive of a funerary function. What we may see is a reuse in a funerary context of gold glasses with a possible funerary meaning deliberately chosen from a wider range of gold glass. The generic inscriptions also highlight the improbability that gold glasses depicting Christian episodes ever served as liturgical vessels, an idea first proposed as early as 1720, and repeated, albeit sporadically, up to and including the present day.<sup>80</sup> Typology and the unity of the two Testaments were publicly preached to a widespread audience in the 4th century. As such, the different biblical episodes would have been very well known to the contemporary Christian population of Rome. Like the vessels illustrating saints, gold glasses portraying scriptural episodes were probably not manufactured to serve a specific function apart perhaps for display purposes. Instead, they were likely to have been produced to cater for the demand for such images by everyday people in affordable media. This demand is aptly demonstrated in a passage from Asterius, bishop of Amaseia (d. *c.* AD 410), written in the late 4th century. He noted that 'the more religious among rich men and woman, having picked out the story of the Gospels, have handed it over to the weavers – I mean our Christ together with all of His disciples, and each one of the miracles the way it is related... In doing this they consider themselves to be religious and to be wearing clothes that are agreeable to God'.<sup>81</sup> It is notable that Asterius not only mentions biblical episodes, but also 'Christ together with all of His disciples' depicted on clothing deemed 'agreeable to God'. What went on in textiles may well have gone on in other media. Asterius's comments further suggest that the portrait-style depictions of popular saints and martyrs on gold glass, as well as the illustrations of biblical episodes, are indicative of the demand for personal images in media affordable to the populace at large.

Images of secular people and events may fit a similar pattern. For example, the technically skilful brushed technique gold glass medallions, where the images appear more individualized, may have been intended to evoke the presence of an absent person or persons. A possible function

of these portrait medallions can be deduced both on the basis of the form of the objects as actual medallions, and on account of their iconography, as they seem to depict real portraits of individual men or women with one or more children. Significantly, in no instances are both an adult man and woman shown on a single piece. Consequently, it is plausible that these portable, indeed pocket-sized, medallions may have served to evoke the presence of absent persons and the use of such images in this fashion is attested in a number of broadly contemporary textual sources.

Predominant amongst these is the romance of *Chaereas and Callirhoe*, probably written in the mid-1st century AD and still widely popular in the 2nd century and later.<sup>82</sup> Two passages from the work explicitly tell of conversations held between Callirhoe and the portrait of her absent lover Chaereas on her ring.<sup>83</sup> Therefore medallions depicting individual men such as that in the British Museum's collection (**cat. no. 30**) might have been the possessions of women, evoking the presence of an absent husband or son. Likewise, medallions depicting an adult female with one or more children may have been carried around by the father of the family whilst he was away from home. Indeed, on the Brescia medallion (**Pl. 1**), which depicts a woman with her two children, a short inscription arguably referring to the 'father of the family' is present, even though an adult male is absent from the scene.<sup>84</sup> Brushed technique medallions may thus have been commissioned by the wealthy to serve as a highly portable and luxury alternative to painted portraits, which were perhaps more common but, other than the Fayoum mummy portraits, have not survived in the archaeological record.

Although it has been suggested that gold glasses were presented as luxurious gifts to guests and well-wishers on ceremonious occasions 'who may already have been so rich that they had everything', there is no evidence to suggest that they were offered to guests as mementos of the occasion at all.<sup>85</sup> It is instead perfectly plausible that gold glasses produced for weddings and other notable events were purchased as one-off pieces either by or for the person or persons that the ceremony commemorated. A commemorative function for at least some gold glasses indicates that, although cut and incised technique gold glasses may well have been owned by people of relatively modest status, they were nevertheless probably prized and valued items respective to the income of those who purchased them. The more generic cut and incised gold glasses depicting the paired portraits of men and women certainly represent married couples. However, there is no evidence to suggest that they were produced as wedding gifts or indeed that they relate to the actual marriage ceremony in any way. Firstly, many examples incorporate one or more children, thus constituting family groups, and as such cannot have been produced to celebrate a wedding. Further, whilst the coronation of the wedded couple was a key feature of the Christian wedding ceremony in the 4th century, simultaneous crowning of co-emperors or of Sts Peter and Paul could also represent harmony.<sup>86</sup> Rather than being indicative of the wedding ceremony itself, this particular motif thus clearly implies the notion of *concordia* and unity between two people, and so gold glasses of this type could have been feasibly purchased by or for the couple depicted at

any stage of their married life and need not have been acquired to mark any particular event. However, it is clear that some gold glasses at least were produced specifically with the intention of commemorating a key event in the lives of those that either commissioned them to incorporate their names or purchased them with ready-made generic inscriptions. A single gold glass currently in the Metropolitan Museum of Art, New York, does represent the marriage ceremony quite explicitly and was therefore evidently produced to mark the occasion.<sup>87</sup> Unlike the quarter-length bust portrait-style depictions of 'married couples' discussed above, the Metropolitan Museum glass depicts a full-length man and woman and includes all of the key attributes applicable to the marriage ceremony. The couple join right hands over an altar in the classic form of the *dextrarum junctio*, the marriage contract; above their hands is a ring (presumably the wedding ring) and a single floating crown (noted above as featuring in the wedding ceremony) appears above their heads. The accompanying inscription reads 'VIVAS IN DEO' ('live in God') and is a phrase not found on any 'married couple' gold glasses. It formed part of the Christian wedding ceremony from at least the 3rd century.<sup>88</sup>

Weddings were not the only event commemorated in gold glass: **cat. no. 43** shows a boy identified as Fortunius receiving the garments associated with manhood from his father. The piece was thus almost certainly produced to commemorate the *togam virilem sumere*, the coming of age ceremony of the eponymous Fortunius; again this was not a funerary event, but rather a generic scene personalized through the inscription and name.

Inscriptions on gold glasses – whether associated with images or not – are predominantly generic wishes for health and long life on the behalf of individuals, regardless of the subject matter depicted. These are hardly funerary sentiments. It is also worth noting that these inscriptions have often been interpreted as toasts and general encouragements to drink, hence the frequent identification of gold glasses as drinking vessels.<sup>89</sup> But rather than being a simple convivial drinking toast, the commonly occurring motto 'PIE ZESES' ('drink that you may live') has been interpreted by Auth as constituting a wish for life in a pagan, Jewish or Christian hereafter.<sup>90</sup> The other frequently occurring word on gold glass meaning drink ('BIBAS') has furthermore been interpreted by Cameron as interchangeable with the word 'VIVAS', which also occurs frequently on gold glass and means 'life'.<sup>91</sup>

As noted above, just as gold glasses were chiefly valued for their iconography in the 18th and 19th centuries, this was also the case in the 4th century. It is thus of little surprise that at least some cut and incised technique vessels were closely trimmed down to the line of their base-discs or diminutive medallion blobs to preserve only the iconography in antiquity. In some instances, this may have been carried out after the original vessel had been accidentally broken. In others, however, the vessel walls may have been completely and deliberately removed in order to create a portable decorated medallion. On rare occasions, gold glass diminutive medallions are shown to have been reworked into jewellery prior to their deposition in this



manner.<sup>92</sup> All of the gold glasses known to have been reduced to their base-disc in antiquity depict either the portrait-style depictions of Christian saints or biblical episodic imagery. Closely trimmed to form medallions, some cut and incised technique gold glasses depicting Christian saints and subjects may have been used by those that purchased them as portable objects of personal devotion, in some instances perhaps depicting the saint whose cult the owner of the gold glass image followed. In this context, gold glasses bearing the portrait-style representations of saints with simple personal dedicatory inscriptions, such as **cat. no. 2**, may have been deemed particularly suitable.<sup>93</sup>

However, as the deposition of gold glasses in the catacombs and grave goods in burials shows, there was a secondary usage of gold glass at least for some pieces. In the catacombs, gold glasses are noted as having been recovered fixed into the wet sealing plaster of individual burial niches. Cut and incised gold glasses were affixed into the plaster sometimes as complete vessels, sometimes as the broken fragments of vessels and occasionally as closely trimmed roundels, retaining only the iconography.

Quite what their function was in the catacombs is unclear. Gold glasses from these contexts have from the earliest times been identified as markers identifying the person or person interred in each niche.<sup>94</sup> This hypothesis has been repeated almost verbatim by subsequent scholars up to and including the present day.<sup>95</sup> It was further strengthened when an identical function was also suggested in the late 19th century for the range of other items affixed in the same manner in the wet plaster of the burial niches.<sup>96</sup> These objects, including gold glass, enabled individual tombs to be identified amongst the packed walls of the galleries, studded with *loculi* and otherwise unrecognizable. However, in the areas known to 18th- and 19th-century explorers, the majority of the objects fixed into the sealing plaster of the *loculi* had been long since looted with only a few pieces still remaining. In contrast, more recent catacomb discoveries aptly demonstrate that in undisturbed areas, items fixed to the sealing plaster of the *loculi* exist in abundance.<sup>97</sup> As such, it would have been near impossible to identify easily any individual tomb from another because of the presence of a large number of highly similar items associated with each. Instances of gold glass from these contexts are no exception. Identification would not be helped by the generic and stylized images of figures in gold glass. Furthermore, many cut and incised technique gold glasses depicting secular people do not include identifying name labels.

Christian images may have served as protective amulets for the dead, embedded into the catacomb walls in order to indicate that the deceased was a Christian and thus serve as a deterrent to evil.<sup>98</sup> This explanation is possible with regard to gold glasses bearing the depictions of saints and martyrs but it does not present an all-encompassing explanation. Not all of the gold glasses that have been recovered from the walls of the catacombs incorporate Christian iconography; they include, albeit in smaller numbers, Jewish, pagan and distinctly secular images. Cut and incised gold glasses have also been interpreted as having been used in a final meal, both the classic type of libations or the more typically

Christian *refrigerium* (the commemorative meal for the dead) at the tomb of a recently deceased relative before the burial niche was closed.<sup>99</sup> Utilitarian glass vessels inserted into the sealing *loculi* plaster of Roman catacombs as complete objects have been similarly interpreted in this context by De Santis.<sup>100</sup> On completion of the meal, the vessel was either inserted complete or as a broken base into the sealing plaster of the burial niche, 'perhaps in a gesture matching the pagan deposition of grave goods in this period of transition to Christianity'.<sup>101</sup> Indeed, Bisconti tentatively suggests that the deliberate breaking of some of the gold glass vessels could have been connected to the ritual gesture of the breakage of the food container used for the funerary meal.<sup>102</sup> This interpretation may perhaps be plausible in a small number of cases. However, it certainly does not provide an adequate explanation for the majority of gold glasses inserted into the walls of the catacombs, which may have been closely trimmed to form decorative medallions and in some instances pieces of jewellery long before their deposition.

Any plausible explanation as to the secondary function of gold glass in the catacombs must take into account the wide range of other objects deposited in association with them: items such as coins, children's toys, shells and leaves which have been noted above as unsuitable for the identification of individual tombs and which could not have functioned as protective amulets. Neither could they have been used in the consumption of a funerary meal or other similar rite. As far back as 1720, Boldetti identified these items as grave ornamentation and signs of affection.<sup>103</sup> Bisconti has suggested that the objects chosen to ordain the sealing plaster of individual *loculi* were those considered to be the most decorative and aesthetically pleasing to the viewer.<sup>104</sup>

However, gold glasses may have been dear to the deceased during life, as exemplified by their reduction to decorated base-disc medallions and occasionally their incorporation into items of jewellery long before their final deposition. In this respect, they might also have constituted a suitable grave good akin to pagan tradition, accounting for gold glasses such as the St Severin bowl deposited in inhumation burials outside the catacombs. Gold glasses have been argued above as a relatively expensive medium in terms of the people of more modest wealth who are likely to have purchased them. This would have enhanced their value as a grave good. This explains the presence of gold glass in inhumation burials as well as in the sealing plaster of catacomb *loculi*. The presence of brushed technique portrait medallions in the sealing plaster of catacomb *loculi* might have similarly represented an object dear to the deceased. The practice of decorating individual *loculi* with objects such as leaves, coins, and gold glasses may have formed a more modest substitute for the decorative programmes of frescos which adorned the areas of the catacombs reserved for people of high status and wealth.<sup>105</sup> Luminous materials such as glass would have captured the light of pilgrims' lamps, thus encouraging the visitors to direct their glance towards the resulting reflections in an attempt to ensure that those interred in the *loculi* did not go unnoticed and thus unremembered.<sup>106</sup> The person in charge of decorating the individual *loculi* with one or more gold glass vessels is indeed in some instances likely to have broken the object

intentionally in order to isolate and better display the image. The images depicted in gold glass have been noted above as being the most valued feature of the objects. The biblical images closely parallel the wall-paintings and sarcophagi also found in the catacombs. As such, alongside the other objects displayed, gold glasses may have shared a function with more lavish paintings and sarcophagi of the very wealthy.

Glass itself was not an expensive material in Late Antiquity. Diocletian's Price Edict, written in AD 301 for use in the eastern provinces of the Roman Empire, is a very comprehensive document and specifies prices for 700 or 800 different articles, including glass.<sup>107</sup> In the text of the edict recovered from Aphrodisias in Asia Minor, a *libra* (1 lb) of glass (line 7a) cost 40 denarii, by far the most expensive item noted in the entire document.<sup>108</sup> Barag was tempted to interpret this glass as '[YAAOY XPYΣ]OY', translated as 'of gold glass', though it is more likely, as Stern suggests, that it refers to glass for mosaics.<sup>109</sup> Nevertheless, providing that this reconstruction of the complete sentence is correct, the fundamental implication is that glass incorporating gold in some unspecified form was more expensive than vessels made of glass alone. Furthermore, prices from other documentary sources dating to the AD 360s indicate that the cost of most goods were always higher in Rome (where the majority of gold glass has been found) than anywhere else.<sup>110</sup> However, the fact that Late Antique gold glass was perhaps more expensive relative to other contemporary glassware does not mean that it was of aristocratic value in 4th-century Rome.

Whatever the price of glass, it was never as costly or valuable as precious metal. It was not, however, the preserve of those who could afford silver plate in order to fulfil the same proposed function of display. Indeed, there appears to be no obvious alternative to high status glassware fulfilling this need from the city of Rome during the late 4th century. As a result, gold glass such as the British Museum example dedicated to the aristocrat Orfitus (**cat. no. 35**) may not have been out of place in the homes of the extremely wealthy and would certainly have constituted a suitable gift from the members of a small community to its wealthy patron. Nevertheless, compared to gold and silver, it seems likely that gold glass was also affordable to persons lower down the social scale who were perhaps not in a position to purchase luxurious silver plate. These individuals may perhaps have included the more successful amongst the traders and craftsmen identified as being interred in the same areas of the catacombs from where the majority of gold glass has been recovered.<sup>111</sup> Whilst gold glass is thus likely to have constituted the most valuable display pieces in the homes of such individuals, the vessels are likely to have constituted less valued items in the homes of extremely wealthy silver-owning aristocrats such as Orfitus.

Further, as my experiments in manufacture suggested, it was not a difficult medium to produce. The individual components of gold glasses, such as base-discs and vessel bowls, could effectively have been mass produced. Once learned, the process of fusing the gold leaf between the two layers of glass required no more elementary skill than that of the very basic glassworker able to blow a simple bubble of

glass. The degree of artistry involved in producing the iconography is certainly not of the highest standard, even more so in light of the images that were most probably mechanically transferred from pattern books. Furthermore, imperfections often occur in the finished design which can only be attributed to careless workmanship. In addition, the amount of gold leaf used in each object is extremely small and the 'vulgar' orthography of the inscriptions further indicates a less than aristocratic market for cut and incised technique gold glasses.

In terms of the relative cost and value of gold glass, it is worth emphasizing again that a large proportion of cut and incised gold glasses depicting secular people (such as **cat. no. 37**) do not have customized inscriptions naming the individuals portrayed in the field. In addition to this, Cameron has emphasized that more than half of the gold glasses illustrating secular people published in Morey's extensive catalogue are not customized. Many simply carry the generic legend 'PIE ZESES' ('drink that you may live') or no legend at all.<sup>112</sup> This again suggests that many of the glasses were mass produced, rather than being tailored to specific individuals. Consequently, it is not unreasonable to suggest that such examples were most probably purchased ready made, and that the market for cut and incised gold glasses was by no means exclusive.

Although the three known individuals who can be identified by inscription in surviving gold glass constitute men of very high rank and status, and thus by implication wealth, this does not in itself make the medium a costly one. The most frequently depicted person is Pope Damasus (bishop of Rome between AD 366 and 384), of whom five examples survive.<sup>113</sup> Two other secular people can be identified in the British Museum's collection: Memmius Vitrasius Orfitus, prefect of Rome in the AD 350s (**cat. no. 35**), and Flavius Amachius, governor of Phrygia from AD 361 to 363 (**cat. no. 33**).

In the case of Damasus, the production of gold glass in a single Roman workshop producing objects with Jewish, pagan and purely secular imagery, often with personalized wishes for life and health, makes official papal involvement in production extremely unlikely. This effectively disproves suggestions that gold glasses depicting saints with distinct Roman connections were produced as official papal propaganda in order to highlight the unassailability of Rome's apostolic tradition.<sup>114</sup> Likewise, the long-standing hypothesis that gold glasses portraying the contemporary Pope Damasus were produced either by the pope himself or by another member of his circle of friends depicted alongside him to advertise their mutual association is also false. As noted in **cat. no. 14**, the men shown alongside Pope Damasus in gold glass can all be positively identified with 3rd- and early 4th-century saints and martyrs whose cults were popular in the late 4th century.

If Cameron's interpretation of the inscription accompanying the depiction of Orfitus (**cat. no. 35**) is correct, then the piece was probably commissioned not by Orfitus himself, but by the town of Acerentia in honour of its patron.<sup>115</sup> This would suggest that whilst gold glass was not aristocratic in value and comparable, for example, with luxury silverware, the choice of it as a gift given by the small

town to Orfitus certainly suggests that it was nevertheless expensive. However, not all the gold glass bearing names needs to have been in the personal possession of these men: the standardized portrait-style depictions of these aristocratic persons on cut and incised gold glass does not indicate that the clientele was equally as distinguished as the subject matter. Similarly, there is no reason to believe that **cat. no. 33** was commissioned by Amachius himself. He is shown dressed in the garb of an augur or pagan priest, and a case can be made that many pagans of less than aristocratic means would have been glad to own a glass portraying one of their contemporaries so actively engaged in the resurrection of the old religion and the restoration of temples. Likewise, many ordinary Christians would have been glad to own a gold glass with the labelled image of the current or recently deceased Pope Damasus. Indeed, according to Cameron, the spelling of Damasus' name in gold glass suggests that these objects were not intended for members of the aristocratic circles in which Damasus moved.<sup>116</sup> The emphasis placed on often idealized indicators of wealth and status may thus suggest that gold glass was considered an expensive medium by the strata of society who did purchase it. That social stratum was likely to have included people such as grocers and weavers who were buried in the catacomb *loculi*, the sealing plaster of which gold glasses were embedded into alongside a range of other items, most often of relatively modest monetary value.<sup>117</sup>

## Conclusion

It is clear that gold glass distribution, particularly that of cut and incised gold glass, is far wider than has previously been realized. The known distribution of the latter is not restricted to the environs of Rome and Cologne. Rather, it can be evidenced largely throughout the western Roman Empire, particularly in Italy, Gaul and the Rhineland as well as the Balkans. However, cut and incised gold glass is reported from Rome in far greater quantities than elsewhere across the Roman Empire. Indeed, generally fewer gold glasses have been recorded as the distance from Rome increases, strongly suggesting that Rome was in fact the centre of cut and incised technique gold glass manufacture and the principal market for its distribution. No such gold glass has been reported from Britain or the Iberian peninsula, although the possibility of its recovery in these regions in small numbers remains.

In terms of the archaeological evidence, the vast majority of gold glasses, including both the more common cut and incised technique as well as the brushed technique examples, have been recovered from walls of the Roman catacombs, inserted into the sealing plaster of the burial niches. Positioned in the same manner and often alongside other small items of comparatively low monetary value, this further suggests that although gold glass may have been deemed expensive by the strata of society who did purchase it, it was not necessarily or automatically the preserve of the extremely wealthy who could afford to buy silver plate. This hypothesis is supported by inscriptions recording the burial of tradesmen of relatively modest means within the niches in the catacombs. Where gold glass has been reported from outside the catacombs, funerary contexts again prevail.

These contexts are not indicative, however, of a purely funerary function. Glass recycling in Rome and the Roman world has ensured that, unlike other material such as ceramics, any available old or broken glass could be collected and recycled to form other vessels. Glass can thus disappear completely from the archaeological record in contexts other than burials, which were rarely disturbed.<sup>118</sup> In this respect, the preservation of the majority of gold glasses in the Christian catacombs of Rome may account for the lack of pagan pieces. However, the inclusion of gold glasses as grave goods, most often with Christian decoration, does suggest that, despite not necessarily being of high monetary value, they were still the valued possessions of their owners. This notion is further enhanced by the broken fragments, often carefully trimmed down to the line of the base-disc to preserve only the iconography, which seem to have been retained by their owners even after breakage and long before final deposition with a burial.

In contrast to the large number of different workshops postulated for gold glass which are based almost exclusively on subjective groupings of stylistic elements, workshop identity is argued here to relate instead to general technique. On this basis, three separate workshops can be envisaged for the production of brushed technique, gilt glass trail and cut and incised technique gold glasses. Minor variations in iconographic style visible between glasses produced in the same technique are seen as the result of a small number of different craftsmen working together within the same workshop. Despite the wider distributions of cut and incised and gilt glass trail technique vessels, all three workshops were almost certainly located in Rome, from where their products were disseminated.

The attribution of gold glass to a small number of distinct workshops on the basis of technique has wider implications for chronology. As the products of a single or a couple of workshops, all brushed technique gold glass portrait medallions can be dated to the late 3rd and early 4th centuries. A similar date range is also attributable to gilt glass trail vessels on the basis of the few pieces which can be dated through contextual association. The idea of a single workshop production has more significant ramifications for cut and incised technique gold glasses. These were previously believed to be the product of multiple workshops operating separately throughout the 4th century. However, I would argue for the existence of a single workshop which can be dated quite precisely to the period between AD 360 to 390. This date has been attributed largely on the basis of known individuals depicted on glasses in the British Museum's collection and other published corpuses, whilst the abandonment of the catacombs by AD 410 provides an effective limit after which point they cannot have been produced.

Individual glass workshops producing specialist glass of this nature over a period of little more than a generation seems to be a highly logical scenario in the Roman world. Specific glassmaking techniques such as gold glass are highly unlikely to have been willingly shared with rival glassworkers. With particular regard to cut and incised technique gold glass, the single workshop producing them may well have centred on a single family of glassworkers, the

technique being subsequently lost on the death or retirement of the last family member, hence the relatively short production period.

## Notes

- 1 Buonarruoti 1716; Boldetti 1720, 191–217; Garrucci 1858; Wiseman 1859, 178.
- 2 Aus'm Weerth 1864; 1878; 1881; Bone 1886; Düntzer 1867.
- 3 Vopel 1899, 20, 51, 281, 288, 366.
- 4 BM correspondence register: 2 June 1854.
- 5 Düntzer 1867, 132; Franks and Nesbitt 1871, 50–2.
- 6 Aus'm Weerth 1864, 124–5; Dalton 1901b, 127.
- 7 See Harden 1987, 263–8.
- 8 Smith 2000, 338–76.
- 9 Morey 1959, no. 222, pl. XXIV; Ladner 1941, 19 and 36, fig. 5, no. 27; Mazzoleni 2002, 147, fig. 152.
- 10 Albizzati 1914, 242–7.
- 11 V&A inv. no. 1052.1868: Ficoroni 1732, 12.
- 12 Markus 1997, 8.
- 13 See Morey 1959, no. 203, pl. XXIV, for an example held in the Vatican Campo Santo Teutonico (inv. no. F. 15).
- 14 Filippini 1996, 113–28, nos 6–7, 9, 11.
- 15 *Ibid.*, 123, no. 10, fig. 78.4.
- 16 *Ibid.*, 124, no. 13.
- 17 Kaba 1964, 338; Filippini 1996, 119, no. 3.
- 18 From grave 20: Alarcão 1968.
- 19 For a detailed account of these, see Filippini 2000; Panfilo: Morey 1959, nos 220–5, pl. XXIV.
- 20 For an example of a plaque still *in situ* see: Morey 1959, no. 224, pl. XXIV. However this is not documented by Filippini (2000).
- 21 Vopel 1899, followed recently by Harden 1987, 266.
- 22 Vatican Museum, inv. no. 621 (ex-763): Morey 1959, no. 11, pl. II.
- 23 Boldetti 1720, 91–2.
- 24 Morey 1959, no. 103, pl. XVII; inv. no. 623 (ex-2110); see also Filippini 2000, 127–8, no. 2.
- 25 E.g. Vatican Museum, inv. no. 619 (ex-771): Morey 1959, no. 68, pl. XI.
- 26 Morey 1959, no. 294, pl. XXVIII.
- 27 Individual diminutive medallions have been reportedly excavated from a tomb on the Via Portuensis (Smith 2000, 374, no. 75; Vopel 1899, no. 281) and, according to Garrucci (1872–80, vol. 3, 144, pl. 178.12), in the garden of the Church of St Eusebius.
- 28 Palatine Hill: Vopel 1899, no. 366; Via Appia: Vopel 1899, no. 20; Smith 2000, 375–6.
- 29 For example at Castel Gandolfo: Garrucci 1872–80, vol. 3, 142; Vopel 1899, no. 267. For other small items found alongside gold glass, full details associated with each example of gold glass are provided in Appendix A.
- 30 See Vopel 1899, nos 281 and 288, both from the environs of Rome.
- 31 Les Alyscamps: De Rossi 1877, vol. 3, 172; Dunaújváros and Dunaszekesó: Fülep 1968, 401 and 404.
- 32 For catacombs, see for example Vatican Museum, inv. no. 619 (ex-771): Morey 1959, no. 68, pl. XI; for other burials (e.g. that noted above from Arles), full details of context are provided in Appendix A.
- 33 Indeed, the depiction has been misinterpreted in both of the comparatively recent exhibition catalogues to include the fragment: Landes 1988, 195–6, no. 31; Foy and Nenna 2001, 219–20, no. 400.
- 34 Vatican Museum, inv. no. 672 (ex-481): Morey 1959, 31–2, no. 150, pl. XXI; Zanchi Roppo 1969, no. 126, fig. 34.
- 35 See Wiseman 1859, 185; Dalton 1901b, 246.
- 36 Engemann 1968–9, 7–25.
- 37 *Ibid.*, 16–22; Rutgers 1995, 83.
- 38 Zanchi Roppo 1967 and 1969; Faedo 1978; and most recently by Nüsse 2008.
- 39 Ward-Perkins 1978; Rutgers 1995, 92–9; Elsner 2003b.
- 40 Corning Museum, inv. no. 66.1.267: Harden 1987, 253–4, no. 143; Whitehouse 2001, 275–7, no. 867.
- 41 Froehner 1899, 164, no. 155, pls 21–2; Fremersdorf 1967, 201, pl. 282.
- 42 Described but not identified as such by Morey 1959, no. 115, pl. XX; Schüler 1966, 59, no. 1, fig. 17.
- 43 See Harden 1987, nos 134–77.
- 44 Pers. comm. by Mark Taylor and David Hill, May 2009.
- 45 See Morey 1959, nos 15 and 111; Garrucci 1858, pl. XXV.4–7.
- 46 Fremersdorf 1967, 201, pl. 282.
- 47 Harden 1987, 263–5; Kisa 1908, 868, 877 and 880; and most notably Fremersdorf 1967, 217.
- 48 Harden 1984, 11.
- 49 Buonarruoti 1716.
- 50 Garrucci 1864, 142–6.
- 51 Vopel 1899, 17–32; Dalton 1901b, 229–34.
- 52 Dalton 1901b, 230.
- 53 *Ibid.*, 233.
- 54 Vopel 1899, 32.
- 55 Dalton 1901b, 234.
- 56 *Ibid.*
- 57 See Auth 1979, 37.
- 58 Vopel 1899, 32; Kisa 1908, vol. 3, 864; Zanchi Roppo 1967, 20.
- 59 Auth 1979, 37, n. 19.
- 60 Zanchi Roppo 1967; 1969.
- 61 Cameron 1996, 300, n. 43.
- 62 For Aquincum, see Kaba 1964, 338; for Aljustrel, see Alarcão 1968, 79.
- 63 Fleischer 2001, 54.
- 64 Arce 1984, 36.
- 65 Morey 1959, no. 222, pl. XXIV; Ladner 1941, 19 and 36, fig. 5, no. 27; Mazzoleni 2002, 147, fig. 152.
- 66 Garrucci 1872–80, vol. 3, 142, pl. 177.9; Vopel 1899, no. 267.
- 67 Toynbee 1944, 120–1.
- 68 Grig 2004, 219–20.
- 69 *Ibid.*, 223–4.
- 70 Cameron 1996, 301.
- 71 Morey 1959, no. 129, pl. XXI; Dalton 1901b, 232; Cameron 1996, 300; Grig 2004, 212.
- 72 Two gold glasses in the Vatican Museum depict Damas alongside three other individuals. The first incorporates depictions labelled as ‘PASTOR, PETRVS and PAVLVS’ (inv. no. 484: Morey 1959, no. 106, pl. XVIII), whilst the second shows Damas alongside ‘SIMON, PETRVS and FLORVS’ (inv. no. 175: Morey 1959, no. 107, pl. XVIII). A further example in the Museo Nazionale in Florence portrays him with ‘SVSTVS, PETRVS and PAVLVS’ (inv. no. 31: Morey 1959, no. 250, pl. XXVI).
- 73 Garrucci 1864, 142–6; *idem*, 1872–80, vol. 3, 172–3 and 175; Vopel 1899, 87; Grig 2004, 209–11.
- 74 Vopel 1899, 87; Grig 2004, 209–12.
- 75 Grig 2004, 220.
- 76 Wiseman 1859, 189; Northcote and Brownlow 1879, 306–8.
- 77 Paulinus of Nola *Poema XXVI*. (*aliter XXXV*).
- 78 John Chrysostom *Homil. Encom. in Meletium*, PG 50, 516, translation in Mango 1986, 39–40.
- 79 Huskinson 1982, 87–90.
- 80 See, for example, Boldetti 1720, 189; Northcote and Brownlow 1879, 321–4; Harden 1987, 268.
- 81 Asterius of Amaseia *Homil. I* (ed. Halkin) 165–8, translation in Mango 1986, 50–1.
- 82 Elsner 1998, 97.
- 83 Chariton, *Chaereas and Callirhoe* 1.14 & 2.11, translation in Goold 1995, 83 and 127.
- 84 Morey 1959, no. 237, pl. XXV; Albizzati 1914, 253.
- 85 Harden 1987, 267–8; Cameron 1996, 298–9.
- 86 Walter 1979, 84; Vikan 1990, 152–3.
- 87 Inv. no. 1915, 15.168; Weitzmann 1979, no. 261, 282–3.
- 88 Weitzmann 1979, 283.
- 89 See Grig 2004, 204–5.
- 90 Auth 1996, 108–10.
- 91 Cameron 1996, 298.
- 92 E.g. Vatican Museum, inv. no. 672 (ex-481): Morey 1959, no. 150, pl. XXI; Zanchi Roppo 1969, no. 126, fig. 34.
- 93 See also Grig 2004, 223–4.
- 94 See Bosio 1632–4, 126, 197, 509.
- 95 Including Harden 1987, 266; Stern 2001, 139.
- 96 De Rossi 1864–77, vol. 3, 575–8; Northcote and Brownlow 1879, 266–97; Salvetti 1978, 103–30; De Santis 1994, 23–51; Bisconti 2002, 77–83.
- 97 Bisconti 2002, 79.

- 98 Eisen 1919, no. 2. In his discussion of the use of amulets in Roman catacomb burials, Nuzzo does not classify gold glasses as fulfilling the same function. Indeed, objects classed as amulets in Nuzzo's paper have distinctly different iconography than that featured in gold glass (Nuzzo 2000, 249–55).
- 99 Following the suggestion made by Boldetti 1720, 188–91. See also Harden 1987, 266; Deichmann 1993, 319; Grig 2004, 205.
- 100 De Santis 2000, 240.
- 101 Harden 1987, 266.
- 102 Bisconti 2002, 80.
- 103 Boldetti 1720, 188.
- 104 Bisconti 2002, 79–80.
- 105 Ibid.
- 106 Ibid., 81–2.
- 107 Charlesworth in Erim and Reynolds 1973, 108–9; Barag 1987, 109–16.
- 108 Barag 2005, 184.
- 109 Ibid. and Stern 1999, 466.
- 110 Duncan-Jones 1982.
- 111 Ferrua 1991, 156; Cameron 1996, 299.
- 112 Cameron 1996, 300.
- 113 **Cat. no. 14** in the British Museum's collection, see also Morey 1959, nos 106–7, 250 and 356.
- 114 See Huskinson 1982, 87–90.
- 115 Cameron 1996, 300.
- 116 Ibid.
- 117 Ferrua 1991, 18 and 56.
- 118 De Santis 2000, 242; Sternini 1989, 59–64; *idem* 1995, 44.

# Catalogue of the Gold Glasses

## Introduction

The British Museum contains 55 genuine examples of Late Antique gold glass, and a further nine fakes, 19th-century Venetian replicas and experimental reproductions. The majority of the objects are held by the Department of Britain, Europe and Prehistory, whilst a single piece (**cat. no. 30**) is curated by the Department of Greece and Rome.

### Arrangement of the catalogue

Since no other published catalogue has included every example of gold glass in the British Museum's collection, new catalogue numbers have been issued for all objects. Where a name has been used to refer to a specific example in the majority of the published literature (for example, the St Severin bowl), that name has also been included following the object's assigned number. In preparing the individual entries, I have attempted to give as much information as possible about the findspots, basic dimensions, iconography and physical nature of each object. Colour photographs accompany each catalogue entry. Profile illustrations of each glass can be found in Appendix B. The catalogue is arranged by iconographical type rather than by technique, and within that by date and the British Museum inventory number.<sup>1</sup> It includes genuine gold glasses in the collection acquired from known benefactors as well as objects registered as Old Acquisitions where no record of acquisition details is preserved within the Museum's archive. The more recent fakes and reproductions are catalogued last, in the order in which they entered the Museum's collection.

The three major forms of gold glass technique identified earlier and used throughout this catalogue are:

1. 'Cut and incised technique': the image is literally cut and incised into the gold leaf. The most common type takes the form of vessel bases, sandwiching an image cut and incised from a sheet gold leaf between a glass base-disc and an overlaying colourless layer of glass forming the vessel bowl. These I will refer to as 'cut and incised technique vessel bases'. The second type are referred to as 'diminutive medallions'. Employing the same technique of design incision as the vessel bases, they constitute small coloured glass blobs applied to the wall of a larger vessel sandwiching the design between the coloured backing and the outside of the colourless glass vessel wall making the design visible when viewed from the inside. The final type is referred to as 'gilt-glass plaque'. Again, the technique of design incision into the gold leaf overlaying a single layer of colourless glass is the same; however, in this instance the image is not overlain by a second protective glass layer and the objects do not constitute vessels in any form.
2. 'Brushed technique': highly naturalistic portrait medallions with cobalt blue backings where the delicate incisions in the gold leaf forming the image enclosed between the two layers of glass are produced with precision, simulating brushstrokes.
3. 'Gilt-glass trail technique': bases of vessels with a gold-leaf covered glass trail inscription sandwiched between two layers of colourless glass.

The iconographic repertoire of Late Antique gold glass is both wide ranging and highly diverse. Although large, the British Museum's collection is eclectic in nature and does not



cover every single iconographical variant. I have therefore divided the gold glass into four broad categories. The two largest iconographical groupings in the collection, and indeed the most well-known types of gold glass imagery, Christian religious portraiture and Christian biblical episodic imagery, are discussed first. Secular portraits and portrait-style depictions form the third category. The smaller iconographical groupings, Jewish symbolism, pagan imagery, secular subjects and inscriptions unaccompanied by images, often overlooked in gold glass scholarship, are discussed in the final section. However, these broad groupings are not intended to impose an all-encompassing categorization applicable to the complete corpus of extant gold glasses.

The iconography of the British Museum's collection of gold glass relates closely to that of the larger corpuses published by Morey and Garrucci. As such, the trends observed in the British Museum's collection are largely applicable to the medium as a whole. As with the single example present in the collection (**cat. no. 30**), genuine brushed technique gold glass medallions depict 'portraits proper' set within a thin perfectly circular single line frame given prominence by a translucent blue-glass backing. The subjects appear as half or quarter-length busts, and are composed of either a single man or woman with one or more children. The facial features of each of the figures are highly naturalistic and individualized, probably constituting a true likeness of the intended subject. The costume worn by each figure, however, appears to be far more standardized.

Cut and incised technique gold glasses, taking the form of vessel bases, diminutive medallions and gilded-glass plaques, all adhere to the same set of broad iconographic trends, regardless of the specific subject depicted. Rather than only portraying Christian images or representations with distinctly Christian associations, a far wider range of subjects including distinctly Jewish, pagan and secular scenes are frequently seen in gold glass. Where secular people (with associated Christian or pagan attributes) and saints are shown, they most frequently take the form of standardized interchangeable stock elements, used time and time again in the representation of individuals, pairs and groups, a 'portrait-style' image rather than a genuine portrait. The portrait-style depictions of secular people and saints, biblical episodic imagery and other miscellaneous subjects (also largely composed of interchangeable standard elements) including Jewish iconography and pagan and secular scenes can, in almost every instance, be paralleled very closely in other contemporary media. However, it is notable that only a narrow range of methods is used to represent a particular person, event or subject. Often subjects are restricted to only one specific representation, appearing identically on both vessel bases and diminutive medallions, in contrast to the large and varied vocabulary of types observable in other contemporary media from Rome.

The provenance of the collection is overwhelmingly the city of Rome, and so the iconography of the British Museum's gold glasses is treated here as part of the artistic language in use in Late Antique Rome. In the first instance, iconographic parallels to gold glass are sought amongst contemporary items also with a provenance in the city.

Comparisons are initially made within the medium of gold glass. These are, wherever possible, followed by instances of the same element or scene occurring in other contemporary minor and then monumental art, moving from the narrow to the wider comparison. In instances where there are literally hundreds of parallel images, only a handful will be noted in detail, from a cross section of media exploring the relationship of gold glass with other local contemporary artistic production.

More than 60 secular individuals are named on gold glasses published in the large corpuses of Morey and Garrucci. The only two identifiable people from the 4th century to appear in the medium, however, are both in the British Museum's collection. **Cat. no. 35**, probably represents Memmius Vitrasius Orfitus. On the basis of its inscription, it has been argued to be a gift made to the aristocrat and his wife on behalf of a small provincial Italian town.<sup>2</sup> The piece depicting Amachius (**cat. no. 33**) is referenced here as a representation of Flavius Amachius, governor of Phrygia, and an example of a contemporary pagan 'saint', commissioned not by the man himself, but by someone who supported his policies. Other secular names on gold glass in the British Museum's collection, including Tzucinus (**cat. no. 36**), Severus (or Severa), Cosmas and their daughter Lea (**cat. no. 38**), Pompeianus and Theodora (**cat. no. 39**), Biculius (**cat. no. 10**) and Fortunius (**cat. no. 43**), cannot be identified with any known person in the 4th century. This again suggests that whilst gold glass may well have been an expensive medium, it was not necessarily aristocratic in value.

In Morey's corpus cut and incised technique glasses bearing inscriptions unaccompanied by any further visual embellishment follow the same pattern as those in the British Museum's collection. Most often taking the form of vessel bases, many, like **cat. no. 52**, constitute short generic phrases, usually wishes for life and good health, assertions of virtue and common drinking toasts.<sup>3</sup> The most common inscriptions on cut and incised technique gold glasses frequently include the phrase 'DIGNITAS AMICORVM' (e.g. on **cat. no. 10**), translated by different authors as 'a mark of friendship', 'here's to our friendship',<sup>4</sup> or, as adopted here, 'the pride of your friends'.<sup>5</sup> They also include 'DVLCIS ANIMA' (e.g. on **cat. no. 37**), translated as 'sweet-heart'<sup>6</sup> and 'VIVAS/VIVATIS' or 'BIBATIS', meaning 'live' and 'drink' respectively, and according to Cameron, understood in both senses.<sup>7</sup> 'VIVAS IN DEO' (e.g. on **cat. no. 44**), translated as 'live in God', also occasionally appears. By far the most common individual phrase occurring on the vast majority of cut and incised gold glass is the Latinized Greek drinking toast 'PIE ZESES' (ΠΙΕ ΖΗΣΗΣ), meaning 'drink that you may live'.<sup>8</sup> The phrase also appears on a large variety of other contemporary objects.<sup>9</sup>

When portrait-style depictions of secular people are used in cut and incised gold glass, the personal names of those portrayed are often, but not exclusively, included in conjunction with one or more of these generic phrases. Those illustrated are thus specifically invoked in the generic wishes for life and good health. Where saints are shown, they are often accompanied by identifying name labels; however, these occur separately from any longer generic inscription

comprised of one or a combination of the phrases below. The same range of generic inscriptions accompany images in gold glass showing biblical episodes and other miscellaneous subjects, including Jewish iconography and pagan and secular scenes. The subjects of the depictions, however, are never identified. Unlike those on glasses showing secular people, the generic wishes for life and health present on gold glasses representing saints, biblical episodes and other miscellaneous subjects appear instead to relate to the owner of the glass and not the subject portrayed. Gold glasses with inscriptions as the sole subject of the iconography also largely follow the same pattern as those accompanying various images. On cut and incised gold glasses, the same narrow set of standardized phrases repeatedly occurs regardless of the subject depicted, suggesting that a small number of craftsmen were responsible for production.

Other inscriptions, such as that on **cat. no. 50**, bear slightly longer phrases, often including a family name. These are nonetheless akin to the largely generic wishes for life and health discussed above as being associated with various images, including secular and saintly portrait-style depictions and images of biblical episodes. Occasionally, inscriptions also take the form of generic assertions of virtue, often including a specific family or personal name. A primary example of this bears the inscription 'FUCENI SEMPER VERAX' ('the Fuchini are always truthful').<sup>10</sup>

### A note on clothing

In the examples of gold glass catalogued here, all the figures in Part I of the catalogue, Christ and His Saints (**cat. nos 1–15**), wear identical clothes: a tunic and what I call a pallium of 'omophorion type'. This latter garment is only worn by bust-length male saints in gold glass; it is never worn by a secular person or by any saint depicted as full-length. These terms require some further explanation.

The tunic and mantle (*pallium* or *himation* in Greek) were long considered the quintessential items of Greek dress. The mantle, worn over the tunic, was draped over the left shoulder in order to leave the right shoulder free. The pallium functioned as the distinctive mark of the philosopher and intellectual and was thus deemed by the Early Church Fathers as being eminently suitable Christian attire, accounting for its depiction in gold glass.<sup>11</sup> Significantly, it is replaced by the toga, the epitome of Roman dress, in depictions of secular men, especially those from Rome itself. In later centuries the omophorion was the long white scarf worn by bishops, looped over the shoulders and dangling in front and behind the wearer. Although illustrated in a highly generic fashion, this is not what the saints and Christ are wearing in their depictions on gold glass. However, the term 'omophorion type' was coined by Morey to describe the pallium worn by male saints with its odd and distinctive v-shaped fold down the front. Morey suggested that this represented an early form of the garment.<sup>12</sup> Buonarruoti, followed by Dalton, proposed that the type of mantle worn was not the ordinary lacerna (cloak), but a particular kind of medium-sized garment, such as the Hebrew *ephod*, which both male and female Early Christians (at least in cities) wore over their shoulders for prayer.<sup>13</sup> This garment was

later abandoned by the laity, but was retained by the clergy as a mark of ecclesiastical rank.<sup>14</sup> Like the omophorion of later years, this garment was considered to be clerical dress by the 4th century, as was the garment exclusively worn by male saints appearing as busts in gold glass. In some instances, as with **cat. no. 4** showing Sts Peter and Paul and, albeit less visibly, **cat. no. 14** depicting multiple saints, the garment is given further prominence by being over-painted in red enamel. In secular representations, enamelled aspects of the iconography are reserved only for conveying greater visual prominence upon items imbued with status. This suggests that, regardless of what it actually symbolized, the detail of clothing was indeed of special significance.

As Buonarruoti lamented, however, the iconography of gold glass portrait-style portrayals of saints is so generic that a secure identification of the actual garment worn is not possible. Indeed, the term 'omophorion type' has not been accepted by all subsequent scholars. The catalogue entry for *Glass of the Caesars*, for example, described the garment worn by Christ on the vessel base that depicts him with unnamed saints (**cat. no. 11**) as having 'a large medallion suspended by a strap on the chest'.<sup>15</sup> However, because 'omophorion type' is an expression adopted in Morey's catalogue, the largest published corpus of gold glass available, I will continue to use it for ease of reference.

### Notes

- 1 The majority of the British Museum inventory numbers take the form of the year, month and day of acquisition, followed by the specific number of the particular object from the larger collection being registered, thus, for example, 1863,0727.3. Prefixing the inventory numbers by which each object is registered on the British Museum's accession register and object database, BEP stands for the Department of Britain, Europe and Prehistory, whilst GR denotes that the piece is held by the Department of Greece and Rome. Objects registered with the additional British Museum prefix OA, stand for 'Old Acquisition'. The list of references provided for each entry is restricted only to publications dealing specifically with the individual object itself. All references in the text to British Museum catalogue numbers are in **bold**.
- 2 Cameron 1996.
- 3 E.g. Morey 1959, nos 19–20 and 226–7, pl. III; see also: Wible 1980.
- 4 Northcote and Brownlow 1879, vol. 2, 308 and n. 1.
- 5 Harden 1987, 285; Whitehouse 2002, 249.
- 6 Harden 1987, 282.
- 7 Cameron 1996, 298.
- 8 Dalton 1921, 142.
- 9 Auth 1996, 103; Cameron 1996, 298, n. 20.
- 10 Currently in a private London collection (Christie's, Sangiorgi Collection, 1999, 86, lot 222).
- 11 For the pallium see: Cleland *et al.* 2007, 137; Tertullian, *De Pallio* 6.1.3.
- 12 Morey 1959.
- 13 Buonarruoti 1716, 75–85 (translation in Osborne and Claridge 1998, 202); Dalton 1901b, 245.
- 14 Dalton 1901b, 245.
- 15 Harden 1987, no. 158. Spier 2007a, no. 45, describes Christ on the same glass as wearing 'a tunic and cloak fastened at his chest'.

# Catalogue of the Gold Glasses

## Part 1: Christ and His Saints (Cat. Nos 1–15)

Representations of Christian saints on gold glass in the British Museum's collection seem only to occur as fairly generic portrait-style depictions on cut and incised technique sandwich-glass vessel bases and diminutive medallions. Of the 15 representations of saints, 13 are on vessel bases and 2 are diminutive medallions. Many of these examples are in an extremely fragmentary condition and are identifiable only by comparison with more complete examples in other collections. Furthermore, the British Museum's collection illustrates only a small range of the types present in Morey's broader catalogue. For example, although portrait-style depictions of female saints occur frequently in Morey's catalogue, the British Museum's collection consists only of glasses showing male saints.

The general formula used for illustrating saints in gold glass is very similar to that employed in the portrayals of secular individuals, married couples and family groups. Three gold glasses in the British Museum depict individual saints; seven pieces show paired portraits, four of which exist only in fragmentary form. Six of the pairs are of Peter and Paul; one represents Sixtus and Timothy. Two saints occur upon single medallions, indicating that they were either part of a pair or, as is more likely, a group (although they are catalogued here as individual figures). Three gold glasses illustrate Christ with groups of saints, and a further example shows a group of saints. One example is tentatively identified as a depiction of St Peter with a lay woman, perhaps illustrating a 4th-century devotee of his cult.

### A. Individual saints (cat. nos 1–3)

Representations of individual saints are depicted on three examples of gold glass in the British Museum's collection, two of which are diminutive medallions. Although single diminutive medallions once formed sequences of multiple saints on the walls of larger vessels, they are discussed under this subheading as individuals. As with the representations of individual secular figures, all three saints are illustrated as quarter-length busts and occupy the centre of the field. No standardization regarding the orientation of the head can be observed.

#### 1. Diminutive medallion with St Paul

Rome, c. AD 360–400

Provenance: probably from Rome

Dimensions: Max. l. 23mm; max. w. 25mm; t. (bottom layer) 4mm; t. (top layer) 2mm

From the Hamilton Collection (1856)

BM Reg. no. BEP 1856,0425.1

**Technique:** cut and incised. Both Dalton and Morey state that the piece is set in a 19th-century gold ring, which has since been removed. It is a fragment, a single medallion from a vessel studded with diminutive medallions. The greenish colourless glass vessel wall has been crudely trimmed to the line of the cobalt blue glass medallion, removing some of the gold leaf border to the left. The piece has a convex obverse and reverse. A number of fine cracks are evident in the gold leaf, which is 'silvered' in places.

**Description and comment:** within a circular single band border is the frontal quarter-length bust of a youthful



Plate 35 Diminutive medallion with St Paul (cat. no. 1)

male figure, beardless and with short hair, dressed in a tunic and pallium of the omophorion type. His head is quarter-turned to the left, whilst his right hand protrudes from his tunic across his breast in the gesture of speaking. Positioned on either side of the bust, is the inscription 'PAV | LVS' which, along with his clerical costume, identifies him as St Paul.

The representation adheres to the same standardized formula of appearance as the bust depictions of saints and relates closely to the portrayal of male saints in the artistic language of 4th-century Rome. Such medallions once formed part of a sequence on the wall of a single vessel, much like the St Severin bowl (cat. no. 16). It is probable that they formed a sequence of multiple bust-type images of saints arranged around the wall of the vessel, possibly in pairs, similar to those representations occurring around the top of the contemporary Brescia casket (see Pl. 52).<sup>1</sup> As Paul here is quarter-turned to the left, it is plausible that he was paired with a right-facing bust of St Peter upon a second diminutive medallion. Gold glass diminutive medallions also portray saints as full-length seated figures.<sup>2</sup> These closely resemble elements of the paired depictions of seated saints occurring on vessel bases such as cat. no. 5. There are no examples of these, however, in the British Museum's collection.

**References:** Perret 1851–5, vol. 4, pl. XXI.2; Garrucci 1858, 35, pl. XIV.5; Garrucci 1864, 99, pl. XIV.5; Garrucci 1872–80, vol. 3, 153, pl. 183; Vopel 1899, no. 320; Dalton



Plate 36 Vessel base with St Peter (cat. no. 2)

1901a, no. 635, pl. XXXI; Iozzi 1900, 19–20, pl. III.2; Leclercq 1923, no. 160, col. 1835, fig. 4529; Morey 1959, no. 323, pl. XXX.

## 2. Vessel base with St Peter

Rome, c. AD 360–400

Provenance: probably from Rome

Dimensions: max. l. 36mm; max. w. 34mm; t. (of lower layer) 2mm; t. (of middle layer) 3mm; t. (of upper layer) 4mm

Garrucci stated in 1858 that it was in the private collection of Sig. Luigi Fould, although by the time of the second edition of 1864, the piece is recorded as being part of the British Museum's collection  
BM Reg. no. BEP OA 856

**Technique:** cut and incised. There are three layers of greenish colourless blown glass, with the upper layer mostly missing. Much of the base-disc and all of the foot-ring have been trimmed away. It is a fragment, broken all around, although approximately half of the iconography is retained. The gold leaf is well preserved, but with fine cracks throughout. Infiltration between the middle and lowermost layers has resulted in some discolouration and the image is far clearer when viewed in reverse. There is some iridescence in addition to a few bubbles in the glass.

**Description and comment:** the vessel base is extremely badly damaged, although Garrucci's illustration is an



Figure 15 Garrucci's line drawing of cat. no. 2

accurate reproduction of the iconography as it appears (Fig. 15).<sup>3</sup> The fragment clearly depicts the bust of a single man, identified as St Peter in the accompanying inscription. The saint, who has short curly hair and a cropped beard, is depicted frontally. He is dressed in a tunic and pallium, apparently of the omophorion type. The inscription, in the left of the field, reads: 'PE/TRV/SPRO/TEG/A', translated as 'Peter protect [me?]'. The last letter 'A' of the inscription is badly discoloured, and has also been read as 'E'.<sup>4</sup> It is not shown in Garrucci's illustration. Because of the fragmentary nature of the piece, it is impossible to speculate what, if anything, was inscribed or depicted above the right shoulder of St Peter. Traces of gold leaf to the left of the inscription may represent a decorative pattern or, as Garrucci illustrates it, the remnants of a reciprocal border. If the latter is correct, then this reciprocal border is made up of considerably thinner discs than upon other gold glasses.

**References:** Garrucci 1858, 28, pl. X.1; Garrucci 1864, 77–81, pl. X.1; Garrucci 1872–80, vol. 3, 144–5, pl. 179.1; Vopel 1899, no. 316; Dalton 1901a, no. 633; Leclercq 1923, col. 1835, no. 156; Morey 1959, no. 298, pl. XXIX.

### 3. Diminutive medallion with male figure

Rome, c. AD 360–400

Provenance: probably from Rome

Dimensions: max. l. 25mm; max. w. 24mm

Garrucci stated that it was part of the British Museum's collection by 1858

BM Reg. no. BEP OA 857

**Technique:** cut and incised. A fragment, consisting of a single medallion from a diminutive medallion-studded vessel. The greenish colourless glass vessel wall has been closely trimmed to the line of the unusual purple glass medallion at the top. The piece has a convex obverse and a concave reverse. A number of fine cracks are evident in the gold leaf. There are a collection of pin-prick bubbles in the glass and significant chips, greater in number on the reverse.

**Description and comment:** within a single-line octagonal border is a short-haired and beardless male figure



Plate 37 Diminutive medallion with male figure, front and back (cat. no. 3)

quarter-turned to the right. Flanking his head is a dot and a leaf spray. He wears what could perhaps be described as a tunic and pallium of the omophorion type, or possibly a lacerna (cloak), fastened on the breast with a circular brooch. He certainly does not wear the *toga contabulata* worn by secular male figures in gold glass. This suggests that he should be recognized as a saint, despite the lack of any identifying inscription.

**References:** Garrucci 1858, 46, pl. XX.5; Garrucci 1864, 125, pl. XX.5; Garrucci 1872–80, vol. 3, 167, pl. 189.5; Vopel 1899, no. 91; Iozzi 1900, 24, pl. V.1; Dalton 1901a, no. 606, pl. XXXI; Leclercq 1923, col. 1851, no. 434, fig. 4546; Morey 1959, no. 325, pl. XXX.

### General comments on cat. nos 1–3

Busts of individual male saints rarely occur in other contemporary media. Instead, as in gold glass, paired or grouped saints are represented far more frequently. In Morey's catalogue, all busts of individual male saints are depicted with beards. However, the length of the beard and the extent of the hair on the subject's head does appear to have been applied in a rather arbitrary fashion. The 4th-century bishop, Epiphanius of Salamis, lamented how the same saint was illustrated differently according to the whims of the artist, stating that such artisans '...lie by representing the appearance of saints in different forms according to their whim, sometimes delineating the same



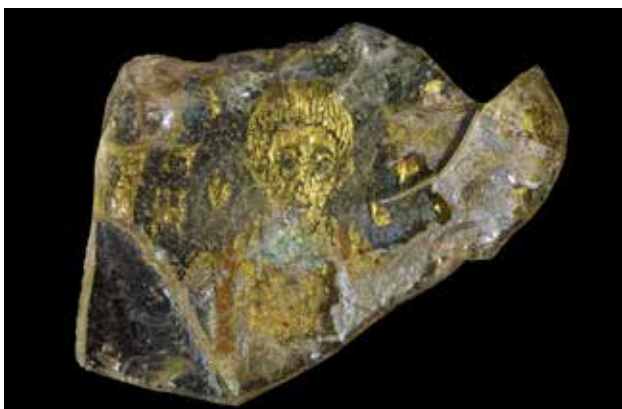


**Plate 38 Vessel base with St Laurence and inscription, 4th–5th century. Metropolitan Museum of Art, New York, inv. no. 18.145.3. Rogers Fund, 1918**

persons as old men, sometimes as youths, [and so] intruding into things which they have not seen'.<sup>5</sup> Age, signified by a longer beard and a balding head, clearly illustrates the concept of a highly regarded intellectual figure in Late Antiquity, where wisdom was perceived as having been acquired with age and experience.<sup>6</sup> Male saints displaying the characteristics of age are perhaps then intended to evoke in the viewer the archetypal idea of wisdom, in contrast to the youthful and therefore perhaps divine appearance of Christ.

Other instances of the depiction of individual saints in gold glass in Morey's catalogue include simple inscriptions, usually taking the form of an identifying name label. The vessel base depicting St Peter here (**cat. no. 2**) is the only example which actually invokes the protection of a saint. A single gold glass from the Vatican collection, inscribed with '[VI]CTO[R VIV]AS IN NOMINE LAVRETI' ('Victor live in the name of [St] Laurence') may, perhaps, be another not so explicit example invoking the protection of a saint, as could a further piece, also related to Laurence, bearing an inscription translated by Garrucci as '[...]anus, live in Christ and in Laurence' (**Pl. 38**).<sup>7</sup>

**Plate 39 Vessel base with Sts Peter and Paul (cat. no. 4)**



## B. Paired male saints (cat. nos 4–9)

The British Museum's collection includes seven gold glass representations of paired saints. More than half of these (**cat. nos 4, 6–8**) survive only as small fragments.

Nevertheless, comparison of the surviving iconography with more complete glasses from the other collections published in Morey's catalogue reveals that paired depictions of saints, like those of married couples, conform to a highly standardized layout. Even very fragmentary glasses can therefore be assigned to the correct category. The paired saints illustrated in the British Museum's collection can be divided quite distinctly between those showing saints as busts and those portraying saints as seated full-length figures.

### 4. Vessel base with Sts Peter and Paul

Rome, c. AD 360–400

Provenance: probably from Rome, apparently found in an unspecified catacomb

Dimensions: max. l. 38mm; max. w. 46mm; t. (bottom layer) 1mm; t. (middle layer) 4mm; t. (top layer) 4mm

From the Bunsen Collection (1854)

BM Reg. no. BEP 1854,0722.4

**Technique:** cut and incised. There are three layers of greenish colourless blown glass, with the gold leaf design sandwiched between the lowermost and middle layers. The piece has a slightly concave base-disc. It is a fragment, broken all around, with less than half the iconography retained. No part of the foot-ring survives. On the reverse, the lowest layer of glass is cracked towards the bottom. Infiltration between the middle and lowest layers has resulted in some discolouration of the image, which is far clearer when viewed in reverse. The gold leaf is well preserved, but with fine cracks throughout. Some iridescence and bubbles are present in the glass.

**Description and comment:** within a circular single band border on the left is the frontal quarter-length bust of a short-haired, bearded adult male. He wears a tunic and pallium of the omophorion type which is further highlighted with over-painted red enamel. His head is quarter-turned inwards. To the right is the similar short-haired, full-bearded head of an adult male; his head is also quarter-turned facing inwards. The pose of the two figures is the same as that found on the gold glasses portraying married

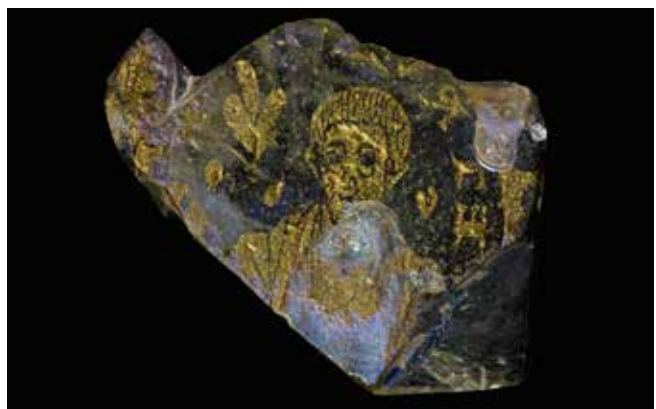






Plate 40 Vessel base with Sts Peter and Paul (cat. no. 5)

couples. Between the busts is a spray of leaves below which are two dots; above the left shoulder of the left-hand bust is a small leaf spray and the fragmentary inscription: '[P] ETRVS [...]'. The surviving inscription and physical appearance of the seated male figure clearly indicates that it is St Peter who is portrayed on the left. The identical figure depicted to the right thus probably represents St Paul. As such, the now lost portion of the inscription probably constituted the name label 'PAVLVS'. Both figures are shown with full heads of hair and beards, in contrast to **cat. no. 10**.

**References:** Garrucci 1858, 33, pl. XI.4; Garrucci 1864, 93, pl. XI.4; Garrucci 1872–80, vol. 3, 147, pl. 180.4; Vopel 1899, no. 360; Iozzi 1900, 15, pl. II.8; Dalton 1901a, no. 638; Morey 1959, no. 338, pl. XXX.

### 5. Vessel base with Sts Peter and Paul

Rome, c. AD 360–400

Provenance: probably from Rome

Dimensions: max. l. 118mm; max. w. 121mm; d. (of foot-ring) 150mm; t. (of lower layer) 1mm; t. (of upper layer) 3mm

From the Matarozzi Collection; purchased from Signor Mosca (1863)

BM Reg. no. BEP 1863,0727.8

**Technique:** cut and incised. There are two layers of greenish colourless blown glass with a slightly concave pad base-disc and a low fire-polished foot-ring. The vessel base is lower than the foot-ring, which means that the bowl would not have been stable when placed on a flat surface. It is a fragment; the wall of the vessel has been broken away and the bottom has been crudely trimmed along the line of the base-disc. The majority of the foot-ring has been retained, although portions are missing to the lower left and right as well as to the upper left. The piece is cracked diagonally in three separate instances. More of the vessel wall on this example survives than is normally the case and

indicates that the vessel was probably a shallow bowl. The gold leaf is well preserved, but with fine cracks throughout. The iconography is largely obscured (although not rendered illegible) from above, and to a far lesser extent from below, by a pinkish film between the two layers of glass.

**Description and comment:** portrayed within the circular reciprocal border of half circles are two full-length adult male figures, short haired and beardless, seated on folding stools with wide tapering legs. Behind the head and shoulder of each figure, contiguous with the circular border, is on the left the inscription 'PETRVS' (Peter) and on the right 'PAVLVS' (Paul). Both are depicted three-quarter turned towards one another. They both have crossed legs and wear plain tunics and pallia. Peter rests his right hand on his lap whilst his left is extended towards Paul, as if he is speaking. Paul holds a scroll with both hands over his breast. In the field between their heads is a wreath of oak leaves with attached ribbons enclosing a leaf spray. This is the only complete example of full-length paired seated saints in the British Museum's collection.

**References:** Sanclemente 1808–9, vol. 3, pl. XLI.3; Garrucci 1858, 35, pl. XIV.4; Garrucci 1864, 98–9, pl. XIV.4; Garrucci 1872–80, vol. 3, 153, pl. 183.4; Franks 1864, 382, no. 4; Vopel 1899, no. 344; Iozzi 1900, 19, pl. III.1; Dalton 1901a, no. 637, pl. XXIX; Leclercq 1923, col. 1837, no. 186; Morey 1959, no. 341, pl. XXX.

### 6. Vessel base with St Peter

Rome, c. AD 360–400

Provenance: probably from Rome

Dimensions: max. l. 39mm; max. w. 34mm; t. (of lower layer) 3mm; t. (of upper layer) 4mm

Formerly in the Samuel Rush-Meyrick and Douce Collections; given by Major General Augustus Meyrick (1878)

BM Reg. no. BEP 1878,1101.305



Plate 41 Vessel base with St Peter (cat. no. 6)

**Technique:** cut and incised. The piece has two layers of greenish colourless blown glass with a slightly concave base-disc. It is a fragment, broken all around, with less than half of iconography retained. The foot-ring has also been trimmed away in its entirety. On the reverse, the lower layer is chipped. Infiltration between the layers towards the top of the piece has caused some discolouration, obscuring the iconography in this area. The lower portion of gold leaf is well preserved, but with fine cracks throughout. The piece is chipped at the top right.

**Description and comment:** only a small fragment of the left-hand side of the vessel base survives. Within a circular reciprocal border are the body and upper legs of an adult male figure, in profile looking towards the centre. He wears a plain tunic and pallium and his right arm is outstretched across his body, probably in the act of speaking; he is beardless. Below his arm is the inscription 'PETR[U]S', identifying the man as St Peter. It is probable that this piece, when complete, depicted the commonly occurring formula of Sts Peter and Paul, full-length and seated in conversation (as for example with **cat. no. 5**).

**References:** Vopel 1899, no. 368; Dalton 1901a, 129, no. 639; Leclercq 1923, col. 1838, no. 209; Morey 1959, no. 306, pl. XXIX.

### 7. Vessel base with St Peter?

Rome, c. AD 360–400

Provenance: probably from Rome

Dimensions: max. l. 39mm; max. w. 29mm; t. (of lower layer) 1mm; t. (of upper layer) 3mm

From the Franks Collection (1886)

BM Reg. no. BEP 1886,1117.330

**Technique:** cut and incised. The base has two layers of greenish colourless blown glass with a slightly concave pad base-disc and a low fire-polished foot-ring. The vessel base is lower than the foot-ring, which means that the bowl would not have been stable when placed on a flat surface. It is a fragment; the wall of the vessel has been broken away and the bottom has apparently been carefully trimmed along the line of the base-disc. The majority of the base-disc has been lost. The foot-ring is slightly misshapen due to unintentional overheating during the manufacturing process. Only a small part of the image is preserved. The gold leaf is well preserved, but with fine cracks throughout. Some iridescence is present on both surfaces and there is some minor discolouration. There are many pinprick bubbles in the glass.

**Description and comment:** displayed within the circular reciprocal border of half circles is the full-length profile of a single male figure facing towards the centre. The figure is draped, possibly indicating the tunic and pallium, although the exact clothing is unidentifiable, and sits on a folding stool with wide curved and tapering legs. An inscription may well have been present, but the fragment is small and does not preserve the area usually carrying inscriptions on pieces with similar compositions. Despite being fragmentary, the piece is recognizable as a depiction of two full-length seated saints. Dalton suggests that this example probably represented St Peter and St Paul (similar

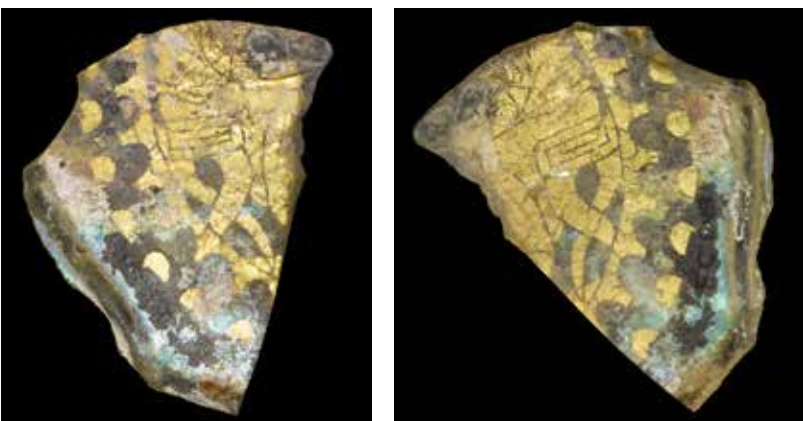


Plate 42 Vessel base with St Peter? (cat. no. 7)





Plate 43 Vessel base with St Paul (cat. no. 8)

to cat. no. 5), although a comparative example in the Vatican Museum, with a nearly identical folding stool, depicts Sts Sixtus and Timothy.<sup>8</sup>

**References:** Dalton 1901a, no. 643, pl. XXIX; Morey 1959, no. 303, pl. XXIX.

### 8. Vessel base with St Paul

Rome, c. AD 360–400

Provenance: probably from Rome

Dimensions: max. l. 40mm; max. w. 37mm; t. (of lower layer) 2mm; t. (of upper layer) 3mm; d. (of foot-ring) 70mm

From the Franks Collection (1893)

BM Reg. no. BEP 1893,0426.183

**Technique:** cut and incised. The vessel has two layers of greenish colourless blown glass and a slightly concave pad base-disc with a low fire-polished foot-ring. It is a fragment; the wall has been broken away and the bottom has been trimmed very closely along the line of the base-disc. The foot-ring is complete. The gold leaf is well preserved, but with fine cracks throughout. Some iridescence is present on

both the obverse and the reverse and there is some minor discolouration and encrustation along the inside edge of the foot-ring.

**Description and comment:** within the circular reciprocal border of half circles is the short-haired and beardless bust of an adult male. His head is shown in profile looking left at an illegible feature, possibly a leaf spray. In the field to the right is the inscription 'PAVL[V]S', identifying the man as St Paul. As his head is shown in profile, it suggests that Paul was originally paired with another saint, possibly Peter.

**References:** Vopel 1899, no. 369; Dalton 1901a, no. 640, pl. XXIX; Leclercq 1923, col. 1838, no. 210; Morey 1959, no. 339, pl. XXX.

### 9. Vessel base with Sts Sixtus and Timothy

Rome, c. AD 360–400

Provenance: probably from Rome

Dimensions max. l. 66mm; max. w. 65mm; d. (of foot-ring, conjectured) 75mm; t. (of lower layer) 4mm; t. (of upper layer) 3mm

Plate 44 Vessel base with Sts Sixtus and Timothy (cat. no. 9)



From the Matarozzi Collection; purchased from Signor Mosca (1863)

BM Reg. no. BEP 1863,0727.12

**Technique:** cut and incised. There are two layers of greenish colourless blown glass. The vessel has a slightly concave pad base-disc and a low, fire-polished foot-ring. It is a fragment; the wall of the vessel has been broken away and the bottom has been closely, but roughly trimmed along the line of the base-disc, three quarters of which is intact. The piece is cracked through diagonally and there is a large chip in the base-disc. Some iridescence is present on both surfaces and there is discolouration predominantly to the lower right in the area of the fracture. The gold leaf is well preserved, but with fine cracks throughout.

**Description and comment:** within the thick single band circular border are two clean-shaven men, depicted as quarter-length busts turned slightly to face each other, the figure on the left slightly overlapping the one on the right. Both wear the clerical tunic and pallium of the omophorion type and have full heads of closely cropped hair. Positioned between their heads is a small leaf spray that has been used to fill some of the surrounding space. In the field, contiguous to the border, is the inscription: 'SVST | VSTIMO | TEVS', identifying the figures as Sts Sixtus and Timothy respectively. They represent Pope Sixtus II (bishop of Rome between AD 257 and 258 when he was martyred during the persecution of Valerian) and St Timothy, martyred in Rome during the persecution of Diocletian in the early 4th century, an event which was celebrated on 22 May in the *Roman Martyrology*. Although no other pairing is quite so prolific as that of Peter and Paul, paired depictions of other male saints also occur as busts in gold glass, as is the case here. The paired busts of these other saints all follow the generic clean-shaven and short-haired model that features here. Indeed, Epiphanius of Salamis specifically noted that saints other than Peter and Paul were all shown as being 'closely cropped'.<sup>9</sup>

**References:** Sanclemente 1808–9, vol. 3, pl. XLII.8; Garrucci 1858, 52, pl. XXIV.1; Garrucci 1864, 139, pl. XXIV.1; Garrucci 1872–80, vol. 3, 173, pl. 193.1; Iozzi 1900, 24, pl. V.2; Dalton 1901a, no. 641, pl. XXVIII; Leclercq 1923, col. 1840, no. 253, fig. 453; Morey 1959, no. 313, pl. XXIX; Harden 1968, no. 93.

### General comments

Although such examples are not present in the British Museum's collection, the paired depictions of Sts Peter and Paul included in Morey's catalogue frequently illustrate Paul as an old man, balding and with a long beard, but Peter as somewhat younger, with a full head of hair and closely cropped beard. The generic, but nonetheless differentiated appearances of Peter and Paul was noted by Epiphanius of Salamis: '... these imposters represent the holy apostle Peter as an old man with hair and beard cut short; some represent St Paul as a man with receding hair, others as being bald and bearded...'.<sup>10</sup> The more aged appearance of Paul follows closely the description given in the apocryphal *Acts of Paul* which describes him as 'a man small of stature, with a bald head and crooked legs, in a good state of body, with eyebrows meeting and nose

somewhat hooked...'.<sup>11</sup> No similar accounts of Peter's appearance survive.

Along with the tunic and pallium, the beard in Late Antiquity constituted the distinctive attribute of the philosopher and intellectual. Therefore, for example, both Peter and Paul in **cat. no. 4** are generically portrayed as archetypal images of the Late Antique philosopher. In a society in which wisdom was acquired with age, Paul's bald head and longer beard perhaps granted him a degree of superiority over Peter in many examples of gold glass. His higher status may be further enhanced through his near exclusive appearance in gold glass on the right-hand side of the field when the object is viewed from above. This may stem from Paul's role as the leader of the church of the Gentiles, to which the majority of people in 4th-century Rome belonged, as opposed to Peter who was the leader of the church of the Jews. This is also reflected in other contemporary media from Rome, such as mosaics. However, as with depictions of married couples, the paired busts of saints convey an image of *concordia*, harmony and unity. So often distinguished by the differing treatment of hair and beard, the identical features of Peter and Paul (see for example **cat. nos 4** and **10**) may well have been intended to further enhance a notion of homogeneity, and thus the unity of the two branches of the church that they represented.

The paired bust depictions of saints are not unique to gold glass. An extensive number of parallels from across the entire range of contemporary media from the city of Rome have been published. Like gold glass, the majority show the paired busts of Sts Peter and Paul and, in almost every case, Paul appears as the more aged figure and in each instance is depicted on the right of the field when the object is viewed from above. Amongst these comparative objects are the series of bronze medallions recovered, as with gold glass, from the plaster of the Roman catacombs, in addition to a repeating pattern of roundels upon an embossed bronze sheet casket dating to the later part of the 4th century from Hungary.<sup>12</sup> Like the vessel base (**cat. no. 10**) reproduced in this catalogue, these objects show the faces of the two figures in profile, and in the case of the casket, Peter and Paul are both accompanied by identifying inscriptions. As in gold glass, both the series of bronze medallions and the casket include a central symbol between the heads of the two saints, in this instance in the form of a *chi-rho*.

These portrait-style depictions of Peter and Paul are also paralleled in other media, notably the Brescia casket (**Pl. 52**) and the epitaph of Asellus, although such representations of other paired saints in different forms of media are less common.<sup>13</sup> Nevertheless, where they do occur, as on the Brescia casket, in the majority of cases they are depicted identically to their appearance in gold glass: clean-shaven with closely cropped hair.<sup>14</sup>

In gold glass, paired depictions of male saints frequently occur as full-length figures, sometimes standing but more commonly seated, facing one another and apparently in the process of conversation. This compositional formula is largely unparalleled elsewhere: one rare example may be found on the base of a terracotta bowl, allegedly found in Rome in the early 20th century, and now in the Metropolitan Museum of Art, New York (**Pl. 45**).<sup>15</sup> The

image is almost identical in format to **cat. no. 5**. It shows the full-length portrait-style depictions of Peter and Paul (clearly labelled as such), seated upon folding stools, the *chi-rho* monogram between their heads, in the process of conversation, and is an image which can be precisely paralleled to a gold glass illustrated by Garrucci.<sup>16</sup> Furthermore, the crenellated border surrounding the central image on the terracotta bowl is not found in any other media and is in fact more closely akin to that found on ceramics produced for the Grand Tour. Additionally, the object is covered with a green glaze. This is certainly not a feature of contemporary ceramics and has been explained away as a later addition.<sup>17</sup> However, all of this implies that it is plausible that this object is a reproduction produced in the late 19th century and based on Garrucci's drawing.

Despite the absence of direct compositional parallels in other contemporary media, the individual elements of full-length seated portrait-style depictions of saints occur commonly throughout the 4th century in Rome. The single, rather than paired, male figure dressed in a plain tunic and pallium and seated upon a folding stool with wide tapering legs is used most notably upon sarcophagi to convey the notion of intellect. These figures have been variously described as philosophers, teachers, men of letters and other intellectual figures.<sup>18</sup> Just as in gold glass, they occur both as bearded and balding (indicative of old age) and as younger clean-shaven men with full heads of closely cropped hair.

### C. Christ and saints (cat. nos 10–13)

#### 10. Vessel base with Sts Peter and Paul crowned by Christ

Rome, c. AD 360–400

Provenance: probably from Rome

Dimensions: max. l. 108mm; max. w. 101mm; d. (of foot-ring) 89.5mm

From the Matarozzi collection; purchased from Signor Mosca (1863)

BM Reg. no. BEP 1863,0727.4

**Plate 46 Vessel base with Sts Peter and Paul crowned by Christ (cat. no. 10)**



**Plate 45 Pottery bowl with Sts Peter and Paul, 4th century. Metropolitan Museum of Art, New York, inv. no. 52.25.1. Fletcher Fund, 1952**

**Technique:** cut and incised. The base is formed of two layers of greenish colourless blown glass with a slightly concave pad base-disc and a low fire-polished foot-ring. It is lower than the foot-ring, which means that the bowl could not have been stable when placed on a flat surface. It survives as a fragment; the wall of the vessel has been crudely trimmed away in accordance with the base-disc, all of which survives. More of the vessel wall on this example survives than is normally the case on the majority of gold glasses and indicates that the vessel was probably a shallow bowl. The gold leaf is well preserved, but with fine cracks throughout. Some iridescence is present on both surfaces and there is some minor discolouration, although neither of these factors inhibits the view of the image. There are many pinprick bubbles in the glass.







Plate 47 Vessel base with Christ and saints (cat. no. 11)

**Description and comment:** the base depicts two half-length frontal busts facing one another with their heads in profile. The figure on the right overlaps the one on the left. Both are male with half-bald heads and curving, pointed beards. Both wear a tunic and pallium of the omophorion type fastened by a circular brooch on the breast. At shoulder height, between the heads of the two busts, is a diminutive, full-length, frontal youthful male figure, probably representing Christ. This figure is beardless with long hair falling to his shoulders, like other representations of Christ on gold glass. He wears a wide-sleeved tunic and pallium and holds a crown above the heads of the two male busts. Christ's head is flanked by two dots. Behind the head of each bust is an identifying inscription: at the left 'PETRVS' and at the right 'PAVLVS', identifying them as Sts Peter and Paul.

The image of the coronation by Christ echoes the iconography used in images of married couples on gold glass. Christ's presence here perhaps emphasizes *concordia* (unity), although coronation is a theme rich in iconographical overtones. Walter sees no reason not to view the crown in the context of saints representing the crown of martyrdom and a mark of immortality.<sup>19</sup>

The central image is enclosed by a standard double band inscription-enclosed border that reads: 'BICVLIVS. DIGN[ITAS] [A]MICORVM VIV ASPIEZESES (dot)'. It has been translated as 'Biculus, the pride of your friends, may you live as you should, drink that you may live'. Dalton notes that Biculus is an unusual name, and tentatively suggests that it is an abbreviation for 'Buculeus' or 'Bucolus'. Vopel suggests 'Vigilius'.<sup>20</sup>

Profile representations of saints' heads occur on numerous instances in Morey's catalogue, most frequently depicting paired busts labelled as Sts Peter and Paul. In each instance, however, the bodies of the saints are portrayed not in profile, but quarter-turned. The depiction of the heads in profile here constitutes a striking departure from the quarter-turned manner in which the heads of married couples are exclusively shown in gold glass.

**References:** Garrucci 1858, 34, pl. XII.4; Garrucci 1864, 95, pl. XII.4; Garrucci 1872–80, vol. 3, 151, pl. 181.4; Vopel 1899, 82, no. 333; Iozzi 1900, 14, pl. II.6; Dalton 1901a, no. 636, pl. XXIX; Leclercq 1923, col. 1836, no. 175, fig. 4530; Morey 1959, no. 314, pl. XXIX; Huskinson 1982, 129–32, fig. 34; Harden 1987, no. 160, 285.

### 11. Vessel base with Christ and saints

Rome, c. AD 360–400

Provenance: probably from Rome

Dimensions max. l. 78mm; max. w. 90mm; t. (of lower layer) 2.5mm; t. (of upper layer) 2mm

From the Matarozzi Collection; purchased from Signor Mosca (1863)

BM Reg. no. BEP 1863,0727.6

**Technique:** cut and incised. The base is made from two layers of greenish colourless blown glass with a slightly concave pad base-disc and a low fire-polished foot-ring. It is fragmentary; the wall of the vessel has been broken away and the bottom has been trimmed in order to retain the iconography. The foot-ring survives only as a fractured edge to the left and right. Some minor iridescence is present on both surfaces in addition to some blackish discolouration at the top, but neither element inhibits the view of the image. The gold leaf is well preserved, but with fine cracks throughout. A half circular score appears in the gold leaf in the right of the field, which is the result of the inadvertent touching of the hot surface of the decorated base-disc with a stick in an attempt to move the object prior to the fusing of the upper glass layer.

**Description and comment:** within a single line square border is a further diamond-shaped border dividing the field into a central lozenge with four smaller triangular segments comprising the angles of the outer square. On three sides of the outer square border is an inverted triangle; a fourth is missing above the upper edge. Within the central field is the quarter-length bust of a youthful depiction of a clean-shaven Christ, identified by the label 'CRIS | TVS'. Christ's hair is





Plate 48 Vessel base with Christ and saints (cat. no. 12)

short at the front and long at the back, falling in curls upon his shoulders. He is dressed in the clerical tunic and pallium of the omophorion type, fastened by a circular medallion, possibly indicating a brooch, upon his breast.<sup>21</sup> His head is turned slightly towards the left and is flanked by two small dots. Above each shoulder appears one large dot. Serving as a space filler, a further small dot can be seen above his head. Identical single quarter-length busts of short-haired and beardless men are present within each of the angles of the outer square, who are flanked by two dots again acting as space fillers. They are all unidentified by inscription and indistinguishable in appearance, and in each instance their heads are quarter-turned towards the left. The accompanying figures are apparently dressed in the same costume as Christ.

**References:** Sanclemente 1808–9, pl. XLII.9; Garrucci 1858, 39–40, pl. XVIII.1; Garrucci 1864, 108–11, pl. XVIII.1; Garrucci 1872–80, vol. 3, 158, pl. 187.1; Franks 1864, 383, no. 6; Torr 1898, 5, fig. 2; Vopel 1899, no. 297; Iozzi, 1900, 22, pl. IV.2; Dalton 1901a, no. 630, pl. XXVII; Leclercq 1923, col. 1834, no. 135; Morey 1959, no. 305, pl. XXIX; Harden 1968, no. 91; Harden 1987, no. 158; Spier 2007a, no. 45.

## 12. Vessel base with Christ and saints

Rome, c. AD 360–400

Provenance: probably from Rome

Dimensions: max. l. 74mm; max. w. 77mm; t. (of lower layer) 1mm; t. (of middle layer) 2mm; t. (of upper layer) 4mm

From the Matarozzi Collection; purchased from Signor Mosca (1863)

BM Reg. no. BEP 1863,0727.13

**Technique:** cut and incised. The vessel base is formed from three layers of greenish colourless blown glass with a markedly concave base-disc. The gold leaf design is sandwiched between the lowermost and middle layers. It survives as a fragment; the walls of the vessel have been broken all around removing the border and much of the

iconography. Only the centre remains intact. The foot-ring, which would have needed to be unusually high for the vessel to stand freely, has also been completely removed. On the reverse, the lower layer is cracked towards the bottom. Infiltration between the uppermost layers has resulted in severe discolouration nearest the break. The image is far clearer when viewed from the reverse. There are some bubbles in the glass and fine cracks in the gold leaf throughout.

**Description and comment:** Christ is depicted in all but identical fashion in costume and physical appearance to the vessel base depicting him with four saints (cat. no. 11). Within the central circle is the quarter-length bust of a clean-shaven youthful depiction of Christ, identified by the label ‘CRIS | TVS’. Christ’s head is turned slightly to the left; his hair is short at the front and long at the back, falling in curls upon his shoulders. He is dressed in the clerical tunic and pallium of the omophorion type.

The space radiating from the central circle, itself enclosed by a circular single band border, is divided into six trapezoidal panels by columns with base and columns with capitals, each appearing to bear a *tabula ansata* (a box or tablet with handles for an inscription). Within the panels stand six full-length figures, facing one another in pairs. The single complete surviving figure is short haired and beardless. All clearly wear the plain tunic and pallium. The most complete figures hold their pallia with their right hands and, with their left, point in symmetrical pairs to the *tabula ansata* between them. Torr recorded traces of the letters ‘TEVS’ on the remaining fragment of the *tabula ansata*, which he suggested was the ending of ‘TIMO TEVS’ (‘Timothy’).<sup>22</sup> No such letters are now visible; furthermore, they are not visible on the photograph provided by Torr or the earlier line drawing by Garrucci and so should be discounted.<sup>23</sup>

Another gold glass image of Christ in the Hermitage Museum, not published by Morey, retains part of a figural border which, when complete, would have been near identical to this example (Pl. 49).<sup>24</sup> The figures surrounding



**Plate 49 Vessel base fragment with Christ, 4th century. The State Hermitage Museum, St Petersburg, inv. no. W 1224**

the central bust portrait should be viewed as an elaborate figural border of saints. Identical borders occur in numerous other instances of gold glass. The central circle in such cases sometimes contains the portrait bust of a saint, but on other occasions secular subjects are represented.<sup>25</sup> However, the type exemplified here is the most common. Borders of this kind are perhaps reminiscent of the slightly later cupola of the Orthodox Baptistry in Ravenna (c. AD 458), but otherwise are not generally paralleled in 4th-century art.

**References:** Sanclemente 1808–9, vol. 3, pl. XLII.7; Garrucci 1858, 40, pl. XVIII.2; Garrucci 1864, III, pl. XVIII.2; Garrucci 1872–80, vol. 3, 159, pl. 187.2; Torr 1898, I, fig. 1; Vopel 1899, no. 300; Iozzi 1900, 22–3, pl. IV.3; Dalton 1901a, no. 631, pl. XXVIII; Weis-Liebersdorf 1902, 124, no. 53; Leclercq 1923, col. 1834, no. 138; Morey 1959, no. 307, pl. XXIX.

**Plate 50 Vessel base with Christ and saints, front and reverse (cat. no. 13)**



### 13. Vessel base with Christ and saints

Rome, c. AD 360–400

Provenance: probably from Rome

Dimensions: l. (of remaining fragment, max.) 97mm; w. (of remaining fragment, max.) 95mm; d. (of foot-ring) 90mm; t. (of lower layer) 2mm; t. (of upper layer) 4mm

From the Matarozzi Collection; purchased from Signor Mosca (1863)

BM Reg. no. BEP 1863,0727.9

**Technique:** cut and incised. The base has two layers of greenish colourless blown glass, a slightly concave pad base-disc and a low fire-polished foot-ring. It survives as a fragment; the wall of the vessel has been broken away and the bottom has been roughly trimmed along the line of the base-disc. More of the vessel wall on this example survives than is normally the case and indicates that the vessel was probably a shallow bowl. The gold leaf is well preserved, but with many fine cracks throughout. Some iridescence is present on both surfaces and there is some minor discolouration. The left-hand side of the iconography is obscured by iridescence and discolouration at the point where the base-disc is cracked and broken. There are some internal cracks and many pinprick bubbles in the glass.

**Description and comment:** the field within the circular single line border is divided into two parts by a horizontal line slightly thinner than that of the border. The upper portion is divided into four broadly equal panels by three spiral-fluted columns with foliated capitals, perhaps in an attempt to represent spiral Solomonic columns with Corinthian capitals. These are joined at the tops by a festoon-like curtain, which is hanging from the outside edges of the first and third columns. A full-length frontal depiction of a single beardless male figure is portrayed within each of the panels.

The first wears a tunic and pallium, draped over his left lower arm, his head half-turned slightly downwards to his right. With his right (bottom) and left hands, the first two fingers of which are elongated (top), he holds a scroll. The







**Plate 51 Vessel base fragment with part of a colonnade, 4th century. Victoria & Albert Museum, London, inv. no. C13A-1946**

remaining three figures are all rendered identically, with the exception that their heads are all half-turned slightly downwards to their left. Leaf sprays are present as a space filler between the legs and underneath the left arm of each figure. The first and fourth figures are slightly cramped, the size of the panels here being inhibited by the circular border.

The second, third and fourth figures are labelled ‘PAVLVS’ (the apostle Paul), ‘SVSTVS’ (the martyred Pope Sixtus II) and ‘LAVRENTIVS’ (Laurence, who was martyred in Rome along with Sixtus in AD 258) respectively. The glass in the area of the first panel is damaged, rendering any name label now illegible. Considering that the second figure directly facing the first represents Paul, it is highly likely that the first figure is intended to portray Peter, completing the most commonly depicted pairing in gold glass. In the field above the columns is the generic Latinised Greek inscription ‘PIE ZESES’ (‘Drink that you may live’).

In the lower part of the field are three half-length male busts, all are bearded and semi-bald. The first and third figures wear tunics and pallia, apparently of the omophorion type, from which their fingers protrude. Their heads, the first more rounded and with a shorter beard than that of his counterpart, are in profile, facing inwards towards the central figure who is also shown dressed in a tunic and pallium of the omophorion type draped over his right lower arm and holding a scroll in the same manner as the upper four figures. He is also bearded and balding. However, unlike those flanking him, whose heads are in profile, this central figure is depicted in a frontal pose, unusual in portrait-style depictions on gold glass. Each figure is labelled to the left of his head: ‘IPPOLITVS’ (Hippolytus, who died and was buried in Rome in AD 236, and by the 4th century was venerated as a martyr), ‘CRISTVS’ (Christ) and ‘TIMOTEVS’ (Timothy) respectively. To the right, behind the head of Timothy, is a scroll. Together with his longer beard and appearance on the right of the field, the side with higher connotations of status, this may be intended as a further marker of his superiority over Hippolytus. The bald and bearded portrayals of Timothy and, with a slightly longer beard, Hippolytus, closely resemble depictions of Peter and Paul rather than the clean-shaven and more

youthful representations of Timothy and Hippolytus on other examples of gold glass.<sup>26</sup> The bearded and bald depiction of Christ as an old man is unusual. Franks suggested that these three figures, Christ in particular, had been mislabelled.<sup>27</sup> As the labels appear so clearly related to each figure, and are in no instances misspelled, a mistake seems highly unlikely. Vopel noted that the saints portrayed together on this example share the month of August for their feast days: Sixtus: 6 August; Laurence: 10 August; Hippolytus: 13 August; and Timothy 22 August.<sup>28</sup>

Although no direct parallels to this gold glass exist, the colonnaded upper register containing identical figures appears upon a number of other gold glasses, notably in the Museo Nazionale in Florence, the Museo d’Arte in Pesaro and the Victoria & Albert Museum (Pl. 51).<sup>29</sup> These gold glasses also include the portrait busts of other saints in the lower register. The saints holding scrolls depicted standing within the colonnade conform to a standard formula for presenting standing male saints, not only in gold glass where they occur in individual as well as portrait-style depictions, but also in other media.<sup>30</sup> These include catacomb paintings, such as that in the Via Latina Catacomb and contemporary sarcophagi from Rome.<sup>31</sup> The presence of a colonnade dividing space into separate panels is also a feature of 4th-century metalwork: a similar colonnade occurs on a silver *missorium* (large plate) celebrating the ten year anniversary (*decennalia*) of the Emperor Theodosius in AD 388 found in southern Spain, but probably made in either Rome or Constantinople.<sup>32</sup> The formula also occurs on contemporary sarcophagi.<sup>33</sup> All of the composite individual elements in this gold glass once again relates directly to the iconographic conventions popular in the language of 4th-century art in Rome.

**References:** Sanclemente 1808–9, vol. 3, pl. XLI.1; Garrucci 1858, 38, pl. XVII.2; Garrucci 1864, 105, pl. XVII.2; Garrucci 1872–80, vol. 3, 156–7, pl. 186.2; Franks 1864, 383, no. 5; Roller 1881, vol. II, pl. LXXVII.2; Vopel 1899, 90–1, no. 305; Iozzi 1900, 21, pl. IV.1; Dalton 1901a, no. 632, pl. XXIX; Dillon 1907, pl. X; Leclercq 1923, col. 1834, no. 143, fig. 4528; Morey 1959, no. 344, pl. XXX; Harden 1968, no. 92; Harden 1987, no. 159.

### General comments

In Morey’s catalogue, depictions of Christ always portray him as he is shown in these British Museum pieces. Writing in his 4th-century castigation of figural art, Epiphanius of Salamis pointed out that artisans and craftsmen ‘...paint the Saviour with long hair, and this by conjecture because He is called a Nazarene, and Nazarenes wear long hair. They are in error...’<sup>34</sup> However, long hair and youthful looks were markers of divinity in both Greek and Roman art. It was with this in mind that Thomas Mathews favourably (if contentiously) compared a long-haired and youthful almost feminine Christ to both broadly contemporary images and texts relating to Apollo and Dionysos.<sup>35</sup> In addition to this, Christ’s long hair and to a lesser extent his youthful complexion in gold glass serves to distance him from and indeed displays an aura of sanctity over that of other male, often bearded and distinctly aged saints portrayed in the same medium.



**Plate 52** Brescia casket, late 4th to 5th century. Museo Civico, Brescia

Depictions of Christ in bust form are comparatively rare in other mediums of 4th-century art. Where they do exist, however, Christ is sometimes portrayed as youthful, clean shaven and long haired, closely akin to his appearance in most gold glass. A classic example is the central roundel on the Brescia casket, where Christ is also shown wearing the tunic and pallium of the omophorion type (**Pl. 52**).<sup>36</sup> Christ also appears as clean shaven with long hair when shown full length, seated or standing upon a number of contemporary sarcophagi and the mosaic with the *Traditio Legis* from the apse of the Church of Santa Costanza, also in Rome. Nevertheless, other pieces such as the painting of Christ on the ceiling of the Catacomb of Commodilla, in the Cubiculum Leonis, and indeed the vessel base catalogued here as **cat. no. 13**, show him as an older man with a beard, more akin to the Greek ideal of the philosopher and intellectual (**Pl. 53**).<sup>37</sup> Clearly, by the latter part of the 4th century, no standard iconography for the physical

**Plate 53** Bust of Christ, 3rd century, catacomb of Commodilla, Rome



appearance of Christ had yet been developed. His youthful long-haired looks and his clothing, paralleled closely in other contemporary media and noted specifically by Epiphanius, demonstrates that gold glass does conform to the prevailing pictorial language of 4th-century Rome.

The simultaneous coronation of Peter and Paul by a central diminutive Christ (**cat. no. 10**) does not occur in any contemporary depiction of paired saints. As the apparently less superior Peter (appearing to the left of the field) is inadvertently crowned by the right hand of Christ, it is again possible that this image presents a conflation of different elements existing within the pictorial language of 4th-century Rome.

#### **D. Multiple male saints (cat. nos 14–15)**

In Morey's catalogue, the portrait-style representations of multiple male saints take a range of forms including quarter-turned busts, full-length standing figures or a combination of the two. One gold glass vessel base depicts multiple male saints without the presence of Christ.

##### **14. Vessel base with multiple saints**

Rome, c. AD 360–400

Provenance: probably from Rome

Dimensions: max. l. 94mm; max. w. 77mm; d. (of foot-ring, conjectured) 105mm; t. (bottom layer) 3mm; t. (top layer) 2mm

Purchased in Rome from the antiquities dealer Baseggio; from the Robinson Collection (1859)

BM Reg. no. BEP 1859,0618.2

**Technique:** cut and incised. Two layers of greenish colourless blown glass with a slightly concave pad base-disc and a low fire-polished foot-ring make up the vessel base. It is a fragment; the wall of the vessel has been broken away and the bottom has been closely trimmed along the line of the

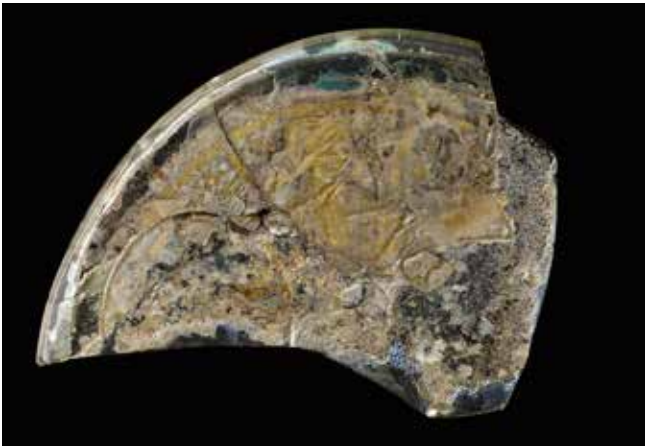


Plate 54 Vessel base with multiple saints, front and back (cat. no. 14)

base-disc, of which only a portion survives. The foot-ring is slightly misshapen due to overheating during the manufacturing process. The piece is cracked vertically and on both sides causing a large degree of discolouration that obscures the iconography, which is only clearly visible under very close inspection. A greater portion of the upper layer survives in contrast to the base-disc, thus exposing the design to significant damage. The piece is heavily iridescent with many bubbles in the glass.

**Description and comment:** Garrucci's illustration of this gold glass (Fig. 16) depicts what remains of the iconography visible on the remaining fragment. The area within the single circular border is divided into trapezoidal panels, three of which partially survive. Dalton and Morey both identify a central circle, with Morey describing it as enclosing a bust wearing a tunic and pallium of the omophorion type.<sup>38</sup> No trace of this circle now remains, nor was it illustrated by Garrucci. Both Dalton and Morey postulated six trapezoidal panels. Of the existing three, two panels depict beardless busts half-turned towards each other, each wearing a tunic and pallium of the omophorion type, the omophorion in each instance is further highlighted in over-painted red enamel. The third panel is too badly damaged to be clearly visible; however, it is likely to have taken the same form. The inscription '[SIM]ON' occurs in association with the first bust; the second is labelled 'DAMAS'. Vopel read 'SVS' beside the third bust and these letters are clearly visible in the illustration provided by Garrucci, implying that this bust represented Sixtus.<sup>39</sup> Dalton, however, saw only 'S', and nothing is now visible.<sup>40</sup>

Damas has long been identified with Pope Damas I. Two gold glasses in the Vatican Museum portray Damas alongside three other individuals. The first incorporates depictions labelled as 'PASTOR', 'PETRVS' and 'PAVLVS', whilst the second shows Damas alongside 'SIMON', 'PETRVS' and 'FLORVS'.<sup>41</sup> A further example in the Museo Nazionale in Florence presents him with 'SVSTVS', 'PETRVS' and 'PAVLVS'.<sup>42</sup> Grig, expanding upon a brief remark by Vopel, has argued that gold glasses depicting Damas alongside other labelled individuals represent a circle of friends, and were produced either by Damas himself, notable in his efforts at literary self-promotion, or by one of his circle to advertise their association with the pope.<sup>43</sup>



However, this theory can be questioned. Grig stated that neither Simon nor Florus, who were both shown alongside Damas, were known to be either saints or martyrs in the late 4th century, and even went so far as to identify Florus with the eponymous individual who was the father of Projecta, for whom Damasus wrote a funerary epitaph.<sup>44</sup> Like Damasus himself, however, the men he is depicted alongside all wear the tunic and pallium of the omophorion type that was characteristic of Christian saints and holy men. In fact, an examination of venerated 4th-century saints and martyrs reveals that a man by the name of Simon was martyred in Spain during the persecution of Diocletian and that his feast day is recorded on 27 October in the *Roman Martyrology*. In the case of the other figures appearing with Damasus, an individual called Florus was martyred in Ostia during the Diocletianic persecutions and his feast day is recorded on 22 December, again in the *Roman Martyrology*. Peter, Paul and Sextus (Pope Sextus II) are all saints who were frequently depicted in gold glass, whilst Pastor is identified by Grig as a Spanish martyr commemorated by the poet Prudentius in the late 4th century.<sup>45</sup> Damasus himself appears in the *Roman Martyrology* along with five other popes of much earlier periods, all identified on gold glass and interpreted by Grig as some of those celebrated as part of the cult of saints and martyrs.<sup>46</sup> Consequently, all of the individuals shown alongside Damasus in gold glass, and the pope himself, constitute saints and martyrs already venerated prior to the late 4th century and so do not necessarily represent a circle of late 4th-century papal companions.

Figure 16 Garrucci's line drawing of cat. no. 14





Although it is still possible that gold glasses depicting Damasus alongside other Christian martyrs could have been produced during Damasus' lifetime, Grig readily admits that the self-promotion of popes on items of portable material culture is unparalleled in any other media during the 4th and even 5th centuries.<sup>47</sup> In this context, it is questionable how valuable a medium cut and incised gold glass was. As I suggested in Chapter Four, the manufacture of gold glass did not need to be difficult or costly. This, combined with the rudimentary spelling of Damasus' name, suggests that it is unlikely that gold glass depicting his image belonged to the aristocratic circles in which Damasus, the so-called 'ear-scratcher of matrons', notoriously moved.<sup>48</sup> Importantly for our purposes, it should be noted that by the 4th century, a recently deceased bishop was customarily paid the highest honours of the church and accorded a liturgical place equal or similar to that of a martyr.<sup>49</sup> Indeed, in a passage from John Chrysostom's funerary encomium for Meletius, bishop of Antioch (AD 360–81), the depiction of the deceased holy man is described as adorning the personal effects (including vessels) of the laity so that they may be consoled after his departure from life. Chrysostom states that it was common practice for the laity to represent the image of a popular saint or recently deceased bishop 'on the bezel of their rings, on drinking cups and on bowls...and in many other places so they might not only hear his holy name, but also see everywhere his physical traits, thus having a double consolation after his demise'.<sup>50</sup> Therefore, it is not unreasonable to conclude that the image of Pope Damasus on gold glass was not necessarily produced at his own instigation or by his circle. Instead, these vessels could have been made after his death by others who were neither aristocratic nor personally acquainted with him, but who would have been glad of a bowl depicting his holy image alongside that of other popular saints and martyrs.

The busts within the trapezoidal panels conform to the portrayals of individual and paired saints, in addition to those of Peter and Paul, in other gold glasses. They would have surrounded a central circle, most probably containing the bust of either Christ or a further saint, perhaps Peter or

Paul. This formula can be readily paralleled in a number of gold glasses from Morey's catalogue, specifically in the Vatican Museum collection.<sup>51</sup> I do not see this base as a single depiction of a saint surrounded by an elaborate figural border similar to the example of Christ with unnamed saints discussed above (**cat. no. 11**). Not only do the saints surrounding the central roundel here all wear the tunic and pallium of the omophorion type (synonymous it seems with the portrait bust), but in this instance each bust is of a significant size and is clearly labelled. The composition of a central circle surrounded by trapezoidal panels themselves within a circular frame is a specific feature of contemporary art. Depictions of multiple saints presented in this composition in gold glass conform closely to the prevailing pictorial language of 4th-century Rome. Other examples occur specifically within catacomb paintings, such as that in the vault of Hall I in the Via Latina catacomb which also contains multiple portrait-style images.<sup>52</sup>

**References:** Garrucci 1864, 144, pl. XXV.8; Garrucci 1872–80, vol. 3, 175, pl. 194.8; Vopel 1899, no. 426; Dalton 1901a, no. 642; Leclercq 1923, col. 1841, no. 267; Morey 1959, no. 340, pl. XXX.

### 15. Vessel base with St Peter and possible female orant

Rome, c. AD 360–400

Provenance: apparently found in an unspecified catacomb at Rome

Dimensions: max. l. 72mm; max. w. 71mm; max. d. (of foot-ring, conjectured) 100mm; t. (bottom layer) 1mm; t. (top layer) 3mm

From the Bunsen Collection (1854)

BM Reg. no. BEP 1854,0722.3

**Technique:** cut and incised. The vessel base has two layers of greenish colourless blown glass with a slightly concave pad base-disc and a low fire-polished foot-ring. The vessel base is lower than the foot-ring, which means that the bowl could not have been stable when placed on a flat surface. It is a fragment; the wall of the vessel has been broken away and the bottom has been trimmed very closely along the line of

Plate 55 Vessel base with St Peter and possible female orant, front and back (cat. no. 15)

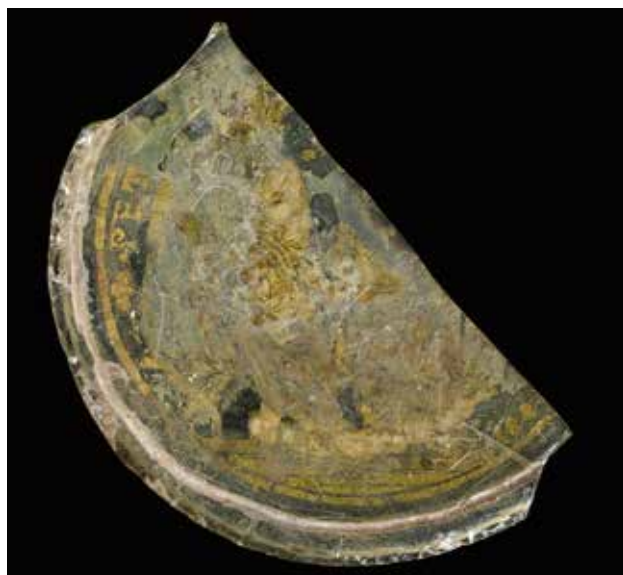






Figure 17 Garrucci's line drawing of cat. no. 15

the base-disc, approximately half of which is missing. A deep score on the surface of both sides of the piece represents a failed or aborted attempt to remove the foot-ring. The gold leaf is well preserved, but with fine cracks throughout. Iridescence and discolouration are present on both surfaces obscuring part of the image (Fig. 17). The base-disc has many half circular cracks and a portion is missing towards the top of the piece exposing the upper layer.

**Description and comment:** half of the piece has been broken away and therefore the whole scene has not been retained. Within the circular single band border on the left is the full-length portrait-style depiction of an adult male figure, bearded and with short hair. The man is barefoot and wears a tunic and pallium with an over-painted red enamel stripe at the bottom. He holds a scroll with both hands, the first two fingers of his left hand extended. He is seated on a folding stool which has thin, curved legs tapered at the bottom, his head and legs in profile facing inwards and to the right, whilst his upper body is portrayed frontally. To the right of him stands a female figure of whom only the lower portion survives. She is dressed in a tunic and *palla*, above which the border of a veil is just visible. As her hands are not visible at her sides it is likely that she is standing in the orant position. A single dot appears in the surviving space between the two figures. The floor surface is scored to give the impression of floorboards. In the field, following the inside of the circular border, the remaining inscription reads: 'PET[RVS]'. A leaf spray prefaces the inscription; on the opposite side, presumably at the end of the (now lost) latter part of the inscription, are three heart-shaped leaves.

The inscription, physical appearance and costume of the seated male figure imply that it is St Peter who is represented. Following Garrucci, Dalton suggested that the depiction represents an apocryphal act of Peter and that the second figure represents one of his female students, specifically St Petronilla, St Pudentiana or St Praxedes.<sup>53</sup> It is unfortunate that the majority of the inscription, which probably continued to give the name of the female figure and thus identify the scene, has been lost.

However, it may simply be a devotional image. The female depicted might represent the secular woman who commissioned the glass, commending her soul to St Peter. The now lost portion of inscription might have given her

name, but may also have constituted a dedicatory inscription such as 'Peter, protect me', as found on **cat. no. 2** which also depicts St Peter. This was suggested by Grig in the context of a single vessel base (now in the Metropolitan Museum of Art, New York<sup>54</sup>), which depicts a full-length orant female figure labelled 'PEREGRINA', standing between Sts Peter and Paul (**Pl. 56**). Peregrina is certainly not known from any hagiographical sources and, according to Grig, seems most likely to represent a devotee commending her soul to the care of the two apostles. In other contemporary media, most notably in catacomb paintings, saints and their devotees are shown alongside one another. In the Catacomb of Domitilla, for example, the image of St Petronilla is depicted escorting the deceased woman Veneranda to heaven.<sup>55</sup> Although dating to the 5th and early 6th centuries, slightly later than the period of gold glass production, St Januarius is shown together with recently deceased devotees in the catacomb of San Gennaro in Naples.<sup>56</sup> Identical scenes to this occur on a number of chronologically comparable sarcophagi from Rome.<sup>57</sup> Deckers has interpreted such depictions on sarcophagi as the deceased portrayed as a philosopher with his wife symbolized as the personification of piety.<sup>58</sup> However, in light of the gold glasses in the collection of the British Museum and the Metropolitan Museum of Art, this image may also represent the deceased woman commending her soul to a saint.

**References:** Garrucci 1858, 37, pl. XVI.2; Garrucci 1864, 102, pl. XVI.2; Garrucci 1872–80, vol. 3, 144–5, pl. 185.2; Vopel 1899, no. 318; Iozzi 1900, 20, pl. III.4; Dalton 1901a, no. 634; Morey 1959, no. 342, pl. XXX.

### General trends observable on gold glass portrait-style depictions of male saints

Gold glasses illustrating the portraits of saints, in the same way as those depicting secular individuals, employ largely generic figural representations made specific through the

Plate 56 Vessel base with Peregrina between Sts Peter and Paul, 4th century. Metropolitan Museum of Art, New York, inv. no. 18.145.2. Rogers Fund 1918



application of name labels. The portrayal of male saints on the British Museum's gold glasses conforms very closely to the standardized formula for the portrayal of male saints in other media and to the iconographic conventions popular in the language of 4th-century art from Rome. Both in the British Museum's collection and in Morey's corpus of gold glass, male saints are shown exclusively wearing the tunic and pallium of the omophorion type. As a result, it is thus possible to easily identify male busts as saints rather than as secular figures even in the absence of any accompanying inscription. In contrast to busts, however, the full-length depictions of saints exclusively wear the plain tunic and pallium. They are, however, again distinguishable from secular males on the basis of costume, for secular men wear either the *toga contabulata* or, less often, the dalmaticus.

As with gold glasses showing images of secular figures, inscriptions associated with saints on gold glass are mostly generic wishes for life and good health and do not always label the saint depicted. **Cat. no. 2**, which personally evokes the protection of St Peter, is the significant exception. It is only Christ and, albeit in a less uniform manner, Peter and Paul who can be readily identified in gold glass depictions by their differentiated facial features. Images of Peter and Paul appear far more frequently in gold glass than the representations of other saints. Where other saints are portrayed and identified in gold glass, however, the vast majority can also be linked specifically with Rome.

Considering that the majority of gold glass has been recovered from Rome and was most probably manufactured there, the frequent depiction of Peter and Paul, in most cases shown together on the same glass, is unsurprising. The obvious explanation is the Roman Church's claim (formally established at the Council of Rome in AD 382) to have had a double apostolic foundation by Peter and Paul.<sup>59</sup> Furthermore, Rome was the site of the martyrdom and burial of both saints. Peter and Paul may also represent the church of the Jews and the church of the Gentiles respectively and their depiction together may therefore serve to emphasize church unity. The apparent superiority of Paul, the perceived leader of the Gentiles, in the majority of gold glasses however, is consistent with their manufacture in Rome where the vast majority of the Christian population were Gentiles.

## Notes

- 1 Tkacz 2001, 233–6.
- 2 E.g. Museo Nazionale in Florence, inv. no. 40: Morey 1959, no. 252, pl. XXVI.
- 3 Garrucci 1872–80, vol. 3, pl. 179.1.
- 4 Morey 1959, no. 297, pl. XXIX.
- 5 Epiphanius of Salamis 1929, 71–2, fr. 23–7; translation in Mango 1986, 42.
- 6 Zanker 1996, 299–300.
- 7 Victor: Morey 1959, no. 40, pl. VI; Laurence: Garrucci 1858, 44–5; Morey 1959, no. 460, pl. XXXIV; Metropolitan Museum of Art inv. no. 18.145.3.
- 8 Morey 1959, no. 74.
- 9 Epiphanius of Salamis 1929, 71–2, fr. 23–7; translation in Mango 1986, 42.
- 10 Ibid.
- 11 *Acts of Paul and Thecla* 3.3; translation in Hennecke and Schneemelcher 1992, vol. 2, 239.
- 12 Medallions: e.g. Vatican Museum, inv. no. 60959: Donati 2000, 214 and 140, nos 61–2; roundels: Römisch-Germanisches Zentralmuseum, inv. no. 0.4651: Weitzmann 1979, no. 387.
- 13 Brescia casket: Tkacz 2001, 234; Asellus epitaph: Vatican Museum, inv. no. 28596: Spier 2007a, no. 68.
- 14 Tkacz 2001, 233–6.
- 15 Metropolitan Museum of Art, inv. no. 52.25.1: Weitzmann 1979, no. 506.
- 16 Garrucci 1858, pl. XIV.8.
- 17 Weitzmann 1979, no. 506.
- 18 Philosophers (Deckers 2007, 102), teachers (Weitzmann 1979, no. 370), men of letters (ibid., no. 238) and other intellectual figures (ibid., no. 256).
- 19 Walter 1979, 83.
- 20 Vopel 1899, 82, no. 333.
- 21 Morey 1959, no. 305.
- 22 Torr 1898, 2.
- 23 Garrucci 1858, pl. XXIII.1; Torr 1898, fig. 1.
- 24 Hermitage, inv. no. W 1224: Zaleskaya 2006, no. 603.
- 25 This is exemplified by the glass now in the Museo Nazionale in Florence (inv. no. 32; Morey 1959, no. 240, pl. XXVI, no. 240, where the central circle contains a generic simultaneously crowned 'married couple'. Radiating borders of full-length saints surrounding a central circle occur in a number of varying forms upon the gold glasses illustrated in Morey's extensive catalogue.
- 26 See especially Garrucci 1858, pl. XII, fig. 7; Vatican Museum, inv. no. 772 (ex-447): Morey 1959, no. 74, pl. XII; Verona, Museo di Castelvecchio inv. no. 4567: Morey 1959, no. 278, pl. XXVIII.
- 27 Franks 1864, 383.
- 28 Vopel 1899, no. 305.
- 29 Florence (inv. no. 32: Morey 1959, no. 254, pl. XXVI); Museo d'arte, Pesaro (Morey 1959, no. 287, pl. XXVIII); Victoria & Albert Museum, London (inv. no. C13A-1946: Morey 1959, no. 357, pl. XXXI).
- 30 Individual (e.g. Vatican Museum, inv. no. 728 (ex-462): Morey 1959, no. 40, pl. VI) as well as paired (e.g. Vatican Museum, inv. no. 766 (ex-433): Morey 1959, no. 36, pl. VI, no. 36).
- 31 Ferrua 1991, fig. 102. They also occur frequently upon contemporary sarcophagi (Dresken-Weiland 1998, no. 111, pl. 41).
- 32 Elsner 1998, 85; Weitzmann 1979, no. 64.
- 33 Spier 2007a, nos 47 and 64.
- 34 Epiphanius of Salamis 1929, 71–2, fr. 23–7; translation in Mango 1986, 42.
- 35 Mathews 1999, 126–7.
- 36 Tkacz 2001, 234.
- 37 Nicolai 2002, pl. 1.
- 38 Dalton 1901a, no. 642; Morey 1959, no. 340.
- 39 Vopel 1899, no. 426.
- 40 Dalton 1901a, no. 642.
- 41 Vatican Museum, inv. no. 484: Morey 1959, no. 106, pl. XVIII; inv. no. 175: Morey 1959, no. 107, pl. XVIII.
- 42 Museo Nazionale, inv. no. 31: Morey 1959, no. 250, pl. XXVI.
- 43 Vopel 1899, 87; Grig 2004, 209–12.
- 44 Grig 2004, 210.
- 45 Ibid., 210, n. 38.
- 46 Ladner 1941, 16–37; Grig 2004, 219–20.
- 47 Grig 2004, 213–14.
- 48 Cameron 1996, 300.
- 49 Salzman 1990, 44.
- 50 John Chrysostom, *Homil. Encom. in Meletium*, PG 50, 516; translation in Mango 1986, 39–40.
- 51 Vatican Museum, inv. no. 457: Morey 1959, no. 38, pl. VI.
- 52 Ferrua 1991, 114–15, figs 96–9.
- 53 Garrucci 1864, 102; Dalton 1901a, 128.
- 54 Metropolitan Museum of Art, Rogers Fund inv. no. 18.145.2: Morey 1959, no. 449, pl. XXXVI; Grig 2004, 224–6.
- 55 Grig 2004, 225–6; Giuliani 1994.
- 56 Grig 2004, 226; Achelis 1936, pls 33–4.
- 57 See Bovini and Brandenburg 1967, no. 747, 306–7.
- 58 Deckers 2007, 102.
- 59 Huskinson 1982, 35.

# Catalogue of the Gold Glasses

## Part 2: Biblical and Apocryphal Scenes (Cat. Nos 16–29)

The British Museum's collection of gold glass is highly eclectic in nature and, as such, illustrates only a small sample of the biblical and apocryphal episodic imagery present in the larger corpus of gold glass published by Morey. Fourteen gold glasses in the British Museum's collection depict biblical or apocryphal scenes; all are produced in the cut and incised technique. Two constitute complete vessel bases (**cat. nos 19** and **23**) and as such retain all of their intended iconography. Ten take the form of individual diminutive medallions (**cat. nos 18, 20–2, 24–9**). Such medallions once formed part of a sequence on the wall of a single vessel and consequently, each individual medallion only depicts a single element of a complete sequence. The St Severin bowl (**cat. no. 16**) is the only example of a diminutive medallion-studded bowl to retain, albeit in fragmentary form, partial sequences of biblical episodic elements across 12 remaining medallions. Nine other surviving medallions on the St Severin bowl take the form of small stars or leaf sprays. The object known as the St Ursula bowl (**cat. no. 17**) depicts eight scenes, three from the Old Testament, one from the New Testament and four further unidentifiable scenes.

Ten biblical and apocryphal episodes are portrayed on the British Museum's gold glasses. However, the complete iconographic schema is only retained for the two vessel bases (**cat. nos 19** and **23**). As episodic imagery in gold glass can be paralleled almost precisely in other media, it is therefore possible to reconstruct whole sequences of diminutive medallions from a single element, often using gold glass medallions from other collections. Where necessary, this has been done below with regard to partial sequences in the British Museum's collection.

This part of the catalogue is arranged in the following order: multiple scenes (the St Severin and St Ursula bowls); single Old Testament scenes; single New Testament scenes, including images of the rod-wielding figure (for whom, see below).

### **General trends observable on gold glass representations of biblical and apocryphal scenes**

Fourth-century Christian biblical episodic images were commonly abridged and also diverged from their source narratives in ways which suggest that they were not simply excerpted scenes intended to aid viewers in the recollection of a particular narrative.<sup>1</sup> Instead, they functioned to illuminate the meaning of an entire story, or perhaps one of its more specific elements, in a distinctly Christian context. Biblical episodic imagery in gold glass is no exception. In the majority of cases, the biblical episodes depicted are conflated into a single emblematic scene. Nevertheless, whether occurring individually on single vessel bases or as a collected sequence of different scenes upon the same object, these episodes cannot be viewed simply at face value. Reflective of the corpora published by Morey and Garrucci, each Old Testament episode in the British Museum's collection is distinctly Christian in nature, depicting only the point in the narrative when the main character becomes either a type of Christ or typologically foreshadows another New Testament figure such as St Peter.

In terms of the subjects shown and the specific pattern of rendition, biblical and apocryphal episodic imagery in gold

glass can be paralleled almost exactly in contemporary 4th-century art from Rome and the western Roman Empire, for instance on monumental types such as sarcophagi and catacomb painting to more portable art forms such as bronze medallions and point-engraved glass. Broadly coetaneous with gold glass, glass vessels with incised decoration provide a suitable comparison within the same medium. Fragments of engraved glass have been found throughout the western Roman Empire and, like gold glasses, incorporate biblical episodic imagery as well as pagan scenes and recreational activities, primarily hunting scenes.<sup>2</sup> The largest surviving corpus has been recovered from the Rhineland. Engraved glass imagery comparable with the depictions in gold glass are noted under the relevant subheadings below. The two most notable pieces are the Arras cup in the Louvre and the Podgoritzta bowl in the Hermitage (**Pl. 65**), which are both discussed in detail with regard to the St Severin bowl.<sup>3</sup> As with the majority of other contemporary media, however, the representation of each episode is often identical to its appearance in gold glass. In only a very few instances does a wider range of types appear to have been employed.

All of this suggests that, like images of secular people and saints, biblical episodic imagery in gold glass was also closely related to the artistic language and iconographic conventions of 4th-century Rome, often drawing on a range of interchangeable stock elements applicable to various different biblical episodes, as well as to depictions of non-biblical scenes. The composition of the British Museum's collection of gold glass does, at first sight, suggest an array of images distinctly weighted towards Old Testament episodes. As with biblical episodic imagery in other media, however, the corpora of gold glass published by Morey and Garrucci indicate that approximately equal numbers of episodes from both the Old and New Testaments were represented.<sup>4</sup> However, the biblical subjects illustrated on gold glass appear to show a far narrower range of episodes and methods of portraying each scene in comparison with other media from the period.

The appearance of a generic rod-wielding figure occurs frequently in gold glass and is associated with almost every example of Old and New Testament imagery. In each instance he takes the form of a short-haired and clean-shaven male figure, dressed in a tunic and pallium and holding a rod or wand. He is used almost exclusively in those illustrations of New Testament episodes which represent Christ in the performance of various miracles, with the rod symbolizing Christ's miraculous agency. When the element is applied to Old Testament episodes, however, the meaning is far less apparent, and can be interpreted variously as part of the biblical narrative, as Christ the Logos (or Word of God), as the personification of the deliverance from danger or indeed as a conflation of all three. As Christ is portrayed in identical fashion in both gold glass and other objects when performing his miracles, given the typological context of each episode, it seems logical to identify this figure with Christ as Logos, providing the Christian inspiration behind the miracle. The application of the rod-wielding figure to biblical imagery is discussed below in relation to each specific episode in the British Museum's collection. This further element cannot always be identified with any

passage from the scriptural account of each scene. Christ is also depicted as a rod-wielding miracle worker on a wide range of other 4th-century objects.<sup>5</sup>

In addition to this, the Old and New Testament stories occurring in gold glass place an emphasis on salvation. The rod-wielding figure may thus have been intended to visibly represent the act of deliverance, perhaps in the context of the contemporary prayer for the dead known as the *Commendatio Animae*, as will be discussed further below.<sup>6</sup> Although inscriptions are often present, in almost every instance these follow the standard formulae for wishes for life and good health, identical to those associated with the gold glass portrait-style depictions of secular people and saints. The lack of any particular identifying inscription accompanying each episode suggests that a single reading of each image was not intended. Typology and the unity of both Old and New Testaments was a deeply significant issue in the 4th century, and prominent Christian thinkers such as Ambrose and Augustine preached extensively on the subject in public.<sup>7</sup> The hope for personal salvation was also manifested in the 4th century through prayers including the *Commendatio Animae*, suggesting that gold glass depictions of biblical and apocryphal episodic imagery conform to the pattern of contemporary Christian thought.

## A. Multiple scenes (cat. nos 16–17)

### 16. The St Severin bowl

Rome? c. AD 360–400

Provenance: found in 1864 in a burial in the quarter of St Severinus, Cologne

Dimensions: max d. of vessel c. 210mm

Formerly in the collection of Karl Disch and purchased by Franks at the sale of his collection in 1881; from the Franks Collection

BM Reg. no. BEP 1881,0624.1

**Technique:** cut and incised. The bowl retains 21 complete and incomplete diminutive medallions (an additional single blue glass diminutive medallion, depicting a rod-wielding figure, apparently found with the St Severin bowl and originally part of it, is in the collection of the Rheinisches Landesmuseum, Bonn; **Pl. 58**).<sup>8</sup> One greenish colourless layer of glass forms the vessel wall, with cobalt blue and green medallions applied to the outside in three concentric circles. The vessel is incomplete, surviving in two separate portions, both of which have been broken and mended. The larger of the two pieces retains 16 medallions and consists of four repaired pieces. The smaller consists of three repaired pieces and retains four medallions. Twelve of the medallions are of the most common size (approximately 20–25mm in diameter), whilst a further nine medallions of a considerably smaller size (approximately 10mm in diameter), appear as spacers between them. The St Severin bowl clearly illustrates the manner in which sequences of individual medallions were applied to the wall of a single vessel; when viewed from the reverse it is clear that the iconography was intended to be viewed from the inside of the vessel.

A detail from the earliest illustration of the bowl, produced shortly after its initial discovery in 1864, shows the



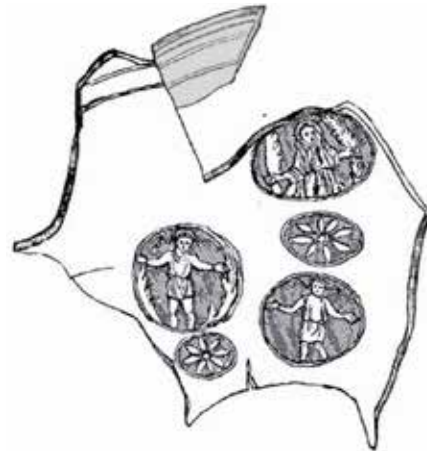
Plate 57 The St Severin bowl, front and back (cat. no. 16)







**Plate 58** Medallion from the St Severin bowl, 4th century, in the LVR-LandesMuseum Bonn, inv. no. A 139



**Figure 18** Detail of the St Severin bowl as illustrated by Aus'm Weerth in 1864 showing, highlighted, the small third rim fragment whose current whereabouts is unknown

smaller of the two fragments of the vessel now in the British Museum.<sup>9</sup> However, it also depicts a third, much smaller, fragment not present in the Museum's collection (**Fig. 18**). From the illustration, which places it adjoining the smaller of the two fragments that survive today, this third piece incorporates both wheel-cut lines running around the mouth of the vessel and what appears to be a very short length of the rim of the vessel itself. The fragment is missing from the illustration of the St Severin bowl presented by Garrucci in his publication of 1872–80, and its current whereabouts is unknown.<sup>10</sup>

Some of the diminutive medallions show signs of tooling. There is some slight pitting of the glass in places, as well as some encrustation, milky weathering (an early stage of glass corrosion) and incipient iridescence. There are many pinprick bubbles in the glass. The gold leaf is well preserved, but with fine cracks throughout.

**Description and comment:** twenty-one medallions survive on the fragments of the bowl. They illustrate elements of the Fall (Genesis 3:6–7), the Sacrifice of Isaac (Genesis 22:2–13), the Three Hebrews in the Fiery Furnace (Daniel 3:8–27), Daniel in the den of lions (Daniel 6:16–23), Susanna and the Elders (Daniel 13:15–44) and episodes from the story of Jonah (Jonah 1–4).

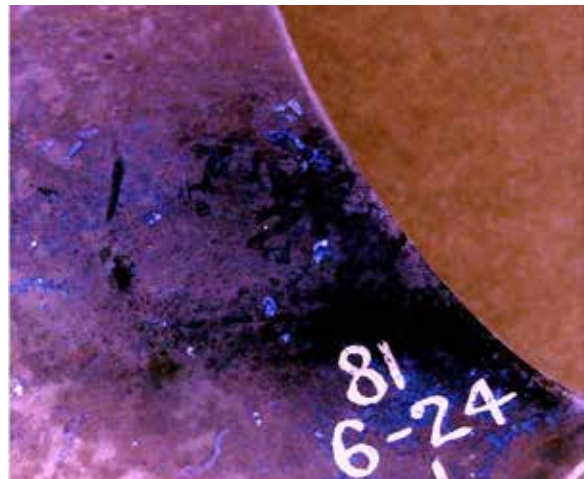
**Plate 59** Traces of a three-line gilded inscription on the outside of the larger fragment of the vessel wall of the St Severin bowl



In addition to the diminutive medallions, the faint traces of three lines of a gilded inscription are discernible upon the outside of the vessel wall on both the larger and the smaller of the remaining fragments and, in both instances, around the top of the bowl (**Pls 59–60**). On both fragments, the inscription occurs almost directly between the two medallions nearest to the mouth of the bowl. As such, it is reasonable to assume that this three-line inscription ran between the uppermost diminutive medallions around the complete circumference of the bowl. On the smaller fragment, linear indications of gold leaf also occur around the inscription, which is visible slightly above the '81' of the applied Museum inventory number showing as white in the illustration (**Pl. 60**). As it was gilded, but not sandwiched between protective layers of glass, nothing of the original gold leaf remains. However, the glass has weathered around the edges of where the individual letters had once been. The letters are thus just visible in areas where less weathering has occurred, but no sense can now be made of the complete inscription.

Morey read the larger of the two surviving inscriptions as 'OM(?)O ITV IR'. However, on closer inspection, and with the use of colour-enhanced photographs, the inscription seems instead to read '[...]/DE(?) [...]/OES[...]ZE(?)E(?)'.

**Plate 60** Traces of a three-line gilded inscription on the outside of the smaller fragment of the vessel wall of the St Severin bowl







**Plate 61** Nicolo intaglio with the Fall of Man, 3rd–4th century. British Museum, London, BEP 1872,0604.1381

The second inscription, which Morey seemingly did not notice, appears to read ‘M[...]/TM(or V)[...]/Z[...]’. Although rendered almost illegible, the inscriptions might represent the standard generic wishes for life and good health also seen on almost all gold glass vessel bases, irrespective of iconography. Indeed, if my reading is correct, then the final word of both extant inscriptions ‘ZE(?)E(?)’ and ‘Z[...]’ respectively, might be ‘ZESES’, the Latinized Greek term that frequently appears on gold glass vessel bases meaning ‘drink’.

#### The Fall of Man (Genesis 3: 1–21): two medallions

With close parallels to representations of the Fall of Man on other objects such as gems and rings (**Pl. 61**),<sup>11</sup> a serpent-entwined and fruit-laden tree, on either side of which two figures stand, are depicted within a slightly distorted single band border (**Pl. 62**). Both figures are naked; the one on the left (and at whom the serpent looks) is female, and thus represents Eve. With her right hand Eve attempts to cover her nakedness, whilst with her left hand she reaches forth towards a circular indication of fruit upon the tree. She has long hair, with what appears to be a ring set at the top, and is depicted as quarter-turned towards the tree in the centre. The male figure to the right, representing Adam, is quarter-turned to the left and attempts to cover his nakedness with both hands. Adam is clean shaven and has a full head of short hair. In the field, a single dot appears behind Eve, whilst two are present behind Adam. The scene captures both Adam and Eve at the moment of original sin (Genesis 3:6); however, allusions to future events, namely the covering of nakedness after the consumption of the fruit (Genesis 3:7) are also made. The scene is thus not a narrative depiction of the biblical episode, but represents in one image an emblematic schema of the entire conflated episode.

The next medallion to the left of Adam depicts a rod-wielding figure (**Pl. 63**) and I believe that another such existed to the right of Eve. Such a representation appears explicitly in association with the Fall of Man on a single gold glass vessel base in the Ashmolean Museum depicting multiple biblical episodes (**Pl. 64**).<sup>12</sup> The rod-wielding figure



**Plate 62** Detail of the St Severin bowl with Adam and Eve

does not appear in association with the Fall of Man on other gold glass vessel bases where the episode is depicted in isolation. In medallions and vessel bases alike, the addition of this figure would have made the image unsymmetrical, elongated and cramped within the circular border, which may explain its absence.

The rod-wielding figure does not feature in the scriptural account of the Fall of Man and the *Byzantium* exhibition catalogue described the figure on the Ashmolean Museum’s vessel base simply as ‘the creator’.<sup>13</sup> He may represent the confrontation and subsequent banishment of Adam and Eve by the Lord (Genesis 3:8–19), although in the biblical account, it is only the voice of the Lord that is heard and he is not seen in person. Morey identified this figure on the Ashmolean piece as Christ, placing the episode within a Christian context, although he did not provide any reasons for his identification.<sup>14</sup>

Nevertheless, the idea that this figure does represent Christ is highly plausible: Adam was identified as a ‘type’ of

**Plate 63** Detail of the St Severin bowl with a rod-wielding figure





**Plate 64** Vessel base with multiple rod-wielding figures, 4th century. Ashmolean Museum, Oxford, inv. no. AN2007.13

Christ in the Bible by St Paul (Romans 5:14–19) and Christ was viewed specifically as the redeemer of Adam’s original sin. Early Christian typology aimed to identify Old Testament figures that foreshadow, hint at or even openly predict things that come to fulfilment centuries later in the New Testament.<sup>15</sup> In doing so, it also functioned to demonstrate the unity of the two Testaments.<sup>16</sup> A depiction of Christ as a rod-wielding miracle worker in association with the Fall of Man would function to present Christ visibly as the redeemer of Adam’s sin, placing the episode in a clearly Christian context. Indeed, the Fall of Man was viewed in the context of salvation on the contemporary point-engraved Podgoritza bowl (**Pl. 65**), identified by inscription in the context of the *Commendatio Animae*.<sup>17</sup> In the 4th century, the Fall was also viewed as a precursor of Christ’s crucifixion.<sup>18</sup>

The fruit-laden tree entwined by a serpent also features in other contemporary media associated with the biblical episode of Daniel and the Dragon of Babylon and the myth of Hercules and the Apples of the Hesperides.<sup>19</sup> Gold glass diminutive medallions depicting the serpent-entwined tree

**Plate 66** Detail of the St Severin bowl with the Sacrifice of Isaac



**Plate 65** The Podgoritza bowl, 4th century. The State Hermitage Museum, St Petersburg, inv. no. W. 73

may have been an interchangeable stock element also used in sequences depicting those episodes.

#### The Sacrifice of Isaac (Genesis 22:2–13): one medallion

A single diminutive medallion depicts the Old Testament episode of the Sacrifice of Isaac (Genesis 22:2–13) (**Pl. 66**). All four of the major elements associated with the Sacrifice of Isaac are shown within the circular single band border. Isaac appears to the far left of the field and is depicted as a heroic nude, clean shaven and with short hair. Facing to the left, his ankles are tied together whilst his wrists are bound behind his back. Isaac’s hair is grasped by the right hand of the larger central figure, identifiable as Abraham. Abraham wears a wide-sleeved girdled and striped tunic of the type worn by shepherds, fisherman and craftsmen whose work required freedom of movement in contemporary Roman art.<sup>20</sup> His left arm is outstretched holding a knife above Isaac’s head. Above his right arm is a stylized altar which emits a single flame. Abraham is shown here with a full head of hair and a beard, his head is turned back over his shoulder to look at a ram appearing behind him, facing left with its head turned back to look at Abraham. Emerging from the upper portion of the border above the ram is an outstretched arm with an open hand shown in the gesture of giving.

Neither the complete scene, nor explicitly recognizable individual elements of it, survives on any other gold glass medallion. However, the complete scene, almost identical to that on the St Severin bowl, exists on a gold glass vessel base in the Vatican Museum, accompanied by the generic inscription ‘HILARIS ZESES CVM TVIS SPES’ (‘Joyfully drink with you and yours’).<sup>21</sup> A further example, but uninscribed, survives in the State Hermitage Museum (**Pl. 67**).<sup>22</sup> The gold glass vessel base in the Ashmolean Museum with the Fall of Man also depicts the Sacrifice of Isaac in the same way (**Pl. 64**).<sup>23</sup> Furthermore, this vessel base appears to depict the generic rod-wielding figure as applicable to





**Plate 67** Vessel base with the Sacrifice of Isaac, 4th century. The State Hermitage Museum, St Petersburg, inv. no. 1223



**Plate 68** Vessel base with the Three Hebrews in the Fiery Furnace, 4th century. Metropolitan Museum of Art, New York, inv. no. 16.174.2. Rogers Fund, 1916

both this scene and to the episode of Moses or Peter striking the rock, which occurs immediately before it. A medallion illustrating this figure might thus be envisaged as part of a diminutive medallion sequence showing the Sacrifice of Isaac. On the St Severin bowl, the area positioned to the immediate right of the Sacrifice of Isaac is missing and so it is plausible that one of the medallions in this area originally portrayed the rod-wielding figure.

The figure associated with this scene may represent the angel of the Lord and his conversation with Abraham (Genesis 22:11–13). However, this part of the narrative is already sufficiently accounted for through the outstretched hand from heaven. The figure may therefore symbolize Christ as Logos, visibly placing the episode in the context of Christian typology or a visualization of the specific act of salvation. In this instance, it is worth noting that Isaac was identified in the context of salvation in the ‘Liberia’ petitions of the *Commendatio Animae*, a prayer for the dead particularly focused upon salvation,<sup>24</sup> and as a type of Christ foreshadowing the Crucifixion by contemporary writers such as Augustine.<sup>25</sup>

### The Three Hebrews in the Fiery Furnace (Daniel 3:8–27): two medallions

Elements from the Old Testament episode of the Three Hebrews (Shadrach, Meshach and Abednego) in the Fiery Furnace (Daniel 3:8–27) occur on two diminutive medallions on the smaller fragment of the St Severin bowl. These constitute only part of the full sequence of medallions which depicted this scene, the additional medallions having been lost. A complete episode of the Three Hebrews in the Fiery Furnace features as a composite part of the overall design on a single vessel base in the Metropolitan Museum of Art, New York (**Pl. 68**).<sup>26</sup>

The two remaining medallions from the sequence on the St Severin bowl are nearly identical, each showing a single

orant male figure, clean shaven and beardless, wearing an embroidered long striped tight-sleeved and girdled tunic, trousers and a Phrygian cap with pendent strings (**Pl. 69**). He stands amongst stylized triangular indications of flames and is surrounded by a single band circular border.

On the Metropolitan Museum piece, the three individual Hebrews are depicted in precisely the same manner as they appear on these gold glass medallions. To the right, and undoubtedly related to the three orant Hebrews, is the rod-wielding figure, towards whom all of the Hebrews face. On this basis, we might posit a fourth medallion as part of this scene on the bowl, one illustrating the rod-wielding figure who would represent the fourth figure observed by King Nebuchadnezzar in the furnace itself as taking the form of one ‘like the Son of God’ (Daniel 3:25), protecting the Hebrews from the flames. This fourth figure was specifically identified as Christ by various 4th-century authors.<sup>27</sup> The episode as a whole was again used to represent salvation in the *Commendatio Animae*, and it was

**Plate 69** Detail of the St Severin bowl with one of the Three Hebrews in the Fiery Furnace





**Plate 70** Detail of a silver reliquary with the Three Hebrews in the Fiery Furnace, late 4th century. Museo Diocesano, Milan, inv. no. MD 2004.115.001

typologically viewed in the 4th century by Jerome as the foreshadowing of Christ's Resurrection.<sup>28</sup> The rod-wielding figure associated with the episode in gold glass can therefore plausibly be identified again as Christ and visibly symbolizes the act of salvation.

The Three Hebrews are depicted in the same manner in the vast majority of other 4th-century media from Rome. In many instances, however, the fiery furnace itself is also shown and its absence in renditions of the scene on medallions is perhaps because of the division of the episode into three separate elements. A fourth additional figure is often included in association with the Three Hebrews in the Fiery Furnace in other contemporary objects from Rome such as sarcophagi.<sup>29</sup> However, he usually appears empty handed and only in rare instances does he carry a rod (**Pl. 70**).<sup>30</sup>

#### Daniel in the Lions' Den (Daniel 6:16–23): 2 medallions

Depicted within a single band octagonal border is a man, nude and orant (**Pl. 71**). Two small leaf spray space fillers are positioned above his outstretched arms, whilst a larger leaf spray above a single dot appears below each arm. The

identification of this figure as Daniel, in the guise of an heroic nude, can be made from the appearance of a medallion containing a single seated lion on the right-hand side of the figure (**Pl. 72**). The portion of the vessel to the left of the medallion depicting Daniel has been broken away. The medallion slightly below and to the left of the lion medallion, the green edge of which is still visible, however, would almost certainly have displayed a second identical lion. This would have produced a symmetrical emblematic representation of the scriptural episode paralleled almost identically in the artistic language of 4th-century Rome.

In the outermost register, to the right of the naked orant figure of Daniel and above the surviving lion, appears a single diminutive medallion depicting the rod-wielding figure (**Pl. 63**). Whilst this element may be associated with an unrelated image in a now lost medallion once appearing to the left of it in this outer register (which may form part of the Susanna scenes), it is possible that it was also connected with the Daniel episode. On both the Ashmolean (**Pl. 64**) and Metropolitan Museum (**Pl. 68**) vessel bases depicting multiple biblical episodes noted above, a single rod-wielding figure can be associated with more than one scene.<sup>31</sup> The association on the St Severin bowl of the rod-wielding figure with Daniel may have represented the Lord in the act of salvation, specifically Daniel 6:23, where he reports that the Lord 'hath sent his angel, and hath shut the lions' mouths'.

#### Susanna and the Elders (?) (Daniel 13:15–44): one medallion

The smaller fragment of the St Severin bowl includes a single diminutive medallion depicting an orant female (**Pl. 73**). She stands within a single band circular border between two trees of the same height as her. She wears a long belted tunic that appears to have a vertical stripe on either side running parallel from the shoulders to the bottom. She also wears a flat headdress with a long veil falling behind her head, which parts into two at her back, each section visibly emerging from beneath her arms.

This image is repeated almost exactly on a vessel base in the Vatican Museum where it was identified by Morey simply as a female orant.<sup>32</sup> It is accompanied by the generic inscription, 'DVLICIS ANIMA PIE ZESSES VIVAS', translated as 'Sweetheart, may you live, drink that you may live'. The image of an orant woman standing between two



**Plate 71 (left)** Detail of St Severin bowl with the orant naked figure of Daniel

**Plate 72 (right)** Detail of St Severin bowl with one of the lions from the story of Daniel in the Lions' Den



trees can also be paralleled in other gold glass vessel bases, where she is often labelled in the field as Agnes or, less commonly, as Mary.<sup>33</sup> This format appears to be the standard method of portraying individual female saints in gold glass. Near identical representations of orant women occur frequently in Roman art, especially in catacomb paintings and sarcophagi, although they are rarely identified by scholars as portraying a specific person or scene.<sup>34</sup>

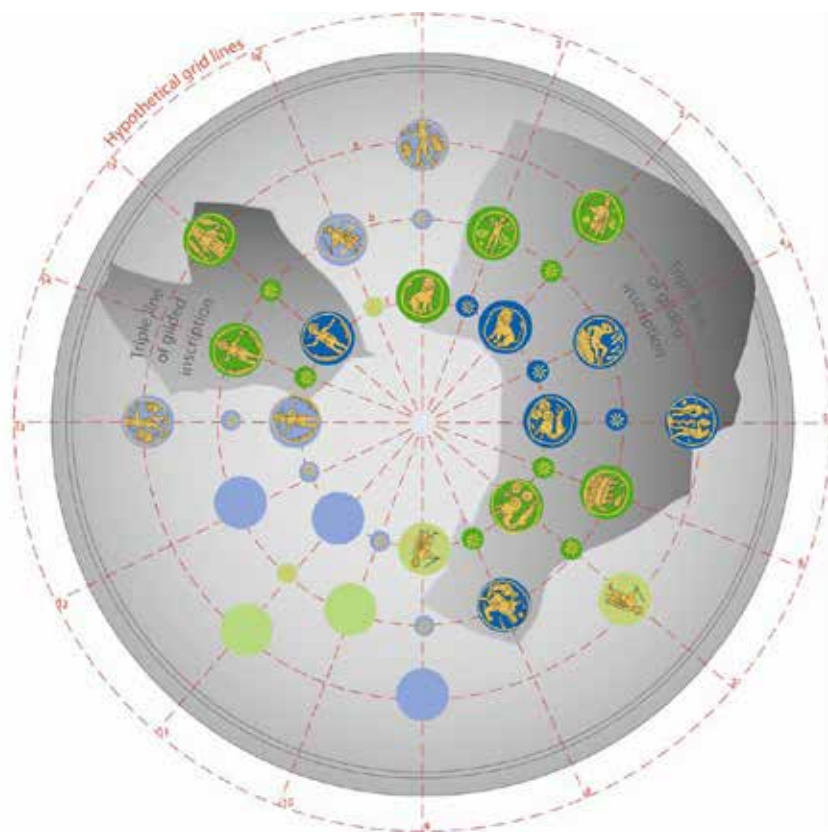
Despite this, all of the other diminutive medallions on the St Severin bowl depict biblical episodes or elements from them. It is thus unlikely that this medallion was intended as an anonymous depiction. A closely comparable image on the glass bowl from Podgoritza (Pl. 65) is labelled with an incantation from the *Commendatio Animae*; ‘SVSANA DE FALSO CRIMINE’ (‘Susanna from the false crime’).<sup>35</sup> This raises the possibility that the figure on the St Severin bowl may represent all or part of the biblical episode of Susanna and the Elders as it appears in other contemporary media. With this in mind, it should be noted that the wall of the St Severin bowl on either side of this medallion has been broken away and that the diminutive medallions on these sides have consequently been lost. In other representations, the orant Susanna, standing between two trees, is flanked on either side by the accusing Elders.<sup>36</sup> On the St Severin bowl, we might therefore postulate the presence of a further diminutive medallion on either side of the medallion depicting Susanna, each portraying an accusing Elder.

The complete sequence of these three figural elements does not occur on any recorded gold glass vessel base, nor have the Elders been identified on any surviving diminutive medallions. A plausible candidate, however, does present



Plate 73 Detail of the St Severin bowl with Susanna from the story of Susanna and the Elders?

itself on a single gold glass diminutive medallion in the Vatican Museum.<sup>37</sup> This depicts a short-haired and beardless male nude. Moving towards the left, he covers his genitalia with his left hand whilst extending his right hand in a gesture of pointing. He is located within a single band circular border and a lone tree is depicted both in front and behind him. Morey did not note the pointing gesture in his description of the piece, instead identifying the figure as Adam with his hand outstretched in the manner of receiving.<sup>38</sup> If identified with Adam, however, the gesture of



NOTE  
Each time the figure is noted in the text the additional number (1-16) relates to the gridline whilst the following letter (a-c) relates to the concentric circle, identifying the individual diminutive medallion under discussion

Figure 19 Reconstruction of the iconographic schema of the St Severin bowl





Plate 74 Detail of the St Severin bowl with the story of Jonah and the great fish

the figure would mean that its emphasis lay on Adam's accusation of Eve and not on the issue of the original sin, and as such would be unparalleled. Rather than Adam, therefore, we might interpret this figure as one of the accusing Elders.

If it were made up of the three diminutive medallions postulated above, the biblical episode of Susanna and the Elders on the St Severin bowl would not be a narrative depiction, but would rather encapsulate the entire episode in a single image. In the central medallion, still retained on the St Severin bowl, Susanna would be confronted whilst at her bath in the garden, indicated by the two trees. The nudity of the postulated Elders would appear to indicate their intention to rape Susanna. The fully clothed but, more importantly, praying Susanna seems to refer to the point in the narrative at which Susanna appealed directly to God following her accusation. The pointing gesture of the Elders may also represent the preceding public accusation. Susanna appears here unveiled, as is stated in the narrative at the point when she is publically accused. This would leave the flanking trees not only as an indication of the garden, but also of purity and of Susanna's innocence in the form of the *hortus conclusus*.

I would suggest that a further diminutive medallion depicting the generic rod-wielding figure might also have formed part of this sequence in gold glass. Indeed, in the reconstruction of the St Severin bowl detailed in **Figure 19**, a medallion depicting the rod-wielding figure on the larger fragment of the vessel appears to relate directly to the episode of Susanna and the Elders on the smaller fragment. As with its appearance in gold glass in association with other Old Testament episodes, a rod-wielding figure in the story of Susanna is not paralleled in other contemporary media. Nevertheless, the potential for its presence is apparent from the scriptural passage where Susanna appealed directly to God, who in turn stirred up the Holy Spirit in Daniel who ultimately came to Susanna's defence. The rod-wielding figure in this instance may thus have been intended to represent Daniel performing the act of salvation, an episode noted in the context of the *Commendatio Animae*. However, as well as representing salvation, Susanna was viewed by various 4th-century authors, including Augustine, Jerome and Ambrose, as a type of Christ in the events leading up to his Passion, notably his silence before Pilate.<sup>39</sup> The rod-wielding figure associated with Susanna and the Elders might therefore also be identified as Christ the Logos.

#### The story of Jonah (Jonah 1–4): four medallions

Four gold glass diminutive medallions on the wall of the St Severin bowl depict elements from the story of Jonah and the great fish (**Pl. 74**). They are arranged in sequence as a distinct group across both the middle and inner registers. The wall of the vessel to the right of the sequence has been broken away, and thus it is possible that there may have been a fifth medallion relating to the Jonah story.

In previous descriptions of the St Severin bowl, the first medallion in the Jonah sequence has been identified as occurring in the middle register, higher up than the other three remaining medallions in the sequence.<sup>40</sup> Within a single band circular border it depicts a ship occupied by four

men, one of whom Morey identified as Jonah.<sup>41</sup> All four figures are depicted identically, facing towards the left, short haired and beardless with apparently naked torsos. The sailless ship is being rowed to the right, with indications of swirling waters below. Above the vessel there is a single bulbous-headed sea creature, facing right, with a long curling tail shown in profile with a large eye and small fin on the side. The creature appears to have a long tongue emerging from its open mouth that curls around the top of its head. In relation to the scriptural account, this scene as the first in the sequence would represent Jonah's attempt to flee from the task that God has set him, the resulting storm and the sailors' vain attempt to row to safety, before casting Jonah over the side (Jonah 1:4–16). The presence of the sea creature appears in anticipation of verse 1:17, where the Lord had arranged for a great fish to swallow Jonah.

In the inner register, appearing to the far right of the Jonah group, appears what has generally been considered as the second medallion in the sequence. Within a broadly circular single band border is the sea monster, taking the form of the Graeco-Roman *ketos* and quite different from the bulbous-headed dolphin-like creature illustrated in the previous medallion. From its open jaws protrude the naked legs of Jonah as he is swallowed head first by the monster (Jonah 1:17). The image is again repeated in the medallion positioned to the left of both this and the other medallion considered by Dalton and Morey to be the first in the sequence. The *ketos* is again shown in the same pose, but in this instance it is the head and naked upper body of the praying orant Jonah which appears emerging from the jaws of the sea monster, thus encompassing all of Jonah chapter 2:1–10. A further diminutive medallion in the sequence, placed on the inner register to the far left of the Jonah group, depicts the naked reclining figure of Jonah within the single band circular border. He is supported on the ground by his left arm, whilst his right is flung over and behind his head. Above him hang five gourds and the scant indications of the gourd vine, representing a single verse (Jonah 4:6).

However, in contrast to this sequence, a straight right to left reading of the medallions seems possible. The first medallion thus becomes Jonah swallowed by the sea monster in the lower register. The second in the sequence then becomes the image of the boat, above which the great fish is shown having swallowed Jonah and referring specifically to Jonah spending three days and nights in its belly. Although not occurring in contemporary media other than gold glass, verse 1:17 of Jonah as it appears upon the St Severin sequence is split between two adjacent medallions. The third and fourth medallions are placed accordingly to the left and as noted by Dalton. This ordering of the medallions on the bowl would thus depict the entire Jonah story in sequence. The issue here is that it would run sequentially from right to left. However, this can easily be explained in the context of the production methodology for this type of bowl, whereby the craftsman could conceivably have cut in retrograde the Jonah sequence from left to right on the outside of the vessel wall. It would thus have appeared in reverse, from right to left, when viewed, as intended, from the inside of the bowl.

The portion of the St Severin bowl to the immediate right of the Jonah sequence is broken away. Nevertheless, a

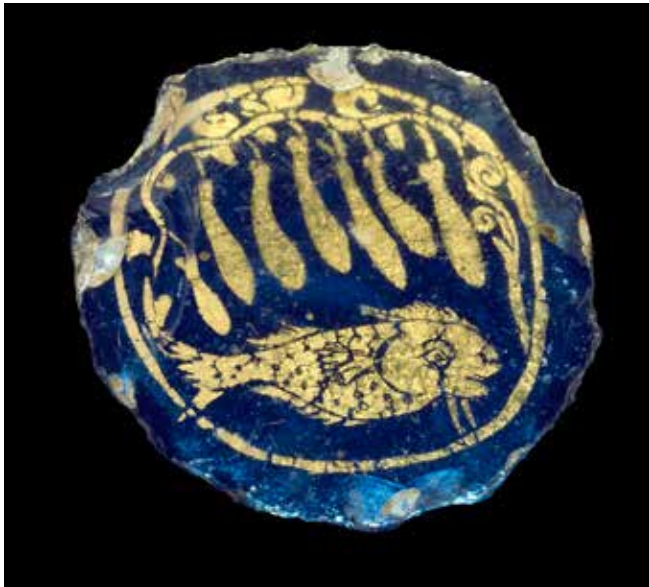


**Plate 75 Gold glass vessel base with the story of Jonah and the great fish, 4th century. Musée du Louvre, Paris, inv. no. ED 1712 S 2053**

case can be made that the original medallion to the upper right of the Jonah sequence was a rod-wielding figure, associated with the Fall of Man medallion. The medallion to the immediate right has also been postulated above as an example of the rod-wielding figure, associated with the Sacrifice of Isaac medallion. Such a figure in either position on the St Severin bowl may well have related to the Fall of Man, the Sacrifice of Isaac and to the story of Jonah. Although no other parallel exists, this element in association with the Jonah episode may be interpreted as the Lord causing the sea storm and summoning the great fish. Jonah, like other figures on the bowl, was identified in the context of salvation in the *Commendatio Animae*. Therefore, the rod-wielding figure may once again have been intended as a visual representation of deliverance and salvation.<sup>42</sup>

Despite encompassing scenes spanning the whole Book of Jonah, the St Severin sequence is in no way a full narrative illustration. The cycle neither depicts the beginning (Jonah's call) nor end (the saving of Nineveh) of the scriptural account. Furthermore, Jonah's nudity and languid posture upon the last medallion in the St Severin sequence bears no resemblance to the ending of the biblical account and Jonah's anger at God for his sparing of Nineveh. As in other media, as well as being explicitly related to the notion of salvation, these four separate elements of the Jonah episode typologically parallel Christ's Passion (deliverance to death and crucifixion, the three days in the tomb, the resurrection and finally his ascent into heaven). Christ compared himself with Jonah (Matthew 12:39–41), and as such the episode was considered to be one of the best known examples of the Passion by 4th-century authors such as Augustine, Ambrose and Jerome.<sup>43</sup> Consequently, the rod-wielding figure associated with the Jonah sequence in gold glass might be





**Plate 76 Gold glass medallion with the conflation of the Jonah story, 4th century. Corning Museum of Glass, New York, inv. no. 66.1.205**

identified as Christ as Logos, visibly presenting the episode in the context of Christian typology.

Each of the elements of the Jonah sequence on the St Severin bowl is paralleled identically in other gold glass medallions from published collections, including two in the British Museum (**cat. nos 9** and **55**). The final medallion of the Jonah sequence on the St Severin bowl, depicting Jonah reclining underneath the gourd vine, is seen on a vessel base in the Vatican Museum collection.<sup>44</sup> Other gold glass vessel bases depict Jonah being cast from the ship into the mouth of the great fish, accompanied by the simple generic phrase 'ZESES' ('live') (**Pl. 75**).<sup>45</sup> The entire episode also appears conflated on a single gold glass diminutive medallion now in the Corning Museum of Glass (**Pl. 76**).<sup>46</sup>

#### A reconstruction of the St Severin bowl (Fig. 19)

Garrucci's illustration of the St Severin bowl suggested that 13 medallions had been lost from the bowl, giving it a total of 34 medallions.<sup>47</sup> My own re-examination of the arrangement of the diminutive medallions on the St Severin bowl, paying particular attention to the colour of the medallions and the order in which those colours appear, instead suggests that a total of 40 diminutive medallions were originally present. The diminutive medallions on the St Severin bowl were not randomly placed, but are instead ordered into three concentric circles of larger medallions. These are interspersed with two concentric circles of smaller medallions. The outer circle comprises of eight large medallions, four of each colour, alternating between green and blue. The central circle includes a further eight larger medallions, interspersed with eight smaller ones. The colours are again alternated: a green larger medallion is followed by a smaller one of the same colour, which in turn is followed by a large and then small blue medallion, and so on. The final inner circle consists of a further eight large and eight small medallions. Based on the remaining medallions on the larger of the surviving fragments, it is logical to suppose that the large and small medallions would have been presented as an alternating pattern of four medallions

of each colour, two of each size. When viewed from above, the medallion sequence as a whole takes the form of an eight-pointed star. No reconstruction of the St Severin bowl conforming to this colour-coded sequence of medallions as they appear upon the remaining fragments is possible with fewer than 40 medallions.

The six Old Testament biblical episodes on the surviving medallions can be reconstructed to form complete sets of images, depicting the Fall of Man (one surviving medallion of Adam, Eve and the Tree), the Sacrifice of Isaac (one surviving medallion of Abraham and Isaac), Daniel in the den of lions (two surviving medallions, Daniel and a lion and one conjectured lion), the Three Hebrews (two of which survive and one of whom must be conjectured), Susanna and the Elders (one surviving medallion depicting an orant woman and two conjectured medallions of Elders) and Jonah and the great fish (four surviving medallions with scenes of Jonah). One rod-wielding figure survives and three further examples of this figure are suggested in the reconstruction. The exact images on only five of the original two medallions cannot be reasonably conjectured. These may possibly have depicted further Old Testament episodes, but may equally have displayed episodes from the New Testament.

On the basis that the surviving St Severin bowl fragments only depict elements clearly identifiable with Old Testament episodes, Schüler interpreted the vessel as a wholly Jewish piece, citing the wall paintings in the 3rd-century synagogue at Dura-Europos in Syria in support of episodic imagery being a composite part of contemporary Jewish artistic language.<sup>48</sup> However, although all of the surviving medallions depict scenes from the Old Testament, the emphasis is distinctly Christian. Each of the Old Testament episodes depicted on the St Severin bowl was viewed in the context of Christian typology by numerous 4th-century authors. Indeed, the designer of the St Severin bowl chose to show precisely those moments from each episode at which the main character became a type of Christ, therefore demonstrating the unity of the two Testaments. Further to this, however, the point depicted in every episode on the St Severin bowl typologically foreshadows Christ's Passion and Resurrection and the actions leading up to these events. In an era prior to the earliest known representations of Christ's crucifixion, the complete episodic schema of the St Severin bowl may have been intended to portray the Passion of Christ in the artistic language of 4th-century Rome. In addition to foreshadowing typologically the Passion, each of the episodes identified on the St Severin bowl relate closely to the notion of Christian salvation, and in particular, the 'Libera' petitions of the *Commendatio Animae*.<sup>49</sup> Each line begins, 'Deliver, Lord, his soul, just as you delivered....,' and is followed by references to Elijah, Noah, Abraham, Lot, Moses, Daniel, Susanna and others.<sup>50</sup>

The glass vessel known as the Podgoritza bowl illustrates eight biblical episodes (**Pl. 65**), two from the New Testament and six from the Old Testament, all accompanied by their corresponding incantation from the *Commendatio Animae*.<sup>51</sup> The Old Testament episodes (the Fall, the Sacrifice of Isaac, the Three Hebrews in the Fiery Furnace, Daniel in the den of lions, Susanna and the Elders and Jonah and the great fish) are the same as those identified on the St Severin bowl,



Plate 77 The St Ursula bowl (cat. no. 17)

and are furthermore depicted at the same point in the biblical narrative. Shown side-by-side, the two New Testament episodes depict the raising of Lazarus and Peter striking the rock. Based on the Podgoritza bowl, the five diminutive medallions on the St Severin bowl where the iconography cannot be reasonably reconstructed may have depicted these scenes, sequences of two and three diminutive medallions respectively in gold glass.

Despite the absence of any explicit identifying inscription connecting the St Severin bowl with the *Commendatio Animae*, a visual association with the prayer might be inferred through the application of the rod-wielding figure, surviving in two medallions from the bowl (one in the British Museum and the one in Bonn), to each Old Testament episode. The application of this element to each episode might reasonably be interpreted in terms of the *Commendatio Animae* as the Lord delivering Susanna from the false crime, Daniel from the den of lions and so on. The rod-wielding figure applied to each scene may also have represented Christ, visibly placing the episode explicitly in a typological context. This element, used in other media to represent Christ in depictions of his New Testament miracles, may thus have been intended to represent Christ as Logos, providing the Christian inspiration behind the event.

**References:** Aus'm Weerth 1864, 121–8, pl. III.1; Aus'm Weerth 1878, 124; Aus'm Weerth 1881, 121 and 129; Garrucci 1872–80, vol. 3, 113–14, pl. 170.1; Kraus 1882–6, vol. 1, 618; Kraus 1896, vol. 1, 482, fig. 358; Dalton 1901a, no. 629, pl. XXX; Dillon 1907, pl. X; Leclercq 1907, vol. 2, cols 491–3; Leclercq 1923, col. 1833, no. 130; Morey 1959, no. 349, pl. XXX; Fremersdorf 1962, 34, pl. 48; Fremersdorf 1967, 217–18, pls 300–3; Römer am Rhein 1967, 276, no. D106;

Barag 1970, 101–2, fig. 1, pl. 26b; Harden 1968, 67–8, no. 88; Harden 1987, no. 154; Spier 2007a, no. 13.

### 17. The St Ursula bowl

Rome? c. AD 360–400

Provenance: found in 1866 in a stone cist containing the burnt bones of an adult female accompanied by a few small items of glass and jet in the cemetery of Ursulagartenstrasse, Cologne

Dimensions: d. (conjectured) 190mm; t (of lower layer) 1mm

Formerly in the Herstatt Collection and presumably purchased by Slade in 1867–8 (the piece is published by Düntzer as being in the Herstatt Collection in 1867); from the Slade Collection (1868)

BM Reg. no. BEP S 317

**Technique:** cut and incised. The plaque is formed of a single layer of greenish colourless blown glass. The apparently slightly concave base-disc has been taken by some to indicate a shallow bowl; however, the width and thickness of glass, together with the lack of evidence for a covering layer instead suggests a gilt glass plaque, with minute traces of gold leaf scattered across the surface of the plaque. The condition of the plaque is noticeably less perfect than published illustrations would suggest. It is considerably fragmented with the central portion almost completely missing. At the time of writing, it has been reconstructed and mounted on a bed of clear casting resin using acetone soluble H.M.G. cellulose nitrate adhesive. It is, however, impossible to exhibit it successfully. Over 100 small fragments, the exact locations of which within the iconography are unclear, remain loose. The absence of a



Plate 78 Düntzer's illustration of the St Ursula bowl

protective layer of glass has resulted in much of the design being lost or damaged through attrition.

**Description and comment:** Dalton has noted that the treatment of some of the scenes is remarkable and certainly unparalleled in other contemporary media. Enhanced by the heavily abraded nature of the iconography, the secure identification of many of the episodes depicted is thus impossible. Düntzer's 1867 illustration, the earliest image to have been produced of the object, does appear highly accurate with respect to the areas that are clearly visible and is referred to with regard to the other now less visible areas. Düntzer's image is presented here (Pl. 78).<sup>32</sup>

Within the outer circular serrated border the piece is divided into eight panels by thin columns radiating from a central medallion. The lower body of an animal, possibly that of a lamb, is depicted within the circular double serrated border of the central medallion. In the border of the central medallion is the remains of the inscription '[...] EC[...] DVLCI[S] [...]'. It is translated as '[...]ec sweet [...]', and probably forms part of the commonly occurring generic phrase 'dulcis anima' ('sweetheart').

Looking at this image from an anticlockwise position, the first two panels of the outer register positioned to the upper right of the piece display the story of Jonah and the great fish. The first panel depicts Jonah cast out of a ship by two apparently nude sailors headfirst into the mouth of the sea monster. The ship, which moves towards the left, has a large quilted main sail and smaller fore sail. The sea monster takes the form of a *ketos*. The scene is paralleled almost identically in a cut and incised gold glass vessel base now in the Louvre (Pl. 75).<sup>53</sup> According to Düntzer, a dove is depicted in the right-hand corner of the panel, the significance of which is, however, uncertain and no longer visible. The sea is

highlighted with blue over-painted enamel, whilst the sea monster's mouth and small details of the ship are highlighted in red over-painted enamel. The episode is concluded in the second panel. In the bottom of the field, Jonah is cast forth, head first and apparently in an orant position, from the mouth of the *ketos*. In the upper portion of the scene, Jonah is shown reclining under the gourd vine. The area of the sea is again highlighted in blue over-painted enamel.

The third panel depicts Daniel in the den of lions (Daniel 6:16–23). The full-length figure of Daniel is shown clean shaven and with closely cropped hair. He wears a girdled tunic with red over-painted enamel clavi, double stripes at the wrists and two dots at the hem. Daniel stands in an orant position between four lions in Düntzer's illustration, the rear two apparently resting on a raised platform, although only the two to the right of the panel are now visible. Four palm trees with green over-painted leaves are depicted behind Daniel and the lions.

The fourth panel depicts the Three Hebrews in the Fiery Furnace (Daniel 3:8–27). The three naked and orant Hebrews stand in the furnace (indicated by a masonry wall) which issue flames over-painted in red enamel. The first and third figure faces outwards in profile, whilst the central figure is depicted frontally. None of the heads of the Hebrews now survive; however Düntzer illustrates the one to the far left as being short haired and beardless.

The fifth panel is largely abraded and has not been identified with any certainty. To the right of the field next to a tower or high masonry wall stands a short-haired and beardless male figure wearing a tunic with red over-painted clavi and pallium. He is turned slightly to the left with his left hand resting on the head of a smaller diminutive figure standing before him. In the background is a double-topped





Plate 79 Diminutive medallion with Adam (cat. no. 18)

palm tree with green over-painted enamel leaves. The scene might represent Christ's healing of the blind man. If this is correct, then the masonry may represent the walls of Jericho (Luke 18:35).

The sixth panel, at the very bottom of the object, is again largely abraded and has not been identified with any certainty. Above a wall of masonry stands what appears to be an orant female figure, wearing a long girdled tunic with two red over-painted vertical stripes. In front of the wall to the left there is a recumbent ox. On the right Dalton and Morey report traces of a second ox or another animal, which is no longer visible.<sup>54</sup> Dalton suggested an identification with Susanna in the garden (Daniel 13), while Morey did not provide any interpretation.

The seventh panel quite clearly depicts the healed paralytic (Luke 5:18–25) who is portrayed as short haired and beardless and wears a girdled tunic with red over-painted enamel clavi, double stripes at the wrists and a single band at the hem. He stands holding with extended arms his bed on his shoulders, represented by a rectangular framework, the top of which is filled with cross-hatching that probably represents straps or bands. Behind him are the indications of small palm trees with green over-painted enamel leaves.

The eighth and final panel is largely abraded to the left of the field, but can perhaps be identified with Moses striking the rock (Exodus 17:1–6; Numbers 20:8). To the right of the field there is a short-haired and beardless male figure wearing a tunic and pallium with over-painted red clavi. In his left hand he holds a staff or wand pointed towards the lower left of the panel. Behind him a double-topped palm tree with green over-painted leaves is depicted. In the left of the panel there is what appears to be a rock with a stream of water over-painted in blue enamel issuing from its top. Upon the blue coloured surface is what seems to be a number of scattered limbs, a head, two arms and two legs. This is unusual, but might perhaps be the result of abrasion.

**References:** Düntzer 1867, 168, pl. V; Franks and Nesbitt 1871, 50–2; Garrucci 1872–80, vol. 3, 111–13, pl. 169.1; Kraus 1882–6, vol. 1, 619–20; Kraus 1896, vol. 1, 481; Vopel 1899,

no. 291; Dalton 1901a, no. 628; Leclercq 1907, vol. 2, cols 488–90; Leclercq 1923, col. 1833, no. 129; Morey 1959, no. 347, pl. XXX.

## B. Single Old Testament scenes (cat. nos 18–25)

### 18. Diminutive medallion with Adam

Rome, c. AD 360–400

Provenance: probably from Rome

Dimensions: max. l. 27mm; max. w. 23mm; t. (bottom layer) 4mm; t. (top layer) 3mm

Garrucci states that it was part of the British Museum's collection by 1858

BM Reg. no. BEP OA 4308

**Technique:** cut and incised. This is a single medallion from a medallion-studded vessel. The greenish colourless glass vessel wall has been closely trimmed to the line of the cobalt blue glass medallion at the top; it has a convex obverse and a concave reverse. Fine cracks are evident in the gold leaf in addition to a number of pin prick bubbles in the glass.

**Description and comment:** within a single band hexagonal border a short-haired and beardless naked male figure is depicted, quarter-turned to the right. With his right hand, he attempts to cover his nakedness, whilst his left arm is positioned across his body, his hand outstretched as if in the act of reception. In the field there are four heart-shaped leaf spray space fillers. The figure is easily identifiable with Adam when compared with other pieces of gold glass.<sup>55</sup> The British Museum's example once formed part of a sequence of medallions on the wall of a single vessel. From left to right, the medallions in the sequence would have depicted a fruit-laden tree entwined by a serpent, instances of which occur frequently in gold glass, and Eve (Pl. 80).<sup>56</sup>

Adam is paralleled identically on gold glass vessel bases where both the serpent-entwined tree laden with fruit and the figure of Eve are represented. One example exists in the Vatican Museum bearing the generic inscription 'DIG[NIT]AS [A]MICORVM PIE [ZESES]' ('Be the pride of your friends, drink that you may live').<sup>57</sup> A further example, unaccompanied by any inscription, is illustrated



Plate 80 Diminutive medallion with Eve, 4th century. Corning Museum of Glass, New York, inv. no. 66.1.202

by Garrucci as being in the Museo Borgiano di Propaganda, although the current whereabouts of the piece is unknown.<sup>58</sup>

**References:** Garrucci 1858, 7, pl. II.3; Garrucci 1864, 24, pl. II.3; Garrucci 1872–80, vol. 3, 126, pl. 172.3; Vopel 1899, no. 171; Iozzi 1900, 5, pl. I.1; Dalton 1901a, no. 616, pl. XXXI; Leclercq 1923, col. 1826, no. 4, fig. 4517; Morey 1959, no. 318, pl. XXX.

**19. Vessel base with Moses striking the rock**

Rome, c. AD 360–400

Provenance: probably from Rome

Max. l. 78mm; max. w. 72mm; d. (of foot-ring) 80mm; t. (bottom layer) 4mm; t. (top layer) 3mm

From the Matarozzi Collection; purchased from Signor Mosca (1863)

BM Reg. no. BEP 1863.0727.2

**Technique:** cut and incised. The base is made from two layers of greenish colourless blown glass with a slightly concave pad base-disc and a high outward curving

Plate 81 Vessel base with Moses striking the rock (cat. no. 19)

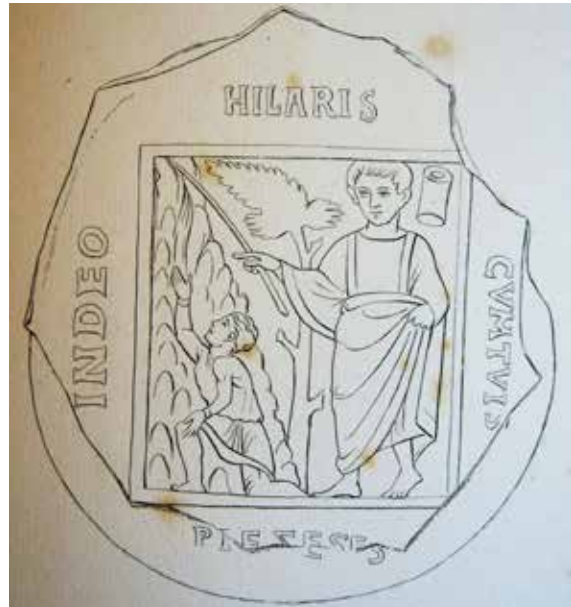


Figure 20 Garrucci's line drawing of cat. no. 19

fire-polished foot-ring; it is a fragment. The wall of the vessel has been broken away and the bottom has been crudely trimmed along the line of the base-disc, the majority of which is intact. The upper surface is heavily iridescent, greatly obscuring the image, which is more visible when viewed from below (Fig. 20). There is some minor discolouration to the top and right of the gold leaf, which is otherwise well preserved, but with fine cracks throughout.

**Description and comment:** a full-length man is depicted within the single band square border at the right, but moving towards the left. He is beardless and short haired, with his head turned slightly inwards. He wears a tunic and pallium, the latter held in his left hand, whilst in his right he holds a rod. In the field above his left shoulder is a scroll, probably intended as a space filler. The figure is depicted with his right arm outstretched striking the rod







**Plate 82** Ivory panel with St Peter striking the rock, c. 430. British Museum, London, BEP 1856,0623.10

against the top of a rock, appearing on the left of the field, from which a stream of water flows. Below the rock there is a youthful short-haired male figure, wearing a tunic and kneeling with his hands outstretched to the water. In the centre of the field, between the rod-wielding figure and the rock, a single tree is depicted. Aligned with the outside edges of the border is the inscription: 'HILARIS IN DEO CUM TVIS PIE ZESES', ('Joyfulness in God with you and yours, drink that you may live'). The iconography of this example was reproduced in a 19th-century Venetian imitation gold glass, presumably based on the illustration provided by Garrucci.<sup>59</sup>

This same scene occurs both in gold glass vessel bases and in single medallions.<sup>60</sup> It also occurs as a sequence of diminutive medallions, the individual rod-wielding figure element being paired with a second medallion depicting the water-yielding rock.<sup>61</sup> In each instance the biblical account has been followed closely and the episode has been identified with the notion of salvation in the *Commendatio Animae*.<sup>62</sup> Moses struck water from the rock in the desert in order that the children of Israel, identified by the kneeling figure with his hands outstretched to the water, should not die of thirst after leaving Egypt. Despite the prevalent identification with Moses,<sup>63</sup> the image also bears distinct similarities to contemporary illustrations of the apocryphal act of St Peter striking water from the rock in order to baptize his jailors in the Mamertine prison in Rome (**Pl. 82**).<sup>64</sup> The composition of Peter's water miracle is identical to that of Moses in other media, the key difference being that Peter is usually shown as bearded and often balding, whilst Moses tends to be clean shaven and with a full head of closely cropped hair. Peter's

water miracle is unmistakably represented in this manner on two gold glass vessel bases, both in the Vatican Museum.<sup>65</sup> In both instances he is clearly labelled 'PETRVS' ('Peter'). This is the only example of episodic imagery depicted in gold glass to identify the figure portrayed by inscription, enabling the viewer to identify the scene indisputably.

Nevertheless, the iconographic similarity of the two episodes in gold glass was surely deliberate. In the context of Early Christian typology, in the 4th century Peter was specifically viewed as a type of Moses, and was discussed as such by Augustine in the context of Moses striking the rock.<sup>66</sup> The distinctly similar image on this base, unaccompanied by any specific identifying inscription, may suggest that the episode was intended as a conflation of the two miracles, with the figures viewed simultaneously as both Moses and Peter.

**References:** Sanclemente 1808–9, vol. 3, pl. XLII.5; Garrucci 1858, II, pl. II.10; Garrucci 1864, 34–5, pl. II.10; Franks 1864, 382, no. 2; Garrucci 1872–80, vol. 3, 129, pl. 172.9; Vopel 1899, no. 188; Iozzi 1900, 7, pl. I.3; Dalton 1901a, no. 617; Leclercq 1923, col. 1827, no. 23; Morey 1959, no. 312, pl. XXIX.

## **20. Diminutive medallion with one of the Three Hebrews in the Fiery Furnace**

Rome, c. AD 360–400

Provenance: apparently found in an unspecified catacomb at Rome

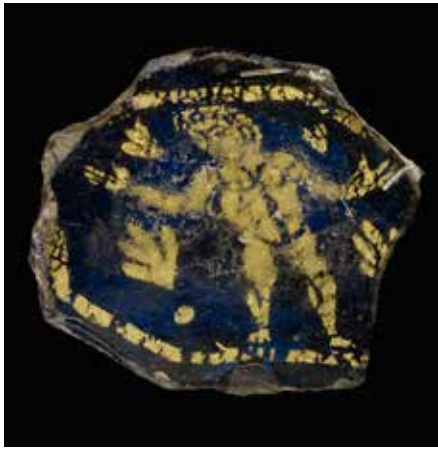
Dimensions: max. l. 24mm; max. w. 29mm

From the Bunsen Collection (1854)

BM Reg. no. BEP 1854,0722.15



**Plate 83** Diminutive medallion with one of the Three Hebrews in the Fiery Furnace (cat. no. 20)



**Plate 84 Diminutive medallion with Daniel in the Lions' Den (cat. no. 21)**

**Technique:** cut and incised. This is a single medallion from a medallion-studded vessel. The greenish colourless glass vessel wall has been closely trimmed to the line of the amber glass medallion. It has a convex obverse and a flat reverse. A number of fine cracks are evident in the gold leaf.

**Description and comment:** within the broadly circular single band border is the full-length representation of a beardless and youthful male figure. The man stands in the orant position, his lower body quarter-turned to the left, his upper body and head quarter-turned to the right. He wears an oriental double-girdled tunic with a row of buttons at the front, richly embroidered trousers and a Persian cap with pendent strings. He stands amid indications of flames. In the field below each arm a single dot is depicted, and above the arms are two leaf sprays. The figure represents one of the three youths in the fiery furnace and would have been part of a sequence of medallions illustrating the entire episode.

The medallion follows a near identical iconographic formula to those on the St Severin bowl and to others of the same scene illustrated in Morey's catalogue.<sup>67</sup>

**References:** Garrucci 1864, 37, pl. III.10; Garrucci 1872–80, vol. 3, 132, pl. 173.19; Vopel 1899, no. 220; Iozzi 1900, 8–9, pl. I.4; Dalton 1901a, no. 621, pl. XXXI; Leclercq 1923, col. 1829, no. 56, fig. 4522; Morey 1959, no. 321, pl. XXX.

### **21. Diminutive medallion with Daniel in the Lions' Den**

Rome, c. AD 360–400

Provenance: probably from Rome

Dimensions: max. l. 22mm; max. w. 24mm; t. (of lower layer) 4mm; t. (of upper layer) 1mm

From the Matarozzi Collection; purchased from Signor Mosca (1863)

BM Reg. no. BEP 1863,0727.14

**Technique:** cut and incised. This is a single medallion from a medallion-studded vessel. The greenish colourless glass vessel wall has been closely trimmed to the line of the cobalt blue glass medallion. The reverse of the base-disc is partially discoloured. The medallion has a convex obverse and concave reverse. A number of fine cracks are evident in the gold leaf.

**Description and comment:** within the single octagonal band border there is a frontal full-length portrait of a naked

short-haired and beardless male figure in the orant position. His head is quarter turned to the left and angled slightly downwards. Within the field, above the arm on both sides of the figure, two leaf sprays are depicted. Below the arms there are two larger leaf sprays, the example on the left having a single dot beneath it. The bottom of the leaf spray to the right of the field is missing. It is probable, however, that a single dot was shown below it as is the case on the example to the left, thus completing the symmetry of all four leaf sprays within the field. The figure represents Daniel as an heroic nude from the Old Testament episode of Daniel in the den of lions and would have been part of a sequence of medallions illustrating the entire episode.

The identification of this figure as Daniel can be made from a comparison with the near identical medallion on the St Severin bowl, where at least two diminutive medallions from the complete episodic sequence of Daniel in the den of lions survive.

**References:** Garrucci 1858, 12, pl. III.12; Garrucci 1864, 37, pl. III.12; Garrucci 1872–80, vol. 3, 131, pl. 173.12; Vopel 1899, no. 201; Iozzi 1900, 9, pl. I. 5; Dalton 1901a, no. 619, pl. XXXI; Leclercq 1923, col. 1828, no. 36, fig. 4520; Morey 1959, no. 319, pl. XXX.

### **22. Diminutive medallion with Daniel and the poisoned cake of pitch and fat**

Rome, c. AD 360–400

Provenance: apparently found in an unspecified catacomb at Rome

Dimensions: max. l. 19mm; max. w. 4mm; t. (bottom layer/medallion) 4mm; t. (top layer) 2mm

From the Bunsen Collection (1854)

BM Reg. no. BEP 1854,0722.17

**Technique:** cut and incised. This is a single medallion from a medallion-studded vessel. The greenish colourless glass vessel wall has been crudely trimmed to the line of the cobalt blue glass medallion. It has a convex obverse and a flat, but slightly misshapen reverse. The left and upper edge of the coloured medallion remains intact, but is broken to the bottom and right in accordance with the covering layer of glass. A number of fine cracks are evident in the gold leaf and in places the gold leaf border is 'silvered' as a result of infiltration from the broken edge. There are some pinprick bubbles in the glass.





Plate 85 Diminutive medallion with Daniel and the poisoned cake of pitch and fat (cat. no. 22)

**Description and comment:** within the octagonal single band border there is a beardless and youthful looking male figure with short hair, wearing a tunic and walking to the left. His head is slightly lowered to look at a spherical object which he carries in both hands. In the field three leaf sprays are shown, one in front and two behind him. Garrucci identified the figure as a Magus making an offering to the baby Jesus; however, the figure does not wear the Phrygian cap typical of depictions of the Magi, who are often shown offering their gifts on trays.<sup>68</sup> Dalton identified the figure as Daniel taking the poisoned cake of pitch and fat to slay the dragon of Babylon (Daniel 14).<sup>69</sup> Dalton's interpretation appears to be correct when compared with the vessel base illustrating the entire episode of Daniel and the dragon of Babylon (cat. no. 23), which also portrays Daniel carrying a spherical object in this way. The medallion constitutes one of a series of medallions depicting the entire episode.

**References:** Garrucci 1858, 13–14, pl. IV.11; Garrucci 1864, 41–2, pl. IV.11; Garrucci 1872–80, vol. 3, 133, pl. 174.5; Vopel 1899, no. 212; Iozzi 1900, 11–12, pl. I.8; Dalton 1901a, no. 620, pl. XXXI; Leclercq 1923, col. 1829, no. 47; Morey 1959, no. 322, pl. XXX.

### 23. Vessel base depicting Daniel and the dragon of Babylon

Rome, c. AD 360–400

Provenance: probably from Rome

Dimensions: max. l. 86mm; max. w. 88mm; d. (of foot-ring) 86mm

From the Matarozzi Collection; purchased from Signor Mosca (1863)

BM Reg. no. BEP 1863,0727.1

**Technique:** cut and incised. The base is formed from two layers of greenish colourless blown glass with a slightly concave pad base-disc and a low fire-polished foot-ring. It is a fragment; the wall of the vessel has been very closely trimmed away in accordance with the base-disc, all of which survives. Both surfaces are covered with a very light iridescent film, which does not obscure the iconography. The base-disc is cracked vertically and to the right. The gold leaf is well preserved, but with fine cracks throughout. A half circular score appears in the gold leaf in the bottom of the field. This is the result of the inadvertent touching of the hot surface of the decorated base-disc with a stick in an attempt to move the object prior to the fusing of the upper glass layer.

Plate 86 Vessel base depicting Daniel and the dragon of Babylon (cat. no. 23)





**Plate 87** Diminutive medallion with the dragon of Babylon, 4th century. Ashmolean Museum, Oxford, inv. no. AN2007.18

**Description and comment:** the scene has been universally interpreted as Daniel slaying the dragon of Babylon with the poisoned cake of pitch and fat (Daniel 14). Within a square double border of half-circles and pyramidal projections is the full-length depiction of two adult males, both of whom are short haired and beardless. To the left is a nimbed figure wearing a tunic and pallium, the latter held in his right hand, whilst in his left hand he holds a rod. In the centre of the field, the second figure (identified as Daniel) wears a sleeved tunic and chlamys and is portrayed as moving to the right. His body is quarter-turned to the right of the scene; however, his head is turned backwards towards the rod-wielding figure and is perhaps in receipt of an instruction. In his outstretched arms, Daniel holds a spherical object representing the poisoned cake of pitch and fat. To the far right of the scene is the dragon of Babylon, with a long sinuous neck and crested head. It rises from a pile of rocks facing Daniel and bites at the cake. A lenticular leaf

and a disc are depicted in the field above the dragon, interpreted here as simple space fillers.

No other gold glass vessel base has been recorded as depicting this episode. Instead, gold glass parallels exist in the form of diminutive medallions, each showing a specific element of the scene originally arranged together in sequence upon the wall of a larger vessel. The image of Daniel carrying the poisoned cake of pitch and fat represented as a spherical object appears on a medallion in the British Museum's collection (**cat. no. 22**). The dragon of Babylon is also paralleled in a single medallion in the collection of the Ashmolean Museum (**Pl. 87**).<sup>70</sup> The rod-wielding miracle worker appears on numerous gold glass medallions (such as **cat. nos 28–9**). He is unattested in the scriptural account, but has nonetheless been identified by Dalton, Morey and Spier as Christ the Logos.<sup>71</sup> Daniel was viewed as a type of Christ in the 4th century, his slaying of the dragon of Babylon seen as an analogy of Christ's triumph over Satan.<sup>72</sup> The presence of the rod-wielding figure as Christ Logos may thus function to present the episode in the context of Christian typology.

As regards to other contemporary media, the episode of Daniel and the dragon of Babylon occurs most frequently on sarcophagi from Rome. Although the format of parallels in other media is closely related, no direct counterparts of the scene as it appears in gold glass are known. As seen in gold glass, the dragon in other media always takes the form of a serpent. Nevertheless, in no other example does it appear from a rocky eminence. On sarcophagi, the dragon emerges from a circular opening, a tomb-like structure or, in multiple instances, entwined around a single tree.<sup>73</sup> In gold glass, this element is similar to the serpent-entwined tree from the episode of Adam and Eve and appears frequently in Morey's catalogue in the form of a medallion. As a result, it is possible to envisage a medallion sequence illustrating Daniel and the dragon of Babylon where the tree, used as an interchangeable stock element, appears in conjunction with medallions such as **cat. no. 22** in the British Museum's collection, replacing the serpent emerging from the rocky peak.

**Plate 88** Diminutive medallion with Jonah swallowed by the great fish (cat. no. 24)







Plate 89 Diminutive medallion with Jonah under the gourd tree (cat. no. 25)

**References:** Garrucci 1858, 12, pl. III.13; Garrucci 1864, 38, pl. III.13; Garrucci 1872–80, vol. 3, 131–2, pl. 173.14; Franks 1864, 381–2, no. 1; Vopel 1899, no. 206; Iozzi 1900, 10, pl. I.6; Dalton 1901a, no. 619, pl. XXIX; Dalton 1901b, 238, pl. III; Morey 1959, no. 345, pl. XXX; Spier 2007a, no. 48.

#### 24. Diminutive medallion with Jonah swallowed by the great fish

Rome, c. AD 360–400

Provenance: apparently found in an unspecified catacomb at Rome

Dimensions: max. l. 26mm; max. w. 30mm; t. (bottom layer/medallion) 4mm; t. (top layer) 1mm

From the Bunsen Collection (1854)

BM Reg. no. BEP 1854,0722.16

**Technique:** cut and incised. This is a single medallion from a medallion-studded vessel. The greenish colourless glass vessel wall has been closely trimmed in a hexagonal fashion to the line of the green glass medallion. The medallion has a very slightly convex obverse and a flat reverse. There are some small chips and pinprick bubbles in the glass; the reverse is slightly iridescent and discoloured. A number of fine cracks are evident in the gold leaf.

**Description and comment:** within the broadly circular single band border is a monster in the form of a *ketos*. The beast is coiled with its head in profile facing left. From its open jaws protrude the naked legs of a man as he is swallowed head first. The medallion depicts Jonah consumed by the great fish, and must have been one of a series of medallions depicting the entire episode.

**References:** Garrucci 1858, 13, pl. IV.2; Garrucci 1864, 39, pl. IV.2; Garrucci 1872–80, vol. 3, 133, pl. 174.11; Vopel 1899, no. 228; Iozzi 1900, 10–11, pl. I.7; Dalton 1901a, no. 622, pl. XXXI; Leclercq 1923, col. 1829, no. 64; Morey 1959, no. 320, pl. XXX.

#### 25. Diminutive medallion with Jonah under the gourd tree

Rome? c. AD 360–400

Provenance: probably from Rome

Dimensions: max. l. 21mm; max. w. 21mm

Garrucci states that it was part of the British Museum's collection by 1858

BM Reg. no. BEP OA 4310

**Technique:** cut and incised. This is a single medallion from a medallion-studded vessel. The greenish colourless glass vessel wall has been closely trimmed to the line of the cobalt blue glass medallion; it has a convex obverse and a concave reverse. Some of the border has been trimmed away. A number of fine cracks are evident in the gold leaf.

**Description and comment:** within the single band circular border, the naked reclining figure of Jonah faces towards the left. He is supported on the ground by his right arm, whilst his left is flung over and behind his head. Above him hang five gourds and the scant indications of the gourd vine.

**References:** Garrucci 1858, 13, pl. IV.4; Garrucci 1864, 40, pl. IV.4; Garrucci 1872–80, vol. 3, 132, pl. 174.15; Vopel 1899, no. 231; Iozzi 1900, 12, pl. I.9; Dalton 1901a, no. 623, pl. XXXI; Leclercq 1923, col. 1829, no. 67, fig. 4523; Morey 1959, no. 331, pl. XXX.

### C. Single New Testament scenes (cat. nos 26–9)

#### 26. Diminutive medallion with Lazarus in the tomb

Rome?, c. AD 360–400

Provenance: apparently found in an unspecified catacomb in Rome

Dimensions: max. l. 25mm; max. w. 27mm; t. (bottom layer/medallion) 5mm; t. (top layer) 2mm

From the Bunsen Collection (1854)

BM Reg. no. BEP 1854,0722.14

**Technique:** cut and incised. This is a single medallion from a medallion-studded vessel. The greenish colourless glass vessel wall has been closely trimmed to the line of the cobalt blue medallion which has a convex obverse and flat reverse. A number of fine cracks are evident in the gold leaf, which is 'silvered' in places.

**Description and comment:** within the broadly circular single band border is a full-length figure, upright and wrapped in a mummy-like grave costume beneath the portico of a brick-built tomb or *aedicula*. The tomb faces three-quarters to the right with two small slotted windows and a gabled porch supported by two columns. The image clearly represents Lazarus in the tomb and would originally have been part of a sequence of medallions depicting the entire episode of the raising of Lazarus.



Plate 90 Diminutive medallion with Lazarus in the tomb (cat. no. 26)

A similar representation of Lazarus appears paired in association with a rod-wielding figure that represents Christ in the process of working the miracle of resurrection on a gold glass vessel base unaccompanied by inscription in the Vatican Museum collection.<sup>74</sup> It also occurs on the Brescia casket, on sarcophagi and in catacomb paintings.<sup>75</sup> This medallion might therefore have been paired with a second medallion depicting the rod-wielding figure to complete the illustration of the biblical episode.

**References:** Garrucci 1858, 26, pl. IX.5; Garrucci 1864, 73, pl. IX.5; Garrucci 1872–80, vol. 3, 142, pl. 178.5; Vopel 1899, no. 265; Iozzi 1900, 17, pl. II.7; Dalton 1901a, no. 624, pl. XXXI; Leclercq 1923, col. 1831, no. 102, fig. 4524; Morey 1959, no. 330, pl. XXX.

**27. Diminutive medallion with Mary or Martha at Lazarus' tomb or the Woman with the Issue of Blood**

Rome, c. AD 360–400

Provenance: probably from Rome

Dimensions: max. l. 19mm; max. w. 25mm; t. (of lower layer) 3mm; t. (of upper layer) 2mm

From the Matarozzi Collection, purchased from Signor Mosca (1863)

BM Reg. no. BEP 1863,0727.17

**Technique:** cut and incised. This is a single medallion from a medallion-studded vessel. The greenish colourless

glass vessel wall has been closely trimmed to the line of the green glass medallion at the top. The bottom of the piece has been broken away completely. The medallion has a convex obverse and concave reverse. A number of fine cracks are evident in the gold leaf.

**Description and comment:** within the single octagonal border is the full-length profile of a female figure, her head in a frontal position. The figure kneels to the right, her arms and hands outstretched, wearing a tunic and *palla* with a veil blown out in an arc behind her. Her hair is patted onto her cranium or it is possible that a single ring features as part of her hairstyle. The figure has been identified by Dalton as Martha or Mary kneeling at the tomb of Lazarus.<sup>76</sup> In some contemporary media, such as the Capsella Brivio silver casket in the Louvre and various sarcophagi from Rome, a third element, a kneeling woman, is included in this scene (Pl. 92).<sup>77</sup> This image is most often interpreted as Mary falling down at the feet of Christ, lamenting that if he had arrived sooner Lazarus would have lived (John 11:32). Consequently this medallion might be added as a third medallion to the sequence showing the raising of Lazarus, representing Mary.

However, paired with a second medallion depicting the rod-wielding miracle worker, the woman could also have formed part of a sequence illustrating Christ's healing of the Woman with the Issue of Blood (Matthew 9:20–2; Mark 5:25–34; Luke 8:43–8).<sup>78</sup> Although Christ is never shown

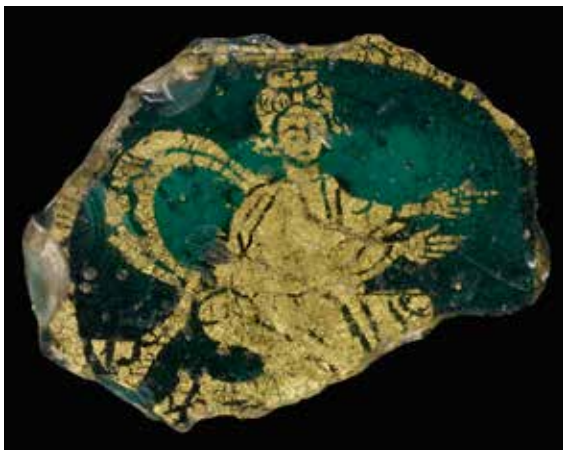


Plate 91 Diminutive medallion with Mary or Martha at Lazarus' tomb or the Woman with the Issue of Blood (cat. no. 27)





Plate 92 Capsella Brivio silver casket from Lombardy, Italy, with the Raising of Lazarus, early 5th century. Musée du Louvre, Paris, BJ 1951

wielding a rod in other contemporary depictions of this episode, the addition of a generic rod-wielding Christ in gold glass would certainly be far from surprising. In the extensive body of gold glass published by both Morey and Garrucci, Christ is depicted almost without exception in this way during the performance of his miracles.<sup>79</sup>

Galit Noga-Banai presents a lengthy and in-depth discussion of the possible conflation of the raising of Lazarus and the Woman with the Issue of Blood on the Capsella Brivio silver casket (Pl. 92).<sup>80</sup> Reading from right to left, the casket employs the same three elements paralleled in gold glass medallions in the British Museum's collection: the rod-wielding figure, the kneeling woman and Lazarus in the tomb (cat. nos 28–9, 27 and 26 respectively). As on the casket, the medallions arranged in this order place the kneeling woman directly in front of the rod-wielding Christ. She is thus apparently in direct receipt of his miracle-working power, and is subsequently more likely to represent the Woman with the Issue of Blood, rather than a subordinate addition removed from the focus of the miracle positioned behind Lazarus.<sup>81</sup> When the three medallions are viewed together, the rod-wielding figure of Christ would have been seen as applicable to both the woman and Lazarus, who are positioned just behind. It is also plausible that the kneeling woman in this sequence could have been viewed simultaneously as both Mary and the Woman with the Issue of Blood. The two episodes are clearly conflated on multiple instances of contemporary sarcophagi from Rome.<sup>82</sup> In each example, Christ raises Lazarus; the Woman with the Issue of Blood

kneels behind him, touching his robe and is accompanied by the figure of Peter, as in the scriptural account. The simultaneous application of a single rod-wielding figure to more than one episode is clearly attested on two gold glass vessel bases in the Ashmolean Museum (Pl. 64) and the Metropolitan Museum of Art respectively (Pl. 68).<sup>83</sup>

**References:** Garrucci 1864, 72–3, pl. IX.2; Garrucci 1872–80, vol. 3, 142, pl. 178.2; Vopel 1899, no. 269; Dalton 1901a, no. 625, pl. XXXI; Leclercq 1923, col. 1832, no. 106, fig. 4525; Morey 1959, no. 334, pl. XXX.

### 28. Diminutive medallion with a rod-wielding figure

Rome? c. AD 360–400

Provenance: probably from Rome

Dimensions: max. l. 24mm; max. w. 25mm; t. (of lower layer) 4mm; t. (of upper layer) 2mm

From the Matarozzi Collection; purchased from Signor Mosca (1863)

BM Reg. no. BEP 1863,0727.15

**Technique:** cut and incised. This is a single medallion from a medallion-studded vessel. The greenish colourless glass vessel wall has been closely trimmed to the line of the cobalt blue glass medallion; it has a convex obverse and concave reverse. Some small chips are present at the edges; the reverse of the base-disc is discoloured. A number of fine cracks are evident in the gold leaf.

**Description and comment:** within the single octagonal border in the centre of the field is a full-length male figure,



Plate 93 Diminutive medallion with a rod-wielding figure (cat. no. 28)



**Plate 94** Diminutive medallion with a rod-wielding figure (cat. no. 29)

quarter-turned to the left. He is short haired and beardless and moves towards the left. In his left hand he holds a rod or wand.<sup>84</sup> He wears a tunic and pallium, draped over his lower right arm. In the field in front of the figure are two leaf sprays, the lower example being larger in size. Behind the figure there is a second large leaf spray and three dots. The figure is most often identified with Christ as a miracle worker or as Logos. However, it seems to be an interchangeable stock element and is also, albeit less often, used to represent Moses and Peter striking the rock.

**References:** D'Agincourt 1823, pl. XXI.25; Garrucci 1858, 22–3, pl. VII.6; Garrucci 1864, 65, pl. VII.6; Garrucci 1872–80, 140, pl. 176.8; Vopel 1899, no. 271; Iozzi 1900, 15–16, pl. II.2; Dalton 1901a, no. 626, pl. XXXI; Leclercq 1923, col. 1832, no. 108, fig. 4526; Morey 1959, no. 317, pl. XXX.

### 29. Diminutive medallion with a rod-wielding figure

Rome? c. AD 360–400

Provenance: probably from Rome

Dimensions: max. l. 21mm; max. w. 22mm; t. (of lower layer) 3mm; t. (of upper layer) 4mm

From the Matarozzi Collection; purchased from Signor Mosca (1863)

BM Reg. no. BEP 1863,0727.16

**Technique:** cut and incised. This is a single medallion from a medallion-studded vessel. The greenish colourless glass vessel wall has been closely trimmed and carefully ground to the line of the gold leaf border; the medallion has a convex obverse and a concave reverse. The cobalt blue glass medallion is ground and broken away to the right, removing part of the border and is uneven in thickness, tapering to less than 1mm at the lower left. Some small chips are present at the edges; the reverse of the base-disc is discoloured. A number of fine cracks are evident in the gold leaf.

**Description and comment:** within the octagonal border is a full-length male figure, quarter-turned to the left. He is short haired and beardless and moves towards the left and holds a rod or wand vertically in his left hand. He wears a wide-sleeved tunic and pallium, draped over his right lower arm. In the left of the field a leaf spray appears below the outstretched arm. Above the arm is a single dot; to the right of the field behind the figure is a single dot. On the identification of the rod-wielding figure see **cat. no. 28**.

**References:** Garrucci 1858, 23, pl. VII.8; Garrucci 1864, 65, pl. VII.8; Garrucci 1872–80, vol. 3, 140, pl. 176.10; Vopel 1899, no. 273; Iozzi 1900, 14, pl. II.3; Dalton 1901a, no. 627, pl. XXXI; Leclercq 1923, col. 1832, no. 110; Morey 1959, no. 335, pl. XXX.

### Notes

- 1 Jensen 2007, 71; Tkacz 2001, 17–18.
- 2 Caron 1997, 19; Harden 1960, 44–81.
- 3 Arveiller-Dulong and Nenna 2005, 325, no. 918; Zalesskaya 2006, 248–9, no. 607.
- 4 Morey 1959; Garrucci 1858; 1864; 1872–80.
- 5 Mathews 1995, 84–9.
- 6 Tkacz 2001, 109–36.
- 7 *Ibid.*, 58.
- 8 Rheinisches Landesmuseum, Bonn, inv. no. A139; Spier 2007a, no. 13, fig. 1; Harden 1987, 279.
- 9 Aus'm Weerth 1864, pl. III.3.
- 10 Garrucci 1872–80, vol. 3, pl. 170.1.
- 11 For instance, Spier 2007a, no. 17.
- 12 Ashmolean Museum, inv. no. AN2007.13; Morey 1959, no. 366, pl. XXXI.
- 13 Buckton 1994, no. 9c, 32–3.
- 14 Morey 1959, 62, no. 366.
- 15 Woollcombe 1957, 39.
- 16 Tkacz 2001, 57–9.
- 17 *Ibid.*, 125.
- 18 Konis 2006, 32–3.
- 19 Daniel and the Dragon of Babylon (on sarcophagi: Garrucci 1872–80, vol. 3, pls 366.3, 370.1 and 383.5), and the myth of Hercules and the Apples of the Hesperides (in catacomb painting: Ferrua 1991, fig. 130, from the Via Latina Catacomb, Rome; and on rare instances of contemporary coinage: Jensen 2005, fig. 40).
- 20 Martorelli 2000, 247.
- 21 Vatican Museum, inv. no. 755 (ex-232); Morey 1959, no. 71, pl. XII.
- 22 State Hermitage Museum, inv. no. 1223; Zalesskaya 2006, no. 602.
- 23 Ashmolean Museum, inv. no. AN2007.13; Morey 1959, no. 366, pl. XXXI.
- 24 Tkacz 2001, 114–17.
- 25 Augustine, *City of God* 16.32; see also Jensen 2005, 143–8.
- 26 Metropolitan Museum of Art, inv. no. 16.174.2; Morey 1959, no. 448, pl. XXXVI. Also see the sequences illustrated in Morey's catalogue (from the Vatican Museum, Morey 1959, nos 147–9, pl. XXI) which follow a near identical iconographic formula.
- 27 For translations and discussion see: Tkacz 2001, 84, n. 56.
- 28 Tkacz 2001, 114–17; Jerome, *Commentarii in Danielelem* 1.3.92 (translation in Tkacz 2001, 84, n. 58).
- 29 Spier 2007a, no. 42.
- 30 On a silver reliquary dated to the late 4th century from northern Italy see *ibid.*, no. 77.
- 31 Ashmolean Museum, inv. no. AN2007.13; Morey 1959, no. 366, pl. XXXI; Metropolitan Museum of Art, inv. no. 16.174.2; Morey 1959, no. 448, pl. XXXVI.

- 32 Vatican Museum, inv. no. 719 (ex-243): Morey 1959, no. 48, pl. VIII.
- 33 Agnes: Vatican Museum, inv. no 774 (ex-739): Morey 1959, no. 82, pl. XIII; Mary: e.g. Vatican Museum, inv. no. 694 (ex-451): Morey 1959, no. 33, pl. V.
- 34 Ferrua 1991, fig. 140, from the Via Latina Catacomb; for sarcophagi: Weitzmann 1979, no. 371.
- 35 Montenegro (now in the State Hermitage Museum, St Petersburg, inv. no. ω 73; Bank 1985, nos 26–9.
- 36 See the Brescia casket: Tkacz 2001, 206.
- 37 Vatican Museum, inv. no. 663 (ex-495): Morey 1959, no. 138, pl. XXI; a further example might be Morey 1959, no. 416, pl. XXXIII (now lost).
- 38 Morey 1959, 30, no. 138 (e.g. **cat. no. 18** in the British Museum's collection). This interpretation was repeated by Zanchi Roppo (1969, 123–4, no. 140) and more recently by Utro (2000, 67, fig. 8).
- 39 For translations and a full discussion see: Tkacz 2001, 74–81.
- 40 Dalton 1901a, no. 629; Morey 1959, 58, no. 349-7.
- 41 Morey 1959.
- 42 Tkacz 2001, 114–17.
- 43 For a full discussion of Jonah as a type of Christ and a list of 4th-century authors and their respective works see Tkacz 2001, 70–3.
- 44 Vatican Museum, inv. no. 714 (ex-238): Morey 1959, no. 46, pl. VII.
- 45 E.g. the St Ursula bowl (**cat. no. 17**); Musée du Louvre inv. no. ED 1712 S 2053; Arveiller-Dulong and Nenna 2005, no. 933.
- 46 Corning Museum of Glass, inv. no. 66.1.205; Whitehouse 2001, no. 834.
- 47 Garrucci 1872–80, vol. 3, pl. 170.1.
- 48 Schüler 1966, 53.
- 49 Tkacz 2001, 109–37.
- 50 Spier 2007b, 9–10; various translations of the complete text are provided by Tkacz 2001, 114–17.
- 51 Now in the State Hermitage Museum, St Petersburg, inv. no. ω 73; Zalesskaya 2006, 248–9, no. 607; transcriptions in Bank 1985, 275–6, nos 26–9; translated in full in Northcote and Brownlow 1879, vol. 2, 318–19.
- 52 Düntzer 1867, pl. V.
- 53 Musée du Louvre inv. no. ED 1712 S 2053; Arveiller-Dulong and Nenna 2005, no. 933.
- 54 Dalton 1901a, no. 628; Morey 1959, no. 347, pl. XXX.
- 55 E.g. Vatican Museum, inv. no. 712 (ex-231): Morey 1959, no. 47, pl. VIII.
- 56 See Morey 1959, nos 136–7 and 217, pls XXI and XXIV, and Eve, exemplified in the Corning Museum of Glass (inv. no. 66.1.202; Whitehouse 2002, no. 833).
- 57 Vatican Museum, inv. no. 712 (ex-231); Morey 1959, no. 47, pl. VIII.
- 58 Garrucci 1872–80, vol. 3, 123–4, pl. 172.1.
- 59 Pillinger 1984, fig. 231c.
- 60 This same scene occurs both in gold glass vessel bases (e.g. Museo Archeologico Nazionale in Aquileia, inv. no. R.C. 1096; Spier 2007a, no. 19) and in single diminutive medallions (e.g. Vatican Museum, inv. nos 660 (ex-496) and 645 (ex-003): Morey 1959, nos 142–3, pl. XXI).
- 61 See Garrucci 1858, pl. II.11, now lost; Utro 2000, fig. 11.
- 62 Tkacz 2001, 114–17.
- 63 Dalton 1901a, no. 617; Morey 1959, 53–4, no. 312.
- 64 Jensen 1992; Jensen 2005, 186–7.
- 65 Vatican Museum, inv. nos 632 (ex-483) and 751 (ex-758): Morey 1959, nos 80–1, pl. XIII.
- 66 Augustine *Sermon* 352.4: translation in Hill 1995, 142.
- 67 E.g. from the Vatican Museum: Morey 1959, nos 147–9, pl. XXI.
- 68 Garrucci 1864, 41–2.
- 69 Dalton 1901a, no. 620.
- 70 Ashmolean Museum, inv. no. AN2007.18: Morey 1959, no. 371, pl. XXXII.
- 71 Dalton 1901a, no. 619; Morey 1959, 57, no. 345; Spier 2007a, 222, no. 48.
- 72 Tkacz 2001, 86.
- 73 From a circular opening, see Garrucci 1872–80, pl. 320.2; from a tomb-like structure, see Garrucci 1872–80, vol. 5, pl. 333.1; or, in multiple instances, entwined around a single tree, see Garrucci 1872–80, vol. 5, pls 366.3, 370.1 and 383.5.
- 74 Vatican Museum, inv. no. 752 (ex-459): Morey 1959, no. 77, pl. XIII.
- 75 Brescia casket (Tkacz 2001, 214), sarcophagi (see Dresken-Weiland 1998, pl. 20, no. 60 and pl. 109, no. 378) and catacomb painting (e.g. from the Crypt of the Virgin in the Catacomb of Marcellinus and Peter where the image is paralleled almost identically: Spier 2007a, no. 10b).
- 76 Dalton 1901a, no. 625, pl. XXXI; Morey 1959, no. 334, pl. XXX, who merely describes the figure as ‘a kneeling woman’.
- 77 Musée du Louvre (inv. no. BJ 1951; Noga-Banai 2008, fig. 3) and various sarcophagi from Rome (see Spier 2007a, no. 39).
- 78 This scene is paralleled closely on other 4th-century objects, most notably on sarcophagi (see Dresken-Weiland 1998, pl. 20, no. 60 and pl. 49, no. 138) as well as on the Brescia casket (Tkacz 2001, 203).
- 79 Morey 1959; Garrucci 1858; 1864; 1872–80, vol. 3.
- 80 Noga-Banai 2008, 40–50.
- 81 *Ibid.*, 41.
- 82 See Garrucci 1872–80, pls 369.4, 380.2-3 and 382.2.
- 83 Ashmolean Museum (inv. no. 2007.13; Morey 1959, no. 366, pl. XXXI) and the Metropolitan Museum of Art, inv. no. 16.174.2 (Morey 1959, no. 448, pl. XXXVI).
- 84 Mathews 1999, 84–9, for the wand.

# Catalogue of the Gold Glasses Part 3: Secular Portraits (Cat. Nos 30–9)

The term ‘secular portraits’ in this section covers what I will call both ‘portraits’ and ‘portrait-style’ depictions of people either as individuals, pairs or as part of a larger group. Numbering ten pieces in total, they constitute the second most numerous group of individual gold glasses in the British Museum’s collection, and include the largest number of complete or near complete fragments: four portray single secular figures (**cat. nos 30–3**), four a secular male and a secular female together (**cat. nos 34–7**) and two show groups of secular figures (**cat. nos 38–9**). Portable portrait images of private secular individuals rarely survive from Late Antiquity, perhaps because of their production in perishable media. A painted glass disc from Pompeii, comparable in size to gold glasses, depicting the bust of a single adult male is a very rare survival from a much earlier period.<sup>1</sup>

Portraits and portraiture, in the true sense of the term, allude to the representation of the actual physical traits of an individual, the precise details which reveal the face of the person or persons portrayed.<sup>2</sup> Based on this definition, a single example of gold glass (**cat. no. 30**), belonging to the brushed technique category of gold glasses, may perhaps be termed as a ‘portrait’. Brushed technique gold sandwich-glass portrait medallions depict the highly naturalistic and individualized busts of different people. It would thus appear impossible to draw out general trends regarding the representation of facial features from these examples. This is, however, not the case with regard to their costume and upper body. As with the Egyptian mummy portraits, it is quite probable that although the faces of the figures depicted are individualized, they appear on generic representations of the upper body. The British Museum’s collection includes only one brushed technique portrait medallion (**cat. no. 30**), which is badly damaged in the area of the figure’s shoulders and chest. It is thus not possible to draw any more solid conclusions here.

The far more numerous cut and incised gold glasses in the collection employ more generic portrayals of figures, in both their costume and physical features. Produced in a linear style, there is an over-emphasis of the contours that results in the reduction of the figural representation to a system of basic features, notably the nose, eyes, ears and mouth. Consequently, for example, the ridge of the nose and the left eyebrow are fused into a single line, a frequent occurrence in Roman popular art.<sup>3</sup> This style of depiction, accounting for the vast majority of published gold glass, cannot therefore be categorized as ‘portraits’ in the true sense of the term. Instead, ‘portrait-style’ seems a more accurate term.

In portrait-style depictions, rather than seeking to reproduce the individualized facial features of the subjects, the people portrayed were recognizable not by their physical traits, but by their insignia, associated attributes and posture.<sup>4</sup> Indeed, in Late Antiquity, the task of the portrait artist was to utilize the figural representation as a vehicle through which to convey the ideas and values of the person portrayed, by demonstrating that they possess all of the correct attributes associated with that ideal.<sup>5</sup> In cut and incised gold glass, the portrait-style depictions of both secular people and saints share many of the same iconographical elements. They are distinguishable, not



through an accompanying inscription (although these are sometimes present), but rather through details of costume and specific associated attributes. The same generic figural representations of the stereotypical citizen of 4th-century Rome are repeated regardless of whether they appear individually, as part of a married couple or with a family group. Furthermore, in each instance, the clothing and attributes of each figure strove to emphasize the individual's idealized wealth and status, often manifested through education and intellect. Indeed, areas highlighted in over-painted enamel on both male and female figures give further prominence only to specifics of costume related to status with regard to the male, and ostentatious displays of generic wealth in the context of the female. Inscriptions accompanying the portrait-style depictions of secular figures in gold glass, regardless of the number of people shown, nearly exclusively take the form of general wishes for good health and often, but not always, incorporate the personal names of those depicted. Regardless of the number of figures portrayed, secular representations all conform closely to the artistic language prevalent in 4th-century Rome. Despite this, however, a markedly narrower range of figure poses, types of costume and female hairstyles appears upon gold glass in comparison with the variety illustrated in other media.

## A. Portraits (cat. no. 30)

### 30. Medallion with youthful male bust

Rome, c. AD 300

Provenance: probably from Rome

Dimensions: d. (of medallion) 52mm; t. (bottom layer) 4mm;

t. (top layer) 1mm

From the Carlisle Collection (1890)

BM Reg. no. GR 1890,0901.1

**Technique:** brushed. A translucent cobalt blue lower disc is overlain by a colourless upper layer. Harden states that both layers are cast and ground.<sup>6</sup> However, close examination of the piece reveals that slight undulations are present upon the reverse, indicating that the base-layer was initially a blown parison, and flattened as it cooled. This feature is highlighted in the profile illustration (see Appendix B). The upper layer was also blown. The edges have been bevelled and ground down in a highly uniform manner.

Only visible under magnification, it is clear that the gold leaf has been incised and the image produced through a series of very small half circles, not small linear strokes as on a similar portrait medallion in the Victoria & Albert Museum (Pl. 4).<sup>7</sup> The blue glass background gives prominence to the image. The upper layer of glass has been cut away over the face and body and over the standard depicted in the left of the medallion. As a result, the gold leaf is damaged to the right of the face and across the chest. A significant degree of limey weathering extends across the reverse and bevelled edge. There is some iridescence and a light milky film over the portrait. Pin-prick bubbles occur in both glass layers.

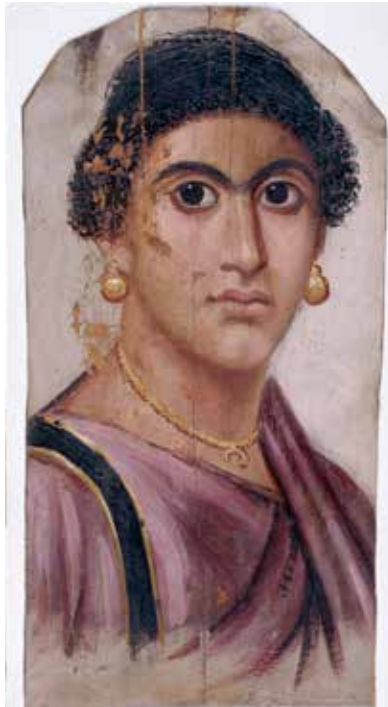
**Description and comment:** within a thin, perfectly circular single line border is the bust of a youthful male. He has short curled hair and a closely cropped beard. Surface



Plate 95 Medallion with youthful male bust (cat. no. 30)

damage has unfortunately rendered his costume illegible, although a fold in what may have been a tunic is visible, running from the figure's left shoulder down across his chest. To the left of the bust a miniature standard is depicted. It consists of two lateral hoops set within a frame, possibly intended to represent openwork or *opus interrasile*. The standard is surmounted by two confronted rampant lions positioned on either side of a central ornamented terminal, resting on a horizontal base. The standard closely resembles a number of 3rd-century bronze standards identified with professional associations, notably those of the sports-related *collegia iuvenum* (sports clubs for freeborn youths), from across the Roman Empire.<sup>8</sup> These have two large blank hoops set side by side in an intricate bronze frame. A bronze standard from Pollentia (Mallorca) also incorporates *opus interrasile*, whilst examples from Athens and Flobecq, like that on the medallion in the British Museum, both have rampant lions on the upper part of the frame.<sup>9</sup> Each also includes additional physically smaller deities, predominantly related to games or the amphitheatre, hence the identification with the *collegia iuvenum*.<sup>10</sup> The standards were used in processions or on other civic occasions. The figure depicted on this example of gold glass in the British Museum possibly represented a member of the *collegia*.

Brushed technique medallions received the particular attention of both the forgers of antiquities and reproducers in the 18th and 19th centuries. The vast majority of those examples known to be genuine beyond any reasonable doubt, depict naturalistic portraits in medallion form set within a thin, perfectly circular single line frame: essentially an *imago clipeata* (round image in a frame). Like cat. no. 30, figures appear as half or quarter-length busts in striking, almost photographic detail.<sup>11</sup> Each is given prominence by a translucent cobalt blue glass backing and they mostly depict the bust portraits of single adult males.<sup>12</sup> Single adult women with one or more infants or youths are also often depicted, as on the Brescia medallion (Pl. 1) which illustrates a woman accompanied by an adolescent boy and girl, possibly a mother and her two children.<sup>13</sup> A woman is also portrayed alongside a single male infant on a second piece in the Metropolitan



**Plate 96 Two Fayoum portrait panels of a man and a woman, 140–60 AD. British Museum, London, EA 74714 and 74713**

Museum of Art, New York (**Pl. 23**). No genuine surviving example depicts either a single woman or an adult male accompanied by one or more juveniles and no example is known to include more than one adult on the same piece.

Although not present on the British Museum piece, short inscriptions do sometimes occur in association with portraits on genuine brushed technique medallions. In instances where they have been recorded, they are exclusively produced in Greek in the Alexandrian dialect of Egypt.<sup>14</sup> These inscriptions sometimes take the form of prominent assertions of skill or virtue.<sup>15</sup> However, shorter less prominent inscriptions are apparently more common. The inscription ‘BOYNEPI KEPAMI’ on the Brescia medallion was interpreted by Albizzati as referring to the ‘father of the family’, who, it should be noted, is missing from the scene.<sup>16</sup> Morey, however, states that the small inscription is the signature of the artist, and that ‘KEPAMI’ (‘potter’) may just as well denote a glass-worker.<sup>17</sup>

The only large corpus of material comparable to the gold glass brushed technique portrait medallions is the encaustic panels with mummy portraits from Roman Egypt.<sup>18</sup> These have been recovered mainly from the Fayoum Oasis. Dated to the 2nd to early 4th centuries, they are of increased significance in light of the Egyptian dialect inscriptions accompanying a number of the brushed technique glasses. Like gold glass portrait medallions, the Fayoum portraits predominantly depict the portraits of individual people, both male and female (**Pl. 96**). Recent analysis, however, has suggested that only the facial features of the portraits are in fact individualized; the costume and jewellery covering the chest and shoulders of the subject are generic.<sup>19</sup> Although a more detailed study is needed, a similar scenario in the case of brushed technique gold glasses can be suggested. Recent work by Prag that employs facial reconstruction techniques to skulls surviving alongside their associated mummy portrait convincingly argues for a production line in which each painter built up his own formulae with the

repetitive and formulaic use of proportion, whilst still endeavouring to capture the likeness of the subject.<sup>20</sup> The similarity of the Victoria & Albert Museum’s gold glass portrait medallion (**Pl. 4**) with others from the Vatican Museum and the Catacomb of Panfilo, Rome (**Pl. 2**), might suggest that the same practice was employed in brushed technique gold glass medallions.<sup>21</sup>

**References:** Harden 1987, no. 152, 276.

## **B. Portrait-style individuals (cat. nos 31–3)**

Images of secular individuals produced in the linear style cut and incised technique occur exclusively on sandwich-glass vessel bases in Morey’s catalogue. The three examples in the British Museum’s collection are also on sandwich-glass vessel bases. Unlike brushed technique medallions, portrait-style depictions of individuals appear evenly weighted between adult male and female subjects. In every instance, these portraits take the form of quarter-length busts. No gold glass cut and incised technique portrait-style representations of unaccompanied infants occur anywhere in Morey’s catalogue or in other published sources.

### **31. Vessel base with male bust**

Rome, c. AD 360–400

Provenance: probably from Rome

Dimensions: max. l. 55mm; max. w. 54mm; t. (of lower layer) 4mm; t. (of upper layer) 4mm

From the Slade Collection (1870)

BM Reg. no. BEP 1870,0606.12

**Technique:** cut and incised. The base is formed of two layers of greenish colourless blown glass, both of which are flat; it is a fragment. The edges of the piece have been very closely ground (**Pl. 7**), losing much of the outer band of the double border and trimming away the foot-ring in its entirety. The gold leaf is well preserved, but with many fine cracks throughout. Some iridescence is present on both



Plate 97 Vessel base with male bust (cat. no. 31)

surfaces; however, this does not obscure the image. The piece is chipped at the top right.

**Description and comment:** within a circular double band border is the quarter-length bust of a short-haired and beardless male, his head turned to the left. He wears a long-sleeved tunic and his left sleeve shoulder and lower arm are cross-hatched to indicate embroidery (the latter in two bands). He also wears a chlamys fastened by a prominent crossbow brooch on his left shoulder. In the field to the right of the figure's head is a scroll, and to the left a case containing three styli. These attributes led Dalton to suggest that the man depicted was a scribe. However, in line with other portrait-style depictions of secular individuals in gold glass, they are more likely to represent idealized indications of wealth and status signified through literacy. The majority of the outer band has been ground away, probably in the 18th or 19th century.

The tunic worn by the man is of the type prevalent during the late 2nd and throughout the 3rd century known as the *dalmaticus*.<sup>22</sup> Fourth-century versions, however, as on this example, had tight fitting sleeves down to the wrist and were elaborately embroidered on the front and back of the shoulders (which could be either round or square) and in bands on the sleeves, as generically shown here.<sup>23</sup> Embellishment in this fashion was a visible indication of wealth and status. The chlamys was a cloak of Greek origin, but the term was used throughout Late Antiquity to refer to the short cloak worn by soldiers, hunters and horsemen which developed out of the *paludamentum*, the cloak of a Roman army general.<sup>24</sup> In the 4th century, the chlamys was increasingly worn by the emperor and civic officials, symbolizing both legitimate authority and honour.<sup>25</sup> The crossbow brooch (*fibula*) was itself a symbol of rank and status, often being large in size and made of gold, silver or gilded bronze.<sup>26</sup>

The man's hands are seen by both Dalton and Morey as holding either end of a scroll, according to the standardized status-laden formula frequently adopted in gold glass.<sup>27</sup> The lower hand on this example is assumed to have fallen outside



the border. However, upon close observation and comparison with other gold glass portrait-style images, this interpretation is incorrect. The 'roll' to the bottom right of the figure, seen as being the top of a scroll, conforms more closely to the generic roll of fabric used to indicate the hand upon a number of cut and incised secular portrait-style depictions (for example **cat. no. 19**). Here the left hand, rather than crossing the chest in order to hold the scroll top, is instead positioned across the body, the index and middle fingers extended but the remainder retracted in the generally recognized Roman gesture of speaking, addressing and teaching.<sup>28</sup> As well as occurring widely upon gold glass portrait-style depictions, this mannerism is common in contemporary depictions of philosophers and, like the scroll, may be interpreted as indicators of education and intellect, and thus high status.<sup>29</sup> This is certainly true of the gesture of address, with the inkpot and styli also being far from unique.<sup>30</sup>

The space within the double band border contains an inscription, commencing with a leaf spray at the apex: 'EVM[...].A.VIVE.VIVAS.PIE.ZESES'. The phrase 'PIE' is a Latinized version of the Greek phrase 'ΠΙΕ ΖΗΣΗΣ', 'drink that you may live'.<sup>31</sup> 'EVM[...].A' constitutes an unidentifiable personal name; the remainder reads 'live, life, drink that you may live'.

A duplicate piece to this, identical in costume and attributes, survives in the Vatican Museum collection, differing only in terms of the personal name and the exact wording of the inscription, which is also a generic wish for life and good health.<sup>32</sup>

**References:** Vopel 1899, 44, fig. 1, no. 77; Dalton 1901a, no. 605, pl. XXVIII; Kisa 1908, vol. 3, 867, fig. 355; Leclercq 1923, col. 1851, no. 418, fig. 4544; Morey 1959, no. 300, pl. XXIX.

### 32. Vessel base with female bust

Rome, c. AD 360–400

Provenance: probably from Rome

Dimensions: max. l. 79mm; max. w. 68mm; d. (of foot-ring,



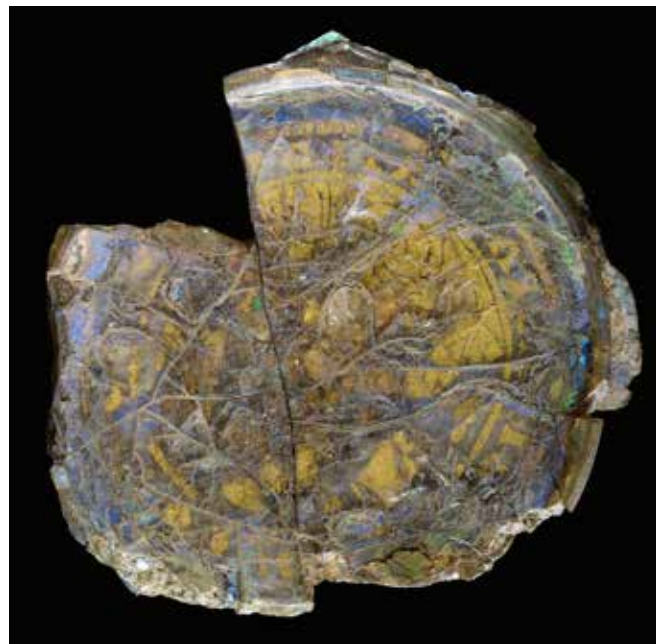


Plate 98 Vessel base with female bust (cat. no. 32)

conjectured) 85mm; t. (bottom layer) 1mm; t. (middle layer) 4mm; t. (top layer) 4mm  
 From the Robinson Collection, purchased in Rome from the antiquities dealer Baseggio (1859)  
 BM Reg. no. BEP 1859,0618.1

**Technique:** cut and incised. This base has three layers of greenish colourless blown glass, a slightly convex pad base-disc and a low fire-polished foot-ring. The gold leaf is sandwiched between the lowermost and middle layers. It is a fragment; the wall of the vessel has been crudely broken away roughly in accordance with the base-disc. Approximately half of the foot-ring survives. The base-disc has many cracks, as well as some iridescence and discolouration that obscures the image from the reverse which is only clearly visible under very close inspection (**Fig. 21**). The left-hand portion is completely missing. The upper and middle layers are also heavily cracked, the former missing to the left. Both are badly discoloured rendering the image illegible from above.

Figure 21 Garrucci's illustration of cat. no. 32 (1872–80, vol. 3, pl. 200.5)



**Description and comment:** Garrucci's line drawing depicts the quarter-length bust of a single secular adult female figure, her head slightly turned to the right. Her hair is swept back behind her ears and falls in two thin curled strands on both shoulders. Above or perhaps on top of her head is a single ring. She is dressed in a tunic, which is unfortunately too badly fragmented to make any further identification possible, and a plain *palla* worn diagonally across the body. She holds a scroll with both hands. In the field, on either side of her head, is a further scroll to the right and an open diptych to the left. The portrait-style bust is enclosed by a circular double-band border containing the inscription reconstructed as: 'BI[B]ASPA[RE]N[T]IB[VS] TVISV[IR]OTVO'. The most convincing reading is 'bibas parentibus tuis viro tuo'. Cameron interpreted 'bibatis', meaning 'drink' to have been interchangeable with 'vivatis', meaning life and, however spelt, understood in both senses.<sup>33</sup> The inscription thus reads: 'Drink/Life to your parents [and] to your husband'. The iconography of this example was reproduced on one of the roundels on a 19th-century Venetian imitation gold glass plaque now in the Corning Museum of Glass and presumably based on the illustration provided by Garrucci.<sup>34</sup>

The single ring placed on the figure's head cannot be paralleled in any other form of contemporary figural representation. This would suggest that it is intended to be part of the hair style, as has been suggested for excavated finds of glass, jet and bronze rings too small to serve as bracelets.<sup>35</sup> It is also supported by the coiffure of the female child in a family group gold glass illustrated by Garrucci, which clearly illustrates a single ring as part of the hair ornamentation (**Fig. 22**).<sup>36</sup> A single ring also appears as part of Eve's hair adornment on the diminutive medallion wrongly attributed to the British Museum's collection by Iozzi in 1900 and now in the Corning Museum of Glass.<sup>37</sup>

The *palla*, which occurs generically on all cut and incised gold glasses depicting secular women, remained almost unchanged throughout the entire Roman period.<sup>38</sup> It was





Figure 22 After Garrucci (1872–80), vol. 3, pl. 199.1

not a fastened garment, but one that instead relied upon drapery and was therefore normally shown held with one hand or instead with one hand completely hidden inside. Less commonly, for example on the Brescia medallion (Pl. 1), the *palla* is shown knotted, allowing both hands to remain free.<sup>39</sup> The *palla* was ultimately unsuitable for any practical activity and has thus been deemed a symbol of an upper-class female.<sup>40</sup>

Literacy in Late Antiquity has been calculated at around 10% of the total population, never exceeding 15–20% even in cities such as Rome.<sup>41</sup> The appearance of a scroll, the most commonly held object in the hands of figures depicted in cut and incised gold glass, is therefore likely to be intended as an indicator of literacy and thus a mark of high status. The holding of the scroll with both hands is a standard formula occurring throughout gold glass portraiture and in other media, notably sarcophagi with *imago clipeata*.<sup>42</sup> The additional scroll appearing in the field places further emphasis upon the intention to portray the subject as a person of intellect and education. The open diptych, also shown upon this piece, is paralleled only on one other instance of gold glass, now in the Vatican Museum.<sup>43</sup> Nevertheless, it is reasonable to assume that, along with the

scroll, the diptych constitutes a marker of literacy and is therefore also indicative of high status.

**References:** Garrucci 1872–80, vol. 3, 186, pl. 200.5; Vopel 1899, no. 100; Dalton 1901a, no. 607; Morey 1959, no. 343, pl. XXX.

### 33. Vessel base with male bust

Rome, c. AD 360–400

Provenance: probably from Rome

Dimensions: max. l. 56mm; max. w. 57mm; t. (bottom layer) 3mm; t. (top layer) 1mm

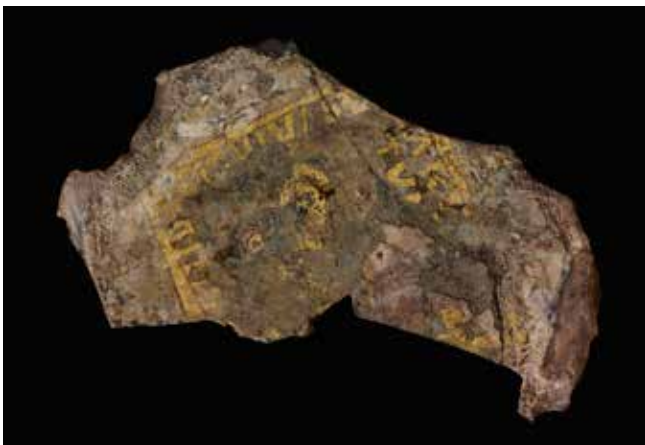
From the Robinson Collection, purchased in Rome from the antiquities dealer Baseggio (1859)

BM Reg. no. BEP 1859,0618.3

**Technique:** cut and incised. The base is formed from two layers of greenish colourless blown glass, with a slightly concave pad base-disc with a low foot-ring. It is a fragment; the wall of the vessel, of which now only a fraction survives, has been crudely trimmed to retain only the central image. Traces of a circular foot-ring are visible, but too little survives to conjecture the diameter. The majority of the upper layer of glass has been lost; as a result, the gold leaf applied to the base-disc is highly abraded. The upper left and lower right portions of the base-disc have been lost since the piece was illustrated by Buonarruoti in 1716 and Garrucci in 1872–80 (Fig. 23a–b). Both surfaces are highly iridescent. There are many pinprick bubbles in the glass, which is furthermore severely discoloured.

**Description and comment:** the object is very badly damaged and in its current state all but illegible. Both Buonarruoti's and Garrucci's illustrations depict the piece as somewhat worn, but nevertheless in a far better state of preservation than it is now. Easily discernible and centrally positioned within the double square border enclosing a reciprocal pattern of half-circles is the three-quarter length bust of a single short-haired and beardless male. His head is slightly turned to the left. He wears what appears to be a *toga contabulata* and carries a curved staff. Garrucci depicts the staff as shaded, his usual convention for indicating over-painted red enamelled detail. In the field, aligned to the square border and surrounding the figure is the inscription: 'AMACHIDVL CISVIVASCVM CARIS TVIS', the most convincing reading being 'Amachi dulcis vivas cum caris

Plate 99 Vessel base with a male bust (cat. no. 33)



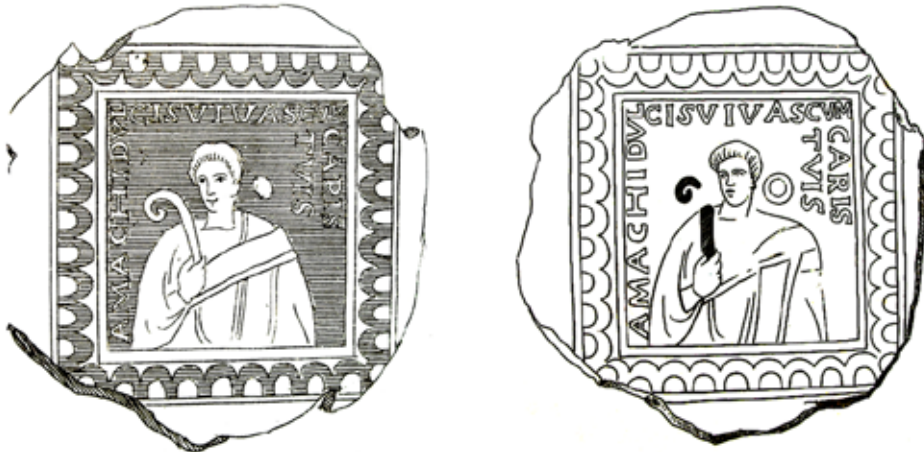


Figure 23a–b Illustrations of cat. no. 33 after (a) Buonarruoti (1716) and (b) Garrucci (1872–80)

tuis’, translated as ‘Amachi, may you live sweetly/pleasantly with those that are dear to you’. Amachi is probably a shortened form of the male name Amachius, known to have been in use in the 4th century.<sup>44</sup>

Beards were unusual in late 4th-century Rome, and as such occur very rarely in secular art. Instead, the prevailing image of the adult male in Late Roman art is, as here, of a clean-shaven face with a crew-cut hairstyle. This style is broadly attributed to 4th-century emperors.<sup>45</sup> Indeed, the pagan emperor Julian (AD 361–3), who himself had a beard, wrote a satirical essay during his reign entitled the *Misopogon*, or ‘Beard-hater’ in which he recalled the ridicule he had suffered prior to the start of his reign when beards were unfashionable.<sup>46</sup> No depiction of a secular male figure in cut and incised gold glass is overtly portrayed as bearded, balding or with long hair. Indeed, the wearing of long hair was frowned upon in the 4th-century *Codex Theodosianus* as part of legislation against barbarian practices.<sup>47</sup>

The *toga contabulata* (literally meaning ‘many folds’) was the standard formal male costume in 4th-century Rome and is the most common type of costume worn by secular men on gold glass, as is most likely the case in this example. The comparative frequency of depiction in the context of portraiture both in gold glass and in other contemporary media such as sarcophagi *imago clipeata* suggests that this garment was worn as ‘best’ by all men of standing, much the same as the modern suit and tie. A sumptuary law of AD 382 stated that the toga should be reserved only for special or state occasions.<sup>48</sup> In the same way as the female *palla*, the *toga contabulata* was therefore very much a mark of status and possibly wealth.

The only visible attribute is in the field to the right of the figure’s head when the object is viewed from above. Buonarruoti depicts this as a single circular disc, whilst Garrucci instead shows it as a single simple ring.<sup>49</sup> This feature is unique on gold glass. When the worn nature of the iconography is taken into account, it is not unreasonable and is in fact most probable to suggest that what Garrucci mistook to be a ring is actually the disc illustrated by Buonarruoti, which had suffered from further abrasion during the intervening period. In line with the majority of secular individual portraiture, this motif may simply represent a dot, quatrefoil or another form of leaf spray design of the type aptly described as ‘space fillers’.<sup>50</sup>

The enamelled curved staff is a singular occurrence in gold glass. Dalton suggested that it is curved like a *lituus* or *pedum*.<sup>51</sup> The former was carried as a badge of office by a pagan augur or priest and used in the demarcation of sacred space.<sup>52</sup> The latter, based upon the shepherd’s crook, functioned in a Christian context as a pastoral staff. With regard to the latter identification, however, the figure does not wear the tunic and pallium of omophorion type associated in all other gold glass depictions with Christian bishops and saints. Furthermore, it is notable that in the illustrations of both Buonarruoti and Garrucci, the staff does not extend below the hand of the figure. It is thus more likely that it represents, if either, the shorter status-imbued *lituus*, given further prominence through over-painted enamel. The man portrayed here may therefore have been an augur.

If so, the pagan augur may perhaps be associated with Flavius Amachius, governor of Phrygia from AD 361 to 363,<sup>53</sup> who achieved notoriety amongst Christians for the reopening and renovation of disused pagan temples and executed Christians who attempted to destroy the statues they contained.<sup>54</sup> In the Roman world, only men of high social status could attain the rank of augur and, as a provincial governor responsible for the attempted revival of paganism, Flavius Amachius would certainly have been eligible.

However, it is possible that, as with the vessel depicting Orfitus (cat. no. 35), gold glasses bearing the image of Amachius were not commissioned or purchased by the eponymous aristocrat. Instead, it is plausible that wealthy, but nonetheless non-aristocratic, pagans in 4th-century Rome may have wanted to own a vessel displaying the image of a man intent on the restoration of the old religion, just as many Christians evidently wished to own vessels depicting the likeness of a contemporary bishop or saint, as with the vessels depicting Pope Damasus in the company of saints (see cat. no. 14). In this context, Flavius Amachius might well have featured as a contemporary pagan hero or ‘saint’.

**References:** Buonarruoti 1716, 127–8, pl. XIX.1; Garrucci 1858, 62, pl. XXXII.4; Garrucci 1864, 167–8, pl. XXXII.4; Garrucci 1872–80, vol. 3, pl. 200.4; Vopel 1899, no. 72; Dalton 1901a, no. 604; Leclercq 1923, col. 1850, no. 413; Morey 1959, no. 301, pl. XXIX.

### General comments

The portrait-style depictions of individual people in gold glass and in other media, mostly sarcophagi, occur far less



Plate 100 Vessel base with married couple (cat. no. 34)

frequently than those of paired married couples. Where they do occur, however, they predominantly take the form of generic quarter-turned busts. On contemporary sarcophagi, individual secular male figures often present near identical parallels to those in gold glass. In such instances they appear as beardless quarter-turned busts, with short closely cropped hair and wearing the status-imbued *toga contabulata*.<sup>55</sup> As in gold glass, figures also often grasp scrolls as a marker of intellect and education, and thus act as further indicators of wealth and status.<sup>56</sup> Individual busts of secular women on contemporary sarcophagi also appear similar to those on gold glass. In many cases they are shown with the same visible signs of wealth and status as their gold glass counterparts through their hairstyle, costume and jewellery.<sup>57</sup> In other instances, however, whilst conforming to the same overall format, secular figures take on a distinctly different appearance. In some sarcophagi, the heads of individual secular figures, occasionally bearded, are depicted in profile, or fully frontal, and with curly hair.<sup>58</sup> In other examples, the person illustrated appears in an orant position, a pose not seen on any surviving gold glass.<sup>59</sup> Women upon contemporary sarcophagi also show a far wider variety of hairstyles compared with those in gold glass. Therefore, although gold glass does adhere to the 4th-century artistic language of Rome, it would appear that a far narrower range of available types and individual elements in circulation were employed.

### C. Portrait-style married couples (cat. nos 34–7)

Gold glass depictions of paired secular figures produced in the cut and incised technique occur exclusively on sandwich-glass vessel bases in Morey's corpus. The British Museum's collection includes four examples, all sandwich-glass vessel bases, represented by **cat. nos 34–7**. **Cat. no. 34** is fragmentary, with only the lower half remaining. These paired portraits exclusively take the form of busts which depict only a single adult male and female. In the past literature, they have been almost entirely referred to as 'married couples'.<sup>60</sup> The majority also include a central diminutive figure. However, **cat. nos 35–6** are the only pieces in the British Museum's collection where this central diminutive figure represents someone other than Christ.

### 34. Vessel base with married couple

Rome, c. AD 360–400

Provenance: said to have been found in an unspecified catacomb at Rome

Dimensions: max. l. 53mm; max. w. 73mm; d. (of foot-ring, conjectured) 100mm; t. (bottom layer) 2mm; t. (top layer) 4mm

From the Bunsen Collection (1854)

BM Reg. no. BEP 1854,0722.5

**Technique:** cut and incised technique. The base is formed from two layers of greenish colourless blown glass with a slightly concave pad base-disc and a low fire-polished foot-ring. It is a fragment; the wall of the vessel has been broken away and the bottom has been trimmed along the line of the base-disc, approximately two-thirds of which is missing. The complete upper half has been broken away. The top glass layer is cracked. Severe discolouration to the upper portion of the top glass layer relating to the break and corresponding cracks inhibits the view of the image in this area. Only the lower portion of the image survives. The gold leaf is well preserved, but with fine cracks throughout.

**Description and comment:** within the circular serrated reciprocal border are two half-length busts. The costume and composition is indicative of an adult female to the left of the field, wearing a richly embroidered mantle. To the right, abutting but not overlapping the female, is a male figure; the folds of his costume most probably indicative of the *toga contabulata*. The iconography suggests that the complete image originally comprised the portrait-style depictions of a married couple.

**References:** Garrucci 1858, 62, pl. XXXII.5; Garrucci 1864, 168, pl. XXXII.5; Vopel 1899, no. 145; Iozzi 1900, 31, pl. VII.1; Dalton 1901a, no. 614; Leclercq 1923, col. 1856, no. 489; Morey 1959, no. 337, pl. XXX.

### 35. Vessel base with married couple and Hercules

Rome, c. AD 360–400

Provenance: probably from Rome

Dimensions: max. l. 108mm; max. w. 101mm; d. (of foot-ring) 100mm

From the Matarozzi Collection, purchased from Signor Mosca (1863)

BM Reg. no. 1863,0727.3





Plate 101 Vessel base with married couple and Hercules (cat. no. 35)

**Technique:** cut and incised technique. There are two layers of greenish colourless blown glass with a slightly concave oval pad base-disc and a low fire-polished foot-ring. The base is a fragment; the wall of the vessel has been very closely trimmed away in accordance with the base-disc, all of which survives. There is some fine cracking in the gold leaf. Light iridescence is also apparent on the underside of the base-disc and around the trimmed edge of the bottom. There are a few bubbles in the glass.

**Description and comment:** the base displays the two quarter-length busts of a married couple inside a double band inscription-enclosed border. Depicted on the right is an adult male, beardless and short haired, wearing a *toga contabulata* and tunic with a red enamel over-painted stripe, perhaps indicating a clavus on his left shoulder. To the left is a woman who wears what has been described as a diadem with white enamel ornamented terminals or gems and pearls on either side.<sup>61</sup> Morey, however, refers to the same element as ‘the hair waved around the face covering the ears, plaited over the cranium and behind the head and terminating in projecting rolls at the tape of the neck with enamel over-painted earrings’.<sup>62</sup> On close examination of this piece and indeed of other examples in Morey’s catalogue, including **cat. nos 27** and **37**, the description of the hairstyle appears to be the more accurate account. The style is of the type dubbed the *Scheitelzopf* (individual braids drawn together to make a broad band of hair which is folded over on the nape of the neck and then pulled up the back of the head), introduced by empresses in the mid-3rd century and paralleled in imperial portrait statues dating to the early 4th century.<sup>63</sup> On highly generic examples such as this, the long tresses swept back over the ears can produce the deceptive impression of a diadem or even a thin scarf or snood.<sup>64</sup> Around her neck the woman wears a complex jewelled collar comprising four rows, two of small red enamel over-painted representations of stones, one of greenish white over-painted oblong plaques and below, a row of white enamel over-painted pendants, possibly

representing pearls (cf. **Pl. 106**). She wears a tunic and dress in a similar generic style to her husband’s toga. The hands of each figure are represented by generic rolls of costume. At shoulder height, between the couple on a dish-shaped stand, is a full-length bearded male figure who represents Hercules and is half turned to the left. He is dressed in the skin of the Nemean lion, acquired after the completion of the first of his twelve labours, and holds a club in his left hand. In his right hand he holds three apples of the Hesperides, over-painted in green enamel. The apples represent Hercules’ final task, plucked from the tree planted from the golden apples given to Zeus and Hera as a wedding present by the earth goddess Gaia, therefore representing symbols of marriage and fertility.

The inscription is unusual in that it deviates from the standard set of generic wishes for life and health apparent upon almost all other examples of cut and incised gold glass. Enclosed within the double-band border, it reads: ‘ORFITVS.ET CONSTANTIA.IN NOMINE HERCVLIS’, and translates as ‘Orfitus and Constantia, in the name of Hercules’. The male figure labelled as Orfitus has been identified by Alan Cameron as Memmius Vitrasius Orfitus, prefect of Rome in every January between AD 354 and 359 with the exception of AD 357.<sup>65</sup> As noted by Cameron, Memmius Vitrasius Orfitus is the only Orfitus known from the 4th century and, like the man depicted with Hercules in the gold glass, was a pagan.

In addition to this, the base includes a specific dedicatory inscription rather than the more usual generic wishes for life and health. Within the field, the inscription reads ‘ACERENTINO FELICES BIBATIS’, transcribed as ‘Acerentino felices bibatis’. Most recent authorities have assumed that ‘ACERENTINO’ is an error for the genitive ‘Acerentini’, and that Acerentini itself is a misspelling of the biform of ‘Acheruntius’ or ‘Acheronticus’, ‘of or pertaining to Acheron’ (the Underworld).<sup>66</sup> The inscription is usually treated as continuous, and translated as ‘Orfitus and Constantia, live happily in the name of Hercules, the





Plate 102 Vessel base with married couple (cat. no. 36)

conqueror of the Underworld'.<sup>67</sup> As early as 1859, however, Cavedoni, reinforced later in 1891 by Mommsen, noted that 'ACERENTINO' almost certainly refers to the small Roman town of Acерentia in southern Italy.<sup>68</sup> Cameron further noted that Acерentia had its own cult of Hercules and was a small, but flourishing town in the 4th century, set within a known wine-producing region.<sup>69</sup> Mommsen initially translated 'Acерentino felices bibatis' as 'enjoy the wine of Acерentia', and thus separated it from the inscription within the circular border.<sup>70</sup> Whilst Cameron accepted this translation, he also noted that if the inscriptions 'Orfitus et Constantia, In nomine Herculis' and 'Acерentino felices bibatis' were intended to be read as continuous, they would instead mean 'Orfitus and Constantia, may you live/drink in happiness in the name of Hercules of Acерentia'.<sup>71</sup> Both are plausible translations and, either way, refer to the small town of Acерentia (modern day Acерenza) situated in Italy on the border of Lucania and Apulia.

**References:** Passeri 1739–51, vol. 3, pl. XCII; Sanclemente 1808–9, vol. 3, 202; Garrucci 1858, 69–70, pl. XXXV.1; Garrucci 1864, 186–8, pl. XXXV.1; Cavedoni 1859, 34–5, pl. XXXV.1; Franks 1864, 383–4, no. 10; Deville 1873, pl. XLVIII; *CIL* XV.7036; Vopel 1899, 230, no. 133; Iozzi 1900, 28–30, pl. VI.3; Dalton 1901a, no. 608, pl. XXIX; Dalton 1901b, 225, pl. I; Pelka 1901, 104; Dillon 1907, pl. X; Leclercq 1923, cols 1853–4, no. 457, fig. 4548; Morey 1959, no. 316, pl. XXIX; Harden 1968, no. 90; Harden 1987, no. 155; Buckton 1994, no. 9b; Cameron 1996, 295–301.

### 36. Vessel base with married couple

Rome, c. AD 360–400

Provenance: probably from Rome

Dimensions: max. l. 72mm; max. w. 80mm; d. (of foot-ring, conjectured) 75mm; t. (of lower layer) 1mm; t. (of upper layer) 3mm

From the Matarozzi Collection; purchased from a Signor Mosca (1863)

BM Reg. no. BEP 1863,0727.11

**Technique:** cut and incised technique. The vessel has two layers of greenish colourless blown glass, a slightly concave pad base-disc and a low fire-polished foot-ring. The vessel base is lower than the foot-ring, which means that the bowl could not have been stable when placed on a flat surface. It is a fragment comprised of two separate fragments. The wall of the vessel has been broken away and the bottom carefully trimmed along the line of the base-disc, which has been broken and mended. The upper left of the base-disc is missing. The upper surface of glass is dulled and with some iridescence. There is also some discolouration on the underside and between the layers of the glass, partially obscuring the decoration, which is more visible when viewed on a black background. There are pin-prick bubbles in the glass and the gold leaf has many fine cracks.

**Description and comment:** two half-length busts of a married couple are displayed within a circular single line border. To the right, there is a beardless adult male with short curly hair. He wears a *toga contabulata* and holds a scroll with both hands; the first two fingers of his left hand are extended, perhaps incorporating the gesture of speech and teaching. The woman appears on the left, slightly concealed and overlapped by the left arm of the male figure. Her face is framed by the curls of her hair below a thin band or possibly a diadem, neatly drawn back in plaits and positioned on the crown of her head coiled in a net, taking the form of the *Scheitelzopf*. She is dressed in a tunic engraved with spirals to suggest an embroidered richly patterned dress and holds a scroll with both hands; the fingers of her left hand are extended in a similar manner to the male figure. A space-filling flower spray is depicted on either side of the couple.

At shoulder height between the two busts is a full-length depiction of a male winged figure, naked, beardless and with short curly hair. This figure has crossed legs and hands outstretched behind the heads of the couple. His face is turned towards the female figure, whilst his body is slightly orientated in the direction of the male. Originally identified by Garrucci as an angel, it has since been reinterpreted by



**Plate 103 Vessel base with married couple and Christ (cat. no. 37)**

Dalton as a winged Cupid depicted as a youth.<sup>72</sup> In the field, curved in accordance with the inner edge of the border, is the inscription '[...]NE. TZVCINVS. BIBITE', the text punctuated with heart-shaped leaves. Garrucci reads '[...] ANE'. The most convincing reading and translation of the inscription is '[...]ne Tzucinus drink/live'. Tzucinus thus constitutes the personal name of the male figure; presumably the obscured word preceding it named the female. Tzucinus is neither Roman nor Greek in origin. Cameron uses the unfamiliarity of the name to make the assumption that he could not have been a person of rank.<sup>73</sup>

**References:** Garrucci 1858, 57–8, pl. XXVIII.6; Garrucci 1864, 156, pl. XVIII.6; Garrucci 1872–80, vol. 3, 181, pl. 197.6; Vopel 1899, no. 125; Iozzi 1900, 24–5, pl. V.3; Dalton 1901a, no. 612, pl. XXVIII; Leclercq 1923, col. 1855, no. 469; Morey 1959, no. 311, pl. XXIX; Harden 1987, no. 156, 281.

### **37. Vessel base with married couple and Christ**

Rome, c. AD 360–400

Provenance: probably from Rome

Dimensions: max. l. 51mm; max. w. 51mm; d. (of foot-ring) 56mm

From the Tyszkiewicz Collection (1898)

BM Reg. no. BEP 1898,0719.1

**Technique:** cut and incised technique. The vessel base has two layers of greenish colourless blown glass with a markedly concave pad base-disc and a relatively high fire-polished foot-ring. It is a fragment; the wall of the vessel has been broken away and the bottom has been trimmed very closely along the line of the base-disc, all of which survives. Two strain cracks are visible in the base-disc. The gold leaf is well preserved, but with fine cracks throughout. The iconography is largely obscured (although not rendered illegible) from above by a whitish film and blistering between the two layers of glass. The iconography is clearer when the object is viewed against a black background. There are a number of pinprick bubbles in the glass.

**Description and comment:** two quarter-length busts are positioned within the single, perfectly circular wide band border. To the right, is a beardless man with short curly hair who is wearing a *toga contabulata* with a red enamel over-painted clavus on his left shoulder. To the left, is a woman, her hair neatly drawn back in plaits finishing upon her cranium coiled in a net, with a row of small curls on her forehead again in the *Scheitelzopf* style. She wears earrings and a necklace over-painted in green enamel, and is clothed in a richly patterned tunic and *palla*. The heads of both figures are slightly turned inwardly towards the centre of the field and each other. At shoulder height between the heads of the couple is a full-length adult male figure. Although not identified on this piece, the same figure is labelled as Christ on two other examples, crowning the paired portraits of Sts Peter and Paul.<sup>74</sup> His head is turned slightly to the right and he is short haired and beardless, giving him a youthful complexion. He is dressed in a tunic and pallium with an over-painted red clavus. His arms are outstretched and he holds in each hand a crown over the heads of both the man and woman. With the exception of **cat. nos 35–6**, the central diminutive figure on every other gold glass with a married couple takes this form.

In the field, curved in accordance with the inner edge of the circular border, is the generic inscription 'DVLICIS ANIMA VIVAS' – 'Dulcis anima vivas' – the most convincing reading being 'Sweet-heart may you live'.

**References:** Froehner 1898, 35, no. 102, pl. VI; Vopel 1899, no. 137, 47, fig. 3; Pelka 1901, 103; Dalton 1901a, no. 613, pl. XXVIII; Leclercq 1923, col. 1856, no. 481; Morey 1959, no. 310, pl. XXIX; Walter 1979, 84; Harden 1987, no. 157, 282.

### **General comments**

Generally, the compositional significance of paired portrait busts is not complex; just as the figures complement one another within their shared field, so they balance one another spiritually.<sup>75</sup> In the imperial sphere, paired profile busts were employed on contemporary coinage and





Plate 104 Lid of the Projecta casket from the Esquiline treasure, c. 380. British Museum, London, BEP 1866,1229.1

medallions and were intended to evoke familial solidarity and or imperial harmony between co-emperors, ultimately indicating that joint rule was not divided rule.<sup>76</sup> On this basis, the paired portrait-style depictions of secular men and woman are likely to have been married couples.

Many of the physical details and indicators of status attributed to married couples are generally the same as those found in the gold glass depictions of secular individuals, placing an emphasis on idealized wealth and status through associated features. Male figures are again depicted as short haired and beardless, whilst male costume is restricted almost exclusively to the *toga contabulata*, a mark of status and possibly wealth, often with (e.g. **cat. nos 35** and **37**) but occasionally without (e.g. **cat. no. 36**) the clavus on the right shoulder. The clavus, a strip of red linen applied to the right shoulder of the toga further acted as a specific indicator of status.<sup>77</sup> It is over-painted in red enamel in many instances on gold glass, lending it further prominence. Examples of the dalmaticus worn with the chlamys fastened by a large crossbow brooch, again a mark of high status, also occur on the portrait-style depictions of married couples.<sup>78</sup> As is the case with the portrait-style depictions of individuals, it occurs far less frequently than the *toga contabulata*, and no examples are present in the British Museum's collection.

Additional details pertaining to women include the elaborate patterns occurring upon many instances of female costume, indicating a richly embroidered fabric and thus wealth. Furthermore, female figures upon paired portraiture are depicted almost invariably wearing a wide jewelled collar and jewelled earrings, often (e.g. **cat. nos 35** and **37**) emphasized with over-painted enamel. Ostentatious displays of jewellery in this fashion were intended to provide a generic impression of idealized wealth and high status. Instances of depictions of married couples in gold glass on which the hands of both figures are not shown, exemplified by three of the four glasses (**cat. nos 34–5, 37**), are actually comparatively rare occurrences. Figures, both male and female, are more frequently shown with a scroll, the symbol of intellect, held at the top and bottom by both hands

respectively, the upper hand also incorporating the gesture of address and teaching as with Tzucinus in the British Museum example (**cat. no. 36**). Alternatively, a scroll may be held by the male alone, the female being empty handed. In other cases, the male figure may hold his hand in the gesture of speech whilst the female either carries a scroll or her hands are not shown, apparently reflecting upon his address. There are no instances of a female making speech gestures accompanied by a silent male carrying a scroll. Men and woman are rarely shown as equals regarding symbols of intellect; it is always the male rather than the female figure who assumes the position of prominence.

The superiority of the male in gold glass portrayals of married couples is further emphasized in the position the man holds within the field. Married couple glasses always show the man to the right of the field when the object is viewed from above. Often (e.g. with Tzucinus, **cat. no. 36**), but not exclusively (e.g. Orfitus, **cat. no. 35**), the male figure slightly overlaps the female. In only rare instances (the anonymous woman shown in **cat. no. 37**) does the woman slightly overlap the man. This formula, given the apparent superiority of the male indicated through the associated attributes of intellect granted in gold glass to him, often at the expense of the female, may perhaps indicate that the right of the field when viewed from above was considered in some way superior to the left. The same thing can be seen in images of Sts Peter and Paul, where Paul occupies the right-hand side of the field.

Full-length diminutive personifications are characteristic of portrait-style depictions of married couples in gold glass. These figures, most often identified with Christ (e.g. **cat. no. 37**), are suggestive of the religious inclinations of the couple and appear in the field between their heads. The symbolic formula showing a central diminutive figure was first produced in art relating to the Roman army.<sup>79</sup> It was employed with the intention of further enhancing the notion of *concordia* or harmony between the figures represented as paired portraits or portrait-busts by identifying the reward, belief or authority that united the pair.<sup>80</sup> This role was



**Plate 105** Gold necklace medallion from the Piazza della Consolazione treasure, medallion (5th century) and amulet (2nd–3rd century). Metropolitan Museum of Art, New York, inv. no. 58.12. Rogers Fund, 1958

increasingly performed by Christ in the period contemporary with gold glass production. Indeed, in the very early 5th century, Severianus of Gabala, in a text also transmitted later under the name of Petrus Chrysologus, Bishop of Ravenna, states that: ‘When the images of two persons, kings or brothers, are painted, we often notice that the painter, so as to emphasize the unanimity of the couple, places at the back of them a Concordia in female garb. With her arms she embraces both to indicate that the two persons, whose bodies are separated, concur in mind and will. So does now the Peace of the Lord stand in the centre to teach us how separate bodies may become one in spirit.’<sup>81</sup> On this basis, and in addition to the pairing of the figures, the portrait-style depictions of men and woman in gold glass may rightly be referred to as married couples.

The British Museum’s collection includes the only two known gold glasses (**cat. nos 35–6**) where the more usual diminutive figure of Christ is replaced by one overtly pagan in character. Cupid is shown on the vessel inscribed to ‘[...] ane and Tzucinus’ (**cat. no. 36**). He was associated throughout the Roman and Late Antique period with love and sexual desire. He was also worshipped as a fertility god, and was thus an apt choice of deity to symbolize marital unity.<sup>82</sup> The presence of Hercules with Orfitus and Constantia (**cat. no. 35**) might have more to do with the 4th-century cult of Hercules present in the town of Acerentia, noted in the unusual dedicatory inscription accompanying the image, rather than because of his suitability for the role of Concordia. Hercules does not reach out to embrace or crown both figures. However, he does carry the Apples of the Hesperides, representing symbols of

marriage and fertility and perhaps intended to convey the same notion of marital unity.

Late Antique gold glass portrait-style depictions of married couples again relate closely to those in other contemporary media and thus the pictorial language prevalent in 4th-century Rome. As with the portraits of individual people, however, it would also appear that a far narrower range of available types and individual elements in circulation were employed. The precise composition of secular married couples upon gold glass is far from unique. The paired busts of men and woman, slightly turned towards the centre, also occur in a range of media from the period, principally in the secular sphere. Examples include the roundel on the lid of the Projecta casket in the British Museum (**Pl. 104**) and the vast majority of sarcophagi *imago clipeata* from Rome. In more portable ‘minor’ arts, paired busts presented in the same formulaic manner as they occur in gold glass are also on a number of jet pendants, reported throughout the north-western provinces.<sup>83</sup> Nevertheless, although never appearing in gold glass, some depictions of married couples in other media, most frequently on sarcophagi *imago clipeata*, show the couple either clasping hands or the woman with her arms around the shoulders of her husband.<sup>84</sup> Occasionally, such as on the early 5th-century Piazza della Consolazione necklace medallion, the busts of married couples are presented in profile (**Pl. 105**).<sup>85</sup> However, profile busts of secular married couples never feature in gold glass.

In contemporary representations of married couples in other media, the costumes of men relate closely to those in gold glass. The range of elaborate jewellery as generic and





**Plate 106** Gold necklace from the Assiût treasure, Egypt, 6th century. Antikensammlung, Berlin, inv. no. 30219,505

idealized status symbols, most notably the wide jewelled collars worn by woman in gold glass, is also paralleled in many sarcophagi *imago clipeata* and on the Projecta casket (Pl. 104). Attributes of wealth and status are thus again a generic feature of the artistic language of 4th-century Rome and not specific to gold glass. An almost identical collar to those depicted in 4th-century art exists amongst the objects of the Assiût Treasure from Egypt (Pl. 106), in all probability a conflation of several smaller hoards dated from between the 3rd and 7th centuries.<sup>86</sup> Nevertheless, sarcophagi *imago clipeata* portrait-style depictions of married couples from Rome demonstrate a higher degree of variation with regard to female costume and hairstyle than is presented in gold glass. The most common difference is the occurrence of marriage-specific female costume in the form of the *flammeum*, the wedding veil of the Roman marriage ceremony.<sup>87</sup>

The simultaneous coronation of married couples by a smaller diminutive figure rarely occurs in other examples from the period. The formula is employed on a single sarcophagus from Rome, although here it is the secular couple who are depicted full-length and the central Christ appears as a quarter-length bust.<sup>88</sup> A full-length figure performing the simultaneous coronation of a married couple appears on the Piazza della Consolazione marriage necklace (Pl. 105). This figure is not accompanied by an identifying inscription, but has been identified with Christ, albeit on the basis of its high degree of similarity with gold glasses.<sup>89</sup> Cupid depicted as a putto appears as a central diminutive figure on the 4th-century Brescia diptych, illustrating the mythical marriage of Diana and Endymion, where he simultaneously crowns the couple.<sup>90</sup> The coronation of a lone emperor by Victory has a long tradition on Roman coinage. The simultaneous coronation of paired busts and full-length depictions of emperors by full-length central figures, in a very similar manner to that portrayed on gold glass, occur on rare issues of the late 2nd to early 4th centuries, the period immediately preceding the production of gold glass.<sup>91</sup> Despite apparently appearing only in rare

instances in media other than gold glass, the feature was nevertheless a standard element drawn from the pictorial language already in circulation in 4th-century Rome.

In almost every instance in other contemporary media where a central diminutive figure is not included, as with gold glass, it is the male who is shown to the right of the field as the image is viewed. Likewise in gold glass, the male figure is also shown as the superior of the pair through the employment of the same associated attributes of intellect. However, on the Piazza della Consolazione marriage necklace, for instance, it is the man who appears to the left of the field when it is viewed from above, and the female who appears to the right. This means that the male, apparently the superior of the couple, is crowned by the right hand of Christ, the hand deemed the more important of the two. In contrast, in gold glass it is the apparently less superior female who is crowned by the right hand of Christ. The diminutive figure of the simultaneously crowning Christ, although present in some instances, is not a standard feature of married couple portraits in other media. It is therefore possible that the more common formula for depicting married couples in contemporary art without an additional diminutive Christ or other deity was adhered to in gold glass, and the crowning figure was inserted as an additional element. This makes examples of gold glass showing paired portraits being crowned simultaneously by a central figure a conflation of different elements existing within the pictorial language of 4th-century Rome.

#### **D. Portrait-style family groups (cat. nos 38–9)**

Gold glass portrait-style depictions of secular groups produced in the linear-style cut and incised technique occur on both sandwich-glass vessel bases and gilded plaques in Morey's catalogue.<sup>92</sup> In every instance, glasses attributed to this category illustrate a paired adult man and woman, like the married couples discussed above, accompanied by one or more children. In no instance does the depictions of secular groups consist of any other formula such as groups of



Plate 107 Vessel base with family group (cat. no. 38)

adults or a single adult with one or more children. They have thus been logically referred to in past literature as family groups.<sup>93</sup> The British Museum's collection includes two such examples.

### 38. Vessel base with family group

Rome, c. AD 360–400

Provenance: probably from Rome

Dimensions: max. l. 81mm; max. w. 83mm; t. (of lower layer) 1mm; t. (of upper layer) 3mm

From the Matarozzi Collection; purchased from a Signor Mosca (1863)

BM Reg. no. BEP 1863.0727.5

**Technique:** cut and incised. The base is formed from two layers of greenish colourless blown glass with a slightly concave pad base-disc; no portion of the foot-ring survives. It is a fragment as the wall of the vessel has been broken away and the bottom has been closely trimmed roughly in accordance with the iconographic border. The right and upper left of the outside edge of the border and also most probably the foot-ring, which would have needed to be exceptionally high to allow the vessel to stand freely, has been trimmed away. The gold leaf is well preserved, but with fine cracks throughout. Some minor iridescence is present on both surfaces, but this does not inhibit the view of the image.

**Description and comment:** three half-length busts of a family group are depicted within the circular reciprocal border of triangles. To the right of the field is an adult male, short haired and beardless, turned slightly inwards towards the centre. He wears a *toga contabulata*. His left hand, with the first two fingers extended, appears across his chest in the gesture of speech and address. To the left, there is an adult female, turned slightly inwards, and dressed in a tunic and *palla*, a wide jewelled collar, necklace and earrings. In a generic display of the *Scheitelzopf*, her face is framed by the curls of her hair, which is plaited over the cranium and

behind the head, terminating in projecting rolls at the nape. A female child is portrayed between the pair. Positioned frontally, the girl is dressed in a similar manner to her mother, but lacks the wide jewelled collar and has her hair drawn up in a knot, or possibly a ring, on the top of her head. Above the shoulders and between the heads of the two adult figures is the *chi-rho* monogram, flanked by two dots. Above the *chi-rho*, there is a floating crown in the form of a wreath with *lemnisci*.

In the field, curved in accordance with the circular border, is the inscription: 'SEBERECOSMASLEAZES ES', translated as 'Severa [or Severus] Cosmas Lea, drink/live'. Vopel suggests that the name of the child, Lea, indicates that the family is of Jewish origin.<sup>94</sup> Dalton read 'Sebere' as 'Severa', and hence the name of the woman who is shown directly underneath. Garrucci, however, read it as the vocative of 'Severus', taking 'Cosmas' as the female name and interpreting the inscription to be a generic wish for life and health, supported by the final word 'Zeses' ('life'), and not simply as name labels associated with each figure.<sup>95</sup>

Depicted as busts, the adult figures are portrayed in exactly the same manner and with the same physical attributes indicative of idealized wealth and status as the paired busts of married couples. Gold glass portrait-style depictions of married couples, so closely akin to the British Museum example of the family group that they are perhaps likely to be the product of the same hand, exist in a significant number of instances. A good example is in the Bibliothèque Nationale, Paris (Fig. 24).<sup>96</sup> On this piece, even the format of the inscription is identical, noting the names of the figures followed by 'ZESES', the Latinized Greek for 'live'.<sup>97</sup>

The girl depicted above represents an additional element superimposed on the standard formula for portraying married couples. Richly adorned in a similar manner to her mother, she is paralleled almost identically upon a second piece whose present location is unknown, illustrated by



Garrucci, which also depicts a family group with the inclusion of a fourth figure, a boy.<sup>98</sup> It is noticeable that in almost all the examples of family group portraiture in Morey's catalogue, which include both a boy and a girl, the male child appears to the left beneath the woman, whilst the female child appears to the right, next to the man.

**References:** Sanclemente 1808–9, vol. 3, pl. XLIV.4; D'Agincourt 1823, 26, pl. XII; Franks 1864, 383, no. 9; Garrucci 1858, 59, pl. XXIX.5; Garrucci 1864, 159, pl. XXIX.5; Garrucci 1872–80, vol. 3, 183, pl. 198.5; Vopel 1899, 83, no. 119; Dalton 1901a, no. 610, pl. XXVIII; Pelka 1901, 154; Leclercq 1923, col. 1855, no. 463; Morey 1959, no. 315, pl. XXIX.

### 39. Vessel base with family group

Rome, c. AD 360–400

Provenance: probably from Rome

Max. l. 90mm; max. w. 104mm; d. (of foot-ring) 130mm; t. (of lower layer) 2mm; t. (of upper layer) 3mm

From the Matarozzi Collection; purchased from a Signor Mosca (1863)

BM Reg. no. BEP 1863,07277

**Technique:** cut and incised technique. The base has two layers of greenish colourless blown glass with a slightly concave pad base-disc and a low fire-polished foot-ring. The vessel base is lower than the foot-ring, which means that the bowl could not have been stable when placed on a flat surface. It is a fragment; the wall of the vessel has been broken away and the bottom has been crudely trimmed along the line of the base-disc. The foot-ring is largely broken and remains only in small portions. The glass is heavily cracked on the reverse. Morey depicts the piece as two separate fragments, but it has since been repaired (**Fig. 25**). Heavy discolouration resultant of the semi-circular cracking obscures the scene, which is only clearly visible under very close inspection. Some iridescence and bubbles are present in the glass.

**Description and comment:** the double band border is surrounded by foliate patterns. Inside it are the full-length



**Figure 24** Garrucci's illustration (1872–80) of a gold glass depicting a married couple. Bibliothèque Nationale, Paris, Cabinet des Médailles, inv. no. 65.5412

portrait-style depictions of a male adult and female with a child of each gender, constituting a family group, standing between two trees. The man stands to the right of the field, half turned towards the centre. He is beardless and wears a *toga contabulata* and sandals. His right hand rests on the shoulder of the girl standing before him. His left hand rests on the left shoulder of the woman. The girl carries a scroll and wears a paenula or planeta (a cloak) with embroidered vertical stripes down the front and embroidered shoes. Her left hand is extended towards the boy. To the left stands the woman, half turned to the right, her face framed by the curls of her hair. She wears a narrow necklace and is dressed in a richly embroidered tunic. She rests her left hand on the left shoulder of the boy. He wears a long tunic with circular ornaments on the left shoulder and knees and boots. In his left hand, he holds a partly opened scroll, incised to imitate text, and his right hand is extended as if speaking. Between

**Plate 108** Vessel base with family group (cat. no. 39)





Figure 25 Garrucci's illustration (1872–80) of cat. no. 39

the heads of the two children is a Christian *chi-rho* monogram.

The family is shown standing between two trees. This format is also used in gold glass portraits of saints and scenic representations of specific biblical episodes. It was possibly intended to symbolize paradise, or perhaps purity in the form of the *hortus conclusus* or enclosed garden.<sup>99</sup>

In the field between the heads of the two adult figures is the inscription: 'POMPEIA NETEOD ORAVIBATIS', 'Pompeiane T[h]eodora vibatis', translated as 'Pompeianus, Theodora live'. The names most probably relate only to the adult figures. Cameron tentatively suggests an identification with Insteius Pompeianus, suffect consul during the early 4th century and known to have been a Christian from a poem on his tombstone.<sup>100</sup> However, a suitable identification for any of the figures depicted is not apparent.

**References:** Sanclemente 1808–9, 192; Garrucci 1858, 58–9, pl. XXIX.4; Garrucci 1864, 158–9, pl. XXIX.4; Garrucci 1872–80, vol. 3, 183, pl. 198.4; Franks 1864, 383, no. 8; Kraus 1882–6, vol. 1, 385, fig. 131; Kraus 1896, vol. 1, 167; Vopel 1899, no. 116; Iozzi 1900, 25, pl. V.4; Dalton 1901a, no. 609, pl. XXIX; Pelka 1901, 155; Leclercq 1923, cols 1822 and 1854, no. 460, fig. 4549; Morey 1959, nos 308–9, pl. XXIX.

Plate 109 Family group, fresco, 3rd century. Catacombs of San Gennaro, Naples



## General comments

In Morey's catalogue, full-length standing portrait-style portrayals of secular family groups in gold glass occur far less frequently than busts. Nevertheless, most of the same conventions are used regarding the locations of figures in the field according to gender, the appearance of the figures themselves and the emphasis placed upon wealth and status in the choice of costume and associated attributes related to literacy. Despite appearing upon the left of the field in front of what we assume is his mother, the male child is still represented with an air of superiority over his sister. Whilst the female child carries a scroll, her brother's scroll is unfurled as he gestures to her in the mode of address and teaching.

On the pieces in the British Museum and on other cut and incised gold glasses in Morey's catalogue, central diminutive figures simultaneously crowning those portrayed in the field are not an associated attribute of any family group depictions. Instead, as on rarer examples of married couple portrayals, single floating crowns applicable to the whole group are most commonly shown, followed by scrolls symbolizing intellect, quatrefoils, dots and other leaf spray space fillers. Both the British Museum glasses also depict the Constantinian *chi-rho* monogram, suggesting the religious inclination of the group shown.

Contemporary representations of family groups in other media are rare. They do not occur upon any sarcophagi *imago clipeata* known to the author from published sources and are largely absent from catacomb frescoes as well as more minor portable objects. A singular example is, however, present in the Catacombs of San Gennaro in Naples (Pl. 109).<sup>101</sup> This depiction shares many of the traits observable upon gold glass examples: the floating crown, the gender-informed composition and the presence of candlesticks upon either side of the group, perhaps analogous to the concept of the *hortus conclusus*.<sup>102</sup> The costume and general appearance of the figures differ greatly from those upon gold glass. As with the portrait-style depictions of married couples in gold glass, this might suggest that a greater range of basic iconography was employed for similar portrayals in other contemporary media.

## Notes

- 1 Beretta and Di Pasquale 2004, no. 4.16.
- 2 Brilliant 1991, 6–7; Grabar 1969, 60; West 2004, 21–30.
- 3 Fleischer 2001, 57.
- 4 Grabar 1969, 65.
- 5 Ibid., 65–6.
- 6 Harden 1987, no. 152, 276.
- 7 Victoria & Albert Museum, inv. no. 1052.1868; Morey 1959, no. 353, pl. XXI.
- 8 Arce 1984; Faider-Feytmans 1984; Veny 2003.
- 9 Pollentia: now in the Museo Arqueológico Nacional, Madrid (inv. no. 1927/64/7); Athens: (now in the Musée de l'Armée, Paris: Faider-Feytmans 1984, fig. 5); Flobecq, Belgium (now in the Musée Cinquantenaire, Brussels, inv. no. B569).
- 10 Arce 1984, 36.
- 11 Elsner 1998, 97.
- 12 See Heintze 1964, figs 26.1–2, 4.
- 13 Morey 1959, no. 237, pl. XXV.
- 14 Crum, in Breck 1927, 353.
- 15 See Harden 1987, no. 153.



- 16 Albizzati 1914, 253.  
 17 Morey 1942, 216; Harden 1987, 265.  
 18 For a general introduction see: Walker and Bierbrier 1997, *passim*.  
 19 Prag 2002, 59–60.  
 20 *Ibid.*, 59–62.  
 21 Vatican Museum, inv. no. 700 (ex-469): Morey 1959, no. 3, pl. I) and Panfilo (Morey 1959, no. 222, pl. XXIV).  
 22 Pausch 2003, 185.  
 23 Croom 2000, 33.  
 24 Ball 2005, 30.  
 25 Croom 2000, 51; Wild 1968, 225–6; chlamys in Cleland *et al.* 2007, 137–8.  
 26 Cf. Dalton 1901a, nos 227–31 (silver), 256–37 (gilded copper alloy) and 264 (gold).  
 27 Dalton 1901a, no. 605; Morey 1959, no. 300.  
 28 Brilliant 1963, 207; L'Orange 1949, 110–44.  
 29 For depictions of philosophers see: Hanfmann 1951, 221.  
 30 Perret 1851–5, vol. 5, pl. LXXIII, fig. 6; Garrucci 1872–80, vol. 6, 155, pl. 488.20.  
 31 Dalton 1921, 142; Auth 1996, 103.  
 32 Vatican Museum, inv. no. 620 (ex-0012): Morey 1959, no. 42, pl. VII.  
 33 Cameron 1996, 298.  
 34 Whitehouse 2003, 94–5, no. 1043.  
 35 Lawson 1976, 247.  
 36 Garrucci 1872–80, vol. 3, pl. 199.1; Sotheby's 1987, no. 124.  
 37 Whitehouse 2002, no. 833.  
 38 Croom 2000, 89.  
 39 See Morey 1959, no. 237, pl. XXV.  
 40 *Palla* in Cleland *et al.* 2007, 136–7.  
 41 Harris 1989, 272; Gamble 1995, 4–5.  
 42 See Studer-Karlen 2012, fig. 104.  
 43 Vatican Museum, inv. no. 638 (ex-221): Morey 1959, no. 193, pl. XXIII.  
 44 Jones, Martindale and Morris 1971, 50.  
 45 Croom 2000, 67.  
 46 Julian the Apostate, *Misopogon*, 338B-D.  
 47 *CTh.* 14.10.4 (trans. in Pharr 1952, 415).  
 48 *CTh.* 14.10.1 (trans. in Wilson 1938, 92; see also Pharr 1952, 415).  
 49 Buonarruoti 1716, pl. XIX, fig. 1; Garrucci 1872–80, vol. 3, pl. 200.4.  
 50 The term is Morey's (1959).  
 51 Dalton 1901a, no. 604.  
 52 Creighton 2000, 210.  
 53 Jones, Martindale and Morris 1971, 50.  
 54 Socrates, *Ecclesiastical History*, Book III Chapter 15, *Martyrs at Merum in Phrygia, under Julian* (trans. in Schaff 1886), 164–5.  
 55 See Christern-Briesenick 2003, no. 305, pl. 79.  
 56 *Ibid.*, no. 245, pl. 65.  
 57 *Ibid.*, no. 49.5, pl. 17.  
 58 *Ibid.*, no. 548, pl. 135, and no. 73, pl. 27.  
 59 Dresken-Weiland 1998, no. 33, pl. 14.  
 60 See Wiseman 1859, 208; Dalton 1901b, 225; Harden 1987, nos 155–7; Grig 2004, 207.  
 61 Harden 1987, no. 155; Buckton 1994, no. 9b.  
 62 Morey 1959, no. 315.  
 63 See Calza 1972, no. 23; Weitzmann 1979, no. 363.  
 64 Weitzmann 1979, no. 268.  
 65 Cameron 1996, 300.  
 66 *Ibid.*, 296.  
 67 Harden 1987, no. 155; Buckton 1994, no. 9b.  
 68 Cavedoni 1859, 34–5; *CIL* XV.7036.  
 69 Cameron 1996, 296–7.  
 70 *CIL* XV.7036.  
 71 Cameron 1996, 298.  
 72 Angel: Garrucci 1858, 57–8; other interpretations: Dalton 1901a, no. 612; Walter 1979, 84.  
 73 Cameron 1996, 300.  
 74 Vatican Museum, inv. no. 729 (ex-485): Morey 1959, no. 50, pl. VIII; and Garrucci 1872–80, vol. 3, pl. 184.3, now lost; see also Verona, Museo di Castelvecchio, inv. no. 4567: Zanchi Roppo 1969, no. 258.  
 75 Vikan 1990, 148.  
 76 See Kent 1978, nos 156, 188, 219, 258, 276, 351, 383, 389, 457, 480, 523, 578, 643, 707; Weitzmann 1979, nos 31–2; Walter 1971, 276.  
 77 For the clavus, see Cleland *et al.* 2007, 35.  
 78 See Barkóczy 1988, no. 550; Morey 1959, no. 99, pl. XVII.  
 79 Walter 1979.  
 80 Reekmans 1958, 32–7; Vikan 1990, 148; Kantorowicz 1960, 4–5.  
 81 *Hermes* XXIX: Petrus Chrysologus, *Sermo* CXLIX; translated in Kantorowicz 1960, 9.  
 82 For Cupid see, Howatson 1989, 162.  
 83 Hartley 2006, no. 106; Hagen 1937, 77–144.  
 84 Dresken-Weiland 1998, no. 148, pl. 57; *ibid.*, no. 20, pl. 9 and no. 150, pl. 60.  
 85 Metropolitan Museum of Art inv. no. Rogers Fund 58.12: Weitzmann 1979, no. 281.  
 86 On the treasure see, Dennison 1918; the collar is now in the Staatliche Museen in Berlin (inv. no. 30219, 505): Weitzmann 1979, no. 284.  
 87 Vikan 1990, 157; Follette 2001.  
 88 Wilpert 1932, pl. LXXIV.3.  
 89 Weitzmann 1979, 307–8, no. 281.  
 90 Volbach 1976, no. 66.  
 91 Engemann 1968–9, fig. 8c–f: the coins depict the emperors Commodus (AD 161–92); Carinus (AD 283–5); Diocletian (AD 284–305); Licinius (AD 308–24); see also Failmezger 2002, pl. 16, nos 275 and 6LILII.  
 92 E.g. Vatican Museum, inv. no. 787 (ex-344): Morey 1959, no. 97, pl. XVI.  
 93 See Wiseman 1859, 208; Dalton 1901b, 237; Harden 1987, 267; Grig 2004, 205.  
 94 Vopel 1899, 83, no. 119.  
 95 Dalton 1901a, no. 610; Garrucci 1872–80, vol. 3, 183.  
 96 Bibliothèque Nationale, inv. no. 65.5412: Morey 1959, no. 397, pl. XXXIII.  
 97 Other similar pieces are in the Dutuit Collection in the Petit Palais, Paris (Morey 1959, no. 418, pl. XXXIII), and the Museo Nazionale, Florence (Morey 1959, no. 259, pl. XXVI).  
 98 Garrucci 1872–80, vol. 3, pl. 199.1; Sotheby's 1987, no. 124.  
 99 Filippini 2000, 129.  
 100 Cameron 1996, 300; Jones, Martindale and Morris 1971, 713.  
 101 Garrucci 1872–80, vol. 2, pl. 101.2.  
 102 Noga-Banai 2008, 73–4.

# Catalogue of the Gold Glasses

## Part 4: Miscellaneous Scenes of Jewish, Pagan and Everyday Life and Inscriptions (Cat. Nos 40–55)

Often overlooked by scholars in favour of pieces with overtly Christian iconography, the wide array of other image types occurring on gold glass includes examples with explicit Jewish imagery, mythical heroes and pagan subjects, in addition to purely secular subjects such as sporting and recreational scenes as well as varied displays of everyday life. There are also examples that bear only secular inscriptions without any other visual embellishment. The British Museum's collection is highly eclectic in nature; nevertheless, it does include nine gold glasses depicting subjects other than portraiture and Christian scenes with at least one example from each of subjects noted above. Although the British Museum gold glasses in this category are relatively few in number, they are representative of the range published by both Morey and Garrucci.

### A. Jewish (cat. no. 40)

#### 40. Vessel base with Jewish symbols

Rome, c. AD 360–400

Provenance: probably from Rome

Dimensions: max. l. 64mm; max. w. 79mm; d. (of foot-ring, conjectured) 105mm; t. (of lower layer) 2mm; t. (of upper layer) 4mm

From the Matarozzi Collection, purchased from Signor Mosca (1863)

BM Reg. no. BEP 1863,0727.10

**Technique:** cut and incised technique. The base is formed from two layers of greenish colourless blown glass with a slightly concave pad base-disc and a low fire-polished foot-ring. It is a fragment; the wall of the vessel has been broken away and the bottom has been trimmed roughly along the line of the base-disc, slightly over half of which has been lost. The piece is cracked vertically. The gold leaf is well preserved, but with fine fissures throughout. Some iridescence is present on both surfaces and there is some minor discolouration. Neither of these factors, however, obscures the view of the image. There are some internal cracks and many pinprick bubbles in the glass.

**Description and comment:** this vessel base is the only example in the British Museum clearly identifiable as being Jewish in nature. The border is formed from a circular double band enclosing an inscription. Inside this, the field is divided into two by a single horizontal line. The centre of the bottom half of the field contains a seven-branched candlestick with foliate branches, the menorah. To its left is an amphora or oil jar, beside which is a single dot, a circular cake or unleavened bread (with a leaf spray below) and a horn. To the right of the candlestick there is a citrus fruit as well as a bundle of branches, to the right of which is a single dot. The upper half of the field has been broken away and the remaining iconography is illegible. The remains of the fragmentary inscription reads '[...]LV.PIE.ZESES.[...]'. The only identifiable phrase is the generic and frequently occurring Latinized Greek 'Drink that you may live'.

The iconography is unmistakably Jewish, as seen in the symbols depicted: (from left to right) the oil jar, unleavened bread, ram's horn (*shofar*), menorah, citrus fruit (*ethrog*) and bundle of palm, willow and myrtle branches (*lulav*). These



Plate 110 Vessel base with Jewish symbols (cat. no. 40)



items are related to specific Jewish celebrations: for example, the *lulav* and *ethrog* were both displayed on the Feast of the Tabernacles (Sukkoth), whilst the *shofar* was blown at New Year. As an ensemble they signify the unity of Jewish religious festivals and allude to the messianic hope for the restoration of the Temple.<sup>1</sup>

Gold glasses with distinctly Jewish symbolism form a concise group of 14 surviving cut and incised type objects in Morey's catalogue. A more detailed catalogue of solely Jewish gold glasses has been compiled by Schüler.<sup>2</sup> The vast majority of pieces take the form of vessel bases and incorporate the same Jewish iconographical elements as illustrated on the British Museum piece. They invariably include the Torah shrine (Pl. 111), depicted as an open cabinet with scrolls arranged on its shelves and flanked either by doves or, more commonly, by lions (Pls 112–13).<sup>3</sup> It is thus almost certain that the Torah shrine flanked by lions or doves, which symbolized the centrality of the Bible to Jewish belief, appeared in the missing upper portion of this

vessel base. Likewise, where inscriptions occur on complete bases with Jewish iconography they tend to be wholly generic in nature, taking the form of wishes for life and good health akin to the glasses discussed in the previous chapters. It is therefore probable that the now lost inscription constituted some form of standard good wish.

Schüler included in his catalogue one diminutive medallion, which is part of the Vatican Museum collection.<sup>4</sup> It depicts a *shofar* flanked by a *lulav*, indicating that gold glass diminutive medallion-studded bowls with explicit Jewish symbolism must also have existed.<sup>5</sup> Flanking the Torah shrine and also occasionally the menorah, lions and doves also exist on individual diminutive medallions on the majority of Jewish gold glass vessel bases. On Jewish diminutive medallion-studded bowls, these elements can thus be reasonably postulated as again appearing on either side of the Torah shrine and menorah. The lion motif has been discussed in the context of the St Severin bowl (cat. no. 16) as being related to the Christian biblical episode of

Plate 111 Vessel base fragments with Jewish symbols, 4th century. Metropolitan Museum of Art, New York, inv. no. 18.145.1a, b. Rogers Fund 1918



Plate 112 Vessel base with Jewish symbols including the Torah shrine flanked by two doves, 4th century. Israel Museum, Jerusalem, inv. 66.36.14





**Plate 113** Vessel base with Jewish symbols including the Torah shrine flanked by two lions, 4th century. Israel Museum, Jerusalem, inv. no. 66.36.15

Daniel in the den of lions. Doves often occur on gold glass vessel bases flanking the full-length portrait-style depictions of female saints and associated with the diminutive medallion sequence of Noah and the ark.<sup>6</sup> Like other elements such as the serpent-entwined tree, the lion and dove, diminutive medallions form apparently interchangeable stock elements applicable to a variety of scenes from different religions.

Schüler argued that the St Severin bowl was Jewish.<sup>7</sup> However, as I have already discussed, it is clearly Christian in nature. Nevertheless, it is possible that Old Testament images without the addition of the rod-wielding figure (argued above as representing Christ), could have featured on Jewish diminutive medallion-studded vessels, perhaps alongside more explicit Jewish symbols. Indeed, Old Testament episodic imagery in a Jewish context does occur in the mid-3rd-century synagogue at Dura-Europos in Syria.<sup>8</sup> If this was the case, then gold glass vessel bases with Old Testament scenes without the rod-wielding figure may have been interpreted as Jewish or acceptable to Jews. In this respect it is indeed notable that the inscriptions that are associated with Old Testament episodic images, where they do occur, are all of a generic nature and do not relate to the Christian context of the scene depicted.

A single gold glass in the Vatican Museum is a possible demonstration of the idea that unequivocally Jewish episodic scenes were acceptable to Jews in 4th-century Rome.<sup>9</sup> The piece itself is in a fragmentary and highly abraded condition. Nevertheless, it clearly depicts a temple surrounded by a garden incorporating specific Jewish symbols. The image has been identified by multiple authors as depicting the Feast of Tabernacles.<sup>10</sup> However, very few explicit instances of 4th-century Jewish art or art produced for the Jewish market have been recorded from Rome; the few instances on gold glass represent the most numerous examples of explicit Jewish iconography in any 4th-century

medium. Where such scenes do occur in other contemporary media from Rome, such as the Cubiculum II fresco in the Villa Torlonia catacomb, they invariably consist of the same standard collection of symbols depicted on the vast majority of gold glasses.<sup>11</sup> Gold glasses with explicitly Jewish imagery thus relate closely to the artistic language of 4th-century Rome that was employed in Jewish contexts.

**References:** Sanclemente 1808–9, vol. 3, pl. XLII.10; Garrucci 1858, 14, pl. V.4; Garrucci 1864, 43, pl. V.4; Garrucci 1872–80, vol. 6, 158, pl. 490.4; Vopel 1899, no. 164; Iozzi 1900, 14–15, pl. II.1; Dalton 1901a, no. 615, pl. XXVII; Leclercq 1923, col. 1857, no. 509; Frey 1936, no. 519; Goodenough 1953, vol. 2, III, no. 970; Morey 1959, no. 346, pl. XXX; Schüler 1966, 60, no. 9, fig. 20.

## B. Pagan (cat. no. 41)

### 41. Diminutive medallion with Hercules and the Cretan bull

Rome? c. AD 360–400

Provenance: Garrucci states that it was part of the British Museum's collection by 1858

Dimensions: max. l. 17mm; max. w. 19mm; t. (bottom layer) 5mm; t. (top layer) 1mm

BM Reg. no. BEP OA 4309

**Technique:** cut and incised technique. This is a single medallion from a medallion-studded vessel. The greenish colourless glass vessel wall has been closely trimmed to the line of the cobalt blue glass medallion; it has a flat obverse and concave reverse. Some of the iconography and almost the entire border have been trimmed away. A number of fine cracks are evident in the gold leaf. There is a collection of pin-prick bubbles in the glass.

**Description and comment:** in the centre is a scene not identified by either Dalton or Morey.<sup>12</sup> Only very small fragments of what appear to be a single band circular border remain. In the field to the right is a bull shown in profile, reared on its hind legs with his head turned backwards and facing left. In the left field is a short-haired and beardless male figure, naked with the exception of a baldric over his left shoulder. His body is quarter-turned to the left, whilst his head is quarter-turned in the opposite direction to face the bull. The figure holds a cord in his hands, apparently attached to the bull. The right arm of the figure and cord has been lost through a chip to the surface.

The scene was first recognized by Garrucci as the mythical episode of Hercules and the Cretan bull, the seventh labour from the twelve labours of Hercules.<sup>13</sup> The episode certainly does not represent Mithras who was commonly depicted in 4th-century Roman art since he is nearly always shown in a standardized format wearing oriental costume with a Phrygian cap and cloak, whilst cutting the throat of the bull beneath him.<sup>14</sup> However, this depiction of the seventh labour of Hercules can be compared to other contemporary 3rd- and 4th-century objects from Rome and across the western Roman Empire. Examples include sarcophagi and also a detail from the mosaic of the twelve labours of Hercules from Liria in Spain.<sup>15</sup>





Plate 114 Diminutive medallion with Hercules and the Cretan bull (cat. no. 41)

This scene was paralleled closely in other contemporary media, and a further gold glass medallion in the Ashmolean Museum unmistakably depicts Hercules' third labour, the capture of the Ceryneian Hind (Pl. 115).<sup>16</sup> It may also be identified as an individual element on a medallion in the Museo Nazionale, Florence.<sup>17</sup> A part of Hercules' eleventh labour, the Apples of the Hesperides, might also be present as a composite part of a larger medallion sequence. In other media, including the contemporary catacomb fresco in the Via Latina catacomb in Rome, the tree laden with the golden apples and guarded by the dragon Ladon is shown as entwined by a serpent.<sup>18</sup> An interchangeable stock element forming part of the Christian Fall of Man sequence, and also possibly part of the episode of Daniel and the dragon of Babylon, gold glass medallions displaying the serpent-entwined tree may be equally applicable to gold glass medallion depictions of the Apples of the Hesperides. It is reasonable to suggest that gold glass medallion-studded vessels similar to the St Severin bowl depicting the twelve labours of Hercules must have existed. Episodes from the twelve labours of Hercules also occur on gold glass vessel bases,<sup>19</sup> as do other pagan and mythological subjects featured in Morey's corpus and which include Venus, Achilles and the daughters of Lycomedes, Cupid and various personifications.<sup>20</sup>

**References:** Garrucci 1858, 71, pl. XXXV.3; Garrucci 1864, 194, pl. XXXV.9; Vopel 1899, 97, no. 45; Iozzi 1900, 27–8, pl. VI.2; Dalton 1901a, no. 602, pl. XXXI; Leclercq 1923, col. 1849, no. 387, fig. 4543; Morey 1959, no. 324, pl. XXX.

### C. Daily life (cat. nos 42–3)

#### 42. Vessel base with gladiator (retiarus)

Rome?, c. AD 360–400

Provenance: probably from Rome

Dimensions: max. l. 81mm; max. w. 72mm; d. (of foot-ring, conjectured) 55mm; t. (of lower layer) 4mm; t. (of upper layer) 3mm

Formerly in the Castellani Collection; from the Tyszkiewicz Collection (1898)

BM Reg. no. BEP 1898,0719.2

**Technique:** cut and incised technique. The base is formed from two layers of glass. The pad base-disc is copper blue in

colour whilst the upper layer is of greenish colourless glass. The base-disc is complete; however, the down-turned foot-ring has been closely grozed away to make the reverse flat. It is a fragment; the wall of the vessel has been broken away, but not in accordance with the base-disc. A significant portion of vessel wall still survives, indicating that the piece was originally a shallow bowl or cup. The gold leaf is well preserved, but with fine cracks throughout. Both surfaces are covered with minor dirt encrustation and a light milky iridescent film, neither of which affect the iconography.

There are a few pin-prick bubbles in the colourless glass, but many such bubbles and impurities occur in the blue glass.

**Description and comment:** this is the only gold glass in the British Museum's collection to depict a secular scene associated with recreation and sport. It shows a gladiator with the distinctive arms and clothing of the type known as the *retiarus* (the lightly armed net man). He is placed in the centre of the field as an adult male figure, full length, short haired and beardless, advancing to the left. He holds a dagger in his left hand and a trident in his right. He wears the normal gladiatorial loincloth (*subligaculum*), here shown with indented edges, and his lower legs are protected by

Plate 115 Diminutive medallion with Hercules and the Ceryneian Hind, 4th century. Ashmolean Museum, Oxford, AN2007.16



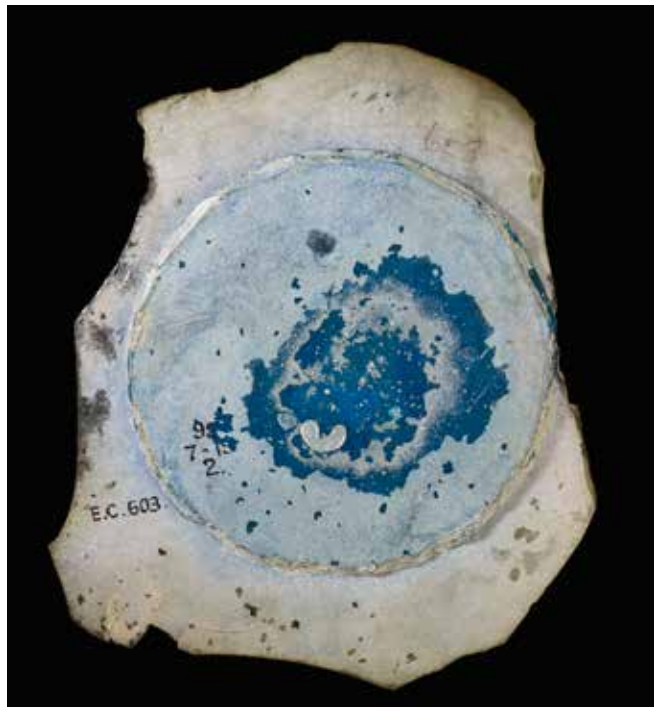


Plate 116 Vessel base with gladiator (cat. no. 42)

padded gaiters. The top of the trident, loincloth and leggings were seen by both Dalton and Morey as being executed in silver foil in order to indicate the white colour of the textile and the silver colour of the iron/steel.<sup>21</sup> On close examination, however, these elements are actually gold leaf over-painted with white enamel detail. The gladiator wears a broad belt outlined and ornamented in over-painted red enamel. His upper body is bare, with the details of his torso also highlighted in over-painted red enamel. His right arm is protected with padding bound with thongs (*manica*), to the upper part of which is fastened a piece of defensive armour known as a *galerus* which was exclusive to the *retarius* and helped to compensate for his lack of a helmet. A diagonal strap across the upper body is probably part of the fastening of the *galerus*. To the right of the field there is a stele engraved with an ornamental 'X' and surmounted by what may be intended as a windbag (*corycus* or *follies pugilatorius*) used to practise boxing, over-painted in reddish brown.

In the field, curved in accordance with the circular border is the inscription: 'STRA/TO/NI/CA EBEN EVIC ISTI/VADEIN/AVRE/LI/A'. In the field, horizontally across the bottom, and apparently separate from the preceding inscription is the generic Latinized Greek inscription 'PIE/ZESE/S' ('drink that you may live'). The complete inscription has been transcribed by Dalton as 'Stratonice, bene vicisti, vade in Aureliam. Pie zesēs'.<sup>22</sup> Dalton reasonably states that 'AVRELIA' probably relates to the province Aurelia in Cisalpine Gaul.<sup>23</sup> However, he does not provide a complete translation of the entire phrase.

It is extremely unlikely that 'Stratonice' is the name of the gladiator depicted. No reference citing 'Stratonice' as a male name exists, indeed, 'Stratonice' apparently relates exclusively to various females of the Hellenistic and later Greek era. It is notable, however, that the city of Stratoniceia in Caria (western Anatolia) was named after one such female.<sup>24</sup> Given the debate surrounding the word 'Acerenti'



on the glass depicting Orfitus and Constantia (cat. no. 35), frequently translated as Acheruntius ('the Underworld'), but in fact reading as Acerentino, a small town in central Italy, it is possible that the word 'Stratonicae' is a similar corruption of the town of Stratoniceia. The full inscription might read in translation: 'You have conquered well in Stratoniceia, go to Aurelia. Drink that you may live'. An alternative reading might be: 'Strato! Nika!' (Strato! Be Victorious).

Imagery related to gladiators is relatively rare in 4th-century art across the Roman Empire. This base is the only known example in gold glass. Other sports-related gold glasses from other collections depict numerous instances of boxing and chariot racing scenes.<sup>25</sup> Further recreational activities such as the hunt and the theatre are also represented.<sup>26</sup> Constituting a small, but nevertheless coherent category, all of them take the form of cut and incised colourless sandwich-glass vessel bases and, particularly with regard to chariot racing scenes, are paralleled nearly identically in other contemporary media.<sup>27</sup> As on this vessel base, other glasses depicting sports or recreational scenes include inscriptions specifically relating to the image, often simply personal names and presumably the names of the participants portrayed.

**References:** Hoffmann 1884, 62, no. 428; *CIL* XV.7041; Froehner 1898, 35, no. 103, pl. VI.3; Vopel 1899, no. 56; Dalton 1901a, no. 603, pl. XXVIII; Dalton 1901b, 225, pl. II; Dillon 1907, 93; Leclercq 1923, col. 1849, no. 398; Morey 1959, no. 302, pl. XXVIII; Harden 1968, no. 89.

#### 43. Gilt glass plaque with the togam virilem sumere

Rome?, c. AD 360–400

Provenance: probably from Rome

Max. l. 136mm; max. w. 143mm; t. (bottom layer) 3mm

Garrucci states that it was part of the British Museum's collection by 1858

BM Reg. no. BEP OA 867



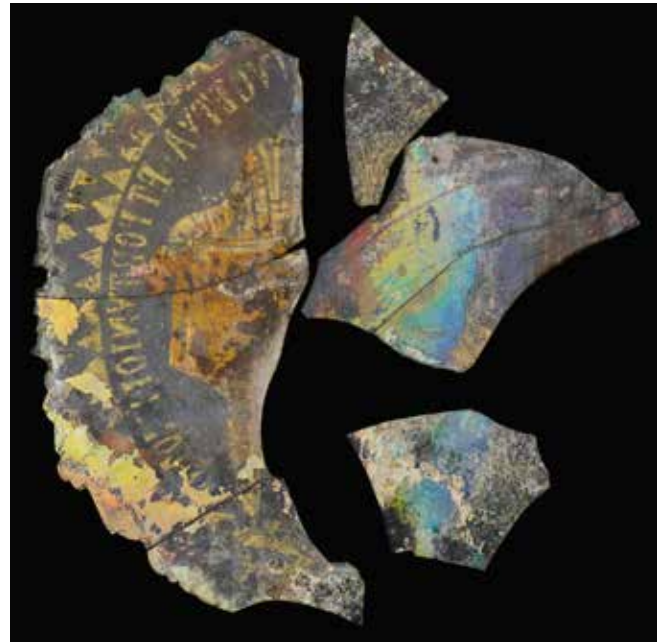
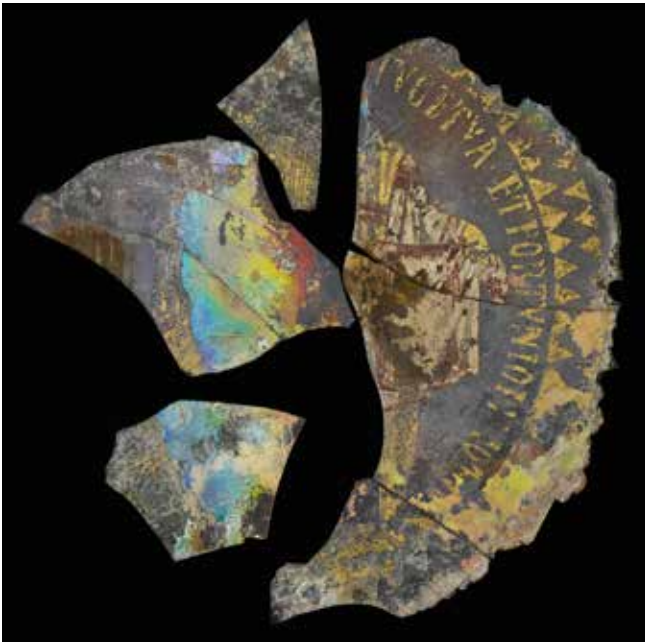


Plate 117 Gilt glass plaque with the *togam virilem sumere* (cat. no. 43)

**Technique:** cut and incised technique. The plaque is made from a single layer of greenish colourless blown glass with tapering edges. It is a fragment; Dalton and Morey record seven pieces.<sup>28</sup> Two of these have since been joined, leaving only five fragments, two of which can be joined as shown in the photographs of the object. This piece has been crudely trimmed roughly in accordance with the border. The gold leaf is severely worn, in some places completely, and only the incisions which have penetrated the glass are visible (Fig. 26).<sup>29</sup> There is some iridescence, but this does not obscure the iconography. A silvery film is apparent in places on the reverse.

**Description and comment:** within a serrated reciprocal border, the full-length figures of an adult male, an adult female and a male child are portrayed. The man stands on the right. Only his right-hand side survives; however, he is clearly visible as wearing a short tunic and what appears to be a chlamys with over-painted red enamel stripes. In both hands he holds a small tunic edged with over-painted red enamel stripes as if he is in the act of putting it on the boy standing in the centre. The child, of whom only the lower part remains, is shown quarter-turned to his right, his hand outstretched towards the woman. He wears a short tunic. The woman stands on the left and is shown with her head turned downwards to her right, in the direction of the boy. She wears a richly embroidered mantle. In the field contiguous to the inner edge of the border is a fragmentary inscription ending '[...] [CUM CON]IVGETVA. ETFORTVNIOFILIO TVO', translated as '[...] with your wife and your son Fortunius'.

Dalton suggested that the scene depicts the boy, Fortunius, receiving the garments associated with manhood from his father.<sup>30</sup> Although only the latter part remains, the inscription is clearly generic and probably constituted a wish for the father's long and happy life with his wife and son. Nevertheless, the name of the child is not usually included in inscriptions in gold glass at the expense of his mother. This would indeed suggest that the image is specifically related to

Fortunius. Furthermore, although the scene is unparalleled in Late Antique art, written sources throughout the Roman period describing the *togam virilem sumere* (the coming of age ceremony for free-born Roman boys) equate quite closely to this scene.<sup>31</sup> Following the removal of the *toga praetexta*, surviving accounts relate how the boy received the *toga virilis* from his father to indicate that he had reached adulthood.

Elsewhere, beyond the British Museum's collection, other scenes from 'everyday life' on cut and incised sandwich-glass vessel bases include shopkeepers, moneylenders, breastfeeding mothers, schooling and other family scenes.<sup>32</sup> At least one specific illustration of the wedding ceremony is also depicted.<sup>33</sup> A shipwright and various activities associated with his profession are featured on a single cut and incised gilt glass plaque akin to this plaque.<sup>34</sup>

**References:** Garrucci 1858, 60, pl. XXXI.3; Garrucci 1864, 162–3, pl. XXXI.3; Garrucci 1872–80, vol. 3, 187–8, pl. 201.3; Vopel 1899, no. 124; Iozzi 1900, 27, pl. VI.1; Dalton

Figure 26 Garrucci's line drawing of cat. no. 43





Plate 118 Vessel base with a temple or sanctuary (cat. no. 44)

1901a, no. 611; Pelka 1901, 159–60; Leclercq 1923, col. 1834, no. 468; Morey 1959, no. 296, pl. XXIX; Pillinger 1984, 55–6, pl. 21, fig. 128.

#### D. Incomplete scenes (cat. nos 44–9)

##### 44. Vessel base with a temple or sanctuary

Rome?, c. AD 360–400

Provenance: apparently found in an unspecified catacomb at Rome

Dimensions: max. l. 87mm; max. w. 45mm; d. (of foot-ring, conjectured) 90mm; t. (bottom layer) 2mm; t. (top layer) 2mm

From the Bunsen Collection (1854)

BM Reg. no. BEP 1854,0722.6

**Technique:** cut and incised technique. The base has two layers of greenish colourless blown glass with a slightly concave pad base-disc and a low fire-polished foot-ring. The wall of the vessel has been crudely broken away roughly in accordance with the base-disc, of which only the left half survives. There is some cracking in the gold leaf which is discoloured on the right hand side broadly along the line of the central break. A thin iridescent film is apparent in places on the surface. Numerous small scratches appear on the underside and are possibly the result of overzealous cleaning. Several small chips are visible in the upper surface of the base-disc, enclosed between it and the vessel bottom.

**Description and comment:** within the circular single band border is a temple or sanctuary incorporating columns with foliated capitals, perhaps an attempt to represent those of the Corinthian style. These support an architrave decorated with a scroll design. The structure rests on a podium decorated in imitation of drapery folds. The space between the columns is closed by gates or railings indicated by cross-hatching, above which is a vase, perhaps representing a lamp, suspended by a cord from the

architrave. To the column's left are a number of lines possibly symbolizing the folds of a curtain, presumably covering the temple entrance. However, it is also feasible that they represent the longer garments of a standing figure. In the field, contiguous with the inside of the circular border, a fragmentary inscription reads '[...] IN DEO' ('in God').

Apart from the central area, which may have shown a single person, the iconography of this example is likely to have been largely symmetrical allowing us to reconstruct what was represented on the missing portion of the base-disc. The words 'In Deo' are usually prefixed with 'Vivas'; this can be conjectured for this piece also, completing the phrase 'live in God'. The only comparable image in gold glass depicts the Jewish Feast of Tabernacles, and also incorporates a colonnaded temple.<sup>35</sup> Unlike this example, however, the British Museum piece does not include any specifically Jewish symbols. Furthermore, the inscription 'Vivas in Deo' may indicate that the subject was Christian not Jewish.

**References:** Garrucci 1858, 88, pl. XXXIX.10; Garrucci 1864, 221, pl. XXXIX.10; Garrucci 1872–80, vol. 3, 196, pl. 203.7; Vopel 1899, no. 459; Dalton 1901a, no. 644; Leclercq 1923, col. 1843, no. 299; Morey 1959, no. 348, pl. XXX.

##### 45. Gilt glass plaque fragment with a scroll

Rome? c. AD 360–400

Provenance: probably from Rome

Dimensions: max. l. 33mm; max. w. 42mm; t. (bottom layer) 3mm

From the Robinson Collection, purchased in Rome from the antiquities dealer Baseggio (1859)

BM Reg. no. BEP 1859,0618.4

**Technique:** cut and incised technique. This is formed from a single layer of greenish colourless blown glass. A single undiagnostic fragment survives; in no place does the original edge of the plaque survive and there is no evidence





Plate 119 Gilt glass plaque fragment with a scroll (cat. no. 45)

for the presence of an upper glass layer. As a result, the gold leaf is abraded but nonetheless visible. Some iridescence is present on both surfaces. The view of the image is not obscured from above.

**Description and comment:** within the single circular band border is a scroll, partly unravelled to reveal markings representative of text. The string or seal on the scroll is over-painted in red enamel. In the field, contiguous with the circular border, is a fragmentary inscription which reads '[...]ES'. In 1901 Dalton read '[...]IES', whereas in 1864 Garrucci tentatively read 'NES', which he reconstructed as '[HILARES OM]NES' ('cheerful/joyful wishes').<sup>36</sup> This phrase is not paralleled on any gold glass from the published corpuses of either Morey or Garrucci. Only a small fragment of the circular band border survives. It is likely, however, to be a single rather than a double band border as the inscription appears within the field.

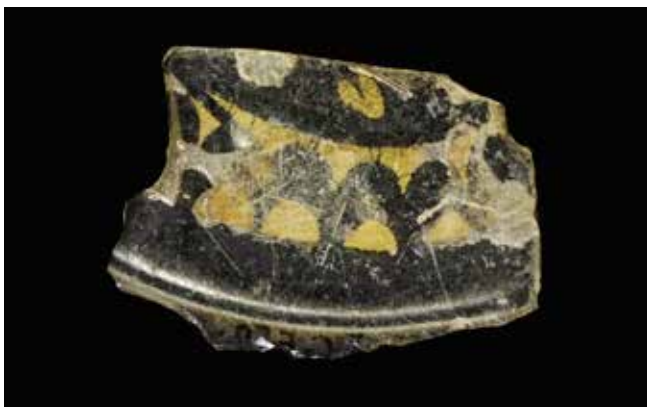
**References:** Garrucci 1864, 168, pl. XXXII.8; Garrucci 1872–80, vol. 3, 186, pl. 200.8; Vopel 1899, no. 464; Dalton 1901a, no. 645; Leclercq 1923, col. 1843, no. 305; Morey 1959, no. 297, pl. XXIX.

#### 46. Vessel base fragment with two leaf sprays

Rome?, c. AD 360–400

Provenance: probably from Rome

Plate 120 Vessel base fragment with two leaf sprays (cat. no. 46)



Dimensions: max. l. 29mm; max. w. 29mm; d. (of foot-ring, conjectured) 70mm; t. (of lower layer) 1mm; t. (of upper layer) 2mm

From the Slade Collection (1868)

BM Reg. no. BEP S 121

**Technique:** cut and incised technique. The base is formed from two layers of greenish colourless blown glass with a slightly concave pad base-disc and a low fire-polished foot-ring. The vessel base is lower than the foot-ring; this means that the bowl could not have been stable when placed on a flat surface. The wall of the vessel has been broken away and the bottom has been closely but roughly trimmed along the line of the base-disc, only a small portion of which remains. The gold leaf is well preserved, but with some minor discolouration and 'silvering' and fine cracks throughout. There are many small scratches on both surfaces of the glass.

**Description and comment:** within the circular reciprocal border of half discs are two small leaf sprays. The rest of the iconography has been lost. The orientation of the leaf sprays indicates that this fragment formed the lower left portion of the base-disc.

**References:** Franks and Nesbitt 1871, no. 121; Dalton 1901a, no. 650; Leclercq 1923, col. 1844, no. 317; Morey 1959, no. 328, pl. XXX.



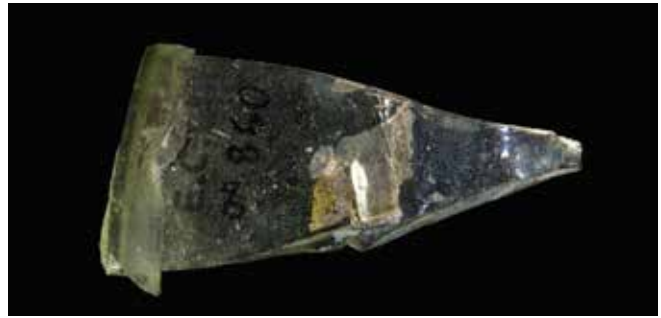
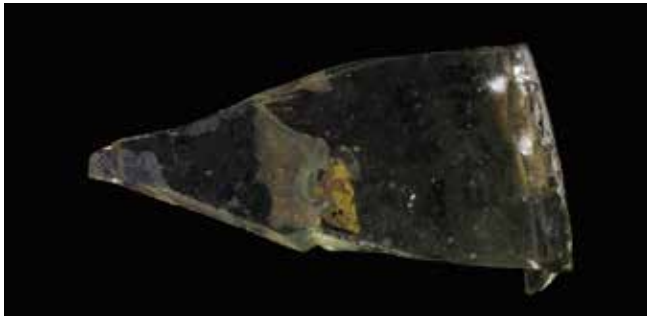


Plate 121 Vessel base fragment with circular half disc reciprocal border (cat. no. 47)

**47. Vessel base fragment with circular half disc reciprocal border**

Rome? *c.* AD 360–400

Provenance: unknown

Dimensions: max. l. 26mm; max. w. 12mm; d. (of foot-ring, conjectured) 70mm; t. (bottom layer) 3mm; t. (top layer) 1mm

BM Reg. no. BEP OA 860

**Technique:** cut and incised technique. The base has two layers of greenish colourless blown glass with a slightly concave pad base-disc and a low fire-polished foot-ring. The foot-ring is slightly misshapen, caused by being heated to higher than intended levels during the manufacturing process. A single small shard is all that remains, with only a fragment of the iconography still visible. The wall of the vessel has apparently been broken away and carefully trimmed to the line of the base-disc. The small amount of gold leaf remaining is well preserved. Some iridescence is present on both surfaces and there is some minor discolouration. Neither of these factors, however, inhibits the view of the iconography that remains.

**Description and comment:** a single gold leaf half circle from a circular reciprocal border is all that survives.

**References:** Dalton 1901a, no. 648; Leclercq 1923, col. 1844, no. 315; Morey 1959, no. 326, pl. XXX.

**48. Vessel base fragment with illegible design**

Rome? *c.* AD 360–400

Provenance: unknown

Dimensions: max. l. 36mm; max. w. 25mm; t. (bottom layer) 4mm

BM Reg. no. BEP OA 864

**Technique:** cut and incised technique. A single layer of greenish colourless blown glass survives. The fragment is

broken all around and undiagnostic. The gold leaf is badly worn and has been almost obliterated because of the lack of a protective upper layer. The piece possibly constitutes the base-disc of a cut and incised technique vessel, the gold leaf being destroyed by the removal of the fused upper layer. Some iridescence and major discolouration is present on both surfaces.

**Description and comment:** the iconography is illegible.

**References:** Dalton 1901a, no. 651; Leclercq 1923, col. 1844, no. 318; Morey 1959, no. 350.

**49. Vessel base fragment with illegible design**

Rome? *c.* AD 360–400

Provenance: probably from Rome

Max. l. 16mm; max. w. 23mm; t. (bottom layer) 4mm

From the Robinson Collection, purchased in Rome from the antiquities dealer Baseggio (1859)

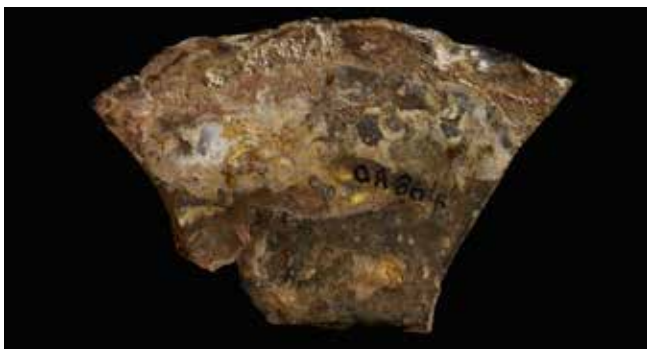
BM Reg. no. BEP 1859,0618.5

**Technique:** cut and incised technique. Only a single layer of greenish colourless blown glass survives. It is an undiagnostic fragment. In no place does the original edge of the plaque survive and there is no evidence for there ever having been an upper glass layer; consequently, the gold leaf is badly abraded. Some iridescence is present on both surfaces and there is some minor discolouration. Neither, however, inhibits the view of the image. Some internal strain cracks are visible within the glass.

**Description and comment:** diagonal patterning appears between and on either side of two thicker, possibly downward, lines. The fragment is too small and too poorly preserved to enable the identification of the original image.

**References:** Dalton 1901a, no. 649; Leclercq 1923, col. 1844, no. 316; Morey 1959, no. 351.

Plate 122 Vessel base fragment with illegible design (cat. no. 48)



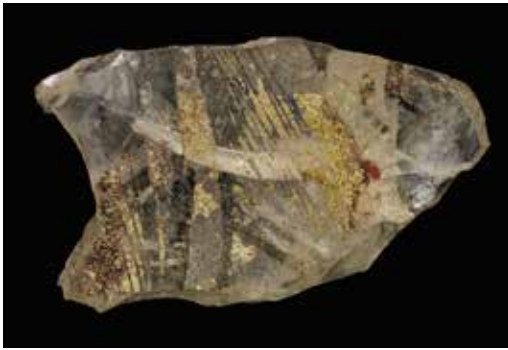


Plate 123 Vessel base fragment with illegible design (cat. no. 49)

### E. Inscriptions (cat. nos 50–5)

Simple inscriptions are represented in the British Museum's collection by six gold glasses. These constitute a cut and incised technique gilt glass plaque (cat. no. 50), a diminutive medallion (cat. no. 54), three vessel bases (cat. nos 51–3) and a gilt glass trail technique vessel base (cat. no. 55). In the larger corpus of gold glass published by Morey, as well as in other publications and collections, cut and incised technique glasses bearing only inscriptions follow the same pattern as those in the British Museum's collection. Most often take the form of vessel bases and many constitute short generic phrases (e.g. cat. no. 52), which are usually wishes for life and health.<sup>37</sup> Other inscriptions, such as that on cat. no. 50, bear slightly longer phrases that often include a family name. These are nonetheless akin to the largely generic wishes for life and health discussed above as being associated with various images, including secular and saintly portrait-style depictions and images of biblical episodes. Occasionally, inscriptions also take the form of generic assertions of virtue, often including a specific family or personal name. A primary example of this, currently in a private collection in London, bears the inscription 'FUCENI SEMPER VERAX' ('the Fuchini are always truthful').<sup>38</sup>

#### 50. Gilt glass plaque with Latin inscription

Rome? c. AD 360–400

Provenance: apparently found in an unspecified catacomb in Rome

Dimensions: D (conjectured) 150mm; t. (maximum) 4mm  
From the Bunsen Collection (1854)  
BM Reg. no. BEP 1854,0722.7-10<sup>39</sup>

**Technique:** cut and incised technique. The plaque is made from a single layer of greenish colourless blown glass with tapered edges. It survives as four pieces, composite parts of the same object. The plaque appears to have been crudely trimmed roughly along the edge of the gold leaf border, the outside of which has been mostly cut away, prior to subsequent fragmentation. Nowhere does the original edge of the plaque survive and there is no evidence of an upper glass layer. As a result the cut gold leaf has suffered considerable abrasion and is extremely faint in places. Iridescence and minor discolouration covers both surfaces.

**Description and comment:** although badly fragmented and abraded, five lines of inscription interspersed with rows of lozenges appear within what seems to be a circular half disc reciprocal border enclosing an area approximately 130mm in diameter. Each line ends with a terminal ornament of dots and leaves or flowers. The lower line of the inscription is underlined by a comparatively large leaf spray. The inscription reads: 'EDONI FR/[CVM]CARIS COIV/[T]VA[P]IE ZESSES. O[M]NIBV[S] VENET/[IAN]IS [VI]TA', transcribed by Dalton as 'Edonius Frater cum caris coniuge tua pie zesses. Omnibus Venetianis vita'.<sup>40</sup> The complete inscription can be translated as: 'Brother

Plate 124 Gilt glass plaque with Latin inscription (cat. no. 50)





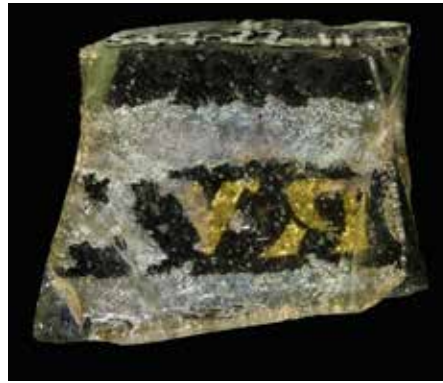
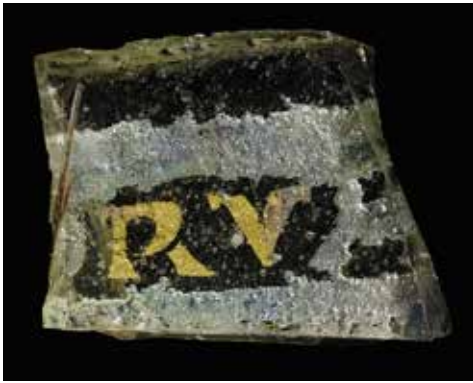


Plate 125 Vessel base fragment with Latin inscription (cat. no. 51)

Edonius may you [and your wife?] live sweetly/pleasantly with those that are dear to you, life to all the Blues'. Dalton did not offer a translation, but suggested that 'Edonius' may be a shortened form (or perhaps with initial letters now lost) of the popular 4th-century male personal name 'Macedonius'.<sup>41</sup> 'Coiv' might instead read 'Con', and thus, as Dalton has transcribed, form part of the word 'coniuge', meaning 'wife'. The complete inscription is secular in nature and includes a wish for life and health in association with the Blue faction in the circus. It does not, as Dalton suggests, constitute an expression of congratulations to a member of the Blue faction.<sup>42</sup>

**References:** Garrucci 1858, 80–1, pl. XXXVIII.6; Garrucci 1864, 216, pl. XXXVIII.6; *CIL* XV.7055; Vopel 1899, no. 6; Dalton 1901a, no. 599; Iozzi 1900, 31–4, pl. VII.2; Morey 1959, no. 299, pl. XXIX.

#### 51. Vessel base fragment with Latin inscription

Rome? *c.* AD 360–400

Provenance: apparently found in an unspecified catacomb in Rome

Dimensions: max. l. 14mm; max. w. 18mm; t. (bottom layer) 2mm; t. (top layer) 3mm

From the Bunsen Collection (1854)

BM Reg. no. BEP 1854.0722.11

**Technique:** cut and incised technique. The base is made from two layers of greenish colourless blown glass with a slightly concave pad base-disc. A single small shard is all that remains with only a fragment of the iconography still visible. The gold leaf is well preserved towards the centre, but is discoloured and 'silvered' at the edges. No part of the foot-ring is retained on the surviving fragment.

**Description and comment:** all that remains of the iconography is a small portion of the circular double-band border enclosed by an inscription that reads: '[...]RV[...]'. Both Vopel and Dalton suggest a possible reading of the inscription as '[PET]RV[S]'. Morey, however, on the basis of the traces of letters present on either side of the surviving ones, suggests '[...]ORVA(or M)[...]'. Closer examination reveals this later reading to be at the least plausible, and if correct, probably constitutes part of the phrase 'DIGNITAS AMICORVM', translated as 'be the pride of your friends'. Unlike 'Petrus', 'Dignitas Amicorum' appears frequently on gold glass circular double-band borders enclosed by an inscription.

**References:** Vopel 1899, no. 473; Dalton 1901a, no. 647; Leclercq 1923, col. 1844, no. 314; Morey 1959, no. 329, pl. XXX.

#### 52. Vessel base fragment with Latinized Greek inscription

Rome? *c.* AD 360–400

Provenance: probably from Rome

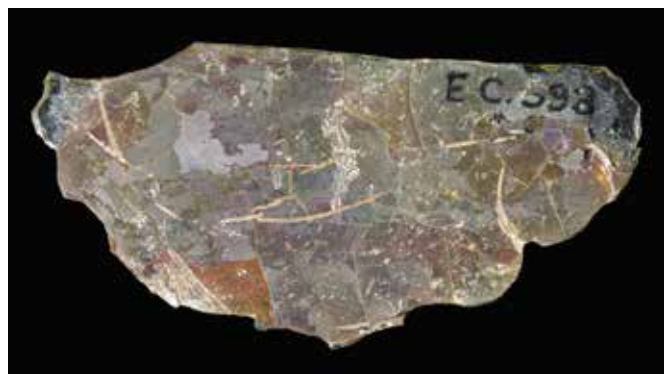
Dimensions: max. l. 22mm; max. w. 42mm<sup>43</sup>

From the Slade Collection (1868)

BM Reg. no. BEP S 120

**Technique:** cut and incised technique. Only one layer of greenish colourless blown glass survives. It has a convex base-disc, the lower edge of which appears to turn upwards. There is no remaining trace of a foot-ring. Dalton and Morey both reported a small fragment of protective glass over-layer; however, this is now lost. The piece may have been roughly trimmed close to the line of the possible border, but only a small portion remains. The top half of the field has been broken away and only the lower half survives.

Plate 126 Vessel base fragment with Latinized Greek inscription (cat. no. 52)





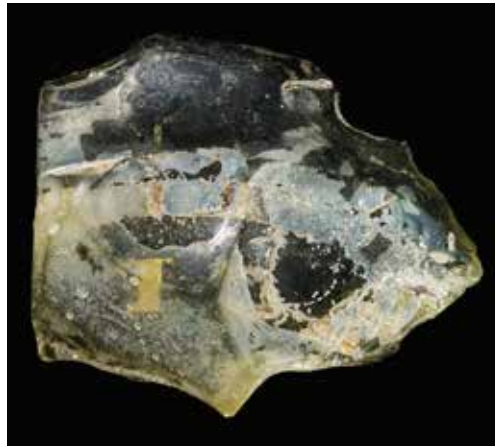
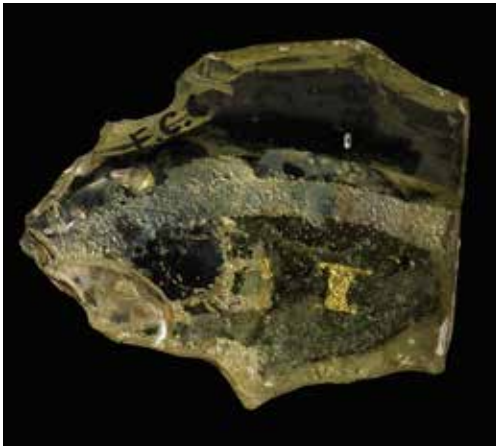


Plate 127 Vessel base fragment with fragmentary Latin inscription (cat. no. 53)

The small portion of remaining gold leaf is well preserved with a few fine cracks. The back of the fragment is completely covered by a silvery deposit. A milky film covers the surface, surrounding but not obscuring the lettering and border.

**Description and comment:** this piece takes the form of a fragmentary and badly discoloured cut and incised gold glass which may originally have been a vessel base, the upper half of which has been broken away. Within a single line border of short dashes is the word 'ZH CAIC', which constitutes the latter part of another Latinized form of the Greek '[III]E] ZHΣHΣ'. Noted above as appearing frequently as a part of a longer generic inscription associated with the full range of images occurring on cut and incised gold glass, the phrase usually appears in Latin letters as 'ZESES'. It translates as 'drink that you may live'.<sup>44</sup> The upper half of the vessel base almost certainly featured the Latinized word 'PIE (III]E)' to complete the generic phrase commonly occurring on cut and incised technique gold glasses.

**References:** Vopel 1899, 80–1, fig. 8, no. 3; Dalton 1901a, no. 598; Leclercq 1923, col. 1845, no. 343, fig. 4538; Morey 1959, no. 336, pl. XXX.

### 53. Vessel base fragment with fragmentary Latin inscription

Rome? *c.* AD 360–400

Provenance: probably from Rome

Dimensions: max. l. 21mm; max. w. 26mm; t. (bottom layer) 3mm; t. (top layer) 4mm

From the Franks Collection (1886)

BM Reg. no. BEP 1886,1117.331

**Technique:** cut and incised technique. The base was made from two layers of greenish colourless blown glass with a slightly concave base-disc. A single small shard is all that remains with only a fragment of the iconography still visible. The entire foot-ring has been lost. The small amount of gold leaf still preserved between the base-disc and the vessel is in relatively good condition. There is little iridescence or discolouration. There are many pinprick bubbles in the glass. No part of the foot-ring is retained on the surviving fragment.

**Description and comment:** all that remains of the iconography is a small portion of the single line circular border. In the field, contiguous with the border, is the inscription '[...]CI[...]'. Vopel read '[...]LCI[...]'], leading Dalton to suggest that the inscription may have formed part of the generic phrase 'dulcis anima', which occurred frequently on other gold glasses such as **cat. no. 37** in the British Museum's collection.

**References:** Vopel 1899, no. 472; Dalton 1901a, no. 646; Leclercq 1923, col. 1844, no. 313; Morey 1959, no. 327, pl. XXX.

### 54. Diminutive medallion fragment with Latin inscription

Rome? *c.* AD 360–400

Provenance: probably from Rome

Max. l. 15mm; max. w. 13mm; t. (of lower layer) 4mm; t. (of upper layer) 2mm

From the Franks Collection (1886)

BM Reg. no. BEP 1886,1117.332

**Technique:** cut and incised technique. This consists of a single medallion from a medallion-studded vessel. The



Plate 128 Diminutive medallion fragment with Latin inscription (cat. no. 54)

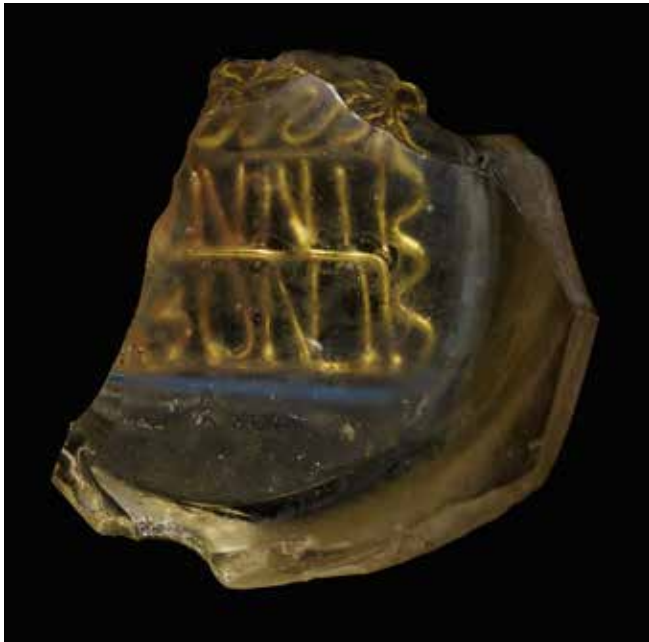


Plate 129 Vessel base fragment with Latin inscription (cat. no. 55)

greenish colourless glass vessel wall has been closely trimmed to the line of the green glass medallion at the top. The upper right portion is missing with the loss of the iconography in that area; the obverse is highly convex, the reverse flat. A number of fine cracks are evident in the gold leaf.

**Description and comment:** there is no surviving border. The upper portion of the medallion has been broken away and the bottom of a single letter, possibly 'P', remains. In the lower portion the word 'VITA', meaning 'life' has been preserved. The complete inscription is not surrounded by a border of any kind. Inscriptions appearing on diminutive medallions also predominantly take the form of short wishes for life and health. Some bear the complete inscription, whilst others include only a part of it. The single medallion published by Morey bearing the word 'DIGNITAS', for example, was evidently intended to be paired with a second medallion with the word 'AMICORVM', completing the phrase which frequently occurs in association with various imagery on gold glass translated as 'be the pride of your friends'.<sup>45</sup>

Unlike vessel bases and plaques where the complete image survives, however, diminutive medallions formed sequences on the walls of larger vessels. It is thus probable that gold glass diminutive medallions bearing only inscriptions once formed part of a larger vessel and as such was intended to accompany other medallions with pictorial iconography. Consequently they do not take the form of isolated inscriptions similar to those on vessel bases and plaques.

**References:** Vopel 1899, no. 28; Dalton 1901a, no. 601, pl. XXXI; Leclercq 1923, col. 1847, no. 370, fig. 4542; Morey 1959, no. 332, pl. XXX.

### 55. Vessel base fragment with Latin inscription

Rome? *c.* AD 300

Provenance: probably from Rome<sup>46</sup>

Dimensions: max. l. 44mm; max. w. 44mm; d. (of foot-ring, conjectured) 50mm; t. (bottom layer) 3mm; t. (top layer) 10mm  
BM Reg. no. BEP OA 858

**Technique:** gilt glass trail technique. The base is formed from two layers of greenish colourless blown glass with a slightly convex pad base-disc and a low foot-ring. A blue and gilt glass trail has been applied to the base-disc and sandwiched between the two layers. The wall of the vessel has been largely broken away, although a small amount surviving on the left side indicated that it may have been a tumbler-style cup. Traces of the foot-ring survive, but the majority has been broken away. The upper and right areas of the base-disc are missing. The remaining gilt glass trail is well preserved, although the gilding appears cracked and in some instances has been largely rubbed away where the trail has been bent to a curve. Minor iridescence is present on both surfaces, but does not obscure the iconography.

**Description and comment:** this is the only example of a gilt glass trail inscription sandwich-glass in the British Museum's collection. It takes the form of a vessel base, and retains most of a cartouche containing a two-line inscription. The rectangular cartouche is enclosed on the upper and right sides by a wavy line border; a matching border can be inferred for the broken left side. The bottom edge of the cartouche is underlined by a single trail of blue glass. The central area bears the two-line inscription 'ANNI/BONI', translated as the generic phrase 'happy new year'.<sup>47</sup> Gilt glass trail glasses invariably bear single inscriptions, in every instance generic 'cheers' of antique convivial tradition, wishing a happy new year ('ANNI/BONI') (such as on the piece in the British Museum) and also a long and happy life ('VITA/TIBI'), or encouraging the drinking of a toast to someone ('A ME/BIBE').<sup>48</sup>

**References:** Vopel 1899, 96, no. 22; Dalton 1901a, no. 600; Kisa 1908, vol. 1, 269; vol. 2, 471; vol. 3, 863; Leclercq 1923, col. 1847, no. 363, fig. 4541; Fremersdorf 1959, 66; Morey 1959, no. 304, pl. XXIX; Alarcão 1968, 76–7, no. 1; Filippini 1996, 123, no. 8.

## Notes

- 1 Fine 2007, 36–7; Spier 2007a, 202.
- 2 Schüler 1966, 59–61.
- 3 Ibid., no. 6 (doves), and nos 4 and 5 (lions).
- 4 Ibid., no. 12; Barag 1970, 102–3, pl. 26a.
- 5 Morey 1959, no. 173, pl. XXI.
- 6 For saints, see Morey 1959, no. 85, pl. XIV; for Noah and the ark, see Morey 1959, nos 140–1, pl. XXI.
- 7 Schüler 1966, 53.
- 8 Spier 2007a, pls 29–32.
- 9 Morey 1959, no. 116, pl. XX.
- 10 For a discussion and full list of references, see St. Clair 1985.
- 11 Fine 2007, 37, fig. 25; Rutgers 1995, 74–5.
- 12 Dalton 1901a, no. 602; Morey 1959, no. 324.
- 13 Garrucci 1858, 71.
- 14 For example a relief sculpture in the foundations of the church of San Clemente: Nardini 1991, 14.
- 15 For sarcophagi, see Jongste 1992, 126–8; for a detail from the mosaic of the twelve labours of Hercules from Liria in Spain (now in the Museo Arqueológico Nacional in Madrid, inv. no. 38315 BIS) see Bayet 1921–2.
- 16 Ashmolean Museum, inv. no. AN2007.16: Morey 1959, no. 369, pl. XXXII.
- 17 Ibid., no. 253, pl. XXVI.
- 18 Ferrua 1991, fig. 130.
- 19 See Morey 1959, no. 12, pl. II, depicting the episode of Hercules and the Erymanthian boar.
- 20 Venus: Morey 1959, no. 10, pl. I; Achilles and the daughters of Lycomedes: Morey 1959, no. 284, pl. XXVIII; Cupid: Morey 1959, nos 15 and 18, pl. III; various personifications, possibly representing the personification of the three metals of coinage, gold, silver and bronze: Morey 1959, no. 17, pl. III.
- 21 Dalton 1901a, no. 603; Morey 1959, no. 302.
- 22 Dalton 1901a, no. 603.
- 23 Dalton 1901b, 225.
- 24 Strabo, *Geography* xiv.2.
- 25 Boxing: Morey 1959, nos 27–8, pl. IV; chariot racing scenes: Noll 1973, figs 1 and 2; Alexander 1931, fig. 2.
- 26 The hunt: Morey 1959, no. 35, pl. VI; the theatre: Morey 1959, no. 25, pl. IV.
- 27 Noll 1973, 33.
- 28 Dalton 1901a, no. 611; Morey 1959, no. 296, pl. XXIX.
- 29 Garrucci 1872–80, vol. 3, pl. 201.3.
- 30 Dalton 1901a, no. 611.
- 31 Dolansky 2008.
- 32 Shopkeepers (see Garrucci 1872–80, vol. 3, pl. 202.2), moneylenders (see Garrucci 1872–80, vol. 3, pl. 202.1), breastfeeding mothers (see Morey 1959, no. 289, pl. XXVIII), schooling (see Garrucci 1872–80, vol. 3, pl. 200.2) and other family scenes (see Morey 1959, no. 110, pl. XIX).
- 33 Morey 1959, no. 447, pl. XXXVI.
- 34 Ibid., no. 96, pl. XVI, no. 96; illustrated and discussed in detail in: Ulrich 2007, 35–49.
- 35 St. Clair 1985, 6–15.
- 36 Garrucci 1864, 168.
- 37 See Morey 1959, nos 19–20 and 22, pl. III; see also Wibl 1980.
- 38 Christie's 1999, 86, no. 222.
- 39 This piece is comprised four separate fragments and has been assigned four different British Museum numbers. As the fragments represent a single item they are here treated as one entry.
- 40 Dalton 1901a, no. 599.
- 41 Ibid.
- 42 Ibid.
- 43 If we accept the lozenges and lines as part of a (unparalleled) border to which the piece was seemingly trimmed prior to fragmentation, then we may project the diameter of the trimmed area at approximately 46mm with a border enclosing an area of approximately 34mm in diameter.
- 44 Dalton 1921, 142; Auth 1996, 103.
- 45 Morey 1959, no. 175, pl. XXI.
- 46 Vopel states that it was part of the British Museum's collection by 1899 (p. 96).
- 47 Filippini 1995, 118.
- 48 Ibid., 118–25.

# Catalogue of the Gold Glasses Part 5: Modern Reproductions and Fakes (Cat. Nos 56–64)

## 56. *Portrait medallion of a man*

18th or early 19th century

Provenance: said to have been found in Italy, near to 'Lake Perugia'

Dimensions: d. 86mm

Purchased from J.G.P. Fisher (1847)

BM Reg. no. BEP 1847,0824.2

**Technique:** brushed technique. The gold leaf image has been gilded and incised upon a layer of a black resin-like substance. This has been overlain by a covering disc of colourless glass. The colourless glass is greatly discoloured, and an attempt has been made to clean it in order to make the image more visible. The whole was originally set within an oak frame, holding the glass cover and the resin base together. The piece has since been disassembled. Only the resin base-disc is illustrated in this catalogue.

**Description and comment:** the half-length bust of an adult male is depicted within a single band circular border, much of which has crumbled away with the edges of the resin-like base-disc. He is beardless with short hair, and wears an unidentifiable and probably invented costume.

**Reference:** Pillinger 1984, col. pl. 14, fig. 99.

Plate 130 Portrait medallion of a man (cat. no. 56)







Plate 131 Portrait medallion of a boy (cat. no. 57)

**57. Portrait medallion of a boy**

18th or early 19th century

Provenance: probably from Rome

Dimensions: d. (of medallion) 46mm

In the British Museum by 1851

BM Reg. no. BEP OA 10,900

**Technique:** brushed technique. The gold and silver leaf image has been gilded and incised in retrograde upon the upper covering layer of colourless glass and is sealed at the back with a black resin-like substance. There is light iridescence and a few pin-prick bubbles in the glass. The gold leaf has been incised with a significant degree of skill and closely parallels the brushed technique.

**Description and comment:** the quarter-length bust of a male child is situated within the thin, perfectly circular, single line border. He wears what appears to be a toga above a tunic apparently executed in silver leaf and has a large circular bulla suspended from a band around his neck. In the left field, contiguous with the circular border and



executed in small letters similar to a genuine brushed technique medallion, is the inscription: 'M CECILIVS'.

It is highly probable that the artist who produced this object copied a single element, the young boy, from a genuine brushed technique medallion, the Ficoroni medallion, now in the Metropolitan Museum of Art in New York (**Pl. 23**).<sup>1</sup> The craftsman responsible for the piece in the British Museum need not have produced his work directly from the original, which was illustrated as early as 1732.<sup>2</sup>

**References:** Yates 1851, 170–1; Pillinger 1984, 17, col. pl. 9, fig. 79.

**58. Vessel base with Jonah and the great fish**

Early 19th century

Provenance: unknown

Dimensions: max. d. 60 mm; t. 28mm

Formerly in the Borghesi Collection and the Madame M. Eichwede Collection; the object entered the British Museum in 1909

BM Reg. no. BEP OA 10,901



Plate 132 Vessel base with Jonah and the great fish (cat. no. 58)



Plate 133 Vessel base depicting St Christopher carrying Christ (cat. no. 59)

**Technique:** cold painted. This is the bottom and tubular base-ring of an antique or Roman glass beaker. The design is cold painted on discs; each disc is affixed to the bottom of the glass vessel by means of cement, probably in the early 19th century. The vessel bowl has been dropped over the foot-ring to cover the double-sided cold painted decoration, and simply glued into place, giving the impression that the imagery is indeed fused between two glass layers as on the original Late Antique pieces. Painted decoration appears on both the inside and the reverse of the vessel. The glass is broken all around with encrustation and there are many pin-pricks on the front and back surfaces.

**Description and comment:** within a single band border painted in red, the episode of Jonah and the great fish is depicted. In the centre of the field is a sea monster, akin to a whale, with open jaws and large triangular teeth. Its body is rendered in gold, its eye and teeth in white, and the inside of its mouth in red. From its mouth protrudes the bearded and nimbed figure of Jonah, his arms and head rendered in white, his plain nimbus and body in gold. The sky above the sea monster is painted a light greyish-blue, whilst the sea is coloured in greenish-grey. On the reverse, within a circular single band border painted in blue, is a three-line unintelligible inscription 'INDT/NVMI/NEA'. The letters M and A are of a peculiar, probably imaginary formation.

**Reference:** Pillinger 1984, 19–20, col. pl. 2, figs 7 and 8.

#### 59. Vessel base depicting St Christopher carrying Christ

Early 19th century

Provenance: unknown

Dimensions: max. d. 59mm; t. 18mm

Formerly in the Borghesi Collection and in the Madame M. Eichwede Collection; the object entered the British Museum in 1909

BM Reg. no. BEP OA 10,902

**Technique:** cold painted. This is the bottom and tubular base-ring of an antique or Roman glass beaker. The design

is cold painted on discs; each disc is affixed to the bottom of the glass vessel by means of cement, probably in the early nineteenth century. The low but wide foot-ring and the base have been simply glued into place, giving the impression that the imagery is fused between two glass layers. The glass is broken all around with encrustation on the front and particularly the back surfaces. The area of glass overlaying the image is discoloured, partially inhibiting the view of the image. There is a pontil mark on the reverse in the middle of the foot-ring. There are many pin-prick bubbles in the glass.

**Description and comment:** within the broadly circular red braided and inner yellow band border, St Christopher is shown carrying the Christ Child on his shoulders. The saint is portrayed as an aged man, bearded and balding with long hair at his back. The details are picked out in black paint on a colourless background. He emerges from a lake or river, with trees rendered in green paint on the far bank. Painted in gold, he wears a girdled robe fastened over his right shoulder exposing his left arm and chest. In his right hand he holds a staff, possibly painted in brown, whilst on his left shoulder is the Christ Child supported by his left hand. Christ also wears a gold-painted tunic and has a gold-painted cross nimbus. His right hand is raised whilst in his left he holds an orb, rendered in gold. Unpublished.

#### 60. Vessel base with Christ

Early 19th century

Provenance: unknown

Dimensions: max. d. 62mm; t. 21.5mm

Formerly in the Borghesi Collection and in the Madame M. Eichwede Collection; the object entered the British Museum in 1909

BM Reg. no. BEP OA 10,903

**Technique:** cold painted. This is the bottom and tubular base-ring of an antique or Roman glass beaker. The design is cold painted on discs; each disc is affixed to the bottom of





Plate 134 Vessel base with Christ (cat. no. 60)

the glass vessel by means of cement, probably in the early 19th century. The low but wide foot-ring and the base have been simply glued into place, giving the impression that the imagery is fused between two glass layers. The glass is broken all around with encrustation on the front and the back surfaces in particular. The area of glass overlaying the image is heavily discoloured, largely inhibiting the view of the image. There is a pontil mark on the reverse in the middle of the foot-ring, in addition to many pin-prick bubbles in the glass.

**Description and comment:** the field is enclosed by a double band circular border, each band rendered in yellowish-green, containing a half-circle pattern consisting of black painted lines. In the centre of the field is Christ,



bearded and with long hair, seated in majesty with his left hand raised. His clothing (the exact garment is unintelligible) is painted in gold, as is his cross nimbus. Unpublished.

**61. Experimental gold sandwich glass with a woman**  
1901

Dimensions: max. l. 107mm; max. w. 66mm

Presented by N.H.J. Westlake (1901)

BM Reg. no. BEP OA 10,904

**Technique:** a flat plate of broken roughly shaped dark blue glass is overlain by a smaller rectangular plate of flat colourless glass sandwiching a piece of partially damaged



Plate 135 Experimental gold sandwich glass with a woman (cat. no. 61)



Plate 136 Experimental gold sandwich glass depicting Christ (cat. no. 62)

gold leaf between the two. The two layers are joined by means of a flux at the edges. The manufacturing process employed by Westlake is noted by Dalton.<sup>3</sup>

**Description and comment:** the profile bust of a woman facing right is lightly incised on the gold leaf background. Her hair is tied in a bun on her head. Unpublished.

**62. Experimental gold sandwich glass depicting Christ**  
1901

Dimensions: max. d. 62mm; t. 21.5mm  
Presented by N.H.J. Westlake (1901)  
BM Reg. no. OA 10,905

**Technique:** two plates of colourless glass sandwich with a sheet of gold leaf between them, apparently fused together by

means of a flux. The surviving object appears to have been broken from a larger piece.

**Description and comment:** a depiction of Christ, bearded and with long hair. The image is not cut and incised, but instead the details on the gold leaf are picked out with brown colour lines, akin to medieval stained glass images. On the reverse is a handwritten label stating that the piece was produced by NHJ Westlake Esq. F.S.A. 22 IV 1901.

**Reference:** Pillinger 1984, pl. 80, fig. 182, col. pl. 27, fig. 181.

**63. Diminutive medallion-studded vessel with large decorated base-disc**

Venice, late 19th century  
Dimensions: max. d. 213mm; h. 49mm  
Given by Charles Hercules Read (1898)  
BM Reg. no. BEP 1898,1211.1



Plate 137 Diminutive medallion-studded vessel with large decorated base-disc (cat. no. 63)





Plate 138 Detail of cat. no. 63: a single lion from the episode of Daniel in the Lions' Den



Plate 142 Detail of cat. no. 63: Jonah cast forth from the belly of the great fish



Plate 139 Detail of cat. no. 63: Susanna, from the episode of Susanna and the Elders



Plate 143 Detail of cat. no. 63: the boat and great fish from the story of Jonah



Plate 140 Detail of cat. no. 63: Jonah swallowed by the great fish



Plate 141 Detail of cat. no. 63: one of the Three Hebrews in the Fiery Furnace

**Technique:** two layers of glass. The pad base-disc of translucent green glass has a high tubular foot-ring; the upper vessel bowl layer is of colourless glass. The diminutive medallions are all of translucent green glass. A sketch of the object in the British Museum acquisitions register shows the piece to have been already damaged and repaired (but with a large chunk missing from the upper edge) when it was acquired. The object was in eleven separate pieces, two of which consisted of three and two repaired fragments respectively. The bowl was completely restored in 2011. The glass is slightly discoloured in places with many pin-prick bubbles.

**Description and comment:** the iconography of the vessel appears to be based on the St Severin bowl in the British Museum's collection (**cat. no. 16**). The base-disc is decorated with the Lamb of God, facing right, enclosed by a thick single line circular border embellished with incised ovals. The wall of the vessel incorporates a concentric circle of six large medallions interspaced with six smaller ones. The smaller medallions all depict star-shaped leaf sprays. This is an invariable feature of Venetian copies of Late Antique gold glasses.<sup>4</sup> Interestingly, however, the bands upon the glass echo the two parallel wheel-cut lines in the same position upon the St Severin bowl itself.

The six larger medallions each reproduce single medallions from the St Severin bowl. These appear to have been randomly selected, and no one biblical episode from the original vessel is depicted in its entirety. From left to right they depict a single lion from the episode of Daniel in the





Plate 144 Gilt green-glass goblet with saints (cat. no. 64)

den of lions (Pl. 138), Susanna, from the episode of Susanna and the Elders (Pl. 139), Jonah swallowed by the great fish (Pl. 140), one of the Three Hebrews in the Fiery Furnace (Pl. 141), Jonah cast forth from the belly of the great fish (Pl. 142) and the boat and great fish prepared by the Lord from the story of Jonah (Pl. 143). The rim of the vessel is decorated by a double thread of translucent green glass.

**References:** Pillinger 1984, pl. 30, fig. 232; Rudoe 2003, 216–17, pl. 12.2.

#### 64. Gilt green-glass goblet with saints

Murano, 1878

Provenance: unknown

Dimensions: h. (of vessel) 197mm; d. (of vessel mouth) 121mm

Formerly in the collection of Sir John Pender and acquired by him at the Paris exhibition of 1878; bought from H.

Blairman & Sons (1998)

BM Reg. no. BEP 1998,0203.1

**Technique:** cut and incised technique. The shape of the vessel and the translucent dark green glass copies a type of Venetian marriage goblet of the 15th century.<sup>5</sup> The vessel remains intact and with no damage or weathering to the gold leaf or to the glass.

**Description and comment:** the upper portion of the vessel is decorated with an elaborate scale pattern, further



Plate 145 Detail of cat. no. 64: Sts Cyprianus and Timoteus



Plate 146 Detail of cat. no. 64: Sts Epolitus and Sustus



Plate 147 Detail of cat. no. 64: Sts Laurentius and Iulius

embellished with over-painted enamel dots in white, red, blue and green. The rim of the vessel incorporates six roundels, each illustrating the portrait-style depiction of a saint. Each saint is depicted as a quarter-length bust, wearing a tunic and pallium of the omophorion type. Their heads are depicted in profile. The saints are arranged in three facing pairs, each accompanied by an identifying name ('CIPRIANVS' and 'TIMOTEVS' (Pl. 145), 'EPOLITVS' and 'SVSTVS' (Pl. 146), 'LAVRENTIVS' and 'IVLIVS' (Pl. 147) respectively). Each saint appears on Late Antique cut and incised technique gold glass vessel bases illustrated by Garrucci.<sup>6</sup>

**Reference:** Rudoe 2003, 210–19.

#### Notes

1 Metropolitan Museum of Art, inv. no. 17.190.109a.

2 Ficoroni 1732, 11.

3 Dalton 1901a, 252.

4 Pillinger 1984, 17, followed by Rudoe 2003, 217.

5 See Tait 1979, no. 21.

6 Garrucci 1858; 1864; 1872–80.

# Appendix A

## Distribution of Gold Glass Findspots and Associated Contexts

A total of 108 gold glasses with a recorded provenance and associated context details have been identified as the result of a detailed review of the literature. Of this number, three are brushed technique portrait medallions; three take the form of gilt glass trail vessels; and 102 constitute cut and incised technique gold glasses. The distribution of the reported gold glass findspots is presented in **Figure 27**. The data is tabulated below according to gold glass subtype. Glasses have been included regardless of whether their reported findspot occurs in the accounts of early antiquarians or from the publications of more rigorously controlled archaeological excavations and subterranean explorations. As such, the contextual data available for each piece is highly variable. The references provided are not meant to be exhaustive and only incorporate key publications dealing with the context and findspots of each piece. Whenever possible, museum inventory or published catalogue numbers are provided to aid identification.

Figure 27 Distribution map of gold glass findspots



### **Brushed technique portrait medallions**

Three brushed technique portrait medallions have reported findspots, all of them from Rome (**Table 1**; illustrated by the open circle in **Figure 27**).

The majority of other unprovenanced brushed technique portrait medallions which are either held in the Vatican Museum or were purchased in Rome (e.g. **cat. no. 30**) may also have been found in the city or its environs, increasing the possible number of pieces from this location.

### **Gilt glass trail technique vessels**

Illustrated by the open downturned triangles in **Figure 27**, gilt glass trail vessels have been reported from three individual locations, Ostia (near Rome, Italy), Budapest (Hungary) and Aljustrel (Portugal) (**Table 1**). One example has been recovered from each site.

In addition, Filippini noted that gilt glass trail vessels in museums in Rome, Aquileia (Italy) and Ptuj (Slovenia) were probably found in these respective localities.

### **Cut and incised technique gold glasses (vessel bases, plaques, diminutive medallions and kantharoi)**

The distribution of cut and incised technique gold glass is far wider than previously thought. Illustrated by the black circles in **Figure 27**, cut and incised technique vessel bases, plaques, diminutive medallions and kantharoi have been reported throughout the western Roman Empire. In total, 102 separate finds have been reported. The vast majority of recorded finds, however, have been made in the catacombs of Rome. Numerous gold glasses have been reported from the catacombs of Sts Agnes, Callistus, Commodilla, Domitilla, Hermes, Maximus, Peter and Marcellinus, Pontianus, Priscilla, Novatianus and Panfilo. The cut and incised technique gold glasses from each of the catacombs are tabulated separately below. Gold glasses from the environs of Rome outside of the catacombs are detailed afterwards, followed by examples from Cologne and elsewhere in Europe in the order of the numbered findspots in **Figure 27**.



Table 1 List of provenances ('Figure' in the table refers to Fig. 27 on p. 153)

### Catacomb of St Agnes (Rome)

Figure	Findspot	Context	Object type and location	Reference(s)
27.1	Catacomb of St Agnes	Fragment, removed from the sealing plaster of a <i>loculus</i>	<i>Vessel base</i> Current location unknown	Armellini 1880, 225–7, pl. IX.1; Leclercq 1923, 1842, no. 290
27.1	Catacomb of St Agnes	Fragment, still <i>in situ</i> in the sealing plaster of a <i>loculus</i> according to Smith 2000, 339, no. 2	<i>Vessel base</i>	Armellini 1880, 293, pl. IX.3; Leclercq 1923, 1851, no. 424; Morey 1959, no. 228
27.1	Catacomb of St Agnes	Fragment, apparently from inside a small lamp place within a <i>loculus</i>	<i>Vessel base</i> Current location unknown	Armellini 1880, 245–6, pl. IX.4; Leclercq 1923, 1843, no. 295
27.1	Catacomb of St Agnes	Fragment, apparently found inside a <i>loculus</i>	<i>Vessel base</i> Current location unknown	Armellini 1880, 296–7, pl. IX.4; Leclercq 1923, 1843, no. 296
27.1	Catacomb of St Agnes	Fragment, removed from the sealing plaster of a <i>loculus</i>	<i>Vessel base</i> Current location unknown	Armellini 1880, 313, pl. IX.2; Leclercq 1923, 1856, no. 485
27.1	Catacomb of St Agnes	Fragment, found loose in the dirt on the floor	<i>Vessel base</i> Pontificia Commissione di Archeologia inv. no. 26	Fasola 1974, 199, fig. 10; Salvetti 1978, 129–30, fig. 15
27.1	Catacomb of St Agnes, apparently found in 1716	Fragment, none given	<i>Vessel base</i> Vatican Museum, inv. no. 746 (ex-464)	Boldetti 1720, 212.2; Leclercq 1923, 1830, no. 70; Morey 1959, no. 14, pl. III
27.1	Catacomb of St Agnes	Fragment, none given	<i>Vessel base</i> Current location unknown	Garrucci 1864, 73–4, pl. IX.6; Leclercq 1923, 1838, no. 211
27.1	Catacomb of St Agnes, apparently found in 1698	Fragment, none given	<i>Vessel base</i> According to Buonarruoti, the glass disintegrated a few days after its discovery	Buonarruoti 1716, 216, pl. XXX; Leclercq 1923, 1850, no. 407

### Catacomb of St Callistus (Rome)

Figure	Findspot	Context	Object type and location	Reference(s)
27.1	Catacomb of St Callistus	Fragment, removed from the sealing plaster of a <i>loculus</i>	<i>Vessel base</i> Vatican Museum, inv. no. 610 (ex-476)	Leclercq 1923, 1846, no. 358; Morey 1959, no. 184, pl. XXII
27.1	Catacomb of St Callistus	Fragment, none given	<i>Vessel base</i> Vatican Museum, inv. no. 744 (ex-192)	Boldetti 1720, 194.1; Vopel 1899, 9, 81, no. 5; Morey 1959, no. 21, pl. III
27.1	Catacomb of St Callistus	Fragment, removed from the sealing plaster of a <i>loculus</i>	<i>Vessel base</i> Vatican Museum, inv. no. 793 (ex-0019 & 0391)	De Rossi 1864–77, vol. 3, 171, pl. XVII.2; Morey 1959, no. 64, pl. X
27.1	Catacomb of St Callistus	Fragment, removed from the sealing plaster of a <i>loculus</i>	<i>Vessel base</i> Vatican Museum, inv. no. 617 (ex-760)	De Rossi 1864–77, vol. 3, 171, pl. XVII.3; Vopel 1899, 9, 12, no. 365; Morey 1959, no. 176, pl. XXII
27.1	Catacomb of St Callistus	Removed from the sealing plaster of a <i>loculus</i> , apparently as a whole vessel	<i>Vessel base</i> Current location unknown	Boldetti 1720, 191.1; Garrucci 1864, 221, pl. XXXIX.7
27.1	Catacomb of St Callistus	Fragment, none given	<i>Vessel base</i> Current location unknown	Boldetti 1720, quoted in Garrucci 1864, 106, pl. XVII.6
27.1	Catacomb of St Callistus	Fragment, none given	<i>Vessel base</i> Current location unknown	Boldetti 1720, 194.4; Garrucci 1864, 221, pl. XXXIX.9
27.1	Catacomb of St Callistus	Fragment, none given	<i>Vessel base</i> Vatican Museum, inv. no. 763 (ex-473)	Boldetti 1720, 189, 192.2; Garrucci 1864, 103, pl. XVI.5; Morey 1959, no. 70, pl. XI
27.1	Catacomb of St Callistus	Fragment, none given	<i>Vessel base</i> Current location unknown; possibly Metropolitan Museum of Art (New York), inv. no. 1916.118.3	Boldetti 1720, 194.2; Garrucci 1864, 92, pl. XI.3; Morey 1959, no. 455, pl. XXXVI
27.1	Catacomb of St Callistus	Removed from the sealing plaster of a <i>loculus</i> , apparently as a whole vessel	<i>Vessel base</i> Current location unknown	Boldetti 1720, 194–5, illustrated on 194.3; Garrucci 1864, 136–7, pl. XXII.5
27.1	Catacomb of St Callistus, apparently found in 1715	Fragment, none given	<i>Vessel base</i> Metropolitan Museum of Art (New York), inv. no. 1916.118.2	Boldetti 1720, 127, 196–7, illustrated on 197.1; Garrucci 1864, 1, pl. 1.1; Morey 1959, no. 448, pl. XXXVI

### Catacomb of St Callistus (continued)

Figure	Findspot	Context	Object type and location	Reference(s)
27.1	Catacomb of St Callistus, apparently found in 1723	Fragment, none given	<i>Vessel base</i> Current location unknown	Garrucci 1864, 155–6, pl. XXVIII.4; Leclercq 1923, 1854–5, no. 462
27.1	Catacomb of St Callistus or possibly Praetextatus, apparently found in 1718	Fragment, none given	<i>Vessel base</i> Current location unknown	Boldetti 1720, 211–12, illustrated on . 212.3; Garrucci 1864, 168–70, pl. XXIII.1; Leclercq 1923, 1849, no. 397
27.1	Catacomb of St Callistus	Illegible fragment fixed into the plaster of a <i>loculus</i>	<i>Vessel base</i> Current location unknown	De Rossi 1864–77, vol. 3, 173; Leclercq 1923, 144, no. 322
27.1	Catacomb of St Callistus, apparently found in 1878	Removed from the sealing plaster of a <i>loculus</i>	<i>Portrait medallion</i> Vatican Museum, inv. no. 700 (ex-469).	Albizzati 1914, 242–7; Leclercq 1923, 1850–1, no. 417; Morey 1959, no. 3, pl. I

### Catacomb of St Commodilla (Rome)

In her unpublished PhD thesis,<sup>1</sup> Smith assumed that the gold glass reported by Bagatti as depicting the Good Shepherd and having come from the Catacomb of Commodilla<sup>2</sup> was the same as Vatican Museum, inv. no. 606 (ex-467). This was on the basis that it was the only gold glass with the Good Shepherd in the Vatican Museum collection that does not

have a bibliography dating back to the 19th century. Indeed, Smith noted that other material published by Bagatti as being from the Catacomb of Commodilla and later removed to the Vatican Museum was similarly not labelled with its original provenance.<sup>3</sup>

Figure	Findspot	Context	Object type and location	Reference(s)
27.1	Catacomb of St Commodilla	Fragment, none given	<i>Vessel base</i> Vatican Museum, inv. no. 606 (ex-467)	Bagatti 1936, 58; Morey 1959, no. 118, pl. XX

### Catacomb of St Domitilla (Rome)

Figure	Findspot	Context	Object type and location	Reference(s)
27.1	Catacomb of St Domitilla, apparently found in December 1880	Fragment, none given	<i>Diminutive medallion</i> Vatican Museum, inv. no. 661 (ex-0020)	Morey 1959, no. 129, pl. XXI
27.1	Catacomb of St Domitilla	Fragment, according to Vopel it was still <i>in situ</i> in the sealing plaster of a <i>loculus</i> in 1899	<i>Vessel base</i> Current location unknown	Vopel 1899, no. 25; Leclercq 1923, 1847, no. 366
27.1	Catacomb of St Domitilla	Fragment, removed from the sealing plaster of a <i>loculus</i>	<i>Vessel base</i> Vatican Museum, inv. no. 598 (ex-744)	Vopel 1899, no. 7; Leclercq 1923, 18; Morey 1959, no. 24, pl. IV 46, no. 347

### Catacomb of St Hermes (Rome)

Figure	Findspot	Context	Object type and location	Reference(s)
27.1	Catacomb of St Hermes	Fragment, none given	<i>Vessel base</i> Vatican Museum, inv. no. 626 (ex-766)	Bonavenia 1894, 141; Leclercq 1923, 1841, no. 264; Morey 1959, no. 122, pl. XX
27.1	Catacomb of St Hermes	Fragment, none given	<i>Vessel base</i> Current location unknown	Bonavenia 1894, 141; Leclercq 1923, 1857, no. 505

### Catacomb of St Maximus (St Felicita, Via Salaria) (Rome)

Figure	Findspot	Context	Object type and location	Reference(s)
27.1	Catacomb of St Maximus, apparently in 1886	Fragment, none given	<i>Diminutive medallion</i> Vatican Museum, inv. no. 627 (ex-769)	Vopel 1899, no. 290; Morey 1959, no. 166, pl. XXI

### Catacomb of St Novatianus (Rome)

Figure	Findspot	Context	Object type and location	Reference(s)
27.1	Catacomb of St Novatianus, found during excavation in February 1929	Fragment, embedded in plaster originally attached to a terracotta slab, Morey says 'now removed'	Vessel base Vatican Museum, inv. no. 622 (ex-2111)	Morey 1959, no. 99, pl. XVII Filippini 2000, 127, no. 1
27.1	Catacomb of St Novatianus, found during excavation in 1929	Fragment, embedded in plaster removed from the catacomb	Vessel base Vatican Museum, inv. no. 623 (ex-2110)	Morey 1959, no. 103, pl. XVII Filippini 2000, 127–8, no. 2
27.1	Catacomb of St Novatianus, found during excavation in April 1929	Fragment, found mixed with discharged earth (spoil)	Vessel base Vatican Museum, inv. no. 690 & 727 (ex-2112)	Morey 1959, no. 51, pl. VIII Filippini 2000, 128, no. 3
27.1	Catacomb of St Novatianus, found during excavation in April 1932	Fragment, still <i>in situ</i> in the sealing plaster of a <i>loculus</i>	Vessel base	Josi 1934, 206; Morey 1959, no. 227, pl. XXV; Filippini 2000, 128–9, no. 4
27.1	Catacomb of St Novatianus	Fragment, still <i>in situ</i> in the sealing plaster of a <i>loculus</i>	Vessel base	Josi 1934, 206–7; Morey 1959, no. 226, pl. XXV Filippini 2000, 128 no. 5
27.1	Catacomb of St Novatianus	Fragment, still <i>in situ</i> in the sealing plaster of a <i>loculus</i>	Vessel base	Filippini 2000, 129–30, no. 6

### Catacomb of St Panfilo (Rome)

Figure	Findspot	Context	Object type and location	Reference(s)
27.1	Catacomb of St Panfilo	Still <i>in situ</i> in the sealing plaster of a <i>loculus</i>	Portrait medallion	Ladner 1941, 19 and 36, fig. 5, no. 27; Morey 1959, no. 222, pl. XXIV
27.1	Catacomb of St Panfilo	Fragment, still <i>in situ</i> in the sealing plaster of a <i>loculus</i>	Vessel base	Morey 1959, no. 223, pl. XXIV
27.1	Catacomb of St Panfilo	Fragment, still <i>in situ</i> in the sealing plaster of a <i>loculus</i>	Gilt plaque (?)	Morey 1959, no. 224, pl. XXIV
27.1	Catacomb of St Panfilo	Fragment, still <i>in situ</i> in the sealing plaster of a <i>loculus</i>	Vessel base	Morey 1959, no. 225, pl. XXIV

### Catacomb of Sts Peter and Marcellinus (Rome)

Figure	Findspot	Context	Object type and location	Reference(s)
27.1	Catacomb of Sts Peter and Marcellinus, found in 1882	Fragment, none given	Vessel base Vatican Museum, inv. no. 608 (ex-479)	De Rossi 1882, 121, pl. VII.1; Leclercq 1923, 1857, no. 504; Morey 1959, no. 116, pl. XX
27.1	Catacomb of Sts Peter and Marcellinus	Fragment, none given	Vessel base Vatican Museum, inv. no. 704 (ex-2592)	Morey 1959, no. 8, pl. I
27.1	Catacomb of Sts Peter and Marcellinus	Fragment, none given	Diminutive medallion Vatican Museum, inv. no. 664 (ex-2570)	Morey 1959, no. 155, pl. XXI

### Catacomb of St Pontianus (Rome)

Figure	Findspot	Context	Object type and location	Reference(s)
27.1	Catacomb of St Pontianus, apparently found in 1688	Fragment, none given	Vessel base Vatican Museum, inv. no. 731 (ex-357)	Buonarroti 1716, 71, pl. IX.4; Leclercq 1923, 1856–7, no. 493; Morey 1959, no. 34, pl. VI
27.1	Catacomb of St Pontianus, apparently found in 1687	Fragment, none given	Vessel base Current location unknown	Fabretti 1702, 563; Garrucci 1864, 131, pl. XXI.3; Leclercq 1923, 1838, no. 214

### Catacomb of St Praetextatus (or Sixtus) (Rome)

In 1851 Perret stated that the same glass was found in the Catacomb of St Sixtus.<sup>4</sup> However, Garrucci later noted that the object was found in the Catacomb of St Praetextatus.<sup>5</sup> Leclercq, possibly following Garrucci, also records that the

piece was found in the Catacomb of St Praetextatus.<sup>6</sup> The current location of the glass is unknown; however, in 1876 Garrucci noted that it was in the Vatican Museum.<sup>7</sup>

### Catacomb of St Praetextatus (or Sixtus) (continued)

Figure	Findspot	Context	Object type and location	Reference(s)
27.1	Catacomb of St Praetextatus, apparently found in 1849	Fragment, removed from the sealing plaster of a <i>loculus</i>	<i>Vessel base</i> Current location unknown	Perret 1851–5, vol. 4, 122, pl. XXIII.21; Garrucci 1864, 104, pl. XVI.9; Garrucci 1872–80, vol. 3, 156, pl. 185.9; Leclercq 1923, 1841, no. 270

### Catacomb of St Priscilla (Rome)

Figure	Findspot	Context	Object type and location	Reference(s)
27.1	Catacomb of St Priscilla, apparently found in 1907	Fragment, Morey reproduces a handwritten note accompanying the object	<i>Vessel base</i> Vatican Museum, inv. no. 619 (ex-771)	Morey 1959, no. 68, pl. XI
27.1	Catacomb of St Priscilla	Fragment, none given	<i>Vessel base</i> Current location unknown	Boldetti 1720, 211–12; Garrucci 1864, 106, pl. XVII.7; Leclercq 1923, 1838, no. 219
27.1	Catacomb of St Priscilla, apparently found in 1766 (according to Leclercq and Garrucci)	Fragment, Morey reproduces an inscribed copper-gilt case with inscription accompanying the object	<i>Diminutive medallion</i> Vatican Museum, inv. no. 672 (ex-481)	Garrucci 1864, 41, pl. IV.9; Leclercq 1923, 1829, no. 46; Morey 1959, no. 150
27.1	Catacomb of St Priscilla	Fragment, none given	<i>Diminutive medallion</i> Current location unknown	Bosio 1632–4, 509, no. IX; Garrucci 1864, 66, pl. VII.15; Leclercq 1923, 1832, no. 117
27.1	Catacomb of St Priscilla	Fragment, none given	<i>Diminutive medallion</i> Current location unknown <sup>18</sup>	Bosio 1632–4, 509, no. VIII; Garrucci 1872–80, 133, pl. 118.6
27.1	Catacomb of St Priscilla	Fragment, none given	<i>Diminutive medallion</i> Current location unknown <sup>18</sup>	Bosio 1632–4, 509, no. X; Garrucci 1872–80, 133, pl. 118.7
27.1	Catacomb of St Priscilla	Fragment, none given	<i>Vessel base</i> Metropolitan Museum of Art (New York) inv. no. 18.145.3	Bosio 1632–4, 509, no. I; Morey 1959, no. 460, pl. XXXVI
27.1	Catacomb of St Priscilla	Fragment, none given	<i>Vessel base</i> Metropolitan Museum of Art (New York) inv. no. 18.145.5	Bosio 1632–4, 509, no. II; Morey 1959, no. 446, pl. XXXVI
27.1	Catacomb of St Priscilla	Fragment, none given	<i>Vessel base</i> Metropolitan Museum of Art (New York) inv. no. 18.145.6	Bosio 1632–4, 509, no. VI; Morey 1959, no. 459, pl. XXXVI
27.1	Catacomb of St Priscilla	Fragment, none given	<i>Vessel base</i> Metropolitan Museum of Art (New York) inv. no. 18.145.2	Bosio 1632–4, 509, no. V; Morey 1959, no. 449, pl. XXXVI
27.1	Catacomb of Priscilla	Fragment, none given	<i>Vessel base</i> Museo Nazionale, Florence inv. no. 34	Bosio 1632–4, 509, no. IV; Morey 1959, no. 259, pl. XXVI
27.1	Catacomb of Priscilla	Fragment, none given	<i>Vessel base</i> Museo Nazionale, Florence inv. no. 32	Bosio 1632–4, 509, no. X; Morey 1959, no. 240, pl. XXVI
27.1	Catacomb of St Priscilla	Fragment, none given	<i>Vessel base</i> Current location unknown	Bosio 1632–4, 509, no. III; Garrucci 1872–80, vol. 3, pl. 198.3, where it is noted as being in the Vatican Museum

In addition to these pieces with a recorded catacomb provenance, Morey (1959) illustrates (his) numbers 11, 42, 68, 122, 170 and 199 (all of them vessel bases) as being in the Vatican Museum, and in each instance being still attached to a block of plaster. This suggests that all six pieces were removed from the Roman catacombs. Morey illustrates a

further piece taking the form of a diminutive medallion (Morey 1959, no. 294) as embedded in plaster in the Museo Nazionale in Naples. This piece may also have been removed from a catacomb in Rome; however, it is also possible that it was recovered from a catacomb in Naples.



### Environs of Rome other than the catacombs

Figure	Findspot	Context	Object type and location	Reference(s)
27.1	Environs of Rome; Via Portuensis	Fragment; apparently in a tomb	<i>Diminutive medallion</i> Current location unknown	Vopel 1899, no. 281; apparently purchased by an Englishman; Leclercq 1923, 1832, no. 118
27.1	Environs of Rome; Church of St Eusebius	Fragment, apparently in the garden of the church	<i>Diminutive medallion</i> Garrucci 1872–80, vol. 3, 144, pl. 178.12, who noted it as being in the possession of the Protonotario Apostolico Monsignor Van den Bergke	Vopel 1899, no. 288; Leclercq 1923, 1833, no. 126
27.1	Environs of Rome; on the Palatine Hill	Fragment, apparently next to the so-called stadium	<i>Vessel base</i> Current location unknown	Vopel 1899, no. 366; Leclercq 1923, 1838, no. 207
27.1	Environs of Rome; Via Appia	Fragment, apparently in a tomb	<i>Vessel base</i> Current location unknown	Vopel 1899, no. 20; Leclercq 1923, 1847, no. 360
27.1	Environs of Rome	Fragment, none given	<i>Vessel base</i> Current location unknown	Garrucci 1872–80, vol. 3, pl. 170.2; Vopel 1899, no. 51; Leclercq 1923, 1849, no. 393
27.1	Caelian Hill	Reportedly from ruins on Monte Celio	<i>Portrait medallion</i> Possibly the piece now in the Victoria & Albert Museum (London), inv. no. 1052.1868 (Pl. 4)	Ficoroni 1732, 12

### Ostia (Italy)

Figure	Findspot	Context	Object type and location	Reference(s)
27.3	Ostia, apparently found in 1864	Fragment, none given	<i>Vessel base</i> Current location unknown	Vopel 1899, no. 14; Leclercq 1923, 1846, no. 354
27.3	Ostia, apparently found in 1888	Fragment, none given	<i>Vessel base</i> Current location unknown	Leclercq 1923, 1846, no. 365
27.3	Ostia (Italy)	Filippini states only that the piece was 'found in Ostia'	<i>Unidentified fragment</i> Ostia antica (Rome), Museo Archeologico inv. no. 5530	Morey 1959, no. 230, pl. XXV; Filippini 1996, 123, no. 10

### Cologne and its environs (Germany)

Figure	Findspot	Context	Object reference	Reference(s)
27.5	Cologne	Broken vessel, from a burial in the cemetery of the Church of St Severin	<i>Diminutive medallion-studded vessel (St Severin bowl)</i> British Museum Reg. no. BEP 1881,0624.1 (cat. no. 16)	Aus'm Weerth 1864, 119–28; see also cat. no. 16
27.5	Cologne	Fragment, apparently close to St Severin	<i>Vessel base</i> Römisch-Germanisches Museum (Cologne) inv. no. 352	Vopel 1899, no. 397; Leclercq 1923, 1839, no. 238; Morey 1959, no. 425, pl. XXXIV
27.5	Cologne	St Severin	<i>Vessel base (?)</i> Current location unknown	Nüsse 2007, 255, no. 9; Ristow 2007, 379
27.5	Cologne	From a stone cist in the cemetery of St Ursula	<i>Gilt plaque (the St Ursula bowl)</i> British Museum Reg. no. BEP S 317 (cat. no. 17)	Düntzer 1867, 168–79, pl. V; see also cat. no. 17
27.5	Cologne	Complete vessel, from a burial in the cemetery of St Ursula	<i>Kanthalos (the Disch Kanthalos)</i> Corning Museum of Glass inv. no. 66.1.267 (Pl. 6)	Albizzati 1926; Fremersdorf 1967, 210, pl. 282; Harden 1987, 253–4, no. 143
27.5	Cologne	Complete vessel, from a burial in the cemetery of St Ursula	<i>Kanthalos (the Schloss-Goluchow Kanthalos)</i> Current location unknown	Fremersdorf 1967, 202–3
27.5	Cologne	Fragment, from a burial in the cemetery of St Ursula	<i>Vessel base (?)</i> Current location unknown	Vopel 1899, no. 103
27.5	Cologne	Fragment, none given	<i>Vessel base (?)</i> Current location unknown	Vopel 1899, no. 496; Nüsse 2007, 255, no. 9

### Neuss (Germany)

Figure	Findspot	Context	Object type and location	Reference(s)
27.6	Neuss	None given	<i>Sandwich-glass plaques</i> Current location unknown	Aus'm Weerth 1878, 106–10; Vopel 1899, no. 295; Fremersdorf 1967, 207–13, figs 54–8; Nüsse 2007, 255, no. 11

### Zülpich (Germany)

Figure	Findspot	Context	Object reference	Reference(s)
27.7	Zülpich	Fragment, none given	<i>Vessel base (?)</i> Current location unknown	Vopel 1899, no. 157; Nüsse 2007, 255, no. 10

### Trier (Germany)

Figure	Findspot	Context	Object type and location	Reference(s)
27.8	Trier	Fragment, from a the cemetery of St Matthias	<i>Vessel base (?)</i> Current location unknown	Ristow 2007, 427; Nüsse 2007, 255, no. 12
27.8	Trier	Fragment, from a the cemetery of St Maximin	<i>Vessel base (?)</i> Trier, Rheinisches Landesmuseum, inv. 1916,87	Ristow 2007, 428–9; Nüsse 2007, 255, no. 13; Demandt and Engemann 2007, CD-Rom, cat. no. 1.11.55
27.8	Trier	Liebfrauenstraße	<i>Vessel base (?)</i> Current location unknown	Binsfeld 1984, 133; Nüsse 2007, 255, no. 14

### Mehring (Germany)

Figure	Findspot	Context	Object type and location	Reference(s)
27.9	Mehring	Fragment, none given	<i>Vessel base (?)</i> Trier, Rheinisches Landesmuseum, EV 1985,25 and EV 83,48	Nüsse 2007, 255, no. 15; Demandt and Engemann 2007, CD-Rom, cat. no. 1.16.42 & 43

### Regensburg (Germany)

Figure	Findspot	Context	Object type and location	Reference(s)
27.10	Regensburg, apparently found in 1688	Fragment, none given	<i>Vessel base</i> Bayerische Nationalmuseum (Munich) inv. no. G2020	Ebner 1892, 157, pl. 9.1; Vopel 1899, no. 356; Morey 1959, no. 438, pl. XXXV
27.10	Regensburg, apparently found in 1688	Fragment, none given	<i>Diminutive medallion</i> Bayerische Nationalmuseum (Munich) inv. no. G2021	Ebner 1892, 157, pl. 9.2; Vopel 1899, no. 428; Leclercq 1923, 1841, no. 269; Morey 1959, no. 437, pl. XXXV

### Augst (Switzerland)

Figure	Findspot	Context	Object type and location	Reference(s)
27.11	Augst	Fragment, none given	<i>Vessel base (?)</i> Current location unknown	Rütti 1990; Nüsse 2007, 255, no. 16

### Carnuntum (Austria)

Figure	Findspot	Context	Object reference	Reference(s)
27.12	Carnuntum	Fragment, none given	<i>Vessel base (?)</i> Current location unknown	Nüsse 2007, 255, no. 18
27.12	Carnuntum	Fragment, none given	<i>Vessel base (?)</i> Current location unknown	Kandler 1983; Nüsse 2007, 255, no. 19

### Dunaújváros (Hungary)

Figure	Findspot	Context	Object type and location	Reference(s)
27.13	Dunaújváros	Fragment, from a burial	<i>Vessel base</i> Magyar Nemzeti Múzeum (Budapest) inv. no. 53.5.1	Fülep 1968; Barkóczi 1988, 217, no. 551

### Dunaszekesó (Hungary)

Figure	Findspot	Context	Object type and location	Reference(s)
27.16	Dunaszekesó	Fragment, from a burial	<i>Vessel base</i> Magyar Nemzeti Múzeum (Budapest) inv. no. 3.1934	Fülep 1968; Barkóczi 1988, 217, no. 550

### **Budapest (Hungary)**

<b>Figure</b>	<b>Findspot</b>	<b>Context</b>	<b>Object type and location</b>	<b>Reference(s)</b>
27.2	Budapest (Aquincum, Hungary)	Complete vessel, found in the piping system of the Legate's Palace	<i>Bowl</i> Aquincumi Muzeum (Budapest)	Kaba 1964, 338; Barkóczy 1988, no. 26; Filippini 1996, 119, no. 3

### **Martigny (Switzerland)**

<b>Figure</b>	<b>Findspot</b>	<b>Context</b>	<b>Object type and location</b>	<b>Reference(s)</b>
27.14	Martigny, found in 1975	Fragment, from a burial	<i>Vessel base</i> Musée National á Zurich inv. no. 75/264	Wiblé 1980

### **Ptuj (Slovenia)**

<b>Figure</b>	<b>Findspot</b>	<b>Context</b>	<b>Object type and location</b>	<b>Reference(s)</b>
27.15	Ptuj	Fragment, from a burial	<i>Vessel base</i> Current location unknown	Mikl 1962–3; Nüsse 2007, 255, no. 22
27.15	Ptuj	Fragment, from a burial	<i>Vessel base</i> Current location unknown	Mikl 1962–3; Nüsse 2007, 255, no. 23

### **Mariana (France)**

<b>Figure</b>	<b>Findspot</b>	<b>Context</b>	<b>Object type and location</b>	<b>Reference(s)</b>
27.17	Mariana	Fragment, from excavations close to the basilica	<i>Vessel base</i> Lucciana, depot Archéologique de Mariana	Foy and Nenna 2001, 219, no. 399
27.17	Mariana	Fragment, from excavations close to the basilica	<i>Vessel base</i> Lucciana, depot Archéologique de Mariana	Foy and Nenna 2001, 219 (note to cat. no. 399)

### **Aquileia (Italy)**

<b>Figure</b>	<b>Findspot</b>	<b>Context</b>	<b>Object type and location</b>	<b>Reference(s)</b>
27.18	Aquileia, found in 1877	Fragment, none given	<i>Vessel base</i> Museo Archeologico di Aquileia inv. no. R. C. 1096	Steinbüchel-Rheinwall 1877–8; Zanchi Roppo 1969, 9–10, no. 1, fig. 1

### **Golf de Fos (France)**

<b>Figure</b>	<b>Findspot</b>	<b>Context</b>	<b>Object type and location</b>	<b>Reference(s)</b>
27.19	Golf de Fos	Fragment, none given	<i>Vessel base</i> Istres, Musée René Beaucaire inv. no. I.Fos.738.J	Foy and Nenna 2001, 219, no. 398

### **Prahovo (Serbia)**

<b>Figure</b>	<b>Findspot</b>	<b>Context</b>	<b>Object type and location</b>	<b>Reference(s)</b>
27.20	Prahovo	Fragment, none given	<i>Vessel base</i> Belgrade, National Museum, inv. 1511/IV	Demandt and Engemann 2007, CD-Rom, cat. no. 1.11.52

### **Arles (France)**

<b>Figure</b>	<b>Findspot</b>	<b>Context</b>	<b>Object type and location</b>	<b>Reference(s)</b>
27.21	Arles	Fragment, found in a stone urn in the cemetery of Les Alyscamps	<i>Vessel base</i> Current location unknown	De Rossi 1864–77, vol. 3. 172; Leclercq 1923, 1847, no. 369
27.21	Arles	Fragment, found during excavations of the circus	<i>Plaque</i> Musée de l'Arles antique	Formigé 1912, 437–8; Foy and Nenna 2001, 220, no. 401

### **Aljustrel (Portugal)**

<b>Figure</b>	<b>Findspot</b>	<b>Context</b>	<b>Object type and location</b>	<b>Reference(s)</b>
27.4	Aljustrel (Portugal)	Complete vessel, from an inhumation	<i>Bowl</i> Musée de la Société Anonyme Belge des Mines	Alarcão 1968, 71–9; Filippini 1996, 119, no. 1

### **Estagel (France)**

Figure	Findspot	Context	Object type and location	Reference(s)
27.22	Estagel	Fragment, found in a leather purse accompanying a male inhumation in a Visigothic cemetery	Vessel base Musée des Antiquités Nationales de St-Germain-en-Laye	Landes 1988, 195–6, no. 31

### **Castiglione della Pescaja (Italy)**

Figure	Findspot	Context	Object type and location	Reference(s)
27.23	Castiglione della Pescaja	Fragment, none given	Vessel base Current location unknown	Vopel 1899, no. 179; Leclercq 1923, 1827, no. 13

### **Castel Gandolfo (Italy)**

Figure	Findspot	Context	Object type and location	Reference(s)
27.24	Castel Gandolfo	Fragment, from a burial lying next to the deceased accompanied by a coin of Heliogabalus (218–22)	Diminutive medallion Current location unknown; Garrucci noted that it was in his own collection	Garrucci 1872–80, vol. 3, 42, pl. 177.9; Vopel 1899, no. 267; Leclercq 1923, 1832, no. 104

### **Sicily (Italy)**

Figure	Findspot	Context	Object type and location	Reference(s)
27.25	Sicily	Fragment, none given	Diminutive medallion Current location unknown	Dalton 1901b, 251; D'Orville 1764, 123A

In addition to the findspots recorded above, Landes briefly notes two gold glasses from Autun in France.<sup>8</sup> I have not, however, been able to confirm this report. Furthermore, a single gold glass vessel base and two diminutive medallions have been reported as having been found in Budrovici and Salona in Croatia.<sup>9</sup> All three objects have the appearance of being forgeries, however, and none of them appear to have confirmed findspots. Therefore, they have not been included in this catalogue.

### **Notes**

- 1 Smith 2000, 350–1.
- 2 Bagatti 1936, 58.
- 3 For example, compare Bagatti 1936, 66, fig. 54 with Morey 1936, no. A27.
- 4 Perret 1851–5, vol. 4, 122.
- 5 Garrucci 1872–80, vol. 3, 156, pl. 185.9.
- 6 Leclercq 1923, 1841, no. 270.
- 7 Garrucci 1872–80, vol. 3, 156, pl. 185.9.
- 8 Landes 1988, 196, no. 31, n. 1.
- 9 Fadić 1997, 190 and 213, nos 189 and 226, with associated references.

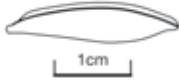


# Appendix B

## Profile Drawings

This appendix contains profile drawings of the 55 Late Antique gold glasses in the British Museum's collection. Drawn by Stephen Crummy.

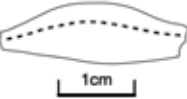
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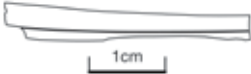
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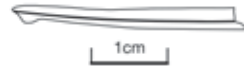
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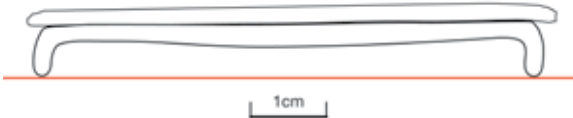
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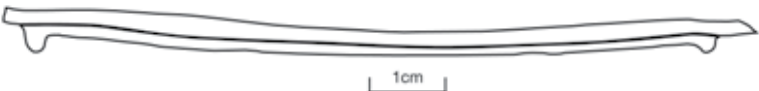
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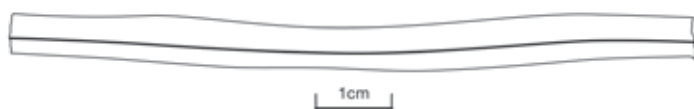
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**Cat. no. 10**



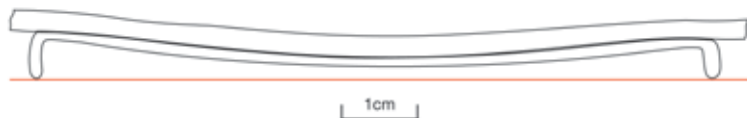
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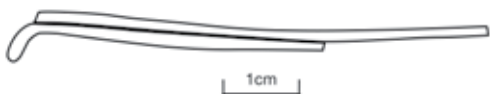
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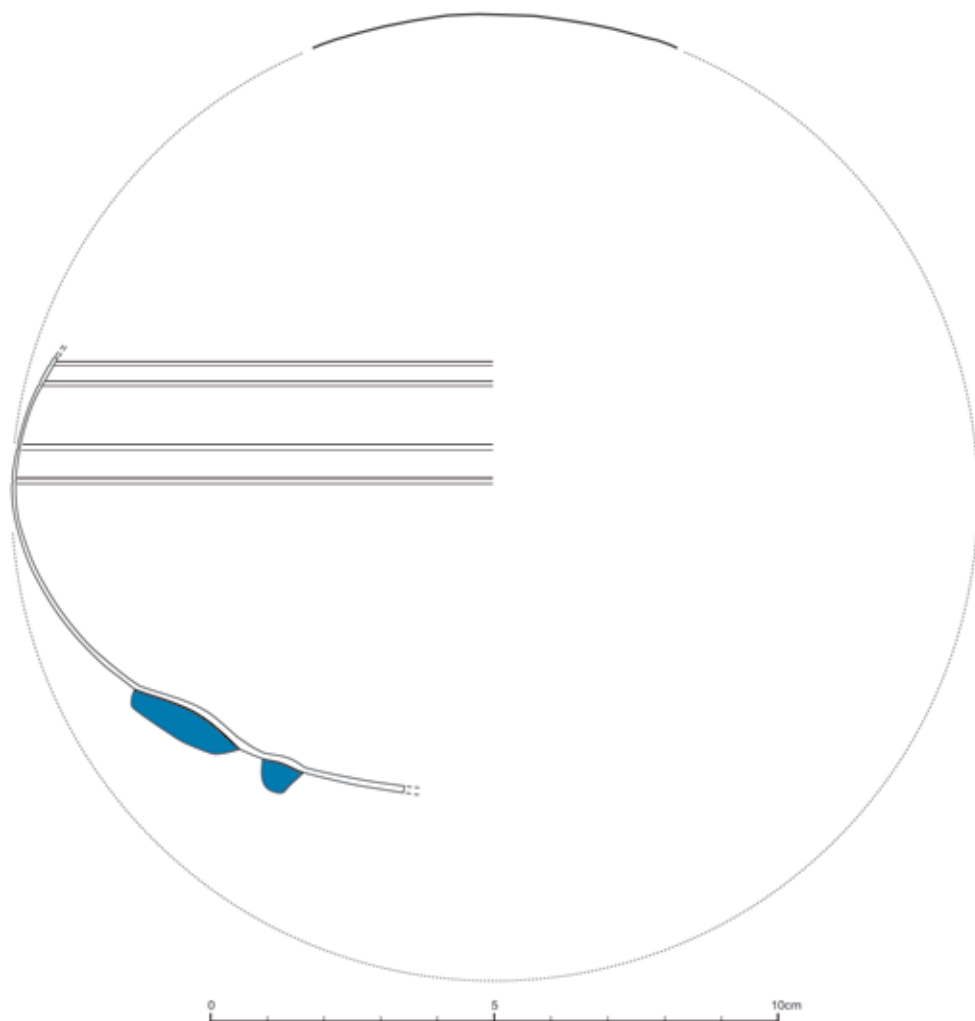
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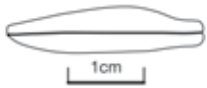
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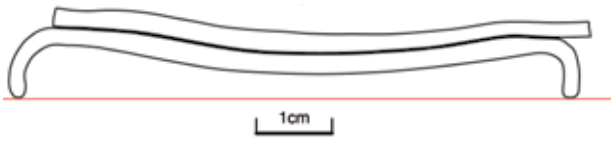
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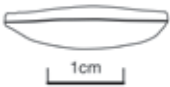
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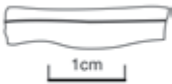
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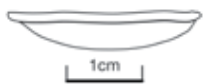
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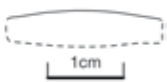
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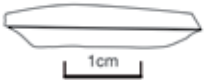
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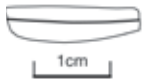
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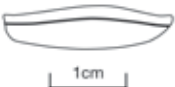
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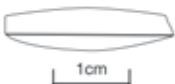
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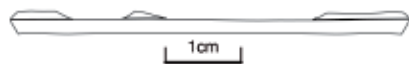
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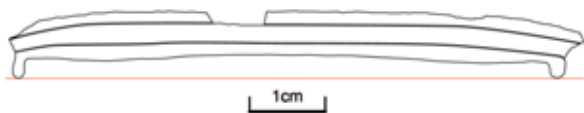
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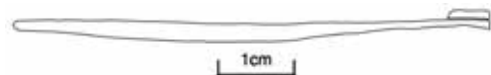
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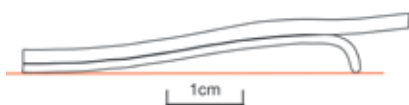
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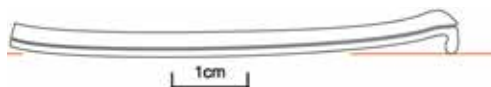
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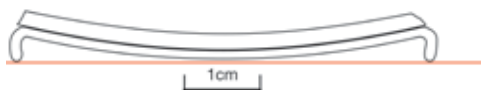
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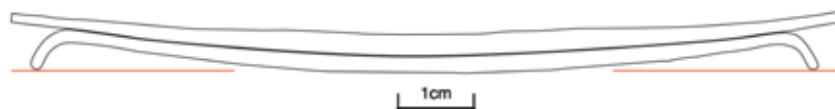
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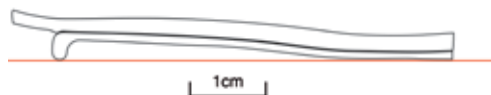
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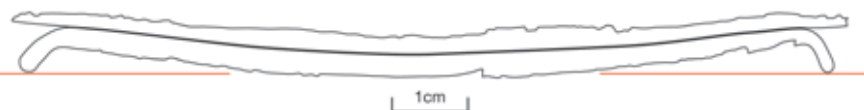
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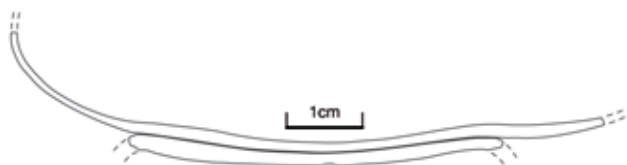


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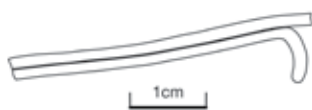




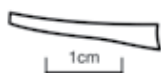
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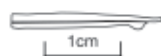
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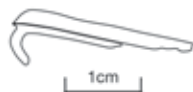
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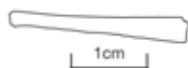
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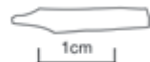
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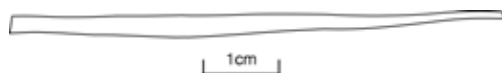
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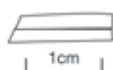
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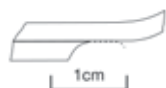
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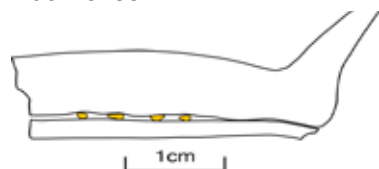
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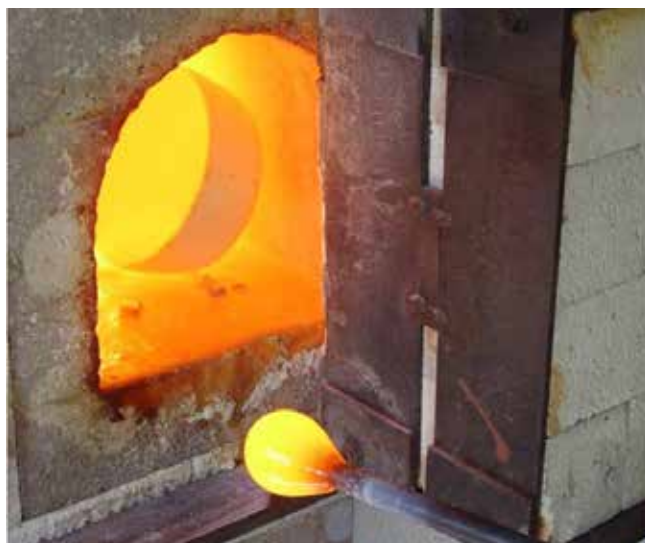
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# Appendix C

## A Modern Attempt at Reproducing Cut and Incised Technique Sandwich-Glass Vessels

The following images demonstrate how to blow a circular bowl with a gold glass sandwich foot-ring (see also Chapter Four). With thanks to the Roman Glassmakers, Mark Taylor and David Hill, for the images and captions.



**Plate 148** The glassblower gathers a small amount of hot colourless soda-lime glass from the main furnace onto the end of his blowing iron. The glass has been mixed to a Roman recipe, based upon analyses of original gold glass discs



**Plate 149** The glassblower has blown a bubble, and is cutting in to create a thin area where the neck of the 'proto-vessel' foot-ring will be cracked off from the blowing iron after shaping



**Plate 150** The base of the bubble has been pushed in and flattened using a flat piece of fruitwood, which is 'kinder' to the surface of the glass than metal tools



Plate 151 The finished blown 'proto-vessel' (which will become the base and foot-ring of a finished gold glass bowl) is cracked off from the blowing iron and placed into the annealing oven or 'lehr', which allows stresses in the glass resulting from uneven heating and cooling to dissipate by holding the glass at a steady temperature during the working day and slowly cooling it overnight



Plate 154 After a short time, the expansion of the glass caused by the heat from the flame has caused the conical top of the object to crack off horizontally all the way round. The unwanted upper dome portion (known as the moil) is set aside for recycling. This use of a hot flame jet is a modern method – in Roman times this very common task may have been achieved by applying a hot blade perhaps, or another of several similar techniques – no one knows for certain how this was done in antiquity



Plate 152 The now annealed (and cold) glass has a short (c. 5–10mm) scratch scored at its edge using a diamond or sharp metal burr, at a height where the foot and base will be cracked off. This will act as a 'crack-starter'



Plate 155 The two parts of the glass foot section – foot (left) and unwanted moil (right). The moil is destined to go back into the glass pot for remelting

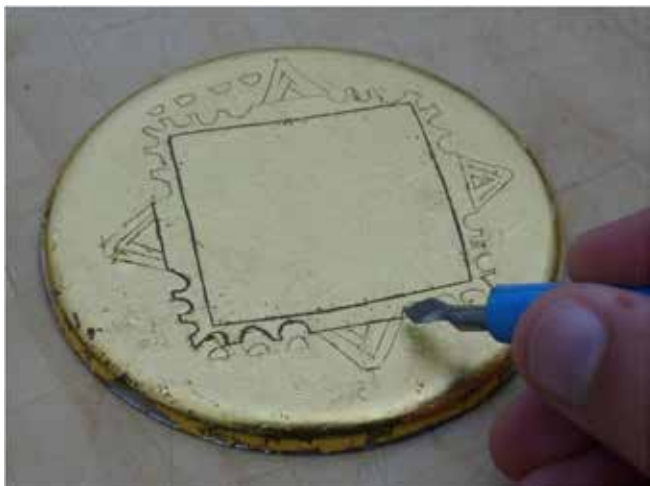


Plate 153 The foot-ring vessel is rotated on a wheel, whilst a pencil-point flame from a gas torch plays upon the scratch



Plate 156 The sharp edge of the foot-ring, where it was cracked off, has been made safe by smoothing it with a stone to avoid unwanted cuts to fingers. The artist paints a thin layer of gum arabic or similar adhesive onto the surface of the glass





**Plate 157** The artist has carefully lain and rubbed down a thin layer of gold leaf or foil onto the gum arabic, and after the glue dried thoroughly has marked out (in this case using a modern OHP pen) the design to be copied. The scene depicted shows the prophet Daniel feeding exploding cakes to the dragon, as related in the Apocrypha. The artist has begun to scratch away the unwanted gold leaf with a small sharp blade



**Plate 160** The artist begins to remove the unwanted areas of the gold leaf to create a blank background to the figures and their decorative framing



**Plate 158** The artist continues to outline the design with the blade, making any changes necessary to the sketch as he engraves



**Plate 161** Most of the unwanted gold has been scraped away. All unwanted fragments of the precious metal will have been carefully saved for recycling



**Plate 159** The outlining is completed



**Plate 162** A detail of Daniel and the dragon at this stage of decoration





Plate 163 The ragged edges and details of the scratched gold surfaces are refined by careful work with a fine wooden stylus (here a cocktail stick) which is dipped in water for ease of movement across the glass. This has the effect of loosening and removing excess gum arabic at the same time as tidying the gold edges



Plate 164 A closer detail of the tidying process with the dampened cocktail stick



Plate 165 The finished foot-ring disc



Plate 166 The gilded foot-ring has been placed into the lehr and has been slowly raised in temperature to *circa* 500°C. The glassblower's assistant removes the disc onto a wooden paddle using a thin wooden stick



Plate 167 The assistant has placed the foot-ring into a small 'garage' of insulating bricks to prevent any draughts of cold air from allowing it to crack from thermal shock. As a double precaution, he is playing a gas torch onto the glass, so as to maintain its temperature at around 500°C



**Plate 168** The glassblower has blown a large bubble of thin-walled glass, and after a reheating, lowers it onto the foot-ring so that the bowl glass covers and adheres to the surface



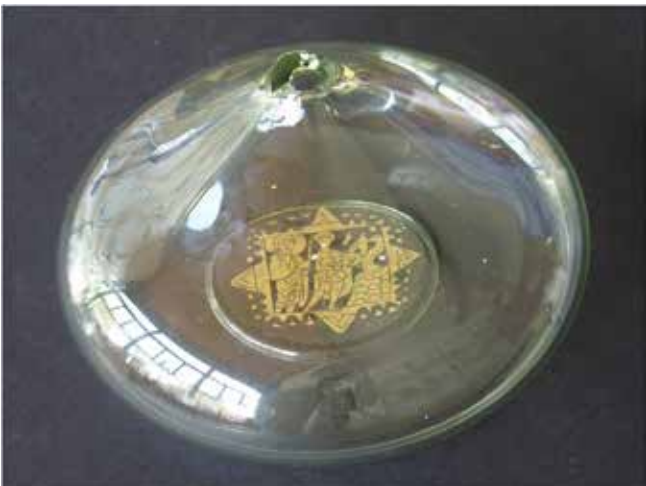
**Plate 171** The edge of the bowl is scored with a diamond or sharp metal burr at the point where cracking off is desired



**Plate 169** After reheating and shaping using gravity and centrifugal force, the glassblower now has a large bowl with the gold glass foot-ring/base bonded permanently at the bottom on his blowing iron. He will now crack this off at the neck, and place the domed 'vessel' in the lehr for annealing and overnight cooling



**Plate 172** The edge of the complete bowl has a pencil flame played upon the area of the scored scratch, and is rotated on the wheel. After a few minutes, it will crack off due to the thermal shock



**Plate 170** The annealed gold glass sandwich foot-ring disc with its bowl and moil attached



**Plate 173** The unwanted upper moil is lifted away, and set aside for recycling





Plate 174 The finished bowl with its gold glass disc/foot-ring at the centre. The edge of the bowl may now be ground to remove its sharp edge, and the bowl will be complete



Plate 175 The finished gold sandwich disc of Daniel and the dragon



Plate 175 Dan Howells trying his hand at glassblowing in May 2009

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