

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. British Museum, London, BEP 1863,0727.6

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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 glassworking 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 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 wellpreserved 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. 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 1959,2 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 findspots 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. 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.² The 1659 publication of Roma Subterranea Novissima by the antiquarian Paolo Aringhi included a further two examples of gold glass.3

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.⁴ 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. 5 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.⁶ Two gold glasses were also included in the 1691 publication of the Sacra historica disquisitio by Giovanni Giustino Ciampini.7 Interested primarily in gold glass iconography, however, Ciampini illustrated only the gold leaf depictions and not the surrounding glass fragments. 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

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. 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, a sindeed was a further example also published by Aringhi in the collection of Francesco Gualdi.

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 corpusessantari who acted principally on commission from members of the papal hierarchy, regulated, but in fact institutionalized, by Pontifical Decree in 1688.12 In the later 17th century, mainly through one presumes commissions granted to the corpusessantari, 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. 13

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.¹⁴ 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. 15 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. ¹⁶ In contrast to Buonarruoti, Boldetti's work has been branded as comparatively 'naïve'. ¹⁷ 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. ¹⁸ 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*. ¹⁹ 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. ²⁰ 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. 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 corpusessantari. 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).²² 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.23

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. 24 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, 25 as well as on cut and incised vessel bases in the Museo Oliveriano in Pesaro and the Vatican. 37 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 1901.²⁸

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 Röstell (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.²⁹ 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.30 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.³¹ 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.32 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.³³ 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.³⁴ 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.³⁵ 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. 36 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.³⁷

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.³⁸ This commission instigated the first real process of scientific catacomb exploration for more than 200 years, bringing the activities of the corpusessantari 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.³⁹ 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.⁴⁰ 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.⁴¹ This conclusion has been widely and almost unquestioningly accepted in the subsequent literature.⁴²

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, 43 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.44 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.⁴⁵ 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 1876.46 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.⁴⁷ 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.⁴⁸

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.⁴⁹ 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.⁵⁰ 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.51 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.⁵² 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.53 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.⁵⁴ 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'.55 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.⁵⁶ 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.⁵⁷ 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

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.⁵⁸ Brief catalogues of examples held in sizeable private collections were also produced.⁵⁹ 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. 60 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. 61 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 Neuberg in 1949.62

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 1923.63 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 (**P1. 1**), ⁶⁴ Fernand de Mély challenged the deeply ingrained opinion of Garrucci and Vopel that all examples of brushed technique gold glass were in fact forgeries. 65 The following year, de Mély's hypothesis was supported and further elaborated upon in two articles by different scholars. 66 A case for the Brescia medallion's



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

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. ⁶⁷ 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. ⁶⁸

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. 69 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 bluebacked portrait medallions, some of which also had Greek inscriptions in the Alexandrian dialect.70 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 (**P1. 2**).⁷¹ 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.72

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.⁷³ 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.74 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.75 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.⁷⁶ Josef Engemann effectively countered this hypothesis.77 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 sportsrelated iconography of contorniate medallions, coin-sized bronze medallions bearing an array of imagery struck by the official mint in Rome.78 Andreas Alföldi had argued that contorniates were struck so that they could be freely

distributed as New Year gifts.⁷⁹ 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 Schüler.⁸⁰

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.81 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.⁸² 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. 83 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.84 A further attempt at defining chronological and workshop groupings, based again upon iconography and perceived stylistic traits, was presented by Lucia Faedo in 1978.85 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. Examples have also been included in exhibitions dedicated to Roman glass, including *Glass of the Caesars* in London in 1987. 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. 88 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. 89 Late 19th-century gold glass reproductions were treated most thoroughly by Judy Rudoe, and six examples appeared in the catalogue of the exhibition *Reflecting Antiquity*. 90

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.⁹¹ 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.92 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.93 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.94 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. 95 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.96

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.
- $43\ \, \text{Aus'm Weerth } 1864,119-28; \textit{idem } 1878,99-114; \textit{idem } 1881,119-33.$
- 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; Neuberg 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.
- 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.1 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.2 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.3 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.4

Following Garrucci, Iozzi also mistakenly attributed four diminutive medallions to the British Museum's collection.5 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.⁶ The medallion is now in fact in the collection of the Corning Museum of Glass, New York, having previously been in the Sangiorgi Collection.⁷ 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.⁸ 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.9 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.* 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

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." 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.12 This ring was acquired by the British Museum in 1948 from the Austrian collector Dr J.H. Jantzen.¹³ 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.¹⁴ 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. ¹⁵ 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. ¹⁶ Other British Museum gold glasses have been used more recently to illustrate some of the more general articles noted already, ¹⁷ and are often used as 'window dressing' in general volumes focused on Late Antiquity and Early Christianity. ¹⁸

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. ¹⁹ 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.²⁰ 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.21 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.22 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.²³ 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.24

The 1856 Hamilton Collection (cat. no. 1)

The Hamilton Collection of 29 Early Christian objects includes a single example of Late Antique gold glass. ²⁵ 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. ²⁶

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.²⁷ 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'.28 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.29

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. 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.

Hamilton had been in correspondence with and given first refusal to the British Museum concerning a number of antiquities prior to the 1856 acquisition.³² 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.³³ 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.³⁴

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.³⁵ 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. ³⁶ 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'.37 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. 38 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).39

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. ⁴⁰ 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. ⁴¹ 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. ⁴² 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'Urbin et son pére 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. ⁴³ 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 Mattarozzi Batelli in Fossombrone, a second piece went to M. Leonardi Matterozi 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.⁴⁴

It is tempting to speculate that Tyszkiewicz's story relates to the Matarozzi group. 45 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. 46 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 Urbania. 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. 47

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 1871.48 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.⁴⁹ 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 1867.50

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.⁵¹ 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 1836.52 Although the gold glass fragment is not noted specifically, Meyrick does record 'several specimens of Roman glass' in the collection.53 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.⁵⁴ 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 1881.⁵⁵ 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.⁵⁶

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. 57 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.⁵⁸ In collaboration with Franks, he published the Slade Collection of ancient glass in 1871 after its entry into the British Museum.⁵⁹ 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).60 Mounts of this type were used by antiquities dealers in Rome between approximately 1860 and 1920.61

The 1893 acquisition of 184 objects was presented to the British Museum by Franks from his own personal collection. ⁶² 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. ⁶³ 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. ⁶⁴ 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. ⁶⁵

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. ⁶⁶ He first visited Italy in 1866 and made numerous return visits in the following years travelling extensively both in Italy and the Mediterranean. ⁶⁷ 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 Feuardent, lot 103.⁶⁸ 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.⁶⁹

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 Glass⁷⁰ and the Musée Archéologique in Lyon respectively,⁷¹ which were purchased for 360 francs each.⁷² 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 (**P1. 5**), a style at the time of the auction in 1898 considered to be a forgery by the most eminent authorities.⁷³ 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.74 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.⁷⁵ 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. To 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. 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.78 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,79 which as noted earlier were used by antiquities dealers in Rome in the midand late 19th century.80 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.⁸¹ 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.82 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. By 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.⁸⁴ 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 1901.85

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 resinbacked 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. ⁸⁶ 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'. 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 1849.88 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 1909.89 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.90 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.91

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. They were all produced in 1901 and were noted briefly in Dalton's article of the same year. 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. 94

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'. 95 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.⁹⁶ 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.⁹⁷ 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.98 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. ⁹⁹ 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). ¹⁰⁰ 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. ¹⁰¹ The price paid for it by Pender is not recorded; however, the gold leaf

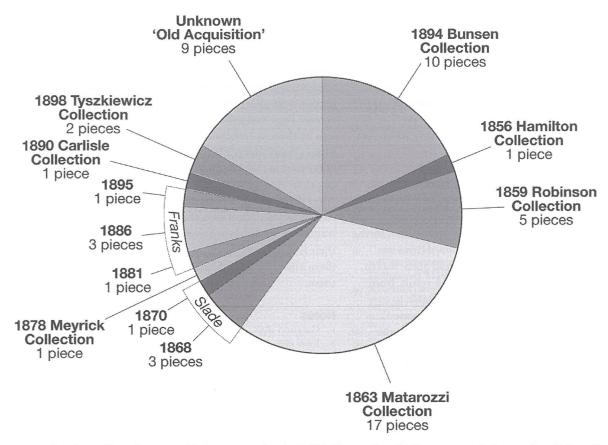


Figure 1 Numbers of Late Antique gold glasses entering the British Museum's collection, represented proportionally by collection and year of acquisition

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. 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. ¹⁰³ **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. 104 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'.105

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. 106 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*. ¹⁰⁷ 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. ¹⁰⁸ 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. 109 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 (P1. 4) had been purchased by the South Kensington Museum for a mere £10 from the collection of the London antiquities dealer John Webb.

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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 wellpreserved 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

- 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.
- 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 Feuardent 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.e: 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.
- 100Ibid.
- 101 Ibid., 217, n. 3.
- 102 Ibid., 210.
- 103Stratford 1993, 46-51; Finney 2003, 193.
- 104Black 1985; Chaney 1998.
- 105 Dalton 1901b, 234.
- 106Greene 1992, 17.
- 107 Ferrua 1968, 251–78.
- 108Franks 1864, 380.
- 109Tyszkiewicz 1898, 40–1.