The Ernst Matthahei Memorial Collection of Early Glass was established in memory of Ernst Matthahei, microscopist, who died in 1966 whilst a member of the School of Botany, University of Melbourne. Money subscribed to a memorial appeal by friends of Ernst Matthahei was used partly to purchase a small, initial collection, and the balance was invested. This investment is managed under University Resolution 7.75 (5) so that the ‘income of the fund is used to establish and maintain (within the University) a glass collection, particularly of early wine and drinking glasses’. The fund was considerably augmented under the terms of the will of the late Mrs Grace Matthahei. By these means the Ernst Matthahei Memorial Collection will remain viable into the future, with money available for continuing purchases.

Both the University and University House (the University’s staff club, located in the only surviving example of the 19th-century houses built on the Parkville campus for professors and their families) agreed that ‘the House’ should be the repository for the collection and, at a small ceremony in May 1971, the collection was formally presented to the University and accepted by the then Chancellor, Sir Robert Menzies.

The Matthahei Collection is now displayed in eight cabinets in the Matthahei Room, University House. It is displayed together with selected pieces from the Sir Russell and Lady Mab Grimwade Bequest—an extensive collection of cultural material including artworks, photographs, furniture, rare books, historical documents, items of memorabilia and decorative arts. The Grimwade items of glass on display with the Matthahei Collection are of national and international significance and include some magnificent early Georgian drinking glasses, spectacular green Victorian decanters and bowls, and an extensive selection of paperweights from some of the most distinguished glasshouses throughout Europe.

Ernst and Grace Matthahei

Ernst Matthahei had been closely associated with University House. He was a foundation member and, at the time of his death, a general committee member and first convener of the wine committee. In establishing as his memorial this important collection for all members of the House and their visitors to enjoy, it was hoped to symbolise his belief in a dignified, comfortable and welcoming staff club. His life-long interest in glass and its application to optical problems is also obliquely reflected.

Ernst Matthahei was born in Trier, Germany, in 1904. A Zeiss scholarship gave him the opportunity to study at the University of Jena where, after obtaining the Diplom-Optiker, he became the assistant to Professor Henkel. In 1929 he came to Australia as technical agent for the Zeiss organisation, and in the 1930s he established Ernst Matthahei & Co., dealers in scientific instruments. After a visit to Germany in 1937, he returned to Australia in 1939, married Grace Moran Villiers, and became an Australian citizen.

Matthahei’s association with the University of Melbourne began in December 1939 when Professor R.D. ‘Pansy’ Wright appointed him to a technical post in the Department of Physiology. By 1942 he was playing an important role in the optical munitions workshop of the School of Botany. He assisted in the preparation of graticules for the Australian Army, and he played a significant part in the development of tropical proofing for optical instruments. At the conclusion of World War II, a Science Faculty workshop, later to become the microscopy laboratory, was established, with Ernst Matthahei in charge.
His original work in the field of fluorescence further enhanced his reputation in research, working with Professor Oscar W. Tiegs (zoology) on the structure of insect muscle, and later collaborating with Professors John S. Turner (botany) and Michael J.D. White (zoology). He pioneered an exceptional series of lectures and workshops on all aspects of microscopy, both theory and practice.

Grace Matthaei was born in Warrnambool in 1910. She graduated BA from the University of Melbourne, going on to complete the Diploma of Education in 1931. She followed a career in journalism, later working with the Red Cross. In 1950 she was appointed part-time librarian in the Department of Geology, where she remained until her retirement in 1975. Grace was also associated with the Department of English where, from time to time, she tutored. She wrote articles for the *Epicurean* that were enjoyed by many readers. She was an associate member of the Royal Society of Victoria, and assistant editor of the Society’s *Proceedings* from 1966 to 1980; she had a long association with the Queen’s Fund and the Lyceum Club.

Ernst’s love of companionship, good wine and food, and Grace’s gourmet knowledge, combined with their joint love of music and art, made them active and valued members of the House.

**Development and management of the collection**

The development of the collection and the purchase of glass have been guided by two expert advisers: Rex H. Ebbott OBE for 23 years until his death in 1991, and Mrs Pat Daniels from 1991 to the present. These expert advisers have been assisted in development and curatorial matters by co-advisers Max Marginson (until 2002), and Peter Attiwill (1992 to the present), and by a subcommittee of University House established by agreement between the University and the committee of University House. Together with Max Marginson and Peter Attiwill, the long-serving members of the subcommittee were Mrs Robin Patton (at one time personal assistant to Dr Ray Marginson AM, Vice-Principal of the University, who was a strong supporter of the Matthaei Collection since its inception), Bob Speechley and Robert Garton, both of whom had long associations with the House. Every year or so, these stalwarts gathered at a weekend to clean the collection, with never a piece broken or damaged.

The curator and historian of glass, Geoffrey Edwards, describes Rex Ebbott as:

… a Melbourne collector and connoisseur of English glass, who had been appointed by the Gallery’s [the National Gallery of Victoria] then Director, Daryl Lindsay, as Honorary Curator of the Glass Collection. It fell to Ebbott to formulate a plan for the development of a comprehensive collection of seventeenth- and eighteenth-century English glass. Ebbott served in his honorary role until his death in 1991, and to him great credit is due for his extraordinary vision, which fostered interest, in the postwar period, in the glass collection as a whole … the majority of the significant pieces that entered the collection between the late 1950s and the 1980s were acquired on Ebbott’s recommendation and attest to his unerring connoisseurship.

Ebbott wrote of the story of glass and of the National Gallery of Victoria’s British glass collection in the extensively illustrated booklet published by the Gallery in 1971. In 1976 Rex was awarded the National Gallery of Victoria’s gold
medal for distinguished service to art in Victoria, and in 1979 he was admitted to the Order of the British Empire. We were therefore most fortunate to have Rex Ebbott at the helm of the Matthaei Collection from the outset. He ensured that the emphasis of the collection was on English and Irish glass from the 18th and early 19th centuries, as was his own, extensive collection. His contacts were distinguished and widespread, including for example the London glass dealers Edward Barrington Haynes of Arthur Churchill Ltd, and Howard Phillips.

And so the collection grew, bit by bit, from its humble start of some 16 pieces to now some 250 catalogued entries. By 1978, the collection numbered 50 pieces with the acquisition of a small, Jacobite firing glass. As it grew, we became increasingly selective so that we could embrace the variety of forms and shapes of bowls, stems and feet of early drinking glasses. With Rex’s vast experience in both selecting the pieces and cataloguing them, their variety and authenticity were ensured. Also, as Pat Daniels noted, Rex’s knowledge of and friendship with local collectors resulted in many donations, not the least of which came from the collection of Georgian glass (as well as Georgian silver and furniture) of the anaesthetist Dr Geoffrey Kaye. Following Rex, we were again most fortunate that Mrs Pat Daniels, an outstanding expert in Georgian glass and porcelain, offered her services as adviser. Pat and Roger Daniels owned Parkside Antiques in South Melbourne, and they have donated a number of significant pieces. Pat and her family returned to England in 1996 where she continues as adviser.

By the late 1990s, the collection included representatives of most shapes and types of early British and Irish glass. We decided that our collection policy should concentrate on three types: colour twists, Silesian (moulded stems), and commemorative glass.

**Overview of the collection, together with selected pieces**

The collection embraces both the 18th and 19th centuries, but it is the drinking glasses of the Georgian period that are of the greatest value. Now to understand the great period of English glass of the 18th century, I have to give a brief account—both of early glassmaking in Europe and of historical events in England—immediately preceding this great period.

The melting of some form of silica—such as sand—in the presence of an alkali such as soda or potash continues as the way of making glass today. These fluxes have become increasingly sophisticated; for example, boric oxide is used as a flux in making the highly heat-resistant Pyrex glass, used extensively today in glass for the kitchen. Modern furnaces, however, are so hot that much of today’s glass is made without the need for an alkaline flux. That is, it is made from silica alone.

By the 16th century, Venice was established as the world centre of glassmaking. The industry was based on the lagoon island of Murano, a move initiated in 1292 because of the fear of fire spreading from the furnaces. The pieces became increasingly highly decorated and coloured, the colours coming from the additions of metals such as chromium for green, cobalt for blue and manganese for pink. By the early 16th century however, the popularity of coloured glass had largely given way to *cristallo*, a clear glass named after the rock crystal that it resembled. It was soda glass—that is, silica melted with a soda flux—while small quantities of manganese (which came to be known as ‘glassmakers’ soap’) gave a very plastic ‘metal’ (the glass mixture...
used in the making). The glasses were of great elegance, often with elaborate decorations. The soda-lime cristallo of Venice was thin and of considerable brilliance, but very fragile.

The making of elegant glass in England began in the mid-1500s when first Jean Carré and then Murano’s Giacomo Verzelini went to England. Carré and Verzelini made glass in the Venetian manner, and so it is known as à la façon de Venise. Verzelini had the field to himself, because the importation of glass into England was forbidden. Only a half-dozen pieces attributable to Verzelini have survived.

Following Verzelini’s retirement in 1592, glassmaking was dominated over the next 60 years by a couple of barons who established very effective forms of monopoly. Sir Robert Mansell controlled England’s glass industry for some decades. Mansell ensured that imports from Venice and Murano were intermittently prohibited, and they were always heavily dutiable.

The great authority on English glass, E. Barrington Haynes, wrote that glass in quantity was now recognised as essential—glass of all shapes and sizes—useful glass, utility glass, and inexpensive glass, and Mansell set up the industry to cater for all of these demands. But there is little of significance in the world’s museums to recognise Mansell’s contribution.

With the Civil War, the glass industry in England disintegrated and so we can say that no glass of any great distinction was produced in England following Verzelini throughout the 1600s until 1680. It can be argued that Cromwell’s dictatorship saved the country, but eventually it appealed to nobody. The monarchy was re-established, and Charles II ascended the throne in 1660 and stayed there for 25 years. The rebirth of royalty engendered a new enthusiasm, particularly in the arts.

This brings us to the start of the great period of English glass. Due to the fragility of Venetian glass, heavy losses were incurred during trading and the Glass Sellers Company began demanding simpler designs and more sturdy manufacture. As a result, a scheme to encourage the invention of a more practical kind of glass was set in train by the Royal Society of London.

In 1673 George Ravenscroft (1632–1683) was joined at the newly established Savoy Glasshouse by John Baptista Mendes da Costa, who came from a noble family of glassmakers from Altare near Genoa. He was one of three Altare glassmakers who, sponsored by the Royal Society, established an experimental glasshouse at Nijmegen in Holland. Here they developed and improved on a metal that included a proportion of oxide of lead in the mix. Ravenscroft set up a glass furnace for da Costa in 1673, and on 19 March 1674 he was granted a patent for seven years to make ‘cristall for drinking glasses’.

Early attempts to introduce a small amount of lead oxide into the melt resulted in glass that ‘crizzled’ (decomposed, leading to clouding and a network of fine cracks). Experimentation by increasing the lead content eventually produced a glass that was heavy, stable, durable and of very great brilliance. This glass was called ‘lead glass’ (referring to the addition of lead) or ‘flint glass’ (the lead oxide was added as powdered flints). David Watts writes: ‘It was the unique combination of da Costa’s special expertise … and Ravenscroft’s “prepared commercial mind” and persistence in overcoming the crizzling problem that resulted in the chance discovery of English lead crystal.’

This new lead glass was of even greater brilliance than Venetian glass from Murano—it resembled rock crystal even more closely.
Ceremonial goblet, English, c.1685, height: 29.2 cm (original height approx. 31.2 cm). Round funnel bowl with ‘nipt diamond waies’ at the base, stem consisting of a hollow prunted bulb between triple collars, wooden replacement foot. The bulb contains two silver threepenny coins of Charles II, one undated but of the period 1663–1668, the other dated 1679. Although both coins show little wear, the later one has been pierced for suspension. Reg. no. 1994.0027, purchased 1994 from the sale of the Don Barnfather collection of glass, with the assistance of the Cultural Fund of the University of Melbourne and an anonymous benefactor. Ernst Mattaei Memorial Collection of Early Glass, University of Melbourne.

But the metal was not nearly as plastic as the soda glass from Murano; it was more difficult to blow, and especially difficult to blow thin. Thus the early 1700s are characterised by thick, heavy glasses, which could be engraved with far better results (and many fewer calamities) than the thin and soft Venetian glasses. This was the beginning of the fine British glass of the 18th century.

In fact, the earliest glass in the Mattaei Collection comes from this time: a mammoth ceremonial goblet containing two threepenny Maundy coins, one dated 1679 (illustrated right). The base of the bowl is decorated with ‘nipt diamond waies’ in which trails of glass were applied and nipped (‘nipt’) in a diamond pattern (‘diamond-wise’). There is some historical evidence ‘that all glasses containing Stuart coins are Jacobite as all coins subsequent to the reign of James II would be excluded from use by Jacobite sympathisers’.14

The provenance of this piece is interesting. It was sent by E. Barrington Haynes of Arthur Churchill Ltd to Mrs Una Fraser in 1955. Haynes wrote: ‘… you will see the foot has been lost and a wooden one fitted … In perfect condition it would realise at least £250 in the sale room; we can offer for £37.10/-.’15

Unfortunately, we did not have the funds to purchase this coin glass when it was for sale as part of the Una Fraser collection in 1992. However, it was again for sale in 1994 (Don Barnfather collection) when, with the assistance of the Cultural Fund of the University and further support from Professors John Coghlan and John Poynter, we made the purchase.

The coin glass is displayed in the first cabinet of the Mattaei Collection, along with other glasses from the period 1710 to 1750 that illustrate many of the forms of feet, stems and bowls of the early Georgian period. One of the more recent additions (purchased in 1999) is a superb four-sided moulded stem (Silesian) wine glass. Pat Daniels found this glass in England; it complements the collection’s six-sided wine glass and eight-sided champagne glass, in line with our collection policy (all illustrated on page 43).

At precisely the same time as Ravenscroft’s development of lead glass, the British throne was in upheaval. Charles II, a firm believer in the divine right of kings, insisted that the rightful heir was his younger brother, James. And so James, who had converted to Catholicism, became James II (and James VII of Scotland) in 1685 on the death of Charles II.
The Whigs were alarmed—to say the least—by the threat of enduring Catholicism, while on the other hand the staunchest of the Tories upheld the rule of law and the principles of hereditary monarchy and the divine right of kings. The British Parliament in 1689 decreed that a Catholic, or anyone married to a Catholic, would henceforth be excluded from the monarchy, and the foundations of a constitutional monarchy were firmly laid. The Catholic James II had been monarch for only three years; following the invasion at Torbay he effectively abdicated by fleeing to France, where he died in 1701.

The cause of James’s son (James VIII and III, the ‘Old Pretender’) and his son, Prince Charles Edward Stuart (Bonnie Prince Charlie or the ‘Young Pretender’), had many followers who were appalled at the total rejection of the divine right of kings. These supporters became known as Jacobites (after the Latin for James), and following James II’s flight from the throne in 1689 until Bonnie Prince Charlie’s death in 1788 there were sustained attempts by the Jacobites to restore what they fervently believed was the rightful monarch, and these risings intensified after the house of Hanover succeeded to the British throne in 1714. Perhaps the best known of these attempts was the fruitless and reckless rising of 1745 (‘the ’Fortyfive’) led by the Young Pretender, who was soundly defeated at the Battle of Culloden in 1746, thus ending all hope of restoring the Stuarts to the throne.

The Jacobites produced many works of art, all of them more or less secretly espousing their cause. Glass is featured extensively. By the 1750s, many of the serious Jacobite groups had become little more than drinking clubs. Nevertheless, particularly after the rising of 1745, a good deal of secrecy and concealment was required, and so the engravings and motifs on Jacobite drinking glasses are full of secret meanings and messages, which have been variously interpreted. The most valuable are the ‘Amen’ glasses, of which there are only 35 known specimens. For example, the Spottiswoode glass was sold by Sotheby’s in 1991 for £66,000, the highest price paid for a Jacobite glass and one of the highest paid for any 18th-century glass. It is now owned by the Drambuie Liqueur Co. Ltd, Edinburgh. We are most fortunate that one of the 35 Amen glasses so valuable? Geoffrey Seddon puts it rather nicely: ‘it is the value placed on historical sentiment. Each of the glasses is an instrument of treason, a tangible piece of history.’

The Jacobite glasses in the Matthaei Collection have been complemented by the recent acquisition (2008) of two anti-Jacobite wine glasses (illustrated on page 44). The first of these, with a 1746 threepenny coin of George II enclosed in a hollow knop, is a Hanoverian glass to commemorate the battle of Culloden. The second has the White Horse of Hanover and the word ‘Liberty’ engraved on the bowl; it has also on the reverse a six-petal heraldic rose. The six-petalled rose and either one or two buds feature heavily on Jacobite glasses, and there has been considerable debate as to their symbolic intent. Does the rose represent James and the buds his two sons, Charles and Henry? Or does the rose represent the crown and the two buds James, the Old Pretender and Charles, the Young Pretender? Seddon notes that the crown has always been represented by the five-petalled Tudor rose, which has no connection to the Jacobite rose. Why then does the six-petalled rose always appear on Hanoverian glasses that sport the
Left to right:
Champagne glass, English, c.1745, height: 12.0 cm. Double ogee bowl, eight-sided moulded pedestal (Silesian) stem enclosing a long air tear, collared at the top and coiled at the base; domed foot. Reg. no. 1995.0105, gift of Dr Frank Curnow Jones, 1995, Ernst Matthaei Memorial Collection of Early Glass, University of Melbourne.

Wine glass, English, c.1720, height: 16.5 cm. Trumpet bowl on six-sided moulded pedestal stem with stars on the shoulders and containing a column of air; folded foot. Reg. no. 1985.0018, purchased with funds from the Ernst Matthaei Memorial Bequest, 1985, Ernst Matthaei Memorial Collection of Early Glass, University of Melbourne.

Wine glass, English, c.1710, height: 15.5 cm. A rare pedestal-stem wine glass. The deep, round, funnel bowl with solid base set directly onto a finely-teared, four-sided Silesian stem; conical folded foot. The solid base to the bowl, the proportion of the bowl to stem, the simplicity of construction and the purity of the metal suggest a date early in the series, certainly no later than 1715. The overall form compares with the balusters of 1700–1710. Reg. no. 1999.0008, purchased by the Committee of the Ernst Matthaei Memorial Collection of Early Glass, 1999, Ernst Matthaei Memorial Collection of Early Glass, University of Melbourne.
White Horse of Hanover? Seddon’s answer is that ‘the Hanoverians displayed it to show that they had already possessed the crown which the Jacobites were striving to capture’.

Over the years, the collection had developed a good representation of twists—air twists, opaque twists, and incised twists. In 2004 Pat Daniels found in England a beautiful colour twist which we had no hesitation in purchasing (illustrated opposite). Pat wrote, ‘I am thrilled to have found it, as I never hoped for more than a one-colour component, red/white or blue/white at best. Here we have not only two colours, but rare ones and both laminated onto white.’

A priority in our collection policy is the purchase of more colour twists. However, prices are rising rapidly; while we may be able to consider the more common red or blue twists, it is most unlikely that we will ever be able to consider the rare yellow twists.

Left to right:

Wine glass, English, c.1746, height: 17.5 cm (tiny chip in rim). Waisted bell bowl with solid base, the stem having a hollow knop with raspberry prunts enclosing a 1746 silver threepenny piece of George II, over an annulated knop and plain foot. A Hanoverian glass made to celebrate the victory at Culloden. Reg. no. 2008.0021, Ernst Matthaei Memorial Collection of Early Glass, University of Melbourne.
What does the future hold?
With the increasing rarity of good pieces, together with their rapidly escalating prices, even one full year’s income from the University’s sound investment of the Ernst Matthaei Memorial Fund is insufficient to enable the purchase of a significant piece. Added to that is the difficulty of finding pieces in good condition that fit into the collection. For example, Pat Daniels and her family wrote:

The English market at first glance appears vast and exciting, but on closer examination the inherent traps and pitfalls become all too obvious … It was disappointing to find (at a major sale of a collection in London) that about only 10% of the items were in pristine condition, but shocking to discover how well the majority had been ‘restored’: grinding and polishing has reached a very sophisticated level indeed!21

The Ernst Matthaei Memorial Collection of Early Glass was founded by a group of glass enthusiasts, and has been maintained by this group ever since. The size of the group has dwindled, and the once-active subcommittee of University House that formed the bridge between the University’s Ian Potter Museum of Art (the owners) and the committee of University House (the exhibitors) was, sadly, disbanded by the House Committee in 2010. That really leaves Pat Daniels and me, advisers on the purchase of glass, as the only active custodians. We must now plan for a succession to ensure that the integrity of the collection—and especially its primary emphasis on early English and Irish drinking glasses—is guarded, and that University House continues to treasure the collection and to honour the many benefactors, just as it must treasure other major gifts and works of art such as those displayed and used in the Victoria Room. It is my view that the Ernst Matthaei Memorial Collection of Early Glass is an integral part of the fabric of the House and of the tradition that the founding members of the House established.

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Wine glass, English, 1760, height: 14.5 cm. A rare colour twist wine glass, with plain ogee bowl and stem enclosing a central peppermint green/white laminated corkscrew inside a deep, rust red/white laminated spiral tape surrounded by a white spiral tape; good, wide plain foot. Reg. no. 2004.0001, Ernst Matthaei Fund, 2004, Ernst Matthaei Memorial Collection of Early Glass, University of Melbourne.

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In preparing this article, I have relied in part on the catalogue: Peter M. Attiwill (ed.), Catalogue: The Ernst Matthaei Memorial Collection of Early Glass together with selected glass from the Russell and Mab Grimwade Collection, University House, University of Melbourne, 1982. The catalogue was last published in this handout format in March 1999, and I have since maintained it in unpublished form. The descriptions of pieces photographed in this article come directly from the catalogue and were provided either by Rex Ebbott or Pat Daniels.


Max Marginson (1928–2002), was a senior lecturer in biochemistry at the University of Melbourne. He was a foundation member of University House. He was convener of the wine-tasting panel for over 15 years, and a member of the panel for much longer.

Dr Ray Marginson’s influence on the development of the cultural collections of the University was profound. Robyn Sloggett writes: ‘[He] was the University of Melbourne’s first Vice-Principal, taking up the position in February 1966 and retiring in 1988. During that time he was instrumental in focussing attention on the cultural collections of the University, and in developing strategies and programs that would not only provide the necessary policies and procedures for their continued development and care, but also ensuring that there was very practical financial support for these purposes.’ (From Ray Marginson, interviewed by Robyn Sloggett, ‘High drama and … comedy: Developing the cultural collections of the University of Melbourne’, University of Melbourne Collections, no. 3, December 2008, pp. 3–8.


E. Barrington Haynes devised a system of styles and types of glass, and identified the essential features of each period. (E. Barrington Haynes, Glass through the ages, Harmondsworth: Penguin, 1948.)

Geoffrey Kaye (1903–1986) also formed a significant collection illustrating the history of anaesthesia. At one time located at the University of Melbourne, it is now at the Australian and New Zealand College of Anaesthetists. (Website of the Geoffrey Kaye Museum, www.anzca.edu.au/resources/museum, accessed 22 April 2011.)


A number of major and extensive private collections were sold through Parkside Antiques, including: An exhibition and sale of English and Irish glass 1690–1840: The Rex Ebbott collection (1991); Una Fraser collection of English, Irish and Scottish Glass 1658–1820 (1991); Don Barnfather collection of glass comprising English, Irish, Continental and Australian glass 1680–1935 (1994). Each of these collectors was a significant donor to the Matthaei Collection.

David C. Watts, ‘Experiment or accident? How George Ravenscroft discovered English lead crystal glass’, 2010, A history of glassmaking in London, www.glassmaking-in-london.co.uk/ravenscroft, accessed 16–17 April 2011. As Watts notes, most texts have given credit to Ravenscroft as an experimenter (see for example Haynes, Glass through the ages, pp. 124–125). I am most grateful to Pat Daniels for her comments and advice on the discovery of English lead glass.


E. Barrington Haynes, Letter to Mrs Una Fraser, 22 November 1955. Documents and letters given by Mrs Una Fraser to Mrs Pat Daniels, now held by Professor Peter Attiwill.


Mrs Pat Daniels, Letter to Peter Attiwill, 14 April 2004.

Pat, Roger and Cilla Daniels, From Bath and beyond: Georgian glass and porcelain and fine tea caddies, illustrated catalogue for a sale, 1997.