Tradescant's rarities: essays on the foundation of the Ashmolena museum 1683 with a catalogue of the surviving early collections

MacGregor, Arthur

ASHMOLEAN MUSEUM · OXFORD

TRADESCANT'S RARITIES

ESSAYS ON THE FOUNDATION OF THE ASHMOLEAN MUSEUM 1683 WITH A CATALOGUE OF THE SURVIVING EARLY COLLECTIONS

EDITED BY

ARTHUR MACGREGOR

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PREFACE

Humphrey Case
KEEPER OF THE DEPARTMENT OF ANTIQUITIES
ASHMOLEAN MUSEUM

A suitable room became available in 1976 for a new display of those objects in the Department's collections which are believed to have been in the Ashmolean Museum from its foundation in 1683. Most of these objects can be attributed to the collection of the John Tradescants, father and son, which had formed a major part of the donation which the University accepted from Elias Ashmole in October 1677. Generous contributions towards furnishing the new Tradescant Room were made by individuals and institutions here and in the United States: the Abraham Foundation Inc.; The Amey Roadstone Corporation; Suzette M. Davidson; The Garden Club of Virginia; Mr and Mrs Roderick S. Webster; and others anonymous. Mrs Davidson deserves special mention since she traces descent from Pocahontas, the daughter of Powhatan from whose confederacy of Indian tribes the Tradescants are likely to have obtained at least one of the surviving objects (No. 12).

The layout of the room was designed by the Department's staff, with Mr M. G. Welch, the Assistant Keeper concerned, playing a prominent role. The intention was to give the impression of a seventeenth-century museum, while using modern display techniques. The fenestration of the old Ashmolean in Broad Street was copied from a contemporary engraving (Pl. CLXXVI) and from nineteenth-century photographs; the panelling and mouldings were adapted from early seventeenth-century examples in the Principal's Lodgings, Brasenose College, by kind permission of the Principal and Fellows. Mounts within the cases were made in the museum's workshop by Messrs A. Field and S. Roberts, and constructional work and installation of fittings were carried out by the University Surveyor's Department under the enthusiastic and expert supervision of Mr P. J. Lockton, beginning in August 1977. The Vice-Chancellor, Sir Rex Richards, opened the completed room on 22 May 1978.

Much new information was obtained about the collection preparatory to the display. Mr Welch reindexed it with the voluntary assistance of Mrs E. Sandford Gunn, amplifying the manuscript index written in 1911 by Mr E. T. Leeds, former Keeper; Miss A. C. Western and her colleagues in the conservation laboratory, Mrs K. Kimber, Miss O. Rennie, Mrs G. Miles, Mrs J. Ralphs, and Mrs V. Hovell undertook a very thorough programme of conservation, the first comprehensive one known to have been made, during which many new features were revealed. It was decided to make the results of these programmes of work the basis of a printed catalogue to mark the tercentenary of the museum in 1983. The only previously printed catalogue of the collection since it had

been in the museum was the very summary one of 1836 by the Duncan brothers, former Keepers.[1]

Mr Welch was able to write two introductory chapters before he left the Department on 1 April 1978, on sabbatical leave prior to accepting a lectureship at University College, London. His successor, Mr A. G. MacGregor, from the York Archaeological Trust, was not appointed until September 1979 and thus faced a strenuous task if the project was to be finished in time. Fortunately Mrs Sandford Gunn was still at hand, and a balance remained from the funds employed in the gallery to contribute towards the salary of Miss A. London as temporary Departmental Assistant, and to enable Mr MacGregor to visit Denmark, Holland, and France to study other early European collections. Mr MacGregor also visited the German Democratic Republic under the British Council cultural exchange programme, and Mrs Sandford Gunn made private visits to museums in Vienna and Innsbruck. The General Board of the Faculties made a timely grant of the remainder of Miss London's salary. The task of translating the *Book of Benefactors* and the 1685 A and B catalogues was undertaken on a voluntary basis by Miss Gloria Moss.

The editing of the catalogue and the invitations to the numerous contributors to it have been Mr MacGregor's responsibilities, assisted throughout by Mrs Sandford Gunn. Contributors have included not only the Director of the Ashmolean Museum and staff of other departments in the Ashmolean but also staff of other museums in Oxford and many from elsewhere. Among these was Mr K. C. Davies of the Oxford University Museum, whose death in 1981 deprived us of a valued colleague. Mr MacGregor and Miss London have also written introductory chapters, and he and Mrs Sandford Gunn have contributed individual entries. The line-drawings were made in the Department's drawing office by Mrs P. Clarke and Mr N. A. Griffiths, with the exception of Figs 74–5 which are by Simon Blake. The photographs were taken in the museum's studio, many of them afresh by Miss D. Griffin. Typing was undertaken by Mrs J. Barlow, Mrs M. Gilson, and Mrs F. Holt. Many others have assisted the editor in various ways. In addition to those mentioned individually in the text, the advice of the following is gratefully acknowledged: Mr R. F. Ovenell, over the transcription of the *Book of Benefactors*; Mr P. H. Bartholomew, Mr G. W. Bond, Dr J. J. Coulton and Dr G. J. Piddock for translations; and Dr B. Atkins on mineralogical identifications. Mrs Z. Stos-Gale carried out X-ray fluorescence analyses at the Research Laboratory for Archaeology with permission from Professor E. T. Hall. Prudence Leith-Ross kindly commented on the two introductory chapters on the Tradescants. Others who have helped in a variety of ways include Dr A. Auer, Mr C. Blair, Mr J. Cherry, Dr H. Ginsburg, Dr M. Henig, Dr M. W. Hunter, Dr B. Juniper, Mr M. Maclagan, Dr R. Pankhurst, Mr A. Paterson, Mr W. Reid, Miss G. Seidmann, Mr D. Sturdy, Mrs V. E. Vowles, and Dr J. Willers. Scholars from many institutions referred to in the text have been consulted: those to whom we are particularly grateful include the staff of the Nationalmuseum, Copenhagen; the Rijksmuseum voor Volkenkunde, Leiden; the Horniman Museum, the Museum of Mankind, and the Victoria and Albert Museum, London; and the Museum für Völkerkunde, Vienna.

[1] Duncan 1836.

An opportunity has been taken of including, in separate sections, catalogue entries relating to objects surviving from the foundation collection but now in other departments of the Ashmolean or in other institutions in Oxford: coins and medals in the Heberden Coin Room; paintings in the Department of Western Art; ethnographic objects now in the Pitt Rivers Museum, zoological and mineralogical specimens in the University Museum, and manuscripts and printed books in the Bodleian Library.

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INTRODUCTORY ESSAYS

THE TRADESCANTS GARDENERS AND BOTANISTS

Arthur MacGregor

Much of the evidence which survives to illuminate the Tradescants' progress from obscurity to comparative fame comes from published and unpublished material of primarily botanical interest. Indeed, it was their success as gardeners which provided the vehicle for their collecting activities and which ensured the powerful but sympathetic patrons under whom their passion for collecting could take root and flourish. Hence in reviewing the lives of the Tradescants, father and son, account must first be taken of their gardening careers.

The often-quoted statement by Anthony Wood[1] that John Tradescant the elder was of Dutch origin finds only qualified support today.[2] Following the discovery in the last century of 'two namesakes Robert Tradescant and Thomas Tradescant of Walberswick in the Countie of Suffolk',[3] more recent researchers have found possible East Anglian antecedents from the first half of the sixteenth century.[4] John Tradescant enters the historical record with his marriage to Elizabeth Day on 18 June 1607, at Meopham in Kent.[5] His bride was the daughter of a former vicar of the parish, James Day.[6] Although his date of birth is unknown, he would seem to have been about thirty when he married.[7]

Tradescant's master at the time is unknown,[8] but he was evidently well launched on his career. Within two years we learn of a journey undertaken to Flushing which had been bedevilled by passport problems to the extent that fruitless bribes had cost him more than the passage: in a letter dated November 1609, Tradescant sends thanks to William Trumbull, the English agent in Brussels, for his intercession, but tells him that 'your good will and labour hath not effected what you desired to do, for they have put me upon the

[1] Wood 1820, vol. 4, col. 357. The reference is absent from the first edition (1691) of *Athenæ Oxonienses*, but appears in the second edition, 'very much Corrected and Enlarged; with the Addition of above 500 new Lives from the Author's original Manuscript' (1721, vol. 2, col. 888). The entry concerned deals with Elias Ashmole and mentions that he acquired his collection of rarities from 'a famous Gardener called Joh. Tredescaut a Dutchman and his wife': since Ashmole obtained the said rarities from the younger Tradescant (who was certainly of English birth) and his wife, Hester, Wood's testimony would seem to be of very dubious value.

[2] Although dismissed by the Tradescants' first biographer, Mea Allan (1964, pp. 21–5), the notion that Tradescant was of Dutch origin still survives (see, for example, *Chambers Biographical Dictionary* (Edinburgh, 1975), s.v. Tradescant). Prudence Leith-Ross, who is currently compiling a new biography, does not entirely exclude this possibility.

[3] The quotation is from the younger Tradescant's will, as first reproduced in *Notes and Queries* ser. 1, 5 (1852), 367–8. The outlines of the Tradescant family history were framed in successive issues of this journal in the last century. See *Notes and Queries* ser. 1, 3 (1851), 119, 286–7, 353–5, 391–4, 469; 4 (1851), 182; 5 (1852), 266, 367–8, 474–5; 6 (1852), 198; 7 (1853), 295; 8 (1853), 513; ser. 4, 7 (1871), 284; ser. 5, 4 (1875), 80; ser. 6, 3 (1881), 147, 512.

[4] Allan (1964) has produced a somewhat speculative family tree.

[5] Meopham Parish Church Registers.

[6] As suggested by Golding-Bird 1934, pp. 89–90, 165. Allan (1964, p. 26) mentions the daughter of a local farmer of the same name as a possible alternative, but the true identity of Tradescant's bride is not in doubt.

[7] Calculated from his apparent age in later portraits (cf. Allan 1964, p. 29).

[8] Various suggestions made by Gardiner (1928, p. 308) and Allan (1964, p. 29) can be discounted on chronological grounds. There is no evidence to back their common assumption that Tradescant was working at the time in the vicinity of Meopham.

rack. I have given for every hundred an angel in one office besides many other "pedy" offices that hath half a crown apiece for the shares so the whole hath cost me 40s besides 24s the passage to Flushing.'[9]

Within a few months of this expedition, the purpose of which is unknown, Tradescant is known to have been in the household of the first of his influential employers, Robert Cecil, first Earl of Salisbury (*c.*1563–1612), at Hatfield House in Hertfordshire. Cecil had acquired the estate two years earlier from James I, in exchange for his mansion at Theobalds, and set about transforming the house and replanting the gardens. The principal façade was rebuilt to a design of Inigo Jones and many of the internal decorations effected by John de Critz, Serjeant-Painter to the King; Mountain Jennings was overseer of the parks and highways, while Tradescant laid out and stocked the gardens. Hatfield was already well provided with vines, some 30,000 of which had been sent to the Earl by Mme de la Boderie, wife of the French ambassador, and 500 more by the Queen of France.[10] Evidently Cecil now felt most need for trees, fruit, and flowers, and to acquire these Tradescant made another visit to the Low Countries and France in the autumn of 1611.

Crossing again to Flushing, the search for suitable specimens took him through Middelburg, Rotterdam, and Delft to Leiden and Haarlem. Detailed accounts of purchases survive among the Cecil papers at Hatfield:[11] they include fruit trees such as the 'rathe ripe' and other cherries, Spanish and other pears, quinces of several varieties, medlars, and apples, as well as 200 lime trees; also acquired were red, white, and black currants, vines, rose bushes, and bulbs, all rare and many apparently hitherto unknown in Britain.[12]

These acquisitions were dispatched by ship from Brussels to Hatfield, together with further purchases of fruit and walnut trees. Perhaps it was on this occasion that he made observations later recorded by John Parkinson:[13] writing of 'chardon' or cardoon artichokes (*Cynara cardunculus*), he says that 'John Tradescante assured mee, hee saw three acres of Land about Brussels planted with this kinde, which the owner whited like Endiue, and then sold them in the winter'. Parkinson also records a variety of strawberry 'that John Tradescante brought with him from Brussels long agoe, and in seven yeares could never see one berry ripe on all sides, but still the better part rotten, although it would every yeare flower abundantly, and beare very large leaves'.[14]

Tradescant next proceeded to Paris where, in the company of the British ambassador's gardener,[15] he called on Jean Robin, then *herboriste* to the French king, and later founder of what was to become the Jardin des Plantes. From Robin's own garden he bought a number of pomegranate, fig, and other trees. A long-lasting friendship seems to have

[9] Historical Manuscripts Commission 1936, p. 188.

[10] Amherst 1896, pp. 155–6; Gunther 1922, p. 328. Amherst notes that this number of plants exceeded the capacity of the vineyard: some were planted out in a nursery so they could be used to replace any that were 'defectyve or dying'.

[11] Hatfield House MSS, Gen. 11/25; Bills 58/2, 3, 31.

[12] Lists of acquisitions and the names of the nurserymen from whom they were obtained are reproduced in Gunther 1922, pp. 328–9, and Allan 1964, p. 38.

[13] Parkinson 1629, p. 520.

[14] Ibid., p. 528.

[15] Hatfield House MSS, Gen. 11/25 records among Tradescant's expenses 'for my Lord Imbassettors gardner to goe withe me two and fro in Parrys to by my things given him on Cronne 0:6:0.'

already begun, Tradescant recording that, in addition to those purchased, 'manye other Rare Shrubs give me by Master Robyns'.[16]

From Paris Tradescant went next to Rouen, where he bought an 'artyfyshall bird', a 'Chest of Shells with eyght boxes of Shells' seemingly to embellish the Hatfield gardens, and a 'great buffells horne', probably to fertilize them.[17] Further fruit trees bought in Rouen raised the number of specimens which reached Hatfield that December to nearly 1,000, many of them first-time introductions. Small wonder that Evelyn, when he visited the estate in 1643, found that 'the most considerable rarity besides the house (inferior to few for its Architecture then in England) was the Garden and Vineyard rarely well water'd and planted'.[18]

Several varieties included in the list of plants acquired on this journey[19] are illustrated in a manuscript, formerly thought to be a guidebook to the Hatfield gardens, known as 'Tradescant's Orchard'.[20] Although the Hatfield connection is not proven, the link with Tradescant is unquestioned. Some sixty-five varieties of fruits are illustrated in order of their respective dates of ripening. The author of the notes was evidently not Tradescant himself, who is referred to under one entry as follows: 'the Amber Plum which J.T. as I take it brought out of France and groweth at Hatfield' (Pl. CLXVIII). Indeed, some varieties can hardly have had time to start fruiting before Tradescant left Hatfield for good, within a few years of his first continental visit.

However, the opportunity for a further visit to France preceded his final departure; this time it was at the behest of William Cecil (1591–1668), who succeeded his father as Earl of Salisbury in 1611, and now turned his attentions to Salisbury House, the family's mansion in the Strand. Here John Gerard had tended the gardens for William's grandfather, Lord Burghley. They were now replanted under Tradescant's hand, seemingly with many hundreds of rose-bushes.[21] Indeed, so lavish was the new earl's spending on this and other projects that it may have been a factor in encouraging Tradescant to diversify his interests and prudently to obtain leases on some sixty acres of farm and woodlands in the manor of Hatfield.[22] However this may be, after three or four years at work on the gardens at Salisbury House, as well as Hatfield and the other Salisbury properties at Cranborne[23] (and, perhaps, at Canterbury), the relationship was finally severed.

From September 1614 Tradescant's name disappears from the Hatfield records, to reappear by midsummer of the following year at Canterbury.[24] His new master was Lord

[16] Hatfield House MSS, Bills 58/31. Tradescant's 'bill for his Chardges from Brussels to London in his returne from beyonde seas' (Hatfield House MSS, Gen. 11/25) is reproduced in Historical Manuscripts Commission 1976, p. 210.

[17] Hatfield House MSS, Bills 58/31. The shells were probably those destined to ornament the beds of the Hatfield streams, while powdered horn may have been used to manure the vines: Gerard (1597, p. 727) recommends 'shavings of horn . . . disposed about the rootes, to cause fertilitie'.

[18] Evelyn, *Diary*, 11 March 1643.

[19] Reproduced in Gunther 1922, pp. 328 9, and Allan 1964, pp. 38–48.

[20] Bod. Lib. MS Ashmole 1461. See below, No. 434, Pl. CLXVIII.

[21] Hatfield House MS, quoted in Allan 1964, p. 57.

[22] 'Rental of the Manor of Hatfield', quoted in Allan 1964, pp. 57 8.

[23] Lady Salisbury (1980, p. 116) records an account (Hatfield House MSS, Accounts 160/1) relating to a visit by Tradescant in November 1610 to Cranborne in order to plant trees.

[24] The earliest evidence of Tradescant's presence at Canterbury is in the form of a letter written by him on 23 July 1615 to Cecil's agents at Salisbury House, concerning rents due on farmland at Hatfield (Hatfield House MSS, Gen. 7/13; reproduced in Historical Manuscripts Commission 1971, 18).

Wotton (1548–1626), formerly Sir Edward Wotton, who had bought St. Augustine's Palace at Canterbury in 1612 from the second Earl of Salisbury. Here Tradescant again applied himself with imagination and energy: numerous exotics flowered for the first time in England, many of them introduced by his own hand following a visit to the Mediterranean in 1620 (see pp. 7–8). During this period under the patronage of Lord Wotton, he was apparently free to undertake other commissions, including, it has been suggested, laying out a garden at Chilham, Kent, an estate bought in 1616 by Sir Dudley Digges (1583–1639).[25]

By 1618, Digges was sent as the King's envoy on an embassy to Russia, and among the company was John Tradescant. Judging from Tradescant's diary of this 'Viag of Ambusad' via the North Cape to Archangel[26], his official duties were negligible. Several entries refer to opportunities for botanical field-work, the first ever recorded on Russian soil.[27] On Thursday 16 July, for example, the following entry appears: 'In that place wheare we anccored I desired to have the boat to goe on shore whiche was hard by, wher when we wear land we found many sorts of beryes, on sort lik our strawberyes but of another fation of leaf; I have brought sume of them hom to show with suche variettie of moss and shrubs, all bearing frute, suche as I have never seene the like.' The following week, on 20 July: 'On Munday I had on of the Emperor's boats to cari me from iland to iland to see what things grewe upon them, whear I found single rosses, wondros sweet withe many other things whiche I meane to bring with me.' No doubt this was the '*Rosa Moscovita*' which came to bloom in Tradescant's garden at South Lambeth.[28]

Later, on the first evening of the voyage home, he wrote: 'That night [5 August] we cam to ancor under Rose Iland, wheare I [and] divers [others] went on shore whear ther was a littill souldgers house poorly garded withe sum 10 men, whear we bought gras for our live sheepe, whear I gathered of all such things as I could find thear growing, which wear 4 sorts of berries, which I brought awaye with me of every sortt.' A section appended to the diary, headed 'Things by me observed', refers to several other plants, some of which seem to have been collected either in the form of seeds or as complete specimens, including:

> on sort of plant, bearing his frut like hedge-mercury, which made a very fine showe, having 3 leaves on tope of every stake, having in every leafe a berry about the bignes of a hawe, all the three berryes growing close together, of a finner bright red than a hawe, whiche I took up many roots, yet am afraid that non held, becuse at our being on ground we staved most of oure frese watter, and so wear faint to watter withe salt watter, but was made beleeve it was freshe, whiche that plant having but a long whit thin root, littill biger than a small couch gras; and the boys in the ship, befor I pe[r]seved it, eat of the berries, except sume of them com up amongst the earthe by chance.

Parkinson identifies white ellebor (*Veratrum album*) as among the species observed on this voyage: it 'groweth in many places of Germany, as also in some parts of Russia, in that aboundance, by the relation of that worthy, curious and diligent searcher and

[25] Allan 1964, p. 66: concrete evidence for this assumption has not been produced.

[26] Konovalov 1951, pp. 130–41. See No. 433 and Pl. CLXVII.

[27] See Hamel 1854, pp. 266–84; Boulger 1895.

[28] Tradescant 1656, p. 162.

preserver of all natures rarities and varieties, my very good friend, John Tradescante, often heretofore rembred, that, as hee said, a good ship might be laoden with the rootes hereof, which hee saw in an island there'.[29] Purple crane's-bill (? *Geranium moscoviticum purpureum*) is also recorded by Parkinson as originating in Muscovy and 'brought to us by Mr John Tradescant',[30] while others add larch to the list of introductions resulting from this expedition.[31] In all, some two dozen plants are recorded in Tradescant's quaint but perceptive diary, which demonstrates clearly the keen and discerning eye of its author, for all that it may have been 'written in a rude hand, and by a person unskilled in composition'.[32]

Wotton seems to have had little reason to complain of the absence of his gardener, and the garden at Canterbury continued to attract attention. Sir Henry Mainwaring wrote to Lord Zouch in a letter of 27 March 1620 that he had gone 'to see my Lord Wottons garden and to confer with his Gardener, for I do much desire that your Lordship should eat a Muske Mellon [*Cucumis melo*] of your own in Dover Castle this year'.[33] Further exotics were noted there by Parkinson: for example, a variety of mandrake (*Mandragora officinarum*), 'which I first saw at Canterbury, with my very loving and kinde friende John Tradescante, in the garden of the Lord Wotton, whose gardiner he was at that time'.[34] The 'Indian moly' (perhaps *Allium sativum*, true garlic, or *Allium moly*, a Mediterranean garlic) 'grew also with John Tradescante at Canterbury, who sent me the head of bulbes to see, and afterwards a roote, to plant it in my garden'.[35] Pomegranates also grew there: 'The wilde I thinke was never seene in England, before John Tradescante my very loving good friend brought it from the parts beyond the Seas, and planted it in his Lords Garden at Canterbury'.[36] Also mentioned is the 'Argier Apricocke', which, 'with many other sorts John Tradescante brought with him returning from the Argier voyage, whither hee went voluntary with the Fleete, that went against the Pyrates in the yeare 1620'.[37]

During the Algiers blockade of 1620–1[38] Tradescant was again released by Wotton, this time to serve as a gentleman volunteer on the pinnace *Mercury* under Captain Phineas Pett (see p. 36). The *Mercury*'s movements are uncertain between February, when she arrived off Alicante, and her return to England in September. Allan has suggested that Pett may have sailed through the Mediterranean as far as Constantinople, possibly as escort for British merchantmen; she also compiles from Tradescant's 1634 garden catalogue a list of plants from the Mediterranean area whose introductions could be explained in this way.[39] Some independent evidence exists for one plant, *Trifolium stellatum* (starry-headed clover), which was said to have been brought by Tradescant

[29] Parkinson 1629, p. 346.
[30] Parkinson 1640, p. 705.
[31] Boulger 1895, pp. 34–8.
[32] Black 1845, no. 824, xvi.
[33] PRO, State Papers Domestic, James I, CXIII, 1620, no. 41; Gardiner 1928, p. 310. 'Melon seeds of all sorts' were among the many seeds sent from Venice to James I by Sir Henry Wotton during the period of his ambassadorship there (Gunther 1922, p. 274 and n. 1). See also No. 443 below.
[34] Parkinson 1629, p. 378.
[35] Ibid., p. 141.
[36] Ibid., p. 430.
[37] Ibid., p. 579.
[38] See Corbett 1904, pp. 110–28; and No. 440 below.
[39] Allan 1964, pp. 100–6. Ducarel (1773, p. 6) had earlier been convinced that 'from some emblems remaining upon Tradescant's monument in Lambeth church-yard, it plainly appears that he had visited Greece, Egypt and other Eastern countries'. Corbett (1904, p. 116) notes, however, that the commander of the fleet, Sir Robert Mansell, was cautioned against sailing eastwards of Cape Spartivento at the southern tip of Sardinia.

from Fermentera, in the Balearics opposite Algiers.[40] There can be little doubt, however, that he collected others. Parkinson writes of varieties of 'corne flagge' (probably *Gladiolus illyricus*), that 'They grow in France and Italy, the least in Spaine, and the Byzantine, as it is thought, about Constantinople, being (as is said) first sent from thence. John Tradescante assured mee, that hee saw many acres of ground in Barbary spread over with them.'[41] The tradition that Tradescant joined the expedition to Algeria specifically for botanical purposes, however, 'that he might have an opportunity of bringing apricot-trees from that country'[42] is unlikely to be accurate.

In 1623 Tradescant found a new and more influential patron in George Villiers, the Duke of Buckingham (1592–1628), and was immediately set to work at Newhall in Essex. Formerly a mansion of Henry VIII, Newhall had been bought by Buckingham from the Earl of Sussex and was now undergoing extensive elaboration. Evelyn described Newhall in 1656, by which time it had been sequestered by Parliament, as

> a faire old house, built with brick ... Garden a faire plot, and the whole seate well accommodated with water; but above all the Sweete and faire avenue planted with stately Lime-trees in 4 rowes for neer a mile in length: It has 3 descents which is the onely fault, and may be reformed: There is another faire walk of the same at the Mall and wildernesse, with a Tenis-Court, and a pleasant Terrace towards the Park, which was well stored with deere, and ponds.[43]

Several entries in Buckingham's accounts relate to sums paid for the purchase of trees and other plants, including one of 1623, 'Paide to John Tradescant by his Lps order for his journey into the Lowe Countries for his charges and Trees bought for his Lp there, £124.14.–.' and one under the account for Buckingham's embassy to the Low Countries in September 1625, 'To John Tradescant for Trees £150.–.–.'[44] Perhaps on one of these occasions he 'brought a small Ozier from St Omers in Flanders, which makes incomparable Net-works'.[45] Buckingham entrusted more than his gardens to Tradescant, as shown by a further entry in the accounts for 1625: 'Paide to John Tradescant for his journey to Paris with my Lords stuff Trunks &c. by waie of Imprest £20.–.–.'[46] The occasion was Buckingham's three-week embassy to the French court, which concluded with his escorting home Henrietta Maria as the bride of Charles I. Tradescant did not return empty-handed either, for there are records of £100 'Given to John Tradescant for the buying of Trees flowers &c.' and of £20 'Given to the Kings Gardiners for divers Plantes presented to his Grace by John Tradescant'.[47]

In 1626 Tradescant was awarded by Buckingham 'the garnetter's place' at Whitehall, a sinecure which caused some jealousy among Tradescant's peers.[48] In 1627 he joined Buckingham's disastrous expedition to lay siege to La Rochelle.[49] With his earlier

[40] Pulteney 1790, p. 176. A visit by the fleet to Fermentera is recorded in Bod. Lib. MS Ashmole 824/15 (see No. 440 below.)

[41] Parkinson 1629, p. 190.

[42] *Notes and Queries* ser. 1, 3 (1851), 351, in which the younger Tradescant is mistakenly referred to; repeated by Brown 1890, p. 1032.

[43] Evelyn, *Diary*, 10 July 1656.

[44] BL Add. MS 12, 528 ('Sir Sackville Crowe's Book of Accompts ... on behalf of the Duke of Buckingham'), f. 12^{v}, no.25; f.28^{v}, no. 15.

[45] Evelyn 1664, p. 43.

[46] BL Add. MS 12,528, f.21^{v}, no. 19.

[47] Ibid., f.23^{v}, nos. 14 and 24.

[48] PRO, State Papers Domestic, Charles I, CLXVI, 1630, no. 35: here one James Haydon petitioned for a grant of benefit to compensate him for loss of income when the 'Garnetters place', bestowed on him by the King, was reassigned to John Tradescant by the Duke of Buckingham.

[49] See No. 441 below.

experience in the Mediterranean, Tradescant may have been a willing enough volunteer and a useful soldier: one report records that 'the winter comes one apace; our men indure much wett in ther trenches; & Jo: Tredescant one of our best ingeniers'.[50]

In the circumstances, there can have been little time for Tradescant (who seems to have escaped personal harm) to bend his mind to more peaceful pursuits, yet some botanical trophies were carried home: Parkinson records that the 'greatest Sea Stocke Gilloflower [probably *Matthiola sinuata*] was brought out of the Isle of Ree by Rochel by Mr. John Tradescant when the Duke of Buckingham was sent with supplies for Monsieur Subise',[51] while Johnson recalls that this plant 'was first sent over from the Isle of Rees by Mr. John Tradescant'.[52]

Buckingham's assassination in 1628 appears to have left Tradescant without a regular employer, until in 1630 he was appointed Keeper of His Majesty's Gardens, Vines, and Silkworms at Oatlands Palace in Surrey, with an annual salary of £100.[53] Finally, in 1637, he was offered the newly established post of Custodian of the Oxford Botanic Garden, which had been founded at a cost of over £5,000 by the Earl of Danby, opened in 1621, and planted with 'divers simples for the advancement of the faculty of medicine'.[54] Danby, whose London seat was at Chelsea,[55] may have been influenced in his choice of gardener by first-hand experience of Tradescant's prowess, for Tradescant had been his near-neighbour across the river at Lambeth since about the time of Buckingham's death.[56] At any rate, Danby seems personally to have conducted the negotiations, since a surviving manuscript records that 'he came to some reasonably good terms of agreement with John Tradescant of West Lambeth, designed for the gardener'.[57] Since the yearly stipend of '£50 or thereabouts' was only half the annual sum paid to Tradescant for his services at Oatlands, it may be conjectured that the Oxford duties were not considered demanding.[58] Tradescant, unfortunately, was never to take up the appointment, and died the following year.[59]

During the ten years in which the Tradescants had inhabited Lambeth, their house and garden had become internationally renowned. The location of their property has recently been established with some precision by David Sturdy.[60] The house lay on the line of the present South Lambeth Road, within about an acre of garden. An orchard of

[50] PRO, State Papers Domestic, Charles I, LXXXI, 1627, no. 59. A manuscript 'Journall of the voyage of Rease' in the British Library (Add. MS 26,051, f. 16') also mentions 'John the Dukes Gardiner' as an engineer, describing him as 'best of all this true and most deserving'. This testimony appears to deny Gunther's assertion that Tradescant accompanied the expedition 'apparently in the capacity of a collector of objects of natural history' (Gunther 1925, p. 282).

[51] Parkinson 1640, p. 624.

[52] Johnson 1633, p. 1099. A reference to this species had however already appeared under the name of *Leucoium marinum* in Gerard's *Herball* of 1597 (pp. 374-6), where it is described as growing 'neere unto the seaside, about Colchester, in the Isle of Man, neere Preston in Aundernesse, and about Westchester'.

[53] PRO, State Papers Domestic, Charles I, CCCII, 1635, no. 94. For details of the vineyards and gardens at Oatlands see Fletcher 1930, pp. 141-5; Forge 1970, *passim*.

[54] Gunther 1912, p. 1.

[55] I am grateful to Mrs Rosemary Nicholson for this information.

[56] Sturdy (1982, p. 1) notes that Tradescant's name does not appear in a parish tax assessment of 1628, but he must have settled in Lambeth late in that year, since a list of plants he records as growing there was begun in 1629 (see No. 436 below). Sturdy further observes that Tradescant showed no very marked interest in medicinal plants which might have recommended him for the Oxford post, but that his son was later to develop this aspect of the Lambeth garden (ibid., p. 2).

[57] Bod. Lib. MS Twyne 6, f. 287.

[58] Prudence Leith-Ross has pointed out (personal communication) that Tradescant's salary at Oatlands had to include all workmanship and materials, but possibly this was not so at Oxford.

[59] Churchwardens' Accounts of St. Mary at Lambeth, quoted in *Notes and Queries* ser. 1, 3 (1851), 394, record for the year 1637 8: 'Item, John Tradeskin; ye grct bell and black cloth, 5*s*.4*d*.'

[60] Sturdy 1982.

some two acres or more lay close by the garden. Although somewhat modified by later alterations, something of the original house can be seen in a late eighteenth-century water-colour reproduced by Sturdy, which shows also the adjacent building later occupied by Ashmole.[61] The environs were otherwise relatively undeveloped, to judge from a record of a visit to Ashmole's property by John Evelyn in 1678, when he noted that 'The prospect from a Turret is very fine, it being so neere Lond[on] & yet not discovering any house about the Country'.[62] As well as fulfilling the recreational needs of the family, the garden and orchard may also have served as a source of income from the sale of plants and fruit. Writing of plums, for example, Parkinson records that 'the choysest for goodnesse, and rarest for knowledge, are to be had of my very good friend Master John Tradescante, who hath wonderfully laboured to obtaine all the rarest fruits hee can heare off in any place of Christendome, Turky, yea or the whole world'.[63] Thomas Johnson acquired Tradescant's rose daffodil, 'from Master John Tradescant of South Lambeth [which] is the largest and stateliest of all the rest' described elsewhere by Parkinson as 'The Prince of Daffodils'.[64] Johnson records several other rare species flowering with Tradescant, including not only exotics such as bastard felwort (probably *Gentiana verna*), which 'grow not wilde in England that I know of', Virginian starworts (probably either *Aster novae-angliae* or *A. novi-belgii*), and Virginian snake-root or snake-weed (*Aristolochia serpentaria*), but also little-known native plants such as Our Lady's slipper (*Cypripedium calceolus*) from 'the North parts of this kingdome', painted sage (probably a form of *Salvia officinalis*), which 'was first found in a countrey garden, by Mr. John Tradescant, and by him imparted to other louers of plants', and bear's ears or mountain cowslips.[65] Tradescant's interest in the more obscure and less spectacular products of his native countryside is a facet of his professionalism often lost behind his association with more prestigious introductions from overseas. It is well illustrated in Johnson's account of one little-loved strawberry, *Fragaria fructu hispido* (a form of *Fragaria moschata*, the Plymouth strawberry):

> There is also kept in our gardens (onely for varietie) another Strawberrie which in leaves and growing is like the common kinde; but the floure is greenish, and the fruit is harsh, rough and prickely, being of a greenish colour, with some shew of rednesse. Mr. John Tradescant hath told me that he was the first that tooke notice of this Straw-berry, and that in a womans garden at Plimouth, whose daughter had gathered and set the roots in her garden in stead of the common Straw-berry: but she finding the fruit not to answer her expectation, intended to throw it away: which labor he spared her, in taking it and bestowing it among the lovers of such varieties, in whose gardens it is yet preserved.[66]

In addition to the plants credited to him in the text of Parkinson's *Paradisus*, a list of further species introduced between the year of publication (1629) and 1633 was appended by Tradescant to his own copy.[67] It comprises over 130 entries, several of them referring to more than one variety; amongst the sources given are the ever-generous

[61] Ibid., fig. 7.
[62] Evelyn, *Diary*, 23 July 1678.
[63] Parkinson 1629, p. 575.
[64] Johnson 1633, p. 135; Parkinson 1629, p. 102.
[65] Johnson 1633, pp. 437, 443, 489, 766, 785, 848. Mr Alan Paterson has pointed out (personal communication) that *G. verna* does in fact grow wild in the British Isles.
[66] Johnson 1633, p. 998.
[67] See No. 436 below.

'Mounser Robyne' and also René Morin of Paris. A full catalogue of some 750 species and varieties grown at Lambeth was subsequently prepared for publication in 1634, and a single copy is still extant.[68] In the same year the explorer Peter Mundy called on Tradescant and saw foreign plants in 'a little garden with divers outlandish herbes and flowers, whereof some that I had not seene elsewhere but in India, being supplyed by Noblemen, Gentlemen, Sea Commaunders etts'.[69] Presumably this 'little garden' formed a separate element within the grounds, functioning as a living collection of natural rarities. During a visit in 1638, Georg Christoph Stirn of Nürnberg saw 'all kinds of foreign plants which are to be found (enumerated) in a special little book which Mr Tradescant has had printed about them',[70] presumably the garden list mentioned above. A comprehensive review of the introduced trees and shrubs grown by the Tradescants at Lambeth has recently been published by P. J. Jarvis.[71]

Tradescant's will, dated 8 January 1638, and proven on 2 May 1638, lists leases on properties in Covent Garden and Longacre, which were left to his grandchildren, in addition to those at Woodham Water in Essex and at Lambeth, which went to his son John. (No mention is made of Elizabeth, his wife, who must be assumed to have predeceased him.)[72]

The early life of John Tradescant the Younger is rather shadowy. He was baptized at Meopham in 1608[73] and between 1619 and 1623 attended the King's School, Canterbury, close by Lord Wotton's garden where his father was employed. He married Jane Hurt in 1627;[74] at some time not precisely known a daughter, Frances, was born,[75] to be followed in 1633 by a son, John.

In 1634 Tradescant the younger was admitted a freeman of the Gardeners Company, although no record survives of his apprenticeship.[76] Three years later he made his first visit to Virginia, when it was recorded that 'In 1637 John Tredescant was in the colony, to gather all rarities of flowers, plants, shells, &c.'[77] He made further visits on two occasions, in 1642 and in 1654.[78]

In Tradescant's 1656 catalogue the Tradescants' name was linked with only five North American plants: blush bears' ears (*Dodecatheon meadia* L.), Virginian maple (*Acer rubrum* L.), another maple (*Platanus occidentalis* L.), Virginian or swamp cypress (*Taxodium distichum* L.), and white Virginian poplar (tulip tree) (*Liriodendron tulipifera* L.). Subsequently, they have been credited with *Aster tradescanti*[79] and with the spiderwort,

[68] Tradescant 1634: the surviving copy is in Magdalen College Library, Oxford (Arch. B.II.1.19); it is reproduced in Gunther 1922, pp. 334–45.

[69] Bod. Lib. MS Rawl. A315; reproduced in Temple 1919, p. 2.

[70] For Stirn's diary see No. 438 below.

[71] Jarvis 1979.

[72] PRO, Prob. 11/177/63; see *Notes and Queries* ser. 1, 7 (1853), 295; Lane Poole 1913, p. 68; Allan 1964, pp. 174–5.

[73] Meopham Parish Church Registers, quoted in *Notes and Queries* ser. 1, 5 (1852), 266; Golding-Bird 1918, p. 152: '1608: August the iiij daye John the sonne of John Tradescant was baptized eodem die.'

[74] Faculty Office Licence.

[75] At the time of her marriage in 1644 Frances was described as 'about nineteen'. Allan (1964, p. 179) accords her a birth in wedlock by giving her birthdate as *c.*1628.

[76] Allan (1964, p. 150) notes that the records of the Gardeners Company pertaining to this period were destroyed by fire in the eighteenth century.

[77] PRO, State Papers, Colonial Series, 1574–1660, vol. 1, no. 11. Allan's suggestion (1964, p. 165) that he had visited Virginia prior to 1637 is based on an influx of twenty-nine American plants recorded in the garden list (Tradescant 1634): this hypothesis finds no supporting evidence elsewhere and the plants in question could easily have arrived through intermediaries.

[78] Allan 1964, pp. 181, 189.

[79] e.g. Pulteney 1790, p. 176; *Notes and Queries* ser. 1, 3 (1851), 354.

Tradescantia virginiana.[80] Parkinson described the latter (Pl. CLXXVIII) under the name *Phalangium ephemerum Virginianum Ioannis Tradescant*:

The soon fading Spider-wort of Virginia, or Tradescant his Spider-wort. This Spider-wort is of late knowledge, and for it the Christian world is indebted unto that painfull industrious searcher, and lover of all natures varieties, John Tradescant (sometimes belonging to the right Honourable Lord Robert Earle of Salisbury, Lord Treasurer of England in his time, and then unto the right Honourable the Lord Wotton at Canterbury in Kent, and lastly unto the late Duke of Buckingham) who first received it of a friend, that brought it out of Virginia, thinking it to bee the Silke Grasse that groweth there, and hath imparted hereof, as of many other things, both to me and others . . .'[81]

Hence this attribution, and perhaps all the others listed here, should be to the elder Tradescant, whose North American introductions were all made via intermediaries.[82] Many no doubt arrived at Lambeth, like the spiderwort, in the care of interested friends, others as a result of a letter specifically requesting specimens, written by Tradescant at the command of the Duke of Buckingham (see pp. 19–20). Yet others came by way of exchange with gardeners who already had specimens of their own, such as '*Doronicum Americanum*', (probably *Arnica montana*, leopard's bane), said to have come from 'the French colony about the river of Canada and noursed up by Vespasian Robin the French Kings Herbarist at Paris, who gave Mr. Tradescant some rootes that hath encreased well with him and thereof hath imparted to me also'.[83]

Exchanges of seeds and plant specimens between botanists were an important feature of this formative period of gardening. A number of entries in Parkinson's *Paradisus* refer to plants or seeds received from the elder Tradescant: these include double cuckoo flowers (presumably a double-flowered form, now lady's smock, *Cardamine pratensis*), 'sent me by my especial good friend John Tradescante, who brought it among other dainty plants from beyond the Seas, and imparted thereof a root to me', and mountain valerian, received 'of the liberalitie of my loving friend John Tradescante, who in his travaile, and search of natures varieties, met with it, and imparted thereof unto me'.[84] Tradescant himself wrote in the annexe to his Russian diary: 'I found a bery growing lowe at my first landing whic in berry was muche lik a strabery but of an amber coller . . . I dried sume of the beryes to get seede whearof I have sent part to Robiens of Parris'.[85]

[80] Blunt (1950, p. 79, notes, however, that evidence for an earlier introduction of *Tradescantia* into Europe exists in an illustration by Georg Hoefnagel (1542–1600).

[81] Parkinson 1629, p. 152.

[82] Kingsbury (1935, p. 229) records that among certain letters which came from Virginia onboard the *Abigail* in 1623 was one from 'George Sandys to Mr John Tradesicant at my Lord Wottons house' (see also *Eighth Report of the Historical Manuscripts Commission* (1881), Appendix pt. 2, no. 41a). Its contents are unknown but it demonstrates none the less some degree of active contact with the Americas at this date. Tradescant was also a subscriber in 1616 to Captain Argall's Virginia plantation. See Kingsbury 1933, p. 58 and Brown 1890, p. 939: 'February 12, 1617. Captain Argall and his associates, here under named, allowed severall Bills of Adventure for transport of 24 persons, at their charge to Va. viz . . . John Tredescant, 1 Bill of £25.'

[83] Parkinson 1640, p. 323.

[84] Parkinson 1629, pp. 388–9.

[85] See No. 433 below. Other allusions to such exchanges of plants occur, for example, in the *Herball* of John Gerard, where the author records that he received of 'the curious and painful Herbarist of Paris', Jean Robin, a 'double yellow daffodil . . . which he procured by means of friends from Aurelia, and other parts of France . . . hyacinths . . . Turkie or Ginnie-hen flowers . . . wild saffron . . . gum succorie . . . dog's bane . . . herb Christopher . . . Indian cress'. The latter 'came first from the Indies into Spaine and those hot regions, and thence into Fraunce and Flanders, from whence I have received seeds from my loving friend John Robin' (Gerard 1597, pp. 98, 122, 126, 196, 225, 755, 829).

Robin is credited as the source of many of the exotics in the list of plants 'reseved since the impression of this booke', appended to Tradescant's copy of Parkinson's *Paradisus*,[86] including '*Iris Affracanus*' and '*Renunculus Asiaticus*'. In the same place is mentioned 'on German rose of Mr. Parkinson from Mounser Robine'. Others come from René Morin in Paris; Sir Peter Wyche, who was British ambassador in Constantinople in the year in question (1630); Humfry Slaynie (see p. 35), and others. Further specimens are simply recorded as coming from Brussels, Holland, France, or merely 'from forrin parts'. Parkinson describes a 'Strawberry headed Trefoile of Portugall' which 'perisheth yearely with mee, and Mr. Tradescant, who had it from Boel at Lishbone'.[87] Golding-Bird's claim, that the elder Tradescant paid £25 to an agent in 1617 to collect specimens in Virginia,[88] seems to be based on a misunderstanding of Tradescant's investment of the same sum in that year in the Virginia Company.[89]

Parkinson's *Theatrum Botanicum* lists several species for which the younger Tradescant is credited with the first introductions,[90] among them the branched burr-reed (*Sparganium ramosum*), columbine (*Aquilegia canadensis* L.), jasmine (possibly *Gelsemium* sp.), cypress (*Taxodium distichum* L.) and, possibly, the Virginian locust tree (*Robinia pseudacacia* L.).[91] Also recorded is a variety of fern 'which Mr. John Tradescant the younger, brought home with him from Virginia, this present yeare, 1638, presently after the death of his father'.[92]

Soon after returning from Virginia, Tradescant the Younger was appointed Keeper of His Majesty's gardens at Oatlands, 'in the place of John Tradescant, his father, deceased', the salary remaining at £100 per annum.[93] In October of the same year he married Hester Pookes, his first wife Jane having previously died.[94] Hester was already related by marriage to the de Critz family, among whom John de Critz had worked contemporaneously with Tradescant the Elder at Hatfield and at Oatlands, while the de Critz family was later to produce a series of portraits of all three generations of Tradescants.[95]

Some record of Tradescant's duties at Oatlands is contained in a bill, dated 12 April 1648, for expenses in respect of 'amending the Walks in the Vineyard Garden, and for Worke to be don to the Gardens at Oatlands, and for repaireing the Bowling Greene there'.[96]

From this time onwards, the younger Tradescant's acquaintance with Elias Ashmole developed. The relationship's progress can be charted from Ashmole's diary,[97] beginning on 15 June 1650, when 'My selfe, wife & Dr: Wharton, went to visit Mr: John Tradescant at South-Lambeth'. The relationship seems to have been friendly: the

[86] See No. 436 below.

[87] Parkinson 1640, p. 1109.

[88] Golding-Bird 1934, p. 165.

[89] PRO, State Papers, Colonial Series, 1574–1660, vol. 2, no. 33. See n. 82.

[90] Parkinson 1640, pp. 1206, 1367, 1465, 1477, 1550.

[91] Mr Alan Paterson points out (personal communication) that *S. ramosum* is a native British species. For a discussion of Tradescant's primacy over Robin in the introduction of *Robinia pseudocacia*, see Allan 1964, pp. 44–5. The *Dictionary of National Biography* (s.v. Tradescant) mentions a tradition that Tradescant the Younger was the first to grow pineapples in England, but the claim is unsubstantiated.

[92] Parkinson 1640, p. 1045.

[93] PRO, State Papers Domestic, Charles I, CCCCXXXII, 1639, no. 41 (docket).

[94] Drew 1943, p. 98: see under 'Extraordinarij recieptes for Buryalles 1634 . . . June first, Jane the wife of John Tradeskin, £00,12.00.' The record of registration of Tradescant's marriage to Hester Pookes is reproduced in *Notes and Queries* ser. 1, 8 (1853), 513.

[95] See Nos. 253, 262, 265, 269, 274 below.

[96] Ash. Lib. AMS 2, enclosure 4.

[97] Josten 1966, vol. 1, *passim*; 2. 530.

Ashmoles (and particularly Mrs Ashmole) stayed at Lambeth on occasion, and Tradescant accompanied Ashmole in August 1652 to attend a trial for witchcraft at Maidstone.[98]

The same year saw the death of Tradescant's nineteen-year-old son John, buried on 15 September next to his grandfather in the churchyard of St. Mary at Lambeth.[99] In the years that followed, various drafts of the catalogue of plants and rarities at South Lambeth were compiled by Tradescant in collaboration with Ashmole and Dr Thomas Wharton (see p. 24). Following publication of the catalogue in 1656,[100] our knowledge of Tradescant stems mainly from legal documents, such as the deed of gift of 1659 by which the collection of rarities was assigned to Ashmole, and the recensions in two subsequent wills (see pp. 41–2). He successfully answered a charge in 1661 of 'making shew of Severall Strainge Creatures without Authority from his Majesties Office of the Revells',[101] and in the same year was summoned (with many others) to face a charge of having 'wilfully . . . refused to pay their assessment for poor relief there, to the grave damage of all parishoners and inhabitants, in evil example . . . and against the peace',[102] an imputation which failed in court. His name also appears in two writs, a *Venire Facias* of January 1662 and a *Capias* of April in the same year, both concerning an indictment of the previous October and calling on a large number of citizens 'to answer touching certain trespasses, contempts and misdemeanours'.[103]

JohnTradescant the Younger died on 22 April 1662. Namesakes then still living in Walberswick received bequests in his will,[104] as did his widowed daughter, Frances, and four god-children. Family responsibilities fell to his widow, Hester. At her expense, a monument to all three John Tradescants was erected in the churchyard of St. Mary at Lambeth.[105] Ducarel described it in 1773: 'This once beautiful monument hath suffered so much by the weather, that no just idea can now, on inspection, be formed of the North and South sides', but from two views of the tomb preserved at Cambridge (Pl. CLXXV) could be seen the following:

On the East side	Tradescant's arms
On the West	A hydra, and under it a skull
On the South	Broken columns, Corinthian capitals, &c. supposed to be ruins in Greece, or some other eastern countries
On the North	A crocodile, shells &c. and a view of some Egyptian buildings

Various figures of trees, &c. in relievo adorn the four corners of this monument.[106]

[98] Ibid., 1. 94–5.

[99] Parish Register, St. Mary at Lambeth.

[100] Tradescant 1656. See Microfiche 5.

[101] PRO, State Papers Domestic, Charles II, XXXVIII, 1661, nos. 74 and 74 I. In response to an appeal by Tradescant against the charge, the King declared himself satisfied 'that the fact, in itself, is not onely of very harmelesse import, & not to bee found pr[e]judiciall to any person; but that it hath been practised & continued, uninterruptedly, by him & his Father, with the Allowance or good liking (at least) of our Progenitors, for many yeares past'.

[102] Powell and Jenkinson 1935, pp. 101–2.

[103] Ibid., pp. 125, 170.

[104] PRO, Prob. 11/308/72. See *Notes and Queries* ser. 1, 5 (1852), 167–81, 474–5; Allan 1964, pp. 198–9.

[105] Aubrey (1719, p. 11) records that 'the top Stone is a Table of good black marble, whereon is this Inscription: This monument was erected at the Charge of Hester Tradescant, the Relict of John Tredescant, late deceased, who was bury'd the 25th Day of April, 1662.'

[106] Ducarel 1773, pp. 10–11.

It was eventually repaired by subscription in 1773. A new leger slab was fitted to the tomb omitting the previous reference to the fact that it had been erected by Hester, but including an epitaph composed for but never added to the first tomb:

> Know, stranger, ere thou pass, beneath this stone,
> Lie JOHN TRADESCANT, grandsire, father, son.
> The last dy'd in his spring; the other two
> Liv'd till they had travelled art and nature thro
> As by their choice collections may appear,
> Of what is rare, in land, in seas, in air:
> Whilst they (as HOMER'S Iliad in a nut)
> A world of wonders in one closet shut.
> These famous antiquarians that had been
> Both gardiners to the ROSE and LILLY QUEEN,
> Transplanted now themselves, sleep here; and when
> Angels shall with their trumpets awaken men
> And fire shall purge the world, these hence shall rise
> And change their garden for a paradise.[107]

Following a second appeal in 1852 the upper slab was again renewed, the version of 1773 eventually finding its way to the Ashmolean Museum, where it is now displayed.[108]

All other trace of the Tradescants was gradually erased from Lambeth. Aubrey recorded in 1719 that:

> At South Lambeth, the farthest House was the House where John Tredescant liv'd, and shew'd his choice Collection of Rarities; where he had a garden stor'd with choice Plants; amongst others he had the Balm of Gilead Tree; Edm. Wyld, Esq; had some layers of it, which grew very well at Houghton-Conquest in Bedfordshire, 'till in the hard Winter the Mice kill'd it. I do not hear of any other now in England. The House and Garden Elias Ashmole bought; as also the Rarities, which he gave to the Musæum at Oxford. Very few rare plants are now remaining here; only a very fair Horse-Ches-Nut tree, some Pine-Trees and Sumach-Trees, Phylerea's, &c. and at the Entrance into the Gate, over the Bridge of the Mote, are two vast Ribs of a Whale.[109]

Dr William Watson published in 1750 a further note of the garden at Lambeth, 'many Years totally neglected and the House belonging to it empty and ruin'd yet though the Garden is quite cover'd with Weeds, there remain among them manifest Footsteps of its Founder'.[110] Among the plants surviving from the heyday of the garden were 'two trees of the *Arbutus* [Strawberry tree] the largest I have seen', which were among the species recorded in the garden by Ashmole in a list of trees he added to Tradescant's copy of the *Paradisus*.[111]

Any survivors of these specimens have long since disappeared in the late nineteenth-century housing developments which saw the demolition of the Tradescants' house in

[107] *Notes and Queries* ser. 1, 3 (1851), 286–7, 394 [corrected].

[108] For a prospectus for the appeal 'for the perfect restauration of the Tomb of the Tradescants, according to its original form', see Bod. Lib. Oxon. C.68, item 185. See also *Gentleman's Magazine* NS 37 (1852), p. 377; ibid. 39 (1853), p. 518. The gift to the Ashmolean is recorded in *Notes and Queries* ser. 6, 3 (1881), 512.

[109] Aubrey 1719, pp. 12–13.

[110] Watson 1750, p. 161.

[111] See No. 436 below.

1879 and the construction of Tradescant Road and Walberswick Street, named to commemorate the former leaseholders.[112] Today no plant specimens survive which can be linked directly with the Tradescants.[113]

Interest in them has been revived by more recent developments at Lambeth. The church of St. Mary at Lambeth was declared redundant in 1972; the churchyard became a wilderness, and the building itself, having been boarded up, was scheduled for demolition in 1976. In that year, thanks to the initiative of Mr and Mrs John Nicholson, admirers of the Tradescants, a stay of execution was obtained and a Tradescant Trust set up to focus interest and effort. By January of the following year the Friends of the Tradescant Trust had been formed, and in the next winter a public appeal was launched. Now, with the aid of funds raised and with major grants in aid from the Department of the Environment and the London Borough of Lambeth, a programme of repair and consolidation is in hand. It is hoped to reopen the church as a museum of garden history, while the churchyard has already been planted as a memorial garden where memory of the Tradescants is sustained by the trees, shrubs, and flowers with which their name is inextricably linked and which once flourished in their own garden at Lambeth.

[112] See Sturdy 1982, p. 10, for the destruction of the Tradescant house.

[113] There seems to be no convincing reason for attributing a *Hortus siccus* in the Bodleian Library (see No. 444 below) to the Tradescants. Gunther's statement (1925, p. 202) that it was 'probably collected by or for the Tradescants' is unsubstantiated; the holograph is indeed thought to be foreign (Black 1845, no. 1465). The recipe for glue to mount plant specimens appended to the volume is not in Tradescant's hand, as claimed by Allan (1964, p. 225), but in Ashmole's.

THE TRADESCANTS AS COLLECTORS OF RARITIES

Arthur MacGregor

The Tradescants amassed their collection of rarities as a parallel and subsidiary exercise to their botanical activities. By the time it was accumulating at Lambeth, shows of rarities had already become popular in London and indeed were viewed with a certain ennui by the most fashionable: Peacham in 1611 complained peevishly, 'Why does the rude vulgar so hastily post in a madnesse to gaze at trifles and toyes not worthy the viewing?'[1] Details are known of only one of these earliest seventeenth-century collections, and, fortunately, it is one with which the elder Tradescant may well have been familiar. Its owner was Sir Walter Cope (d. 1614), a politician who had been a member of the Elizabethan College of Antiquaries.[2] Cope was a close friend of the first Earl of Salisbury, Tradescant's patron and employer, and before falling into debt in later years kept a fashionable house known as Cope Castle in Kensington. In 1599 he was described as inhabiting a fine house in the Snecgas,[3] where he entertained the visiting Swiss, Thomas Platter, who recorded the occasion in his diary.[4] Platter was shown into 'an appartment, stuffed with queer foreign objects in every corner, and amongst other things I saw there, the following seemed of interest . . .'. There follows a list of some fifty entries, several of them referring to more than one object, and including weapons, holy relics from a Spanish ship which Cope had helped to capture, heathen idols, and numerous bone instruments. Geographically, the collection was very varied: ornaments, clothes, an artful little box, earthen pitchers, and porcelain from China; plumes, a Madonna made of feathers, a chain made of monkey-teeth, two dyed sheepskins, stone shears, a back-scratcher, and a canoe with paddles, all from 'India'; there was a Javanese costume, Arabian coats, cloaks, and musical instruments, and a pitcher and dishes from Turkey. Nor was the collection confined to artificial rarities, for among those from the natural world were the horn and tail of a rhinoceros, the horn of a bull seal, a round horn which had grown on an Englishwoman's forehead, a unicorn's tail, a 'flying rhinoceros', a hairy caterpillar, a 'sea halcyon's nest' and Virginian fireflies. Other accessions anticipating the Tradescants' collection were objects associated with persons of note, including the bauble and bells of Henry VIII's fool, the Queen of England's seal, and the Turkish Emperor's golden seal.

Following his detailed list, Platter continues that Cope also possessed, 'besides many

[1] 'Panegyrick verse' prefixed to *Coryat's Crudities* (see Coryat 1905, I. 114).

[2] For an account of the College of Antiquaries see van Norden 1946.

[3] The street has not been identified: Williams (1937, p. 171, n. 2) suggests Snow or Snor Hill.

[4] Ibid.

old heathen coins, fine pictures, all kinds of corals and sea-plants in abundance. There are also other people in London interested in curios, but this gentleman is superior to them all for strange objects, because of the Indian voyage he carried out with such zeal.' Three years later, Cope's collection attracted the attention of the young Duke of Stettin-Pomerania, who visited London in 1602 while on a grand tour of the principal European states. In the diary kept by the Duke's tutor and private secretary, Frederic Gerschow, are noted a number of the objects seen by Platter as well as others not previously recorded:[5] these include a little Indian bird phosphorescent by night; a 'passport given by the King of Peru to the English, neatly written upon wood'; and a 'musical instrument celebrated in ancient times, and called cymbalum'.

In its diversity of artificial and natural rarities, of antiquities, coins, and ethnological material, Cope's collection foreshadowed that which Tradescant was later to form at Lambeth. There is every likelihood that Tradescant saw it, and it may well have influenced or even inspired his own activities: not only was Cope on friendly terms with Tradescant's master, but Tradescant carried out a personal commission for Cope himself during his visit to Leiden in 1611, buying plants to the value of £38.[6]

The journey to Leiden would have provided Tradescant with an opportunity to view another famous collection, in the university's anatomy school, which included much besides anatomical and pathological specimens (see pp. 78–9) and was certainly open to the public during vacations;[7] it is not impossible that Tradescant paid it a visit between rounds of intensive buying at the local nurseries.

Mea Allan suggests that Tradescant's principal source of inspiration was the collection described by Evelyn in 1644 as belonging to Monsieur Morine, 'a person who from an ordinary Gardner, is ariv'd to be one of the most skillfull and Curious Persons of France for his rare collection of shells, Flowers and Insects'.[8] There seems to be some confusion, however, as to whether this was René Morin, with whom the elder Tradescant later exchanged specimens, or his younger brother, Pierre Morin, 'le jeune, dit troisième'.[9]

Although there seem to be few records of an early interest in collecting, the social customs and the natural and artificial rarities noted by Tradescant and carefully recorded in his Russian diary (see No. 433) provide some foretaste of this passion. Prevailing weather, the position of his ship, the condition of the sea, house types, furnishings, street paving, carts (which are compared with those in Staffordshire), sheep (compared with those in Norfolk), and horses are recorded; the principal crops are discussed, and harvest-times given. An interest in costume appears already: two men from 'Cross Island' on the Lapland coast who intercepted the *Diana* on 11 July 1618 to offer salted salmon for sale, are described as 'clad in lether, withe the skins of sheepe withe the firs syde inwards, bothe having crusifixes about the necks very arttifityally mad', and among the Sammoyets 'the men and women be hardli knowne on from the other, because they all wear clothes like mene, and be all clad in skins of beasts packed very curiouslie together, stockins and all'.

[5] Von Bülow 1892, pp. 25–7.
[6] Hatfield House MSS, Bills 58/3.
[7] Scheurleer 1975, p. 222.
[8] Allan 1964, p. 47; Evelyn, *Diary*, c.1–6 April 1644.
[9] Compare, for example, Warner 1954, pp. 169, 172, with vol. 2, p. 132, n. 3, of de Beer's 1955 edition of Evelyn's *Diary*.

Birds were also recorded and collected. On the night of 29 June there came 'a strang bird abord our shipe, whiche was taken alive and put to my costody, but dyed within two dayes after being 60 leaggs from the shore, whos like I yet never sawe, whos case I have reserved'. On 13 July 'many small birds cam abord the shipe, being sume 3 leags from the shore. I have thre of ther skins whiche were caut by myself and the rest of the company'. Collecting plants on 16 July (when a piece of snakeskin was also noted), Tradescant and some others flushed out '5 foulls suche as all those in the place whear we landed hardlie knewe, the ould ons wer great to the bignes of a fesant, the wings whit, the bodies green, the tayll blewe or dove coller. I would have given 5s. for one of their skins'.

It is, unfortunately, impossible to tell with certainty which, if any, of the North-European items later recorded in the 1656 catalogue[10] of the Lambeth collection were collected on this voyage; all of them could have been acquired later by purchase or gift. Among the possible souvenirs are boots from Lapland, Russian boots, shoes and stockings, boots from Muscovy, and 'the Duke of Muscovy's vest wrought with gold upon the breast and arms'. The only identifiably Russian objects to survive are the important abacus (No. 193) and, perhaps, a leather boot (No. 107).

The expedition to Algiers in 1621 would also have given opportunities for collecting. Among possible trophies of this expedition listed in the 1656 catalogue may be counted steel chains from Spain, a 'Portugall habit', a Moore's cap, Barbary shoes and spurs (see Nos. 17–19), two amulets (Nos. 24 and 190), a vest, and a cow's tail from Arabia. More doubtful are various items catalogued from Venice, Malta, Turkey, Jerusalem, and Damascus.[11]

Up to this point Tradescant may have been relying on his own travels and, perhaps, those of his friends to produce accessions, but new horizons opened with his alliance to the Duke of Buckingham. Buckingham was already a connoisseur with a princely art-collection who employed the talents of a scout, Balthasar Gerbier, to locate new masterpieces for his galleries. Evidence of Buckingham's awakening interest in rarities appears in 1625 in the form of a letter addressed to Edward Nicholas, then secretary of the Navy, signed by John Tradescant.[12]

Noble Sir

I have Bin Comanded By My Lord to Let Yr Worshipe Understand that It Is H Graces Plesure that you should In His Name Deall withe All Marchants from All Places But Espetially the Virgine & Bermewde & Newfownd Land Men that when they Into those Parts that they will take Care to furnishe His Grace Withe All maner of Beasts & fowells and Birds Alyve or If Not Withe Heads Horns Beaks Clawes Skins Fethers Slipes or Seeds Plants Trees or Shrubs Also from Gine or Binne or Senego Turkye Espetially to Sir Thomas Rowe Who is Leger At Constantinoble Also to Captain Northe to the New Plantation towards the Amasonians With All thes fore Resyted Raritycs & Also from the East Indes Withe Shells Stones Bones Egge-shells Withe What Cannot Com Alive My Lord having heard of the Dewke of Sheveres[13] & Partlie seene of His Strang Fowlls Also from Hollond of Storks A payre or two of yong ons Withe Divers kinds of Rufles

[10] Tradescant 1656. See Microfiche 5.

[11] Tradescant 1656, pp. 37, 40, 43, 46, 48–54; see also p. 7.

[12] PRO. State Papers Domestic, Charles I, IV, 1625, nos. 155–6.

[13] Claude de Lorraine, duc de Chevreuse, who acted for Charles I at Henrietta Maria's marriage ceremony in Paris. The duc de Chevreuse is not otherwise noted as a collector.

Whiche they theare Call Campanies this Having Mad Bould to present My Lords Comand I Desire Yr fortherance. Yr Asured Servant to Be Comanded till he is

John Tradescant

A more detailed list of requirements is appended:

To the Marchants of the Ginne Company & the Gouldcost Mr. Humfrie Slainy Captain Crispe & Mr. Clobery & Mr John Wood Cape marchant.
The things Desyred from those parts Be theese in primis
on Ellophants head with the teeth In it very larg
on River horsses head of the Bigest kind that can be gotton
on Seacowes head the Bigest that Can be Gotten
on Seabulles head withe hornes
of All ther strang sorts of fowelles & Birds Skines and Beakes Leggs & phetheres that be Rare or Not knowne to us
of All sorts of strang fishes skines of those parts the Greatest sorts of shellfishes shelles of Great flying fishes & sucking fishes withe what Els strang
of the habits weapons & Instruments
of ther Ivory Long fluts
of All sorts of Serpents and Snakes Skines & Espetially of that sort that hathe a Combe on his head Lyke a Cock
of all sorts of ther fruts Dried As ther tree Beanes Littill Red & Black In their Cods whithe what flower & seed Can be Gotten the flowers Layd Betwin paper leaves In a Book Dried
Of All sorts of Shining Stones or of Any Strang Shapes
Any thing that Is strang

Whether or not Tradescant benefited directly from these arrangements, or indeed from any disposal of material following Buckingham's assassination in 1628, he clearly was now in touch with many potentially fruitful contacts, and, with his move to Lambeth around 1628, was in possession of the house in which his collection was to develop into a nationally and internationally known spectacle and which was ultimately to give the house itself a new name – The Ark.

By the time The Ark received a visit from Peter Mundy, on home leave from the East India Company in 1634, a superficial examination of the contents already took an entire day. Mundy shows that the ultimate character of the collection was already well formed:

In the meane tyme I was invited by Mr Thomas Barlowe (whoe went into India with my Lord of Denbigh and returned with us on the *Mary*) to view some rarieties att John Tredescans, soe went with him and one freind more, where wee spent that whole day in peruseinge, and that superficially, such as hee had gathered together, as beasts, fowle, fishes, serpents, wormes (reall, although dead and dryed), pretious stones and other Armes, Coines, shells, fethers, etts. of sundrey Nations, Countries, forme, Coullours; also diverse Curiosities in Carvinge, painteinge, etts., as 80 faces carved on a Cherry stone [cf. Pl. CLXXIII], Pictures to bee seene by a Celinder which otherwise appeare like confused blotts, Medalls of Sondrey sorts, etts. Moreover, a little garden with divers outlandish herbes and flowers, whereof some that I had not seene elsewhere but in India, being supplyed by Noblemen, Gentlemen, Sea Commaunders, etts. with such Toyes as they could bringe or procure from other parts. Soe that I am almost perswaded a Man might in

one daye behold and collecte into one place more Curiosities than hee sould see if hee spent all his life in Travell.[14]

Royal benefaction came in 1635 with a warrant to William Smithsby, keeper of the Hampton Court Wardrobe, to 'deliver to John Treidescant king Henry the Eight his Cap, his stirrups, Henry the 7th his gloves and Combcase'.[15]

Georg Christoph Stirn described the collection three years later in July, 1638:

In the museum of Mr. John Tradescant are the following things: first in the courtyard ther lie two ribs of a whale, also a very ingenious little boat of bark; then in the garden all kinds of foreign plants, which are to be found in a special little book which Mr. Tradescant has had printed about them. In the museum itself we saw a salamander, a chameleon, a pelican, a remora, a lanhado from Africa, a white partridge, a goose which has grown in Scotland on a tree, a flying squirrel, another squirrel like a fish, all kinds of bright coloured birds from India, a number of things changed into stone, amongst others a piece of human flesh on a bone, gourds, olives, a piece of wood, an ape's head, a cheese etc.; all kinds of shells, the hand of a mermaid, the hand of a mummy, a very natural wax hand under glass, all kinds of precious stones, coins, a picture wrought in feathers, a small piece of wood from the cross of Christ, pictures in perspective of Henry IV and Louis XIII of France, who are shown, as in nature, on a polished steel mirror when this is held against the middle of the picture, a little box in which a landscape is seen in perspective, pictures from the church of S. Sophia in Constantinople copied by a Jew into a book, two cups of 'rinocerode', a cup of an E. Indian alcedo which is a kind of unicorn, many Turkish and other foreign shoes and boots, a sea parrot, a toad-fish, an elk's hoof with three claws, a bat as large as a pigeon, a human bone weighing 42 lbs, Indian arrows such as are used by the executioners in the West Indies – when a man is condemned to death, they lay open his back with them and he dies of it – an instrument used by the Jews in circumcision [cf. Pl. CLXXII], some very light wood from Africa, the robe of the King of Virginia, a few goblets of agate, a girdle such as the Turks wear in Jerusalem, the passion of Christ carved very daintily on a plumstone, a large magnet stone, a S. Francis in wax under glass, as also a S. Jerome, the Pater Noster of Pope Gregory XV, pipes from the East and West Indies, a stone found in the West Indies in the water, whereon are graven Jesus, Mary and Joseph, a beautiful present from the Duke of Buckingham, which was of gold and diamonds affixed to a feather by which the four elements were signified, Isidor's MS of de natura hominis [see No. 435, Pl. CLXIX], a scourge with which Charles V is said to have scourged himself, a hat band of snake bones.'[16]

Rasmus Bartholin, another foreign visitor, recorded his impressions in 1647 in a letter from Amsterdam, addressed to Ole Worm in Copenhagen.[17] Bartholin had recently been to Lambeth where he had seen:

[14] Temple 1919, pp.1–3. Nothing is known of the chamber or gallery in which the exhibits were housed. Sturdy (1982, p. 11) speculates that there may have been a purpose-built gallery in the garden, as was the fashion of the time.

[15] PRO, L.C. 5/134, p. 91. A number of other items later listed in the *Musæum Tradescantianum* may have been gifts from the royal household: these include 'Edward the Confessors knit gloves, Anne of Bullens Night-vayle embroidered with silver. Anne of Bullens silke knit-gloves, Henry 8 hawking-glove, hawks-hood, dogs-collar' (Tradescant 1656, p. 49). See also Nos. 84 and 104 below.

[16] See No. 438 below.

[17] Schepelern 1968, p. 273, no. 1536, translated here by Birgitte Speake. Ole Worm himself never met Tradescant, but his son Willum may have done so; apparently in response to some mention of Tradescant by Willum, Ole Worm wrote to the latter in London in 1652 that 'concerning Tradescant, I have heard that he was an idiot' (Schepelern 1968, p. 479, no. 1728). The text of Willum's original letter and the mischievous source of this opinion are unknown.

Mr Tredoscus's collection of rarities, which I looked at with special interest and admiration. However, it would have moved me to even greater admiration if I had not been convinced that your own well-stocked collection is far ahead of his,[18] although I did not have your museum catalogue to hand and have not been able to see the last edition. I cannot deny that he possesses wonderful objects in the form of natural curiosities brought home from India and he has promised to have a list of them printed.

Ten years later, after visiting a relation who lived at Lambeth, Evelyn called at 'John Tradescants Musæum', recording that:

> the chiefest rarities were in my opinion, the antient Roman, Indian and other Nations Armour, shilds and weapons; Some habits also of curiously colourd and wrought feathers: particulaly that of the Phoenix Wing, as tradition gos: other innumerable things there were too long here to recite, and printed in his Catalogue by Mr. Ashmole.[19]

Daniel Fleming's antiquarian interests were sufficiently whetted by a day spent 'goeing unto Tradeskins' in 1653 that he came back within the year, and again in 1662.[20]

Specialist scholars were naturally attracted by the collection. Thomas Johnson, in revising Gerard's *Herball*, records 'Indian morrice bells', made by inserting pebbles into dried and hollowed-out cases of fruits, which were then tied to the legs for dances. 'These do grow in most parts of the West Indies, especially in some of the Islands of the Canibals, who use them in their dances more than any of the other Indians. You may see these upon strings as they are here figured [Pl. CLXXIX], amongst many other varieties, with Mr. John Tradescant at South Lambeth.'[21]

John Ray's edition of Francis Willoughby's *Ornithology* refers to rare birds examined at The Ark. Under the entry for the dodo, for example, he notes that 'we have seen this Bird dried, or its skin stuft in Tradescants cabinet'. Another dried specimen, 'the bigness of a common Lark, hath a streight sharp Bill, a long Tail: And . . . all over of a blue colour', is initially identified as an Indian mockbird, '*Cæruleus Indicus*', but then, 'Upon second thoughts, however Tradescant might put the Epithete of Indian upon this bird, I judge it to be no other than the Caeruleus or Blue Ouzel of Bellonius [*Passeri Solitario congener*]'. A third specimen is tentatively equated with the Brasilian merula (blackbird) of Aldrovandi.[22] Allan's claim that live specimens of Virginian birds were included[23] cannot be substantiated.

The educational value of The Ark to the young did not go unappreciated, and its door seems to have been open to anyone with the desire to enter. It was mentioned by one author in an account of London, which city he judged 'of all places I know in England, is

[18] *mange Parasanger forud for hans*, literally 'many parasangs before his'. The *Oxford English Dictionary* gives 'parasang' as 'A Persian measure of length, usually reckoned as equal to between 3 and $3\frac{1}{2}$ English miles', and illustrates the metaphoric use of the term with a passage from Burton's *Anatomy of Melancholy*: 'Thou art many parasanges before me in means, favour, wealth, honour'.

[19] Evelyn, *Diary*, 17 September 1657.

[20] Magrath 1904, pp. 60, 80, 409; Historical Manuscripts Commission 1890, p. 21, nos. 243, 260; ibid., p. 29, no. 492.

[21] Johnson 1633, p. 1546.

[22] Ray 1678, pp. 154, 193, 194.

[23] Allan 1964, p. 133. The specimens referred to are perhaps the 'Virginia and other birds in great variety' kept in a garden at Lambeth belonging to Captain Foster (Hamilton 1796, p. 190), who was visited by Ashmole in 1669 (Josten 1966, 3. 1140). Interestingly, however, Borel (1649, p. 128) refers to the cabinet of 'Jean Tradesquin, à La maison des oiseaux'. Sturdy (1982, p. 12) suggests that if live birds were not in fact kept at The Ark the name might have derived from some sort of sign-post featuring birds and advertising the location of the museum.

best for the full improvement of children in their education, because of the variety of objects which daily present themselves to them, or may easily be seen once a year, by walking to Mr. John Tradescants, or the like houses or gardens, where rarities are kept, a Book of all of which might deserve to be printed, as that ingenuous Gentleman hath lately done his by the name of *Musæum Tradescantianum, a Collection of Rarities*'.[24]

Its appeal to the populace at large is alluded to in the refutation of the charge brought against Tradescant in 1661 by the Office of the Revells: in dismissing the case against him, the King ordered that 'the said Tredeskyn bee suffered, freely & quietly to proceed, as formerly, in entertaining & receaving all persons, whose curiosity shall invite them to the delight of seeing his rare & ingenious Collections of Art & nature'.[25]

A further reference to 'the Man who shows John Tradescants Rarities (which is extraordinary fine for those who have never seen such a sight)'[26] confirms its accessibility to the general public, presumably on a regular basis, and in this respect it was probably the first museum of its kind in Britain. A small entrance charge appears to have been levied.[27]

Finally, evidence quoted elsewhere in this volume implies strongly that credit for accumulating virtually the whole collection must go to the elder Tradescant. Tradescant the Younger no doubt made some additions, but there is no clear proof of any.[28] The father seems to have anticipated little development of the museum by the son, who none the less continued to operate it as a going concern, co-operated in the preparation of a catalogue, and took the legal steps which ultimately led to its transfer from Lambeth to Oxford after his death.

[24] Hoole 1660, pp. 284–5.

[25] PRO, State Papers Domestic, Charles II, XXXVIII, 1661, no. 74. See also p. 14, n. 101, above.

[26] Leigh 1673, p. 123. By this date the collection was, of course, in the care of Hester Tradescant (see p. 43).

[27] A few references to money spent on visits to South Lambeth survive in contemporary account-books. The Salisbury accounts contain the following reference for 1633–4 (Historical Manuscripts Commission 1971, p. 271): 'Paid for my Lord Cranborne and Mr. Robert going by water and for seeing John Tradeskins Antiquities, £0-9-0.' Sir Edward Deering's Household Book (BL Add. MS 22,466, f. 43) records on 9 May 1649, 'Given at John Tredskins 2*s.* 6*d.*', and on 22 March 1650, 'Given at John Tredskins 2*s.* 0*d.*' Daniel Fleming notes on 6 August 1653, 'Spent in going to Westminster and John Tradeskins 4*s.* 6*d.*'; the following year 'Spent in goeing into Tradeskins 4*s.* 6*d.*'; and in 1662 'spent at John a Tradeskins 2*s.* 6*d.* Item given for the site there unto four, 2*s.* Item for a boat thither and back again 2*s.*' (Historical Manuscripts Commission 1890, pp. 21, 29, 158, 191). In most of these references the entrance fee is unclear, the number of persons in the party being unstated and other charges such as transport (?and the cost of plants purchased) being combined in the total. If the fee 'for the site there unto' was 2*s.* for four people, then 6*d.* would appear to have been the entrance-charge.

[28] The younger Tradescant's visits to Virginia (see p. 11) provide the most obvious opportunities for initiative of this kind, but despite statements to the contrary (e.g. Allan 1964, p. 173) there is no record of what advantage was taken of them for the collection of artificial rarities.

MUSÆUM TRADESCANTIANUM AND THE BENEFACTORS TO THE TRADESCANTS' MUSEUM

April London

On 15 June 1650 Elias Ashmole recorded in his diary: 'My selfe, wife & Dr: Wharton, went to visit Mr: John Tradescant at South Lambeth.'[1] Plans to draw up a catalogue of the rarities contained in The Ark, with publishing expenses to be met by Ashmole,[2] were soon finalized, and by September 1652 Ashmole and Wharton had completed a draft. But, as Tradescant noted in the preliminary address 'to the ingenious reader', the final version emerged only after considerable delay: 'Presently thereupon my onely Sonne dyed, one of my Friends [Wharton] fell very sick for about a yeare, and my other Friend [Ashmole] by unhappy Law Suits was much disturbed.' It was not until 1656, then, that the *Musæum Tradescantianum: Or, A Collection of Rarities Preserved at South-Lambeth neer London by John Tradescant* was published.

The completed catalogue divides into two sections. The first lists rarities by subdivision into a further fourteen groups: 1. 'Birds', 2. 'Fourfooted beasts', 3. 'strange Fishes', 4. 'Shell-creatures', 5. 'Insects, terrestriall', 6. 'Mineralls', 7. 'Outlandish Fruits', 8. 'Mechanicks', 9. 'Other variety of Rarities', 10. 'Warlike Instruments', 11. 'Garments, Habits, Vests, Ornaments', 12. 'Utensils, and Householdstuffe', 13. 'Numismata', and 14. 'Medalls'. The second main section, the 'Hortus Tradescantianus', records the plants cultivated at south Lambeth. An earlier, much cruder form of the latter appears in the 1634 *Plantarum in Horto Iohannem Tradescanti, nascentium Catalogus*.[3] John Goodyer's copy, presumably a proof version, exists in Magdalen College, Oxford, but the letters of John Owen to Johannes de Laet attest to its circulation among Tradescant's contemporaries.[4] The *Plantarum* lists 768 plants, many being synonymous or double entries, as opposed to the 1701 plants recorded in the 1656 catalogue.[5] The precision which distinguishes the later version of botanical entries was not uniformly observed throughout the 1656 catalogue; notations in the first section are in fact often limited to such vague commentary as 'an Umbrella' or 'A Portugall habit'. But together the two sections reveal how the acquisitive abilities of both Tradescants led to the formation of an extraordinarily rich and varied collection.

How was this collection amassed? In the catalogue proper only the benefactions of Elias Ashmole and Thomas Wharton are consistently accredited through the use of the

[1] Josten 1966, 2. 530.
[2] PRO, Chancery Proceedings C 33/221/744; Josten 1966, 2. 621.
[3] Tradescant 1634; reproduced in Gunther 1922, pp. 334–45.
[4] See Bekkers 1970, pp. 16–17.
[5] Jarvis 1979, p. 225.

initials EA and TW, or the fully printed names. Other primary sources yield meagre or partial information. From 1629 to 1633 Tradescant recorded on the endpapers of his copy of Parkinson's *Paradisi in sole Paradisus Terrestris* a list of plants received each year, many from René Morin in Paris (see No. 436). The Public Record Office and the State Papers also contain relevant information: through royal patronage, for example, Tradescant secured 'king Henry the Eight his Cap, his stirrups, Henry the 7th his gloves and Combcase' (see Nos. 84 and 104). Each of these sources, however, is limited in both scope and specificity. Even the account books of the Salisbury family, famed for their comprehensive documentation, offer no list of separate objects donated by the first or second Earl. When each of these sources has been considered, then, one of the most illuminating remains the list of benefactors appended to the *Musæum Tradescantianum*. Arranged in order of degree from King Charles and Queen Henrietta Maria (anglicized to Queen Mary), through Archbishop Laud, to peers and nobles, doctors and captains, and substantial merchants and private citizens, these names provide an indispensable aid in determining the means of collection. There are of course considerable difficulties even in this list, due primarily to the recording of surnames only in many cases. It is impossible to determine, for example, exactly who 'Mr Browne' is: the miniaturist Alexander Browne? the botanist William Browne? the scholar Thomas (later Sir Thomas) Browne? Similar problems surround 'Mr Smith': whether or not Captain John Smith is referred to here cannot be assumed with any certainty. Several interesting features do, however, emerge from the list. Preliminary analysis reveals that many of the names were recorded at an intermediate stage of individual careers and subsequently remained unaltered. 'Mr Nicholas, Secretary to the Navy', for example, held that position from 1625 until 1641 when he was knighted and appointed Secretary of State. Similarly, 'Lord Goring' was raised to the peerage in 1628 and then created Earl of Norwich in 1644. The retention of obsolete titles suggests that accounts were kept in the 1630s and then transcribed directly by Ashmole and Wharton in their compilation of the catalogue. The possibility of such an earlier list gains credence from contemporary accounts which imply that by 1656 the collection had attained near-completion. Its fame was extensive enough by the mid-1630s to attract such visitors as Peter Mundy, whose impressions are recorded above (pp. 20–1). Mundy's note that it took a whole day to view 'superficially' the contents, taken in conjunction with a comment from Hartlib's *Ephemerides* for the period 1646–51, suggest that the collection was by this point solidly founded. The *Ephemerides* record that Robert Child informed Hartlib that Tradescant 'was willing, for an annuity of £100 to sell his chamber of rarities, most of which were represented very lively in a book, and his botanical garden, which together were really worth more than £1,000, and to let his son continue to look after the garden, as he had been brought up to do, thereby saving the cost of employing someone else'.[6] Although Hartlib is not an entirely reliable source, his account does contain several interesting features. The elder Tradescant's death in 1637/8 limits the formulation of this plan to the period between the early and middle 1630s – corroborating evidence of the collection's substance. It suggests further that he, rather than his son, was largely responsible for the consolidation of rarities, and, most

[6] Turnbull 1959, p. 24.

significantly, that the rarities and not simply the botanical specimens had been recorded in a book. Do the differences in detail and specific description between the two sections of the *Musæum Tradescantianum* suggest different sources? Did Ashmole and Wharton perhaps work from an account of the rarities originally compiled by the elder Tradescant, and rely on the son only for assistance with the botanical entries?

In the absence of documentation answers to these questions must remain speculative. Attempts to analyse how and when the collection was amassed, however, benefit considerably from the list of benefactors. Set against the events of the elder Tradescant's career, it maps a pattern of adherence to the men who successively functioned as the great patrons of their age, men who in turn controlled the fortunes of lesser functionaries, who are themselves also represented as benefactors.

Tradescant's first powerful patron was Robert Cecil, Earl of Salisbury. Tradescant entered into service as the Salisbury gardener during the height of his employer's dominance, which lasted from 1608 to 1612. At the point he was not only 'one of the wealthiest men in the country',[7] but exercised political influence comparable only to his successor, Buckingham. Appointed Secretary of State by Elizabeth in 1596, he was retained in this position by James, made Viscount Cranborne in 1604, Earl of Salisbury in 1605, and a Knight of the Garter in 1606. In the reign of King James, Cecil was building at Hatfield, Cranborne, and Salisbury House, and on Hatfield alone spent £40,000 between 1608 and 1612.[8] Tradescant's involvement in this munificence included a tour in 1611 to Leiden, Haarlem, Delft, Brussels, Rouen, and Paris, as described above (pp. 4–5). Cecil was also patron of Rowland Buckett and Richard Butler, possible benefactors to Tradescant's museum, and it was through his influence that Dudley Carleton (pp. 32–3) acquired the post of ambassador to Venice.

William Cecil, the eldest son of Robert, was twenty-one when his father died and he became second Earl of Salisbury. He had been married for four years to Catherine, daughter of Thomas Howard, a marriage designed to reconcile the two great families of Salisbury and Suffolk.[9] A pension of £3,000 per annum for twenty years was granted to Cecil in 1615; a sum which, with the income from fines and wood-sales, enabled him to continue the work on the various estates begun by his father.[10]

From these two great figures of Tradescant's early career a number of ancillary patrons can be traced through the benefactors' list, including 'Mr Munke', 'Mr Rowland Buckett', 'Mr Butler', and 'Lord Cambden'. 'Mr Munke' is most probably Levinus Munck, Robert Cecil's secretary, of whom Chamberlain reported to Carleton in 1623: 'Levinus Muncke died lately very rich for a clarke of the signet, his state falling out they say toward forty thousand pounds.'[11] He entered Parliament in 1601, became a director of the East India Company in 1609, and was also involved in the French Company. The first recorded reference to 'Mr Rowland Buckett' (d. 1639), is as the decorator of the organ-clock sent by Queen Elizabeth on behalf of the Levant Company to the Sultan of Turkey, Mahomet III; Buckett accompanied the gift. By 1608 he was employed by his

[7] Stone 1965, pp. 135–6.
[8] Ibid., p. 554.
[9] Aylmer 1974, p. 114.
[10] Stone 1965, pp. 283–4.
[11] Chamberlain, *Letters* (1939), 2. 502.

chief patron, Robert Cecil, working first at Salisbury House in London and then between 1609 and 1612 at Hatfield, where among other accomplishments he coloured 'the rocks in the great sestern . . . and the picture of Neptune in the East Garden'.[12] A member of the Painter-Stainers Company, he served as Warden (1623–4) and twice as Master (1626–7, 1630–1). At some point before 1636 he was employed by another Tradescant benefactor, James Hay, Earl of Carlisle. The wealth and prestige he acquired through patronage and position is reflected by his residence in London's most fashionable parish, St. Botolph without Aldersgate.

Another artist associated with the Salisbury family who might have known and then become a benefactor to Tradescant is Richard Butler (active 1609–50), who 'executed, at the rate of 6*s*. 4*d*. a square foot, the lights of the east window of the chapel at Hatfield, after designs by Martin van Bentheim'.[13] An alternate identification exists, however, in the person of William Butler (1535–1617/18). Aubrey records in his *Brief Lives* a biography of 'Butler, physitian; he was of Clare-hall in Cambridge, never tooke the degree of Doctor, though he was the greatest physitian of his time'.[14] The comment that he was 'not greedy of money, except choice pieces of gold or rarities' accords with Fuller's notation in the *Worthies of England* that Butler 'was better pleased with presents than money, loved what was pretty rather than what was costly; and preferred rarities before riches'.[15] Butler's court connections and Aubrey's quotation of anecdotes from James Bovey[16] (another benefactor) concerning his character suggest two further links with Tradescant.

Three further benefactors, higher on the social scale than those discussed previously, also have links with the Salisbury family: 'Lord Cambden', Sir Nicholas Bacon, and Sir Butts Bacon. Lord Campden is either Baptist (Noel) Viscount Campden or Baptist Hicks. The former, born in 1612, was married four times, first in 1632 to Anne, daughter of a Tradescant benefactor, William Fielding, first Earl of Denbigh, and his wife, the late Duke of Buckingham's sister, Mary Villiers. The alternative, Baptist Hicks, amassed a large fortune in trade, was knighted in 1603, created a baronet in 1620, and raised to the peerage as Baron Hicks and Viscount Campden. Stone records that Hicks became increasingly involved in money-lending and in this capacity was closely associated with a large number of peers.[17] Connections with Tradescant benefactors appear through his involvement with the Virginia Company, and through his brother, Sir Michael Hicks, who was secretary to both Robert and William Cecil. Hicks may also be the link with another benefactor 'Mr Offley', tentatively identified as Robert Offley, son of Hugh Offley, twice master of the Leathersellers Company, director of the Eastland Company (1579), and involved in the Spanish Company (1577). In his will, proved in 1594, Hugh Offley left £600 as an endowment for apprenticeships in London and £200 for the aid of boys in Chester.[18] Robert Offley was also an eminent London merchant and a member of the East India, North-West Passage, and Somers Islands, or Bermudas Companies. With Baptist Hicks and Dudley Digges among others, he was one of the purchasers of the

[12] Croft-Murray 1962, 1. 194.
[13] Ibid., 1. 195.
[14] Aubrey, *Lives* (1898), 1. 138.
[15] Fuller 1811, 2. 340.
[16] Aubrey, *Lives* (1898), 1. 141.
[17] Stone 1965, p. 432.
[18] Jordan 1960, p. 169.

Bermudas (1612), and the King recommended he serve as deputy treasurer of the company in 1622.[19]

The Bacon family, related to the Salisburys through marriage, included two members who contributed to Tradescant's museum, Sir Butts and Sir Nathaniel. Although minor figures in their own right, they are typical of the lesser benefactors to the collection in being connected with extremely powerful figures.[20] Sir Nicholas Bacon of Redgrave, son and heir of Sir Nicholas Bacon, Lord Keeper, and elder brother of Lord Chancellor Francis Bacon, married Anne Butts. Sir Butts Bacon was the younger son of this marriage. He was created a baronet in 1627 at Mildenhall, married Dorothy, widow of William Jermyn and daughter of Sir Henry Warner, and died in 1661. His brother Sir Nathaniel Bacon entered Corpus Christi College, Cambridge, in 1621, was made a Knight of the Bath at Charles's coronation, and graduated MA in 1628. On his monument in the church at Culford, Suffolk, he is described as 'well skilled in the history of plants, and in delineating them with his pencil'. He presented Tradescant with a small landscape painting (No. 254).

The complex relationships among the benefactors to the Tradescant collection operate in, as it were, a 'chain of command'. For this particular group, the Salisbury family occupies the pre-eminent position and their influence extends down through minor branches of the nobility, such as the Bacons, political appointees like Dudley Carleton, and employees like Rowland Buckett who subsequently acquired wealth in their own right. Affiliations within each of these groups in turn yield a number of benefactors: for example, the Bacon family has links with both 'Lady Killegray' and 'Mr Bushell'.

'Lady Killegray' is probably Mary, daughter of Sir Henry Woodhouse of Kimberley, niece of Sir Francis Bacon, and wife of Sir Robert Killegrew (1579–1633). She survived her first husband and married Sir Thomas Stafford, gentleman-usher to Henrietta Maria. The Countess of Warwick wrote disparagingly of her: 'she was a cunning old woman who had been herself too much, and was too long versed in amours'.[21] Her business ability is reflected in the grant of a patent which gave her the right to search and seal leather, and for this reason she supported the Glovers Guild strongly at court.[22]

Thomas Bushell (1594–*c.*1675) entered the service of Sir Francis Bacon in 1610, serving him until Bacon's disgrace in 1614, at which point he retired to the Isle of Wight in the disguise of a fisherman. He returned to London but on Bacon's death in 1626 retired for a further three years, emerging again in 1629 as the proprietor of an estate in Oxfordshire. Here he discovered around 1632 a spring and curious rock-formations from which he constructed 'famous Wells, natural & artificial Grotts & fountains . . . where he had two Mummies, and a Grott where he lay in a hamac like an Indian'.[23] Charles and Henrietta Maria visited the spectacle in 1636, and the following year Bushell obtained the grant of the royal mines in Wales where coins were minted under his wardenship. In his biography, *The Superlative Prodigall*, Gough speculates that Bushell's rise in favour

[19] Williamson 1913, p. 66.
[20] Simpson 1961, p. 93.
[21] Quoted in *Dictionary of National Biography*, s.v. Sir Robert Killigrew.
[22] Ashton 1979, p. 74.
[23] Evelyn, *Diary*, 18–24 October 1664.

probably originated in contacts with the King made prior to 1636 during the period in which he served as Bacon's secretary.[24] It was in this capacity that he was identified in a manuscript note to a British Library copy of the *Musæum Tradescantianum*: 'Secy to L Bacon I suppose'.[25] An ardent royalist, Bushell's fortunes fell around 1650, and he retreated to a house on Lambeth Marsh described by Aubrey:

> In the garret there, is a long gallery which he hung all with black, and had some deaths heads and bones painted. At the end where his couch was, was in an old Gothique nich . . . painted a skeleton incumbent on a matt. At the other end where was his pallet-bed was an emaciated dead man stretched out. Here he had several mortifying and divine mottos . . . and out of his windows a very pleasant prospect. At night he walkt in the garden and orchard.[26]

Tradescant left Hatfield for Canterbury in 1614/15 where he was employed by Lord Wotton. The garden at Chilham, near Canterbury, may have been planted by him (see p. 6) in 1616 for Sir Dudley Digges, a benefactor whose relationship to Tradescant is comparatively well documented.

After taking his degree at Oxford (1601) Digges travelled on the continent and later promoted the five expeditions mounted between 1610 and 1616 to discover the North-West Passage. In 1618 he was sent by James to negotiate a loan to the emperor of Russia, but was banished from court on his precipitate departure from Cholmogora.[27] Tradescant, who accompanied Digges, kept a record of the journey in diary form (No. 433). Richard Stanley, another benefactor to the collection, captained the ship in which Digges sailed to Russia. He was a commander in the East India Company's service and in 1623 sailed as master of the *Great James* with Captain Weddell. He voyaged to India and China in 1636 as vice-admiral of the Courteen fleet and ultimately supported Parliament during the Civil War.[28]

Digges's membership in numerous companies attests to his continued interest in exploratory travels: a director of the East India Company (1611), North-West Passage Companies (1612), and the Virginia Company (1609), his name also appears on the documents of the New England Venturers (1620), the Muscovy Company (1620), Bermuda Company (1612), Baffin Venturers (1615), and Hudson Venturers (1610). Chamberlain's *Letters* between 1619 and 1621 record Digges's efforts on behalf of the benefactor Dudley Carleton, noting that Digges was 'in a faire way to some preferment, being greatly favoured by the Lord of Buckingham and the Prince'.[29] Soon afterwards, however, he became leader of the parliamentary opposition and in 1626 attacked the Duke of Buckingham, for which he was briefly imprisoned in the Tower. After Buckingham's death, Digges received a grant of the reversion of the Mastership of the Rolls (1630), but did not succeed to the lucrative office until the death of the incumbent, Sir Julius Caesar, in 1636.

Tradescant's next trip abroad was in 1620–1 on an expedition under the command of the benefactor Phineas Pett, to Algiers to suppress piracy (see pp. 7–8). In 1625 he entered

[24] Gough 1932, p. 33.
[25] BL. no. 687 d.9.
[26] Aubrey, *Lives* (1898), 1. 132.
[27] Hamel 1854, pp. 395–6.
[28] *Dictionary of National Biography*, s.v. Swanley.
[29] Chamberlain, *Letters* (1939), 2. 265.

the service at Newhall of his most influential employer to date, George Villiers, Duke of Buckingham. By this time Buckingham's pre-eminence as dispenser of patronage was assured. His rise to power following an introduction to the King at Apethorpe in 1614 saw him successively favourite of James and Charles until his assassination in 1628. The policy of direct cash sales of titles which began in 1615 greatly contributed to forwarding Villiers's career. Between 1615 and 1628 the peerage as a whole swelled by more than half, the Earls alone increasing nearly one and a half times, and it was Buckingham who effectively administered this lucrative business, securing 'almost complete control over royal patronage'.[30] The substantial wealth and political power he achieved can be gauged by the plurality of offices he held between 1624 and 1628: Lord High Admiral; Master of the House; Lord Warden of the Cinque Ports; Chief Justice in Eyre, south of Trent; Gentleman of the King's Bedchamber; and Chief Clerk of the King's Bench.

In such a system of nepotism as then existed, where men angled for preferment with politic distribution of gifts, Tradescant's position within the Villiers household would have made him a natural beneficiary of courtiers' attentions. Buckingham was known to be a keen connoisseur, amassing paintings by Tintoretto, the Bassanos, Titian, and in 1625, Rubens's magnificent collection. A letter from Lady Anne Carleton to her husband in 1624 attests to the importance of such gifts: 'and be you assured heere [at Middelburg, where Italian and Spanish goods were being sold] are very rich and raire thinges, sufficient to make my Lord Buckingham a wonderfull sumtious present'.[31] Under Buckingham's command, Tradescant wrote to Edward Nicholas in 1625, requesting that he should 'In His Name Deall withe All Marchants from All Places' in the collection of rarities (see pp. 19–20), but the numerous benefactors to the collection who were also indebted to Buckingham for advancement suggest that it was not simply merchants who grasped the advantages to be gained from bestowing gifts upon the patron's employee. These benefactors will be grouped for the purposes of discussion into a number of categories: those with family connections, those whose career benefited from Buckingham's active intercession, and those who acted as his agents for the collection of antiquities.

The family connections include the Duchess of Buckingham, Lady Mary Villiers, Lady Denbigh, Laud, and Sir Clipsby Crew. Katherine, daughter and heir of Francis Manners, sixth Earl of Rutland, married Buckingham in 1620 and after his assassination married in 1635 Randal MacDonnel, Earl of Antrim. As she resided in Ireland after the second marriage until her death in 1649, her benefactions to the collection probably date from the period spent in England. Lady Mary Villiers, daughter of the Duke of Buckingham, was married to Charles Herbert, Lord Herbert of Shurland (1634/5) in an attempt to consolidate the fortunes of the Herbert and Villiers families. After the premature death of her first husband she married James Stuart, first Duke of Rutland, and later, in 1664, Colonel Thomas Howard. Lady Denbigh, the patron of Crashaw and sister of the Duke of Buckingham, married *c.*1607 William Feilding, (created First Earl of Denbigh 1622), who died fighting for the King in the Civil War. She followed Henrietta Maria to Oxford and then to Paris where she was converted to Catholicism, thereby

[30] Aylmer 1974, p. 258.

[31] Sainsbury 1859, p. 305.

prompting the Council of State to sequester her property in 1651. Each of these women benefited enormously from their affiliation with Buckingham, amassing considerable wealth. Not only were presents to family members a recognized means for ambitious men to further their careers, but Buckingham himself carefully arranged such perquisites as the £4,550 a year which the Duchess of Buckingham drew from her lease of the customs.[32]

William Laud, Archbishop of Canterbury, began his close relationship with Buckingham in 1622 when he was drawn into attempts to dissuade the Countess of Buckingham (Villiers's mother) from conversion to Catholicism. Educated at Oxford, Dean of Gloucester, 1616, Bishop of St. David's, 1621, and ultimately Archbishop, Laud was impeached for treason by the Commons in 1640, confined to the Tower in 1641, and executed in 1645. His real predominance over the Church began with the accession of Charles I. Laud was a noted collector who gave Bodleian Library 1,229 manuscripts in eighteen languages between 1635 and 1640.[33] 'Mr Dells', another benefactor to Tradescant's museum, is probably Laud's secretary who matriculated at St. John's College, Oxford, in 1619, took his BA in 1622/3, and MA in 1626. He acted as Laud's solicitor during his trial and after his employer's execution erected a memorial tablet to him in the chapel of St. John's College.[34]

Another benefactor known to Buckingham through family connections is Sir Clipsby Crew (1599–1649), son of Villiers's friend, Sir Ranulphe Crew. Sir Clipsby matriculated at Cambridge in 1616, was admitted to Lincoln's Inn in 1619, knighted in 1620, and was MP for Downton in 1624 and 1625 and for Callington in 1626. He was a friend of Herrick who addressed several poems to him, and perhaps of Sir Henry Wotton. Evelyn records that 'Sir Clepesby has fine Indian hangings, and a very good chimney-piece of Water Colours don by Breugle'.[35]

The next, and largest group of benefactors, may be categorized as those whose careers benefited from Buckingham's active intercession: Henry Vane, Edward Nicholas, Robert Heath, Lord Viscount Faulkland, George Goring, Dudley Carleton, Sir James Bagg, and Sir John Acmoote.

Sir Henry Vane's power was consolidated after 1625 by virtue of his strong support of royal policy. Educated at Oxford, knighted by King James in 1611, he purchased the post of Cofferer to the Prince of Wales in 1617, and in this capacity accompanied the King to the Isle of Wight. Here he met Sir John Oglander who 'attested' to the 'Blood that rained on the Isle of Wight', a rarity listed in the *Musæum Tradescantianum*.[36] Sir John Oglander (1585–1655) was, along with Buckingham, joint commissioner for levies in Hampshire. Hamel speculates that the 'Blood' may be some of the meteoric red dust which fell upon the Isle of Wight in 1177.[37] Tension between Vane and Buckingham in 1624–5 was resolved by mid-1625 and the former subsequently enjoyed a succession of promotions: Co-Cofferer of the King's Household (1625), Comptroller and Privy Councillor (1630), Treasurer of the Household and Secretary of State (1640). His

[32] Stone 1965, p. 428.
[33] See, e.g., Evelyn, *Diary*, 10–11 July 1654.
[34] Webster 1975, p. 377.
[35] Evelyn, *Diary*, 28 February 1648.
[36] Tradescant 1656, p. 44.
[37] See *Notes and Queries* ser. 1, 5 (1852), 386.

assumption of enormous power after Buckingham's assassination contributed to his amassing a fortune which by 1640 made him 'one of the richest commoners in England'. In 1641, however, the King deprived him of all court appointments, and Vane went over to the parliamentarians, with whom he was allied until his death in 1655.[38]

Edward Nicholas, to whom the letter written by Tradescant quoted above (pp. 19–20) was directed, served as secretary to Lord Zouch, Lord Warden, Chancellor, and Admiral of the Cinque Ports in 1618. When Buckingham assumed the position as Lord Warden in 1624, he retained Nicholas and further aided his career. In 1625 Nicholas became Secretary for the Admiralty and was admitted one of the Clerks of the Council by Charles in 1635 until 1641, when he was knighted and made Secretary of State. He left England in 1646 and settled in Normandy until the Restoration, when he resumed his position as Secretary of State, 1660–5. His benefaction, then, must have taken place between 1625 and 1641.[39]

Sir Robert Heath was educated at St. John's College, Cambridge, barrister at law, Inner Temple, 1603, bencher, 1617, MP for London 1621–2, and East Grinstead 1624–6, Recorder of London, 1618–21, Solicitor-General, 1621–5, Attorney-General, 1625, Sergeant-at-Law, 1631, and Chief Justice of the Common Pleas, 1631–4. Heath's rise to prominence again involves the patronage of George Villiers: 'he . . . belongs to the Lord of Buckingham',[40] writes Chamberlain in 1618. Heath's conservatism ultimately led to his dismissal from the office of Chief Justice in 1634, but he was subsequently made a Sergeant-at-Law in 1636, a Judge of the King's Bench in 1641, Master of the Court of Wards and Liveries, and appointed Chief Justice of the King's Bench by the King at Oxford, 1643. He was impeached by Parliament in 1644, fled to France in 1646, and died at Calais in 1649.

'Lord Viscount Faulkland' is probably Henry Cary, first Viscount Falkland, who entered Gray's Inn, 1590, matriculated at Queen's College, 1593, was knighted by Essex at Dublin Castle, 1599, and made Viscount Falkland, 1620. Under Buckingham's patronage he was appointed Privy Councillor in 1617, Comptroller of the Royal Household in 1618, and Lord Deputy of Ireland in 1622 ('Lord Buckingham is said to have procured him the post'.)[41] He was interested in Irish and New World colonization and was consequently involved in the Irish Companies and North-West Passage Companies (1612), was one of the 'Adventurers for Virginia', and purchased a tract of land in Newfoundland.

Two of the remaining members of the Buckingham circle, George Goring and Dudley Carleton, were political allies of Villiers. George Goring was knighted in 1608 and then promoted to the peerage in 1628 in order to 'buttress Buckingham's political position in the House of Lords'.[42] The rewards of such patronage extended beyond political to economic preferment: Goring, Stone writes, was 'the greatest customs entrepreneur of them all',[43] concerned in the Sugar Farm, butter export, wine and tobacco licences, and Customs Farm. He was also among the 'great aristocratic pluralists',[44] holding the

[38] *Dictionary of National Biography*, s.v. Vane.
[39] Aylmer 1974, pp. 78–9.
[40] Chamberlain, *Letters* (1939), 2. 180.
[41] Weber 1940, p. 21.
[42] Stone 1965, p. 105.
[43] Ibid., p. 428.
[44] Aylmer 1974, p. 126.

positions of Lieutenant of the Band of Gentleman Pensioners (1614–42), Queen's Vice-Chamberlain (1626–8), Master of the Queen's Horse (1628–39), and Vice-Chamberlain (1639–42). His connections with the royal family were of long standing: he participated with Buckingham in the French marriage preparations, 1624–5, attended the King to York in 1640, and Queen Henrietta Maria to the Netherlands in 1641–2, escorting her back to England in 1642–3. Since he was created Earl of Norwich in 1644, his benefaction to the collection must have been made before that date. After playing a leading role in the second Civil War, Goring was sentenced to death by the high court in 1649, but then set at liberty and permitted to rejoin Charles on the Continent.

Dudley Carleton served as ambassador to Venice and The Hague. He was made Vice-Chamberlain of the Household and member of the Privy Council in 1626, after which he returned to France and then The Hague for a further two years. Created Viscount Dorchester in 1628 as part of Buckingham's attempt to increase support in the House of Lords, he became chief Secretary of State responsible for foreign affairs after Buckingham's assassination.

Carleton's career as a collector began in 1603 with the amassing of manuscripts for his father-in-law, Sir Henry Savile, in Paris. Around 1615 he began to act for Lord Arundel, to whom he sent such presents as a 'Jupiter's head, a very fine bason of stone, wth an Ewer alla anticha, Aeneas flying from y^{e} sack of Troy'.[45] But with Buckingham's ascendence, Carleton transferred his allegiances, primarily to two of the established Buckingham adherents, Conway and Goring.

The two final members of this group to be discussed, Sir James Bagg and Sir John Acmoote, did not owe their preferment to inherent excellence. Sir James Bagg of Salcombe near Plymouth rose to prominence by assiduous attention to the court favourite. He was 'one of Buckingham's more nauseating sycophants',[46] referred to by contemporaries as 'bottomless' Bagg.[47] A member of Parliament, a merchant, and a shareholder in the Virginia Company, he was involved in 'one of the most sordid Star Chamber cases of the period'.[48] Sir John Acmoote is probably the 'Ackmoutie' referred to in Chamberlain's *Letters* between 1613 and 1620 as being at Padua and Venice. He participated as a 'dauncer' in a number of masques including Ben Johnson's *Pleasure Reconciled to Virtue* accompanied by, among others, Buckingham and Goring.[49]

Others who appear in the benefactors' list can be grouped as agents for the collection of antiquities for Buckingham: these include Sir Henry Wotton, Sir Thomas Roe, Mr Gage, Captain Weddell, and Mr Slany.

Sir Henry Wotton, brother of Tradescant's employer at Canterbury, Lord (formerly Sir Edward) Wotton, was appointed ambassador to Venice after serving as Essex's secretary, and remained there during 1604–12, 1616–19, and 1621–4. In the two latter periods he collected paintings and other works of art for Buckingham and the King. Wotton had expert knowledge of Venetian glass, a commodity much favoured by the English court. His known gifts to Tradescant include plant specimens such as Italian fennel.[50]

[45] Sainsbury 1859, p. 268.
[46] Stone 1965, p. 114.
[47] Aylmer 1974, p. 348.
[48] Pearl 1961, p. 111.
[49] Chamberlain, *Letters* (1939), 1. 496; ibid., 2. 14, 128, 200, 282.
[50] Allan 1964, p. 105.

After being knighted by James in 1603, Sir Thomas Roe's first major expedition was to the Amazon and Orinoco in 1609–10. In 1614 he was appointed ambassador to the court of Jehangir, Mogul emperor of Hindustan. He returned from this post in 1619 and presented James with 'two antelopes, a straunge and bewtiful kind of red-deare, a rich tent, rare carpets, certain ombrellaes and such like trinkets from the great Mogul'.[51] In 1621 he was sent to Constantinople as 'Ambassador to the Ottoman Porte' where he remained until 1628 continuing his collecting endeavours. Here he would have received the letter written to Edward Nicholas by Tradescant under the aegis of Buckingham, superscribed 'Espetially to Sir Thomas Rowe who is Leger at Constantinople'. Lord Arundel also vied for his attention in securing antiquities, placing him in an awkward position. His dependence upon Buckingham's patronage for advancement in England determined his primary loyalty, but conciliatory letters to Arundel reflect Roe's desire to offset displeasure by avoiding direct action: 'Therefore trusting y' his Grace will approve y' I have honestly moved to joyne in all chardges and y' y^e^ Collection by his advise, and my credit y' wee can make, shalbe putt into one stocke, and divided by some eaven course when they come into England.'[52] Roe's efforts on Buckingham's behalf were not entirely successful – he admits 'little sckyll'[53] in such matters, fears he 'may commit great errors',[54] and acknowledges that Arundel's agent, William Petty, enjoys far more success. An account by Edward Terry, chaplain to Sir Thomas Roe on this post, suggests, however, a source for the *Musæum Tradescantianum*'s 'Turkish vest' and the 'Rich vest from the great Mogull'.[55] Terry describes Roe's reluctance to petition the Mogul for gifts and then lists the presents which the ambassador was given:

> a cup of Gold most curiously enameled, and set all over the outside with stones (which were small Rubies, Turkesses, and Emeralds) with a Cover, or Plate to set it in, both of pure Gold, the brims of which plate, and the cover were enameled, and set with stones as the other, and all these together weighed twenty & four ounces of our English weight . . . an horse, or two, and sometimes a vest, or upper Garment made of slight Cloath of Gold, which the Mogul would first put upon his own back, and then give it to the Ambassadour . . .'[56]

In 1629–30 Roe served as a special envoy in Sweden and Poland, and after a long period in the political wilderness while he waited without success for Laud to advance his career, he was appointed Chancellor of the Order of the Garter (1637–42) and Ambassador Extraordinary to Hamburg, Ratisbon, and Vienna (1638–40). His commercial ventures included involvement in the Virginia Company (1607), the Levant Company (1621), the Guiana Company (1609), and the New England Venturers (1609).

Two possible identities exist for the 'Mr Gage' included in the benefactors' list. The first, Thomas Gage, was a Dominican who spent some years in the West Indies and Central America before returning to England at some time before 1640. He apostatized, and later, in 1648, published his famous book *The English–American: A New Survey of the*

[51] Chamberlain, *Letters* (1939), 2. 265.
[52] Sainsbury 1859, p. 283.
[53] Ibid.
[54] Ibid., p. 387.
[55] Tradescant 1656, pp. 47, 51.
[56] Terry 1655, pp. 396–7.

West Indies. Gage then served in an advisory capacity to Oliver Cromwell, urging the disastrous expedition mounted in 1654 against the Spaniards in Hispaniola and Jamaica. He died in 1655.[57]

His brother, George Gage, seems on balance the more likely benefactor. George Gage was a close friend of Tobie Mathew and together they were secretly ordained by Cardinal Bellarmine, SJ, in Rome, 1611. Gage served both diplomatic and artistic functions: he conducted negotiations with the Holy See for the marriage of Prince Charles to the Spanish Infanta, and acted for the Duke of Buckingham, Dudley Carleton, King James, and probably Lord Arundel in the purchase of works of art. He was imprisoned in 1652 and died still a prisoner.[58]

Two minor figures on the benefactors' list also have connections with Buckingham: Captain Weddell and Mr Slany. Weddell was an officer in the East India Company, who then commanded the King's ship the *Rainbow*. He may have been with Buckingham on the expedition to the Isle of Rhé on which Tradescant served as an engineer. He then returned to the service of the East India Company and subsequently worked with Sir William Courten.[59] Humphrey Slany was among the merchants directed to purchase and ship rarities in the letter written by Tradescant to Nicholas in 1625. His brother John was the captain and merchant-tailor of London eulogized by William Vaughan in *The Golden Fleece* (1626) for his settlement of Newfoundland.[60]

Among other benefactors who held significant positions at court were James Hay, Earl of Carlisle, and his acquaintance Sir William Boswell, Sir Kenelm Digby (who is further associated with Dr Bugg), and Sir John Trevor (who has links with Phineas Pett).

Of the Earl of Carlisle, Clarendon said that 'he was surely a man of the greatest expense in his person of any in the age he lived',[61] and his comment is supported by other accounts of the Earl's lavish extravagances. For example, a feast for the French ambassador held at Essex House in 1621 cost £3,300; on his embassy to Paris in 1616, Hay's horses were shod with silver. Born in Scotland in 1580, his rise was rapid: created Baron Hay in 1615, Viscount Doncaster in 1618, and Earl of Carlisle, 1622. He served a number of diplomatic missions as ambassador to Paris and Madrid, 1616 (accompanied by two other Tradescant benefactors, Goring and 'Ackmoutie'), to Germany, 1619–20, to Paris, 1622, to Paris and Madrid, 1623, and to Venice, 1628. His court appointments included Gentleman of the Robes, 1608, Master of the Great Wardrobe, 1613–18, and from 1631 until his death in 1636, Groom of the Stole. Carlisle supported his expensive tastes by selling baronies, through prudent marriages, by extracting enormous sums from merchant capitalists and colonists in his capacity as holder of the grant for the Caribbean islands, by his monopoly of Irish wine and tavern licenses, and (though he lacked real political importance) through his position as court favourite.[62]

Sir William Boswell (1580–1650) was Fellow of Jesus College, Cambridge, in 1606, secretary to Lord Herbert of Cherbury (ambassador at Paris, 1620), secretary to the Earl of Carlisle in 1628, and to Sir Dudley Carleton, ambassador at The Hague, to which post

[57] *Dictionary of National Biography*, s.v. Gage.
[58] Hervey 1921, p. 84, n. 2.
[59] Allan 1964, p. 148.
[60] Vaughan 1626, p. 19.
[61] Footnote to Carlisle's entry in the *Complete Peerage*.
[62] Stone 1965, pp. 107, 338, 432–3, 445, 462, 566.

he succeeded in 1633 when he was also knighted. He was a man of 'considerable cultivation' who corresponded with, among others, Johannes de Laet.[63]

Sir Kenelm Digby is accounted, without documentation, 'perhaps the chief benefactor to John Tradescant' by his biographer Petersson.[64] His scholarly interests, which ultimately culminated in his election to the Royal Society at the same time as Elias Ashmole, began at an early age. Tutored by Laud, then Dean of Gloucester, and by Allan, who in 1630 bequeathed valuable books and manuscripts to his pupil, Digby collected antiquities in his travels which included a voyage to Delos in 1627. Although Evelyn dismisses him as an 'arrant Mountebank', his friendship with such politically diverse figures as Laud, Henrietta Maria, Tobie Mathew, and Oliver Cromwell, suggests positive gifts. Digby converted to Anglicanism in 1630 and then reverted to Catholicism in 1635. By 1638 he had become a member of the Catholic circle through his close friendship with the Queen.[65]

Dr John Bugg paid tribute to Digby's scholarly interests by dedicating his own thesis, *De pleuritide vera et exquisita*, to him. Bugg was made free of the Company of Apothecaries in 1620, and in 1632, in an action taken by the Royal College of Physicians, was imprisoned as an 'empirick' – practising physick without a licence. In Leiden he subsequently attained the degree of MD (1633), and was granted a Cambridge licence on his return to England, his degree being incorporated at Oxford, 1635. He was a member of the tour led by the famous botanist Johnson in which the actual flora of England was explored and then recorded in Parkinson's *Theatrum Botanicum*.[66]

The *Autobiography* of Phineas Pett attests to the close links between two benefactors, Mr Pett and Sir John Trevor. Pett records that 'In December this year, 1599, I began a small model, which being perfected and very exquisitely set out and rigged, I presented it to my good friend Mr. John Trevor, who very kindly accepted the same of me'.[67] Pett's motives in offering the gift could hardly have been disinterested. Trevor had been appointed Surveyor of the Navy the previous year, a position which involved enormous power. The year in which he was knighted, 1603, also saw his appointment to the office of Steward and Receiver at Windsor Castle, Keeper of Upper Castle, near Chatham, and Keeper of the royal house and park of Oatlands, the latter position being assumed by Tradescant in 1630. In 1608 scandal threatened his career when he was accused with Sir Robert Mansell and Phineas Pett of fraud in the freighting of the ship *Resistance*, but after a reprimand from the King the three were freed. Trevor sold the Surveyorship in 1611 but retained his interest in the Virginia Company, of which he was a director.[68]

Phineas Pett became master-shipwright at Deptford in 1605, moved to Woolwich in 1607, in 1612 was appointed first master of the Shipwrights Company, and by 1630 was Commissioner of the Navy. He was a master-builder, perfecting frigate design in such ships as the *Sovereign of the Seas*. He was on two expeditions in which Tradescant also participated: against the Algerine pirates at Alicante in 1620, and accompanying Henrietta Maria on the *Prince Royal* from Boulogne to England in 1625.[69]

[63] Hervey 1921, p. 284, n. 1.
[64] Petersson 1956, p. 249.
[65] MacDonell 1910, p. xxiv.
[66] Parkinson 1640, p. 624.
[67] Perrin 1918, p. 14.
[68] Aylmer 1974, pp. 42–3.
[69] *Dictionary of National Biography*, s.v. Pett.

Two further benefactors with maritime interests can tentatively be identified. 'Captain Cleborne' is possibly Captain William Claiborne who was appointed Surveyor to Virginia by the Trinity Term Quarter Court, 23 June 1621. In 1624 he was authorized by the royal commission to act as one of the King's Council in Virginia, and acquired a considerable land grant.[70] Captain West is possibly Francis West, second surviving son of Thomas West, Baron de la Warr, and friend of both Captain Smith and Captain Claiborne. He accompanied Newport to Virginia in 1609 and for many years was involved in the government of Virginia and New England.[71]

Also associated with overseas settlement was Sir David Kirke. Knighted in 1633, he was involved in attempts at settlement in Newfoundland in the 1630s. He was one of the patentees of a grant of Newfoundland made by Charles in 1637 which ensured a monopoly of the island's trade exclusive of fishery. During the Civil War he continued to govern the island without the recognition of Parliament, until 1651 when commissioners were sent to replace him.[72]

Despite the predominance of names on the benefactors' list linked to Buckingham, there are representatives from opposing factions at court, including two members of the Howard family, the Countess of Arundel and 'Lady Maltravers'. Alathea, Countess of Arundel, was the daughter of Gilbert Talbot, seventh Earl of Shrewsbury who married Thomas Howard, Earl of Arundel, in 1606. In 1620 Alathea travelled to Antwerp where she sat for a portrait by Rubens, then moved on to Milan and Padua, arriving in Venice in 1621. There she competed with Sir Henry Wotton, the English ambassador and agent to Buckingham, in the purchase of paintings. In 1622 Alathea was called home after Sir Henry Wotton informed her of rumours that Antonio Foscarini had sold state secrets in her house. In 1626 she again incurred royal displeasure when her son Lord Maltravers suddenly married against the King's wishes the Duchess of Lennox's daughter. Since 'the larger part of the pictures drawings and *objets de vertu* collected by Thomas and Alathea, Earl and Countess of Arundel, followed them to the Netherlands when they finally left England in 1641',[73] gifts to Tradescant were presumably made before that date.

'Maltravers' was the designated title for the son and heir of the Earl of Arundel. On the death of his elder brother in 1623, the second son, Henry Frederick Howard, became Lord Maltravers. He had been made Knight of the Bath in 1616, and was summoned to Parliament in 1640 as Lord Mowbray, succeeding to the title of Earl of Arundel on the death of his father in 1646. As he married against the King's wishes, Elizabeth, daughter of Esme Stuart, third Duchess of Lennox, in 1626, the benefaction must have occurred between this date and 1640. A letter dated 9 September 1636 from Maltravers to the agent William Petty establishes that Maltravers was, like his parents, a collector of *objets d'art*: an interest which his wife, who died in 1673/4, clearly shared.[74]

Another benefactor acquainted with Sir Henry Wotton is 'Mr Francis Cline'. Born in the Baltic Provinces, Francis Clein is first recorded in Denmark, then in Venice for four years where he met Sir Henry Wotton; he returned to Denmark by 1617, visited England

[70] Brown 1901, p. 608.
[71] Osgood 1904, 1. 65.
[72] Beer 1908, p. 370.
[73] Hervey 1921, p. 473.
[74] Stoye 1952, p. 214.

briefly in 1623 when he secured royal patronage, and, after completing commissions in Denmark, settled in England some time before 1625. He carried out a number of works for the King until his appointment as principal designer to the Mortlake tapestry-works, for which he received £250 per year as salary, continuing there under the Commonwealth.[75]

William Murray also benefited from royal patronage. The benefactor cited in the list is probably the William Murray who was involved in negotiations for paintings to decorate Henrietta Maria's cabinet at Greenwich. One of the 'Groomes of his Ma^ties^ Bedchamber' during his life, he was granted a pension of £1,500 a year in 1625.[76]

'Mr. Thomas Herbert' had, perhaps, of all the benefactors the most intriguing relationship with the King. William Herbert, Earl of Pembroke, agreed to finance his relation's travelling, and when Charles sent Sir Dodmore Cotton to Persia as ambassador in 1627, Thomas Herbert accompanied him, recording his experience after his return in 1630 in a work entitled *An Account of some Yeares travaile*. At the outset of the Civil War he enlisted on the parliamentarian side, but his allegiances after this point are a subject of dispute. Foster maintains that after 1647 Herbert attached himself firmly to the royalist cause,[77] while Mackenzie argues that Herbert remained committed to the parliamentarians, profiting enormously from royalist spoils.[78] The former was certainly the interpretation adopted by contemporaries, and Herbert was rewarded for his services with a baronetcy at the restoration (1660). A letter from Herbert to Ashmole (9 September 1680) acknowledges his acquaintance with Tradescant. 'I find by your Letter that you do not now frequent ye Court as you haue formerly, having retyred your self to your house in South-Lambeth; a place I well know having bin sundry times at Mr. Tredescons, (to whom I gaue seuerall things I collected in my Trauailes.) & was much delighted with his gardens.'[79]

It is another reference in a printed work which enables us to identify tentatively the benefactor 'Mr Liggon' as Richard Ligon. He is the author of *The History of the Barbados*, the preface to which is inscribed 'Upper Bench Prison, July 12, 1653'. Ligon embarked for Barbados in 1647, after being 'bred a Faulconer'[80] in his youth, and remained there until 1650. In the account of his journey he carefully describes plant and animal life, mentioning some specimens, such as the humming-bird, which might have been given to Tradescant. In one of these descriptions he acknowledges a familiarity with the collection itself: 'Flies we have of so many kindes, (from two inches long with the great hornes, which we keep in boxes, and are shewed by John Tredescan among his rarities) . . .'[81]

The benefactor Mr Millen (d. 1637) had a professional relationship with Tradescant, as a comment in Parkinson's *Paradisus* makes clear: 'Master John Millen dwelling in Olde Streete, whom from John Tradescante and all other that haue had good hath stored himself with the best only, and he can sufficiently furnish any'.[82] Proximity to South Lambeth may account for Tradescant's acquaintance with two further artisans,

[75] Croft-Murray 1962, 1. 196–7.
[76] Sainsbury 1859, p. 211, n. 272.
[77] Foster 1928, p. xxxv.
[78] Mackenzie 1956, pp. 32–86.
[79] Josten 1966, 4. 1665.
[80] Ligon 1657, p. 4.
[81] Ibid., p. 63.
[82] Parkinson 1640, p. 575.

'Mr Gaspar Calthoose' and 'Mr. Lambert'. Kalthoff was a mechanic employed by Edward Somerset, Marquis of Worcester, between 1628 and 1663. Worcester's interest in mechanical studies and experiments led him to employ the Dutch mechanic who was then installed in the Vauxhall ordnance factory. The Act to dispose of Crown property (1649) exempted Vauxhall from sale. The grant was given to John Lambert in 1647, but this was subsequently overturned with its purchase in 1652 by John Trenchard. At the Restoration it was leased to Henry Lord Moore until the King acted upon a proviso in the lease and granted tenancy to Kalthoff. The Dutch *Patents for Inventions* includes two devices by Kalthoff: the first, in 1649, and the second, in 1653, both involve 'perpetual motion' machines. Worcester's *Century of the Names and Scantlings of such Inventions as at present I can call to mind to have tried and perfected*, first published in 1663, refers to Kalthoff as 'the unparalleled workman both for trust and skill'.[83] William Lambert was a gun-founder to the Marquis of Worcester, who like Kalthoff worked at Vauxhall. He served with the King of Spain during the Interregnum, and upon the Restoration petitioned Charles; he was allowed to return to Vauxhall in 1665.[84]

Two tentatively identified benefactors remain to be discussed: 'Mr Charleton, Merchant' and 'William Courteen, Esq'. William Courten is probably the great merchant knighted in 1622. Mr Charleton is possibly his son, William Courten (who may have adopted, as did *his* son, the surname Charleton), who was involved in considerable litigation after the death of his father. His mother was a daughter of Moses Tryon (perhaps the Mr Trion of the benefactors' list), and he himself married Catherine Egerton, daughter of the Earl of Bridgewater, who engaged for Courten's debts after his bankruptcy (1643). Courten subsequently retired to Florence where he died intestate in 1655. The famous collection of rarities in the Middle Temple which ultimately formed part of the foundation of the British Museum was owned by his son William Charleton.[85] British Library MS Sloane 3988 refers to Hester Tradescant selling objects to this William Charleton after John the Younger's death.

Ashmole's efforts in compiling and publishing the *Musæum Tradescantianum* were clearly appreciated by the collection's owners. In a diary entry dated 16 December 1659 Ashmole records the reward for his dedicated service: 'Mr Tredescant & his wife sealed & delivered to me the deed of Guift of all his Rarities',[86] an action which was to be strongly disputed.

[83] See Dircks 1865, p. 359.
[84] Ibid., p. 537.
[85] Evelyn, *Diary*, 16 December 1686.
[86] Josten 1966, 2. 768.

THE FOUNDATION OF THE ASHMOLEAN MUSEUM

Martin Welch

In late October 1677 the Oxford diarist Anthony Wood noted the acceptance by 'several heads of this university' of the proposed donation of John Tradescant's rarities.[1] The donor was Elias Ashmole, a leading figure in the intellectual world of his day, described by Wood as 'the greatest virtuoso and curioso that ever was known or read of in England before his time'.[2] His versatility was the gift that impressed his contemporaries, for as Josten comments, his mind 'applied itself with equal ease and readiness to matters of business, to law, history, genealogy, heraldry, music, numismatics, medicine, botany, natural history, and to the mysteries of astrology, alchemy, and magic',[3] qualifications which admirably equipped him to be a founder-Fellow of the Royal Society of London. Among his activities he had taken 'paines, care and charge',[4] in his own words, in the preparation and publication of the Tradescant catalogue. The collection he had catalogued was now in his possession and he offered to give it and his own coins and medals, together with all his manuscripts, to his former university. The essential condition attached to the gift was the construction of a suitable new building by the university to house it.

Wood was recording in 1677 the outcome of negotiations which had begun some years earlier. As early as 1670, reference to the proposal was made by Evelyn in a letter to John Beale: 'You heare [our *Alma Mater* men] talke already of founding a Laboratorie, & have beg'd the Reliques of old Tradescant, to furnish a Repositary'.[5] In a letter dated 3 July 1675,[6] Ashmole informed Thomas Hyde, Bodley's Librarian, that he had already broached the subject of this gift with Dr Thomas Barlow, Provost of the Queen's College and newly consecrated Bishop of Lincoln. His 'old and worthy friend' Barlow would approach the Vice-Chancellor on his behalf and Ashmole hoped that the matter could be settled that summer. Ashmole's condition was 'the building of some large Roome, which may have Chimnies, to keepe those things aired that will stand in neede of it'.[7] In all probability these proposals were being formed in Ashmole's mind before September 1674, for in a letter of thanks of that date Ashmole stated his intention to bequeath the gold chain and medal presented to him by the King of Denmark 'to a publique Musæum'.[8] As no such institution existed at this date, it is probable that Ashmole had in

[1] Wood 1820, vol. 4, col. 357; Josten 1966, 4. 1494–5.
[2] Wood 1820, vol. 4, col. 359; Josten 1966, 1. 1.
[3] Josten 1966, 1. 2.
[4] PRO, Chancery Proceedings C7/454/1; Josten 1966, 2. 768–71, 853–4.
[5] John Evelyn, unpublished MS quoted in Hunter 1981, pp. 146–7.
[6] Bod. Lib. 4° Rawlinson 156 *ad finem*; Josten 1966, 4. 1433.
[7] Ibid.
[8] Bod. Lib. MS Ashmole 1131, f. 330[r–v], dated 18 Sept. 1674; Josten 1966, 4. 1394–6.

mind the museum he intended to found, and in time this chain and medal did come to Oxford, where they are displayed.[9]

With the university's acceptance of his proposal Ashmole fulfilled the intentions of the last will of John Tradescant the Younger, made just one year before his death on 22 April 1662. In this he left his 'closett of Rarities' to his wife Hester, who before her death was to arrange for its bequest to either Oxford or Cambridge University.[10] This was the second will made by Tradescant in his endeavour to overrule the deed of gift by which he had presented the rarities to Ashmole in 1659 with effect from the deaths of himself and his wife.[11] We do not know whether Ashmole was informed of this change of mind before Tradescant's death, but on 14 May 1662 he filed a bill in Chancery against Hester Tradescant. Her written reply was sworn on 1 July of that year, but the case was not heard until 18 May 1664 when the court decided in Ashmole's favour. The case has continued to be argued by modern commentators.[12]

The Tradescants had been faced with the problem of the collection's future since the death of their only son and male heir John in 1652. Ashmole states that on 12 December 1659 they informed him that they had finally decided to give their 'Closet of Rarities' to him after their deaths.[13] Ashmole adds that it was Hester who first informed him of their decision. The reasons he recounts were his role in the publication of their catalogue and their awareness of his appreciation of the collection's value.[14] On 14 December Ashmole noted: 'This afternoone they gaue their Scrivenor instructions to draw a deed of Guift of the said Closet to me.'[15] The deed was sealed and delivered by John and Hester Tradescant to Ashmole on 16 December.[16] Ashmole insisted in his Chancery bill that the deed was drafted at John Tradescant's request and that its text was approved by both husband and wife. In the light of Ashmole's statements, it is difficult to accept Hester's insinuations that her husband had committed their collection under the influence of drink (she described him as 'distempered'), nor that the document was sprung on her at the last minute.[17] On delivery of the deed to Ashmole he was also presented with a milled shilling of Elizabeth I in the presence of witnesses to signify his possession of the collection. It was only then that Hester claimed she began to suspect that the bill 'might be prejudice to her'. At her insistence Ashmole gave the deed to her and allowed her to keep it until he should claim it. He is recorded by Hester as using the words 'I pray you take it and consider thereof, and if you like it not, I will not have it for a world . . .' Neither this statement nor his action in surrendering the sole document that proved his right to the collection suggest deliberate deceit on his part.

It has been argued that Ashmole used his legal training to suggest to the Tradescants a form of gift which is irrevocable without the consent of both parties: the document could then be surrendered without too much concern in the knowledge that the Tradescants could not deny its existence in the face of the evidence of those who had witnessed the

[9] See p. 312, n. 162.

[10] PRO, Prob. 11/308/72; Josten 1966, 3. 817.

[11] PRO, Chancery Proceedings C7/454/1; Josten 1966, 2. 768 71, 853 4. These references cover the entire development of the case, and the court's decision.

[12] Josten 1966, 1. 126 8, 143 4, 151 2; Allan 1964, pp. 191 4, 200 7; Piggott 1976, pp. 102 3 and n. 4.

[13] Bod. Lib. MS Ashmole 1136, f. 34'; Josten 1966, 2. 767.

[14] See n. 11.

[15] Bod. Lib. MS Ashmole 1136, f. 34'; Josten 1966, 2. 768.

[16] Ibid.

[17] See n. 11.

gift. Such arguments, however, seem to stretch our credulity to its limits. Deceit may rather have been practiced by the Tradescants, for in two successive wills John Tradescant sought to ignore Ashmole's claims and there is no evidence that Ashmole had knowledge of this change of heart. In the first will the collection was assigned to the King after their deaths. Hester later claimed that the fear that 'some private person might begg the same of his Majestie so as they should not be preserved to posterity' led to its alteration. That 'private person' might well refer to Ashmole who, as Comptroller of the Excise, had access to the royal court and might successfully petition the King on the basis of the deed of gift. They decided instead that one of the two English universities would form the most fitting home for their collection. Those who would wish to see Ashmole as an unscrupulous schemer suggest that he was informed of John Tradescant's decision to revoke the deed the day after it had been delivered, but that he decided to bide his time, preferring to start a court case against the widow rather than the husband. Again, however, our credulity is stretched. Ashmole in his Chancery bill stated that after John Tradescant's death he had requested the return of the deed of gift from Hester in order to secure his right of ownership on her death. She refused to acknowledge the existence of the deed at one moment and then at other times claimed she had burnt it. Her late husband and she both laboured under the illusion that the deed had been revocable on either side and seem to have expected Ashmole not to follow up his claim. If that was the case, they had misjudged their man, for Ashmole had shown a marked willingness in the past to defend through the law his rights as he saw them.

The Court of Chancery in deciding in Ashmole's favour ruled that he should 'have and enjoy all and singular the said Bookes, Coynes, Medalls, Stones, Pictures, Mechanicks and Antiquities' belonging to the collection on 16 December 1659. Hester Tradescant was to keep them in trust during her life, as provided in the deed. Two heralds, Sir Edward Bysshe and William Dugdale, were commissioned to draw up a list of all objects missing at Hester's house and Hester was required to supply Ashmole with all the information he sought concerning the collection. She had boasted to him in 1662 that her late husband had disposed of many specimens listed in the 1656 catalogue and acquired others in their place which the deed did not cover. She was now compelled to replace any missing objects.[18]

Despite the court action, Ashmole felt himself to be on sufficiently good terms with Hester Tradescant to turn to her for assistance in the crisis of the Great Fire of 1666. On the second day of the fire, part of his library and his collection were moved by river from his chamber in Middle Temple. They were stored at her house for a few days and then returned to Middle Temple, together with other books which he had sent to a relation for safety.[19] Ashmole's doubtless frequent visits to view 'his' collection in her house and to show the rarities to his friends and guests cannot have failed to irritate Hester. One such visit is mentioned by Ashmole's brother-in-law, Henry Newcombe, who saw the collection on 1 May 1667.[20] Hester seemingly retaliated by continuing to sell parts of the collection, doubtless convincing herself that they were objects not covered by the deed of

[18] PRO, Chancery Proceedings C33/221/774; Josten 1966, 3. 987–8.

[19] Bod. Lib. MS Ashmole 1136, f. 41; Josten 1966, 3. 1070–1.

[20] Parkinson 1852, p. 165; Josten 1966; 3. 1091.

gift nor the Chancery decision. William Charleton recorded purchases from Mrs Tradescant in May, June, and July 1667,[21] and Ashmole may have become aware of such transactions. It was perhaps to maintain a closer surveillance over the collection that Ashmole took out a lease on a neighbouring house in Lambeth in the autumn of 1674.[22] He had various extensions and alterations made to it and did not move in until 28 August 1675.[23] Shortly after his acquisition of his house, however, Ashmole cryptically records that an attempt to rob Mrs Tradescant was in some mysterious manner thwarted.[24] It is not improbable that Ashmole used this incident as a lever to persuade Hester to transfer the collection to his house. She certainly told her friends and neighbours that he bullied her into doing this, as she later admitted in one of the statements of a submission. This was written in Ashmole's hand except for the signatures and was signed by Hester on 1 September 1676.[25] Ashmole's version of the truth, as represented in the submission, was that Hester had persuaded him to take away the collection, refusing to listen to his request for her to continue to keep the rarities. It was only after she had threatened to throw them into the street that the transfer took place. This and the remaining statements recounted in this document give a picture of a woman who felt herself gravely wronged and persecuted by her new neighbour and former friend Ashmole. Josten has gone so far as to suggest signs of mental instability in Hester Tradescant's actions,[26] but there can be no doubt of Ashmole's insensitivity for her feelings in the measures he took to secure possession of the collection, which he regarded as his own. Hester Tradescant was found drowned in her own pond on 4 April 1678 and may have taken her own life.[27]

Ashmole's negotiations with Oxford University began, as we have seen, in the summer of 1675, not long after the transfer of the rarities to his house. It is not surprising that, in an attempt to save face, Hester Tradescant had boasted to her friends and visitors that 'I had made him promise me to bestow the said Rarities on the University of Oxford; and that I would force him to send them thither', though she admitted in the same submission that 'I never moved the said Mr Ashmole to any such thing when I delivered them to him or at any time since'.[28] Ashmole would not allow her the illusion of having given her late husband's collection to one of the universities stipulated in his last will. He was now the owner of the collection and would be the sole donor.[29] In a letter written to the Vice-Chancellor of Oxford on 26 May 1683, Ashmole explained his motives for the gift:

> It has of a long time been my Desire to give you some testimony of my Duty and filial Respect, to my honored mother the University of Oxford, and when Mr: Tredescants Collection of Rarities came to my hands, tho I was tempted to part with them for a very considerable Sum of money, and was also press't by honourable Persons to consigne them to another Society, I firmly resolv'd to deposite them no where,but with You.[29]

[21] BL. MS Sloane 3988; Gunther 1925, pp. 288 9.
[22] Josten 1966, 4. 1393, n. 5.
[23] Bod. Lib. MS Ashmole 1136, f. 53. Josten 1966, 4. 1438.
[24] Bod. Lib. MS Ashmole 1136, f. 51; Josten 1966, 4, p. 1397.
[25] Bod. Lib. MS Rawl. D.912, f. 668' '; Josten 1966, 4. 1450 2.
[26] Josten, 1966, 1. 209.
[27] Bod. Lib. MS Ashmole 1136, f. 58; Josten 1966, 4. 1607.
[28] See n. 24.
[29] Ash. Lib. AMS 1. Josten 1966, 4. 1721 2. Ashmole's acknowledgement here of the Tradescants' role in amassing the collection, together with the celebration of their genius as well as Ashmole's generosity in a contemporary *carmen academicum* entitled 'Museum Ashmolianum' (Bod. Lib. MS Ashmole 1136, ff. 173 4') disproves, as Josten (1966, 1. 254) has observed, the opinion that Ashmole 'tried to exclude the Tradescants from participating in the honour of the gift'.

We do not know what institution he meant by the phrase 'another Society', but it might refer to either Cambridge University or, conceivably, the Royal Society of London. Ashmole's loyalties to Oxford as a former student of Brasenose were augmented by the unexpected presentation of a Doctorate of Medicine (Phisick)[30] from a grateful university in 1669 in recognition of his task in preparing a catalogue of the consular and imperial Roman coins in the Bodleian Library between 1658 and 1666.[31]

One reason why negotiations between Ashmole and the university took so long was the expansion of Ashmole's original proposal for a 'large Roome' to house the rarities into a 'school' for the study of natural history or 'philosophical history', to use the terminology of the day. In a letter written in June or July 1677, before the university's formal acceptance of Ashmole's proposal, Humphrey Prideaux outlined the enlarged scheme to John Ellis;[32] after reference to Robert Plot's new book, *The Natural History of Oxfordshire*, Prideaux continues that the authorities 'are now on a designe of erecteing a Lecture for Philosophicall History to be read by the author of that booke; to which end, as soon as we are agreed on the ground, we shall built a school on purpose for it with a labratory annext and severall other rooms for other uses, whereof on is to hold John Tredeskins raritys, which Elias Ashmole, in whose hands they are, hath promised to give to the University as soon as we have built a place to receive them . . .' Dr Plot (1640–96) presented himself to Ashmole at Lambeth on 10 December 1677 bearing a letter of recommendation from the diarist John Evelyn.[33] His purpose was to enlist Ashmole's support in his bid to be made the first Reader of the 'Philisophicall Lecture upon naturall things' at Oxford. Somewhat cautiously Ashmole agreed only that 'if the University liked of him, he should haue my suffrage'.[34] The scheme for this lectureship came to nothing, but Plot was appointed the first Keeper (*Custos*) of the Ashmolean Museum and the first Professor of Chemistry at Oxford in 1683. Plot was the only son of a Kentish gentleman and was educated at the free school at Wye before matriculating at Oxford in 1658 from Magdalen Hall. In 1661 he took his BA, his MA in 1664, and the BCL and DCL in 1671. He left Magdalen Hall to be admitted to University College as a commoner some time around 1676. Early in his studies he became involved in the natural sciences and in 1670 proposed a grand scheme to travel throughout England and Wales preparing materials for a natural history of the kingdom. Only two volumes appeared, *The Natural History of Oxfordshire* in 1676 and *The Natural History of Staffordshire* in 1686. His reputation as a scholar rested largely on these two books and indeed the first led to his election as Fellow of the Royal Society. He was an ambitious man and though contemporaries found him witty, with an ability to present his learning to a wide audience, his writings reveal a credulity of the fantastic and a lack of critical scepticism. He could also be generous and gave his collections to the Ashmolean at the end of his keepership. His failure to be elected Warden of All Souls was counterbalanced to some extent by appointment as historiographer royal in 1688, while from 1687 onwards the patronage of Henry Howard, Duke of Norfolk and Earl Marshal, resulted in him holding

[30] Bod. Lib. MS Ashmole. 1136. f. 44^{v}; MS Ashmole 1292; Josten 1966, 1143, 1146–7.

[31] Bod. Lib. MS Ashmole 1136, f. 41; Josten 1966, 3. 1062.

[32] Thompson 1875, pp. 60–1; Josten 1966, 4. pp. 1482–3.

[33] Bod. Lib. MS Ashmole 1136, ff. 114–5^{v}; Josten 1966, 4. 1500–1. For Plot's career see *Dictionary of National Biography*, s.v. Plot.

[34] Bod. Lib. MS Ashmole 1136, f. 57^{v}; Josten 1966, 4. 1501.

various offices connected with the Court of Chivalry. His wide range of interests matched those of Ashmole, and the two must have felt they had much in common from the time of their first meeting.[35]

Sixteen days after Hester Tradescant's funeral, Ashmole 'removed the Pictures from Mr Tredescants House to myne'.[36] He also took on the lease of the Tradescants' house and garden, taking possession on 25 May 1679.[37] Ashmole's possession of the Tradescant's inheritance was now complete. Visitors came to his house to examine both his library and the Tradescant rarities. Hooke recorded calling on 28 April 1677: 'With Sir J Hoskins and Mr Hill to Mr Ashmole, Dugdale there. Saw tradeskants raritys in Garret. Saw Dees and Kellys and many other Books and manuscripts about chymistry, conjurations, magick, &c. made me exceeding welcome.'[38]

Evelyn on 23 July 1678 recorded that he had:

> Return'd, having ben to see Mr Elias Ashmoles Library and Curiosities, at Lambeth, he has divers MSS, but most of them Astrological, to which study he is addicited, though I believe not learned; but very Industrious, as his history of the Order of the Gartir shews, he shewed me a Toade included in Amber: The prospect from a Turret is very fine, it being so neere Lond: and yet not discovering any house about the Country. The famous John Tradescant, bequeth'd his Repositary to this Gent: who has given them to the University of Oxford, and erected a Lecture on them &c.: over the Laboratorie, in imitation of the R: Society: My deare friend Mrs Godolphin and my Wife were with us.[39]

Evelyn's description of Ashmole's manuscripts as mainly astrological presumably reflects what was shown on that visit. Black's catalogue of the Ashmole manuscripts in the Bodleian Library shows there is no truth in it.[40] Evelyn's assessment of Ashmole as 'not learned; but very Industrious' has frequently been quoted out of context. As far as astrology is concerned, we have also Lilly's testimony of 1667, that Ashmole was 'a good Proficient therein though its not his totall study, but onely for Recreation'.[41] Evelyn likewise seems to have misunderstood Ashmole's intention to found a lectureship for an accomplished fact.[42]

Such visits to Lambeth would have been encouraged by a description which appeared in the 1676 edition of *The Universal Angler*:

> I know, we Islanders are averse to the belief of these wonders: but, there be so many strange Creatures to be now seen (many collected by John Tradescant, and others added by my friend Elias Ashmole Esq; who now keeps them carefully and methodically at his house near to Lambeth near London) as may get some belief of some of the other wonders I mentioned. I will tell you some of the wonders that you may now see, and not till then believe, unless you think fit.
>
> You may there see the Hog-fish, the Dog-fish, the Dolphin, the Cony-fish, the Parrot-fish, the Shark, the Poyson fish, sword-fish, and not only other incredible fish! but you may there see the Salamander, several sorts of Barnacles, of Solan Geese, the bird of Paradise, such sorts of Snakes, and such birds-nests, and of so various forms, and so wonderfully made, as may beget wonder and

[35] Josten 1966, 4. 1751, n. 2.
[36] Bod. Lib. MS Ashmole 1136, f. 58; Josten 1966, 4. 1608.
[37] Bod. Lib. MS Ashmole 1136, f. 59; Josten 1966, 4. 1640.
[38] Guildhall Library, London, MS 1758, 'The Diary of Robert Hooke'; quoted in Josten 1966, 4. 1477.
[39] Evelyn, *Diary*, 23 July 1678; Josten 1966, 4. 1623–4.
[40] Josten 1966, 4. 1624 n. 1.
[41] Bod. Lib. MS Ashmole 421, f. 23^{v}; Josten 1966, 4. 1624 n. 2.
[42] Josten 1966, 4. 1500 n. 4, 1624 n. 3.

amusement in any beholder; and so many hundred of other rarities in that Collection, as will make the other wonders I spake of, the less incredible; for, you may note, that the waters are natures store-house, in which she locks up her wonders.[43]

Ashmole lost an important part of his own collection in a fire which completely destroyed his chamber at Middle Temple on 26 January 1679. His losses were listed as follows:

a Library of Bookes, the Collection of 33 yeares, mostly from abroad. A collection of neere 9000 Coynes & Medalls ancient & Moderne, being the Gather of 32 yeares, A large Collection of ancient Evidences & Scales of the English Nobility & Gentry. All the Great Seales of England from the Conquest hithertoo; with many of the Religious Houses, both in England & Scotland those of England depending at their severall Instruments. His Observations upon History, Coynes, Medalls, Heraldry, & some other Subjects (the effects of his Studies for about 30 yeares) which lay there for Improvement as he had leisure. Divers valuable Peices of Antiquity, & sundry Curiosities of Art & Nature.[44]

Ashmole's father-in-law, Sir William Dugdale, described these losses to Wood in some detail in a letter dated 13 May 1679.[45] Fortunately 'his cheif Manuscripts' and 'his Gold-coynes and medalls' had been safe at Lambeth at the time of the fire. Thomas Molyneux was told by Ashmole in 1683 that he regarded the brass coins he lost in this fire as of greater rarity than his gold coin collection.[46] Dugdale reported that all the silver coins had melted and that of 'The Copper coynes most are found, but miserably defaced'.[47] From the information supplied by Dugdale, Wood listed in detail other items including 'many subterranean antiquities, as rare stones such as Dr Plot describes in his Natural History of Oxfordsh. and Staffordshire' and 'a most admirable piece of antiquity made in the British times, viz. a chisel or ax framed from a flint stone, before the framing or working of iron was invented: the picture of which you may see in *The Antiquities of Warwickshire illustrated*, by Will. Dugdale, in his discourse of the town called Oldbury in that county'.[48]

Work began in the spring of 1679 on the construction of the Museum to house Ashmole's and Tradescant's collections. Wood records that 'the first foundation was laid 14 Apr. 1679',[49] but as he elsewhere states that the first stone was laid on 15 May,[50] he is probably referring here to the commencement of foundation digging for the basement laboratory. The site chosen was that of some newly demolished houses facing on to Broad Street between Exeter College and the recently constructed Sheldonian Theatre. It was purchased partly from Exeter College and partly from the City of Oxford for a little over £560 including legal fees.[51] During the foundation digging in April or early May, part of the wall of a neighbouring Exeter College privy appears to have collapsed, the effluent nearly overwhelming some of the workmen.[52] It caused some amusement in the

[43] Walton 1676, pp. 31–2; Josten 1966, 4. 1442.
[44] Bod. Lib. MS Ashmole 1136, f. 101; Josten 1966, 4. 1635.
[45] Bod. Lib. MS Wood F.41, ff. 113–14v; Josten 1966, 4. 1643–4.
[46] Anon. 1841, p. 324; Josten 1966, 4. 1727.
[47] Josten 1966, 4. 1643.
[48] Wood 1820, vol. 4, col. 358; Josten 1966, 4. 1635–6.
[49] Bod. Lib. MS Wood F.31, f. 141, derived from the printed account in Chamberlayne 1684, pt. 2, pp. 325–8.
[50] Wood 1820, vol. 4, col. 358; Josten 1966, 4. 1644.
[51] Oxford University Archives, Vice-Chancellor's Accounts, 1666–97, WP *β*/21/5, *sub anno* 1677–8.
[52] Bod. Lib. MS Wood E.32, f. 26; Magrath 1904, pp. 286–7; Josten 1966, 4. 1642–3.

university, provoking the clownish pun that the museum 'was laid *fundamentaliter* and not *formaliter*.'[53]

There have been various attempts to prove that Sir Christopher Wren was the architect. The earliest assertion appears in *A Pocket Companion for Oxford* of 1756.[54] Much has been made of a letter written by Wren to Henry Oldenburg on 7 June 1668, describing the design of a projected college to house the Royal Society of London.[55] Marked similarities exist between this description and the design of the Ashmolean. There was to be a basement laboratory, a ground floor consisting of vestibule, library, and repository, and on the first floor a large room to house a collection of rarities. Additional small rooms are also mentioned, while the approximate length of the large rooms at 55 feet and the position of the staircase behind the vestibule are remarkably similar. Attempts to link the description to one of two surviving drawings of façades attributed to Wren have not, however, been satisfactory.[56] It is none-the-less possible that the university authorities when considering Ashmole's proposal between 1675 and 1677 approached Wren for advice, and that Wren showed them his ideas of 1668 for the Royal Society's college. Even if he was not consulted at this stage, his agreement might well have been sought because of the necessity to demolish a section of high wall with niches which he had designed next to the Sheldonian Theatre to take some of the Arundel Marbles.

There is no evidence that Wren drew up plans, sections, façades, or even a model of the Ashmolean. The only contemporary evidence we have as to the designer of the building is an engraving (Pl. CLXXVI) made *c.*1685 by Michael Burghers of the east front,[57] in the bottom left-hand corner of which are the words 'T. Wood Archit.' Thomas Wood (*c.*1645–95) was an experienced master-mason in an age when such a craftsman was expected to design as well as supervise building. Gunther's demonstration from the bills for building work that Wood received the same pay as the other masons, except when he undertook a special job involving detailed carving or the staining of a marble chimney-piece, and that Wood's supervision was limited to the masons and the labourers,[58] does nothing to disprove the probability that Wood designed the building. Colvin has pointed out that, on the contrary, as the building accounts contain no payments for designs, it is safe to assume that they were made by Wood himself.[59]

We can follow the progress of the building work in the Vice-Chancellor's accounts and in the collection of bills submitted to the Vice-Chancellor for payment.[60] By 5 August 1679 the sum of £467. 10*s.* 3*d.* had been spent in building the Musæum Ashmoleanum. Between 5 August 1679 and 25 October 1680, Henry Davis, the University Bailiff, was paid £30 'for overseeing the Worke of Dr Ashmole's Repository'. Davis appears to have been paid at the rate of £20 a year for this supervision as the Vice-Chancellor's clerk of works, co-ordinating the work of various specialist craftsmen and checking their bills.

[53] Bod. Lib. MS Wood E.32, f. 26. The author was Dr Lamphire, Principal of Hart Hall.

[54] Josten 1966, 4. 1483 n. 1.

[55] *Wren Society* 13 (1936), 48–9.

[56] BL Sloane Collection 5238 nos. 60, 66; *Wren Society* 5 (1928), pls. XXVII, XXVIII; Fürst 1956, p. 202 n. 551; Sekler 1956, p. 146 n. 1.

[57] Josten 1966, pl. XXI; Mallet 1927, 3. 496–502.

[58] Gunther 1925, pp. 297–300.

[59] Colvin 1954, pp. 693–4.

[60] Oxford University Archives, Vice-Chancellor's Accounts, 1666–97. WP *β*/21/5, NW/3/5.

Wood submitted several bills in that year for the masons and labourers under him and also for tools totalling £1006. 0*s*. 11*d*. Richard Frogley, the carpenter, submitted bills totalling £216. 13*s*. 8*d*. and the joiner Mr Ransford was paid £1. 12*s*. 9*d*. A bill of £24. 7*s*. 7*d*. for ironwork was paid to William Young, and the plasterer John Dew submitted his bill for 8*s*. 9½*d*. In the following year up to 25 October 1681, in addition to the Bailiff's fee of £20, Wood's bills amounted to £343. 8*s*. 2*d*., with an additional £6. 14*s*. 7*d*. 'for Sawes & other Utinsills about the Repository'. Frogley was paid £71. 8*s*. 1*d*. and Dew £1. 1*s*. 6*d*. The bill from Bernard Rawlins of £140 shows that the roof was being leaded by the summer of 1681, and William Young the smith was paid £13. 7*s*. 6*d*. About 10 March 1681 part of the basement vaulting constructed in the previous year gave way, but the damage appears to have been minor, as is made clear by a bill reading 'March 25 for worke and Timber about the new floure that was broken down 6*s*. 8*d*.' Wood may have suffered an accident at about this time, for he was paid nothing on 9 April and the absence of his signature next to the entry and the presence of his mark suggests that he could neither work nor write for a short time, but by 23 April he was again being paid.[61] A gift of marbles from Sir George Wheeler, a traveller and collector of antiquities in the eastern Mediterranean, having been transported by river from London by 'Cully the Boatman' for 14*s*., the sum of £4. 13*s*. 3*d*. was spent in setting them up and in 'Cleansing the street before the Theater from Rubbish & laying stones out of the way'. This was presumably in advance of the impending visits of the Duke of Hanover's heir, the future George I, and of Charles II, who in March 1681 'was pleased to spend some time in viewing the *Marmora Oxoniensia* on the walls of the Theater yard'.[62]

In the year ending 12 October 1682, the Bailiff was again paid £20 and Wood's bills came to £440. 5*s*. The carpenters Frogley and William Longe were paid £242. 3*s*. 3*d*., and Dew received £62. 0*s*. 7*d*. for plastering. Rawlings was now glazing the building for £21. 12*s*. as well as completing the leading for £51. Young the smith received £53. 3*s*. 1*d*., while the joiner John Wild was paid £60 for panelling, or 'Wainscott', as the accounts describe it. Ashmole came to Oxford in mid-August 1682 and inspected the building on 17 August.[63] On 10 February 1683 Plot wrote to a donor to the new museum, Dr Martin Lister at York, and informed him that 'Our Repository is just now finish't.' The accounts for the year ending 30 October 1683 show the work drawing to its close. The Bailiff was paid only £10, while Wood received £106. 17*s*. 4*d*. for his work as 'Stone cutter', and £18. 19*s*. 6*d*. 'for the stained Marble Chimney piece, and for pitching work before the Repository'.[64] Thomas Robinson, a mason, had a bill for £31. 2*s*. 4*d*., while the carpenters Longe and John White were paid £23. 14*s*. 7*d*., and White was later paid a further £11. 7*s*. 6*d*. The joiner Wild received £120 for panelling; Dew had £3. 0*s*. 7*d*. for plastering and Rawlins £190. 4*s*. 8*d*. 'for Leading &c.' Young supplied the 'Casement, the Iron-Gate & other Workes' for £39. 11*s*. 5*d*., and the ironmonger Mr Burrows provided locks and bolts for £5. 10*s*. Dr Plot also purchased locks and keys for £7. 3*s*. 8*d*., and he and Christopher White acquired vessels and other items for the laboratory at a cost of £62. 6*s*. Two chests of drawers for storage of the smaller specimens were made at

[61] Ibid., NW/3/5, f. 236; Gunther 1925, 3. 299.
[62] Clark 1891–4, 2. 529.
[63] Bod. Lib. MS Lister 35, ff. 60–1[v]; Josten 1966, 4. 1706.
[64] Cole 1953, pp. 193–9.

£6 each by Minne and Wild respectively. The accounts for the year up to 6 September 1684 contain further payments to Rawlins 'for Arreurs for leading ye Repository' the sum of £23. 2*s*. 6*d*., and £11. 1*s*. 3*d*. to 'Minne ye Joyner for a Cabinet and other worke &c.' The overall cost exceeded £4,500; an enormous sum, which so exhausted the university finances that for some years afterwards the Bodleian Library was unable to buy books.[65]

The finished building consisted of a main rectangular block aligned east to west and with its north front facing on to Broad Street. The three great rooms made up this main block, with a fire-proof buttressed and vaulted basement laboratory, a ground-floor room for use as a lecture theatre and reception room or vestibule into which visitors entered by the impressive principal door on the east front up a short flight of steps. A small balcony existed outside the central of the five windows on the north front on this floor. The first-floor room was to house the rarities, and the space provided of approximately 56 by 25 feet must have made their arrangement much less congested than in the Lambeth houses of the Tradescants and Ashmole. Access to the upper and lower great rooms was by a wooden staircase added to the south front of the building. Off the east side of the staircase there were various small chambers which were used as library rooms and also provided the curator with a study. Separate access to one of these chambers on the ground floor was provided by an entrance on the east front. The structure was finely built and has been justly described as 'a handsome example of late 17th-century Renaissance design'.[66]

Plot had written to Lister in February 1683 to arrange for delivery of the collection which had been promised by Lister. He informed Lister that on 'Fryday next [16 February 1683] I goe for London to fetch down Mr. Ashmoles Collection towards furnishing this House, when I guess I shall spend about a month in Catalogueing and Boxing them up'.[67] Ashmole noted that on 15 February 'I began to put my Rarities into Cases to send to Oxford.'[68] In a further letter to Lister, written on 24 February, Plot informed him that 'I have been all this week at Mr. Ashmoles packing & boxing up his donation, which amounts to 26 Boxes, some of them 5. other 4. foot long, a yard over & two foot deep, all filld: . . .'[69] On 14 March Ashmole records: 'The last load of my Rarities sent to the Barge. This afternoon I relapsed into the Gout',[70] and we learn that Plot left London for Oxford the next day. The Vice-Chancellor's accounts record £9. 6*s*. being paid 'to Cully the Bargman for carriage of the Goods in ye Ashmolean Repository'.[71] The final stage of the journey to the Museum was by cart, and Wood tells us that on 20 March 'Twelve Cart-loads of Tredeskyns rarities Came from Mr Ashmole at Lond[on] at his new Elaboratory at Oxon.' He adds that 'Doctor Plot soon after or then, [was] mad Custos'.[72] Wood further records that 'By the beginninge of May following the rarities were all fixed in their distinct cabinets & places, and the roome furnished in every part of it.'[73]

[65] Thomas Hyde's letter of resignation as Bodley's Librarian, 10 March 1701, printed in Macray 1890, pp. 170–1.

[66] Royal Commission on Historical Monuments, England, 1939, p. 14.

[67] See n. 63.

[68] Bod. Lib. MS Ashmole 1136, f. 75; Josten 1966, 4. 1714.

[69] Bod. Lib. MS Lister 35, ff. 62–3^{v}; Josten 1966, 4. 1714–15.

[70] Bod. Lib. MS Ashmole 1136, f. 75^{v}; Josten 1966, 4. 1715.

[71] Oxford University Archives, Vice-Chancellor's Accounts, 1666–97, WP*β*/21/5, *sub anno* 1682–3.

[72] Bod. Lib. MS Wood's Diaries 27, f. 12^{v}; Josten 1966, 4. 1717.

[73] Bod. Lib. MS Wood F.31, f. 141^{v}; Josten 1966, 4. 1719.

On his visit in August 1682 Ashmole had dined with the Vice-Chancellor, and their discussion must have included the future administration of the new institution. A copy of the *Statuta Bibliothecae Bodleianae* with a dedication to Ashmole inscribed on 21 September 1677 by Dr Thomas Barlow, Bishop of Lincoln, is now in the Bodleian Library: Josten was probably correct to suggest that this may have been sent to Ashmole for use as a model when drafting the statutes of the museum.[74] Soon after his visit Ashmole sent his proposals to Dr John Fell, Dean of Christ Church and Bishop of Oxford. A copy of his letter or a draft of it survives, dated 30 September 1682. In this he made clear his intention to endow a professorship of chemistry as a necessary adjunct to the donation of his rarities and indicated his wish that Plot should be the first holder of the chair. He proposed:

1. That there shalbe setled at Oxford a Professor of Naturall History & Chemistry, which with the Musaeum, shalbe called Ashmolean, the Lecture to be first read by Doctor Plot.

2. That the Rarities now in the Phisick & Anatomy Schoole there (except such as are necessary for the Anatomy Lecture) shalbe brought into the said Musaeum, when Mr: Ashmole sends downe his Rarities thither, & set up with them. And that all such Rarities as shalbe hereafter given to or bestowed upon the University, shalbe placed there, as soon as bestowed.

3. That the Vice Chancellor the Deane of Christ-Church & Principall of Brasenose Colledge for the tyme being, shall visit the said Musaeum once in 3 yeares, in the tyme of the Longe Vacation, the Tuesday fortnight before Michaelmas.

4. That not any of the Rarities, Bookes or other things shalbe lent or taken out of ye Musaeum by any person upon any pretence whatsoever.

5. That the Rarities &c: shalbe open to be shewed throughout the yeare, except Sundaies, and Hollidaies (unless there be an especiall occasion) from eight of the Clock in the Morning untill Eleven; & from two to five in the afternoone in the Sommer halfe yeare, & from two to foure in the Winter. And constant attendance to be there given during these tymes, by the Person that shalbe appointed and undertake to shew the same.

6. That a Catalogue of all the Rarities shalbe made by the Professor within two yeares after they shalbe placed in the Musaeum, & that an addition be made theretoo every yeare, of what shalbe placed therein, & by whom bestowed.

7. That Mr. Ashmole shall for the present Endow the Professor with 20 li: per annum, for the payment whereof during his lyfe, he shall give his personall security to the University. The first payment to commence at Midsomer 168– And shalbe obliged to setle Lands in perpetuity after his & his wives death, to the like yearely value. Yet in case the said University shall happen to be dissolved in their lyfetyme, then the said Obligation not to be binding to him, his heires or Executors. But if Mr: Ashmole shalbe inclined sooner to lay out any Money in a Perpetuity to the annual value aforesaid, then the University shall use their diligence to procure a good Bargaine, which Lands shalbe setled to the use of Mr: Ashmole & his wife, so longe as they or either of them shall live, and after to the use of the succeeding Professors.

8. That the Professor for the tyme being, shall have 40 li: per annum out of the profits & advantages arising by shewing the said Rarities, towards the support of himselfe & him that shall shew the same, & the overplus to be yearely deposited in the Vice Chancellors hands & transfer'd

[74] Bod. Lib. MS Rawl. A.284, f. 1; Josten 1966, 4. 1492–3. The statutes are as promulgated on 20 June 1610, with additions of 1613, 1615, and 1621.

to his Successors, to be disposed of, for buying in of other Rarities, or otherwise as Mr Ashmole shall consent unto.

9. That the Professor shalbe named appointed & removed from tyme to tyme by Mr Ashmole during his lyfe, and by his wife after his death, which Professor shall have the Custody of the Musaeum & Rarities, and shall read the Lectures, according to his Obligation.

10. That Mr Ashmole soe endowing a Professor as aforesaid shalbe acknowledged a Benefactor and Founder, & that all Honors & Respects done or fit to be done to such Benefactor & Founder, shalbe paid & allowed to him.

11. That Mr: Ashmole shall have power from tyme to tyme to make Rules & Orders to be observed by the Professor, & such person as shall shew the Rarities for the good Government & ordering of the said Musaeum, which being confirmed by the Chancellor Masters & Schollers of the said University shall have the force of a Statute.[75]

Several of the proposals were unfortunately not carried out. Some specimens were transferred from the Anatomy School and the Bodleian, but von Uffenbach in 1710 was to note that the Anatomy School contained many specimens 'which do not belong at all to an anatomical museum, but would be much more suitable to an art gallery (*Kunst-Kammer*) like the Ashmolean Museum'.[76] More seriously, Ashmole never completed the arrangements for the endowment of the chair in chemistry. In *The Antiquities of Berkshire*, published in 1719, Dr Richard Rawlinson recorded Ashmole's intention to provide 'an ample and generous Allowance to the Keeper of his Musaeum' by this endowment, but added that 'this publick Principle was stifled in Embrio by the influence of a Person who was possessed of an eminent Post in the Church'.[77] A marginal note in Rawlinson's own hand reveals that the clergyman was 'Dr. Tillotson late archbishop of Canterbury'. Tillotson had delivered four lectures on the Socinian controversy in 1679–80 and published them in 1693 in answer to doubts of his orthodoxy. Apparently these lectures were 'not undeservedly, and unanswerably attacked by a Member of this University',[78] and Tillotson so resented this attack that he persuaded his friend Ashmole not to endow the chair. The second holder of the keepership of the Ashmolean Museum, Edward Lhuyd, confirms that the chair was never endowed, commenting that 'It has been lately published that . . . he has founded a Natural History Lecture in the same place; but however the mistake happen'd there was no Grounds for such a Report, no Lecture as of any Foundation, having been read there, nor the least word of anything like it in the Statutes of the Museum'.[79] The result was that the only source of income for staff of the museum was derived from the admission fees charged to visitors. This was inevitably an uncertain financial basis and, as time went on, became increasingly inadequate.

The keeper's post came to be regarded as a sinecure which could be neglected, and, according to Thomas Hearne, the appointment of George Huddesford, President of Trinity College, as keeper in 1732 with a salary of £50 per annum 'whether he do any thing there or not' persuaded Sir Hans Sloane to withhold a gift of £20,000 he had proposed to give to the university for the museum.[80] Hearne also understood that Sloane

[75] Bod. Lib. MS Rawl. D.912, ff. 670–1v; Josten 1966, 4. 1707–9.

[76] Von Uffenbach 1753–4, pp. 117–18; Quarrell and Quarrell 1928, p. 24.

[77] Rawlinson 1719, pp. xxi–xxii; Josten 1966, 4. 1500 n. 4.

[78] Ibid.

[79] Bod. Lib. MS Ashmole 421, f. 91; Josten 1966, 4. 1500 n. 4.

[80] Salter 1921, pp. 31, 261.

had earlier considered 'sending many Curiousities to the Univ.',[81] but they came instead ultimately to form the foundation collection of the British Museum.

The opening of the Ashmolean Museum on 21 May 1683 was the highlight of an official visit to the university by James, Duke of York, shortly to be James II, accompanied by the Duchess, Maria Beatrice, and their daughter, Princess Anne. Anthony Wood describes the royal party as leaving the Sheldonian Theatre for 'Ashmoles Musaeum where after they had heard an English speech spoken by Doctor Plot ye Curator, in ye second upper roome, they were entertained first with rarities in the upper room, & afterwards with a sumptuous banquet there, at the charge of ye Universitie. Then they went downe to the Elaboratory, where the[y] saw some experiments to their great satisfaction.'[82] The City of Oxford had presented the royal visitors with gloves,[83] and the university gave presentation copies of Plot's *Natural History of Oxfordshire* and Wood's *Historia et Antiquates Univ. Oxon.* The books and other entertainment cost the university £124. 11*s.* 6*d.*[84] Ashmole was absent, however, explaining in a letter of apology to the Vice-Chancellor on 26 May 'I also intended when they [i.e. the rarities] were brought down, to have accompanyed them, & personally made a Present of My Respects and them at Oxford; but being detained by necessary Occassions in this Place' he could not.[85] He appears to have been prevented by poor health. The university replied to him with a formal letter of thanks in Latin dated 4 June 1683.[86]

Three days after the royal opening the museum held a private viewing day for senior members of the university (its Doctors and Masters).[87] In the middle of September, Wood informs us that 'the Elaboratorie was quite finisht', and Plot began to teach a chemistry course as Professor, though still without any endowment other than the fees he acquired from admission charges to the Museum.[88] Those who registered for the course are listed by Wood as Mr John Massey (Merton College), Stephen Hunt (Trinity College), William Smith and Nathaniel Boys (University College), and a non-member of the university, or *laicus*, Charles Harrys. 'These had meetings in ye larg room over the Elaboratory every friday in ye afternoone to talke of chymicall matters – & were framd into a solemn meeting on oct. 26.'[89] They formed the nucleus of a larger body of scholars which constituted itself as 'The Philosophical Society of Oxford' on 11 March 1684.[90] The records of its proceedings are preserved from 26 October 1683 to 3 June 1690,[91] and under Plot's energetic guidance it corresponded with the Royal Society of London and a similar society founded in Dublin in December 1683.[92] Among the subjects discussed were new accessions to the museum collections. The minutes of the meeting on 24 February 1685 for example record that: 'A Horne was communicated by Dr. Plot said to be a Horne, which grew behind the Head of a Woman, who was shew'n in London about

[81] Salter 1915, p. 372.
[82] Bod. Lib. MS Wood D.19 (3), f. 57^{v}; Josten 1966, 4. 1719–20.
[83] Clark 1891–4, 3. 52; Schultz 1938, pp. 139–40.
[84] Oxford University Archives, Vice-Chancellor's Accounts, 1666–97, WP *β*/21/5, *sub anno* 1682–3.
[85] Ash. Lib. AMS 1; Josten 1966, 4. 1721–2.
[86] Bod. Lib. MS Rawl. D.912, ff. 664–5^{v}; Josten 1966, 4. 1723–4.
[87] Bod. Lib. MS Wood's Diaries 27, f. 26^{r}; Josten 1966, 4. 1720–1.
[88] Josten 1966, 4. 1730.
[89] Bod. Lib. MS Wood's Diaries 27, f. 44^{v}; Josten 1966, 4. 1730.
[90] Josten 1966, 4. 1730 n. 8.
[91] Bod. Lib. MS. Ashmole 1810, 1811.
[92] Ibid. 1813.

14 yeares since, and is reported to have shed her horne once in 3 yeares: This was sent by Mr Ashmole to be laid up in his Repository.'[93]

A keen contributor at the Society meetings was a young Welshman, Edward Lhuyd (1660–1709), who had come up to Jesus College at the age of twenty-two in October 1682. Soon after the opening of the museum he was employed by Plot as an assistant and was appointed the first under keeper (*Procustos*) in 1684 or 1685.[94] He had been educated at Oswestry Grammar School, and although never proceeding to a degree, he became a considerable scholar and is remembered today as a distinguished founder of the study of Celtic philology and as a biologist, geologist, and antiquary. Contemporaries described him as 'honest Lhuyd',[95] and Thomas Hearne considered him a 'person of singular Modesty, good Nature, & uncommon Industry', mentioning Sloane's opinion that Lhuyd was 'ye best Naturalist now in Europe'.[96] His scholarship earned him an honorary MA from Oxford, conditional on his lecturing on natural history once a year for six years,[97] and a Fellowship of the Royal Society in November 1708. His election as Superior Beadel of Divinity at Oxford in March 1709 preceeded only shortly his premature death on 30 June of the same year.[98]

The Statutes, Orders, and Rules for the Ashmolean Museum had not been established in time for the opening, and Ashmole sent a draft of the form he wished these to take in a letter dated 1 September 1684, which was read in Convocation on 19 September.[99] What appears to have been the final version was approved by Ashmole on 21 June 1686[100] and formed the basis for a printed broadsheet in Latin entitled *Instituta Ashmoleana* (Pl. CLXXVII) which appeared in 1714. The 1686 version reads thus:

Statutes, Orders & Rules, for the Ashmolean Museum, in the University of Oxford

Because the knowledge of Nature is very necessarie to humaine life, health, & the conveniences thereof, & because that knowledge cannot be soe well & usefully attain'd, except the history of Nature be knowne & considered; and to this [end], is requisite the inspection of Particulars, especially those as are extraordinary in their Fabrick, or useful in Medicine, or applyed to Manufacture or Trade: I Elias Ashmole, out of my affection to this sort of Learning, wherein my selfe have taken & still doe take the greatest delight; for which cause alsoe, I have amass'd together great variety of naturall Concretes & Bodies, & bestowed them on the University of Oxford, wherein my selfe have been a Student, & of which I have the honor to be a Member: lest there should be any misconstruction of my Intendment, or deteriorating of my donation, I have thought good, according to the Acts of Convocation, bearing date June 4: Anno 1683 and Sept: 19th. Anno 1684 to appoint, constitute & ordaine as follows.

1. I Ordaine that the Vicechancellor for the tyme being, the Deane of Christchurch, the Principal of Brazenose, the Kings Prophessor in Phisick, & the two Proctors, or their Deputies, be Visitors of the said Museum.

2. That there be a solemne Visitation of the said Musaeum yearely, upon the Munday next after Trinity Sunday at eight of the Clock in the Morning to be continued by adjournment, as it shall be found necessary; wherein shalbe examined the State of the said Musaeum, both in

[93] Ibid. 1810, f. 92; Josten 1966, 4. 1756.
[94] Ash. Lib. AMS 7, f. 6; Josten 1966, 4. 1824 n. 1.
[95] *Dictionary of National Biography*, s.v. Lhuyd.
[96] Doble 1885, p. 244.
[97] His lectures were published in J. H. Luick, *De Stellis Maris* (Leipzig, 1733), and in G. Huddesford, *Lithophylacii* (2nd edn., 1760).
[98] Gunther 1945, p. 42.
[99] Ash. Lib. AMS 1; Josten 1966, 4. 1743–5.
[100] Bod. Lib. MS Bodley 594, p. 111; Josten 1966, 4. 1745.

reference to the diligence & fidelity of its Custody, & the accessions made from tyme to tyme, by new Donations.

3. That the whole Donation already given or to be given, be distributed under certaine heads; and a number to be fixed to every particular; & accordingly to be registred in the Catalogue of them.

4. That the said Catalogue be divided into parts, according to the number of the Visitors,[101] soe that the worke of Visitation may be expedited, each Visitor comparing his part & seeing that all particulars are safe and well conditioned, & answering to the Catalogue, As is done in the Visitation of the Bodley Library.

5. That beside the Catalogue, which is to remaine in the Musaeum, another to be in the hands of the Vicechancellor, for the preventing of fraude or embezelment;[102] into which, at the tyme of the Visitation, all the additions made in the precedent yeare shalbe entred: And that every future Vicechancellor shalbe obliged, to deliver the same Catalogue over to his Successor, when he delivers to him his Bookes & Keyes.

6. That whatsoever naturall Body that is very rare, whether Birds, Insects, Fishes or the like, apt to putrefie & decay with tyme, shalbe painted in a fair Velome Folio Booke, either with water colors, or at least design'd in black & white, by some good Master, with reference to the description of the Body itselfe, & the mention of the Donor, in the Catalogue;[103] which Booke shalbe in the Custody of the Keeper of the Musaeum, under Lock & Key.

7. That if there be in the said Musaeum many particulars of one sort, it may be lawfull for the Keeper of the Musaeum aforesaid, with the Consent of three of the Visitors, whereof the Vicechancellor to be one, to exchange it for somewhat wanting; or to make a Present of it, to some Person of extraordinary quality.

8. That as any particular growes old & perishing, the Keeper may remove it into one of the Closets, or other repository; & some other to be substituted.

9. That all Manuscripts given to the Musaeum, shalbe kept by themselves in one of the Closets, or other repository, which shalbe called the Library of the Musaeum, to the end the Curious & such other as are desirous, may have the View of them; but noe person to use or transcribe them, or any part of them, but only such as the Keeper shall allow or appoint.

10. That the Musaeum shalbe open, & attended by the Keeper or the Under-Keeper in the same manner, & at the same tymes, as the Bodley Library is; and at other tymes, if a particular or especial occasion shall require.

11. That the Rarities shalbe shewed but to one Company at a tyme, & that upon their being entred into the Musaeum, the dore shall be shut; and if any more Company or Companies come before they be dispatcht, that they be desired to stay below, till that other come forth.

12. That no part of the Furniture of the Musaeum, nor Bookes out of the Library or Closets, be lent unto or carried abroad by any Person or Persons, upon any occasion, or pretence whatsoever, unless to be delineated or engraved, for the preservation of its memory, in case it be perishable.

13. That the Custody of the Musaeum during my Lyfe, to be at my appointment, who have at present named Doctor Robert Plott thereto; under the Title of Keeper, with an Allowance or Pension to him & his Successors, in the same Employment, not exceeding the some of Fifty pounds per annum, the same to commence at Michaelmas One thousand six hundred eighty, six, & to be deteyned by him out of the Perquisits of the Musaeum. And in case of Vacancies

[101] Ash. Lib. AMS 7–10, 12–14.
[102] Ash. Lib. AMS 11.
[103] No such book survives in the Ashmolean Museum.

after my decease, that then the Nomination and disposall of the Keepership, shall be in my Widdow during her lyfe & after her decease in the aforesaid Visitors or the Maior part of them.

14. That the Nomination & Removall of the Under Keeper shalbe in me during my lyfe, and after my decease in my Widdow during hers, & after her decease in the aforesaid Keeper & his Successors, and at all tymes he shalbe under his & their Survey & correction. And the said Keeper shall allow unto him a Sallary out of the Perquisits also, not exceeding the some of Fifteene pounds per annum, the same to commence at Michaelmas one thousand six hundred Eighty six. And further the said Keeper shall allow a person, to sweepe & clense the Musaeum & Closetts, with such other things therein preserved as he shall appoint, a reward not less than forty shillings a yeare, out of the Perquisits also.

15. That a third Person shalbe chosen by the said Keeper, to be in readiness to performe the Office of the Underkeeper, when & at such tymes as Sicknes, or other allowable Occasions shall cause his absence; And that the said Keeper shall allow him for his particular service, out of the aforesaid Perquisits, so much money as he shall thinke convenient, not exceeding the some of Five pounds per annum.

16. That at the tyme of each Visitation, the Keeper (of the Musaeum) shall render to the Visitors, a true & perfect Account of all the Profitts & Emoluments, that have been made or received in the preceding yeare, by shewing the Rarities;[104] the same annual Account to end at Michaelmas before.

17. That a Honorary of Six halfe Guinies be yearely paid by the said Keeper upon the aforesaid Munday next after Trinity Sunday into the hands of the Vicechancellor for the use of the said Visitors; to be layd out either in an Entertainment, as is done in the Visitation of the Bodley Library, or in Gloves, as is done to the Visitors of the Savilian Lecture, at the choice of the said Visitors, or the major part of them; & that this Honorary be paid by the said Keeper, out of the Profits by him received.

18. That the Overplus of the said Profits after the aforesaid Honorary & Pensions, and the Allowance for sweeping & making cleane the Roomes be discharged, shalbe deposited in a Box or Chest, to remaine in the Library of the said Musaeum, with two different Lockes & Keyes, the one Key to remaine with the Vicechancellor for the tyme being, & the other with the Keeper of the Musaeum for the tyme being; the said Money to be layd out in Painting or drawing such naturall Bodies, as are neere perishing, or in buying more Rarities, or Manuscripte Bookes, or other incident Charges, but not in anything that doth not relate to the said Musaeum.

21 June 1686.
E: Ashmole.

Ashmole maintained the proprietary control declared in this document until his death on 18 or 19 May 1692, and did what he could to encourage the donation of rarities and books to his museum. On 23 September 1683 he recorded his first meeting with Lister, who had already offered additions to the museum's collection.[105] Ashmole also recorded on 10 October 1683 that 'I gaue Mr: Heysig, a Booke of the Garter, my wife gaue him 3 gold Buckles'.[106] John Heysig, a scholar and tutor to a Swedish nobleman, visited Oxford the next day,[107] and it was presumably on this visit that he presented a runic carving, three wooden runic calendars, and two Swedish coins,[108] doubtless encouraged by

[104] Ash. Lib. AMS 5, ff. 1–29; AMS 6.
[105] Bod. Lib. MS Ashmole 1136, f. 77^{v}; Josten 1966, 4. 1731.
[106] Ibid., f. 78; Josten 1966, 4. 1732.
[107] Clark 1891–4, 3. 76; Josten 1966, 1. 275; 4. 1732 n. 9.
[108] Ash. Lib. AMS 11, f. 661^{v}; Josten 1966, 4. 1732 n. 9. See No. 194.

Ashmole's gifts and advice. Some time about the year 1684 Thomas Braithwait of Ambleside, Westmorland, gave a coin collection to the university. Thomas Barlow (Bishop of Lincoln) wrote to the Vice-Chancellor on Ashmole's behalf requesting that the collection should go to the Ashmolean Museum and referring to an agreement between Ashmole and the university that in future all rarities offered to the university should be housed there.[109] Ashmole visited Oxford between 23 and 28 July 1684 and presumably called at the museum, though the purpose of his visit is not recorded.[110] Early in 1685 he sent 'a Persian Gum supposed to be a Mastick, and Windsor Castle, in straw-work, made by Mr. Clerk a German' as well as Mary Davis's horn, to join his collection.[111] His father-in-law, Sir William Dugdale, made his will on 10 August 1685, leaving all his manuscripts to the university to be placed in the Musaeum Ashmoleanum, 'Desiring that the presse, wherein they shall be so kept, may have an Inscription thereon importing that they were myne, and of my gift . . .'[112] Dugdale died on 10 February 1686,[113] and the bequeathed forty-eight volumes duly arrived in Oxford on 29 June.[114] Ashmole made out his own will on 6 September 1686, giving his manuscripts and the gold chains and medals presented to him in recognition of his scholarship, various named paintings, and other pamphlets and books, to his museum.[115] In 1687 he presented 220 Roman and 336 English, Scottish, and foreign silver coins[116] to be added to those he had already given. He encouraged his fellow scholars to follow his and Dugdale's example by leaving their books and notes to the museum, as is revealed in two letters by Aubrey to Wood in the autumn of 1688.[117] Aubrey was attempting to persuade Wood to hand over those of Aubrey's manuscripts which had been left in his care to the Ashmolean. Aubrey states Ashmole's opinion that there was 'such good care and method taken' that books were safer in the museum than in the Bodleian or the University Archives.[118] Anthony Wood was persuaded of the advantages of the Ashmolean and in his will dated 24 November 1695[119] bequeathed all his own manuscripts to it except for those already given to the Bodleian.

Ashmole was also concerned at the state of the pictures hanging on the stone walls of the museum, and Aubrey wrote on his behalf on 31 December 1691 requesting the Keeper 'to let the Pictures hang reclining from the Walls: otherwise the salt, and saltpetre in the Walls, will hurt the Canvess; as you have a sad instance of the Queens picture in the room within by the Laboratory'.[120]

Plot was fully occupied in the museum's early years with preparing catalogues and lecture-courses and with the Philosophical Society. He had resigned the secretaryship of the Royal Society of London in November 1684, which he had held for two years,[121] presumably because his duties in Oxford made it difficult for him to attend the Society's

[109] Josten, 1966, 4. 1735–6.
[110] Bod. Lib. MS Ashmole 1136, f. 80^v; Josten 1966, 4. 1739–40.
[111] Bod. Lib. MS Ashmole 1810, ff. 86, 92; Josten 1966, 4. 1754, 1756.
[112] PRO, Prob. 11/382/41; Josten 1966, 4. 1802.
[113] Bod. Lib. MS Ashmole 1136, f. 88^v; Josten 1966, 4. 1814.
[114] Josten 1966, 4. 1816 n. 8.
[115] PRO, Prob. 11/410/97; Josten 1966, 4. 1828–32.
[116] Ash. Lib. AMS 9, ff. 58–98; Josten 1966, 4. 1836.
[117] Bod. Lib. MS Tanner 456a, ff. 34–5; Bod. Lib., MS Aubrey 12, f. 2; Josten 1966, 4. 1859–62.
[118] Bod. Lib. MS Aubrey 12, f. 2. See Ashmole's statutes of 1686, clause 9 (p. 54 above).
[119] Bod. Lib. MS Top. Oxon. b.9; Clark 1894, 3. 502–4, App. II.
[120] Bod. Lib. MS Ashmole 1814, f. 98–9^v; Josten 1966, 4. 1887.
[121] *Dictionary of National Biography*, s.v. Plot.

meetings. He seems gradually to have spent less and less time in the museum, however, and from 1687 onwards he was regularly in London, having been appointed Registrar of the Earl Marshal's Court in that year.[122] The following year he was appointed Historiographer Royal,[123] and we learn from surviving correspondence between Lhuyd and Lister that by August 1689, Plot was considering resigning the keepership.[124] Lhuyd turned to Lister to support him for the post, but feared that Ashmole would appoint George Smalridge, a protégé and relative of Ashmole, who was then a tutor at Christ Church. Fortunately for Lhuyd, Smalridge had no desire for the appointment, though he did his best not to offend his patron's feelings on the issue. Lhuyd asked Lister to remind Ashmole that some two years before he had promised Lhuyd the post and that it was only this promise that had persuaded him to remain and to catalogue all the 'Naturall bodys' for a mere £12 a year. Plot resigned the professorship of chemistry on 12 November 1689, and at the beginning of 1690 the chair was conferred on Edward Hannes, who delivered his inaugural lecture on 7 July of that year.[125] The appointment was made by the Vice-Chancellor, presumably because Ashmole had forfeited his right to appoint with his failure to endow the chair as he had promised.

On 1 October 1689 Lhuyd informed Lister that Plot's 'Deputy' had resigned.[126] As a result of this a private agreement was reached by which Lhuyd acted as Plot's deputy and received half the Keeper's income, namely about £20 a year. It was not until January 1691, however, that Plot finally resigned, handing the keys of the museum to the Vice-Chancellor in the presence of Lhuyd. He then recommended Lhuyd as his successor, adding that Ashmole was prejudiced against Lhuyd and that Ashmole's consent to the appointment might prove difficult to obtain. This prejudice may have amounted to no more than resentment at Lhuyd's lack of interest in alchemy and astrology.[127] Ashmole gave his consent soon after, however, and Lhuyd, finally free of Plot's patronage, wrote to thank Lister for his help in 'this happy deliverance out of his clutches; for (to give him his due) I think he's a man of as bad Morals as ever took a Doctors degree'.[128] Lhuyd's judgement of Plot was harsh, but it came from a man who became a far greater scholar than Plot and had had to wait long in his shadow.

Lhuyd's first year as keeper was marred by the first robbery the museum suffered. The open display and accessible storage, combined with the impossibility of one guide overseeing a party of visitors, even when their number was restricted as the statutes required, made losses inevitable. Lhuyd was fairly certain of the identity of the thief, a Dutchman or German, who had praised all the specimens which disappeared. On Lister's advice he wrote to a private collector, William Charleton (see p. 39), for advice in tracing the stolen items and particularly on which London dealers to contact.[129] He visited London himself and was reimbursed £4 10*s*. from the Vice-Chancellor's account

[122] Bod. Lib. MS Ashmole 1136, f. 98; Josten 1966, 4. 1845.
[123] See n. 121 above.
[124] Bod. Lib. MS Lister 35, ff. 134-5ᵛ; Josten 1966, 1. 291-2. See also ibid., 4. 1865, n. 1.
[125] Josten 1966, 4. 1867 n. 2.
[126] Bod. Lib. MS Lister 35, f. 136ᵛ; Josten 1966, 4. 1868. The deputy is that required in Ashmole's statutes of 1686, clause 15 (see p. 55 above).
[127] Josten 1966, 1. 298.
[128] Bod. Lib. MS Lister 36, f. 8ᵛ; Josten 1966, 4. 1878-80.
[129] BL MS Sloane 3962, ff. 288-90ᵛ; Josten 1966, 4. 1883-4.

for this journey,[130] but none of the objects were recovered. His fears that Ashmole would blame him personally for the theft, however, proved groundless.[131]

Ashmole paid his last visit to Oxford in July 1690, a very sick man, according to Wood. He arrived from Bath on 15 July and was entertained two days later in the upper room of his museum by the Vice-Chancellor and some thirty leading members of the university. 'Mr Ashmole was carried in a chaire or sedan was placed at ye end of that place & the Doctors standinge about him, Mr. Ed Hannes of Ch. Ch. chymical professor spoke a speech to him – afterwards they went to dinner – Mrs Ashm. Jack Cross & Mr. Sheldon dined together in Doctor Plots study'.[132] Sunday 20 July was spent 'in ye musaeum with Doctor Plot',[133] and they left the next day.

The foundation of this museum was Ashmole's crowning achievement. Although it was principally his donation of the Tradescant collection which made it possible, nothing should detract from his vision, which saw the building as more than a 'repository' for 'rarities', and as the first institution at Oxford devoted solely to the study of the natural sciences. Although an unhappy intrigue persuaded him to withold the endowment he had promised and could have afforded, the tribute paid to him in his epitaph in Lambeth Church has in the event remained apt: 'Mortem obiit 18 Maii 1692, anno aetatis 76, sed durante Musaeo Ashmoleano Oxon. nunquam moriturus.'[134]

[130] Oxford University Archives, Vice-Chancellor's Accounts, 1666–97, WP *β*/21/5, *sub anno* 1694–5.

[131] Bod. Lib. MS Lister 36, f. 32[r–v]; Josten 1966, 4. 1883–4.

[132] Josten 1966, 4. 1873.

[133] Bod. Lib. MS Wood's Diaries, 34, f. 35[v]; Josten 1966, 4. 1874.

[134] 'He passed away 18 May 1692, at the age of 76, but while the Ashmolean Museum at Oxford endures he will never die.'

THE ASHMOLEAN AS DESCRIBED BY ITS EARLIEST VISITORS

Martin Welch

On 23 May 1683 'Yeomen beadles went to severall Coll. & halls to give notice to all Doctors and Masters that the Musaeum Ashmoleanum would be open the next day.' Anthony Wood continued that on 24 May 'Those Doctors & masters that pleased retird to ye Musaeum which is ye upper room, where they veiwed from one till 5 of ye clock what they pleased. Many that are delighted with new phil. are taken with them; but some for ye old – look upon them as ba[u]bles – Ch. Ch. men not there . . .'[1] The Revd Thomas Dixon told Sir Daniel Fleming that at the time of the arrival of the Tradescant collection from Lambeth, the Ashmolean laboratory had come to be referred to as the 'Knick-knackatory',[2] a view perhaps shared by the Christ Church men whose absence Wood noted.

The earliest visitor whose first-hand impressions survive was the physician and naturalist Thomas Molyneux (1661–1733). In a letter from London to his brother in Dublin dated 17 July 1683 he said:

Of this college viz. University, I was also acquainted with Dr. Plott, to whom I had a letter from Dr. Grew; he was very civil and obliging, and shewed me all the new building on the west side of the theatre, built of square freestone, containing, as the inscription over the door intimates, the *Museum Ashmoleanum*; *Schola Historiae Naturalis, et Officina Chymica*. It consists only of these three rooms, one a-top of the other, and a large staircase. The Museum Ashmoleanum is the highest; the walls of which are all hung round with John Tradescant's rarities, and several others of Mr. Ashmol's own gathering; his picture hangs up at one end of the room, with a curious carved frame about it, of Gibbins his work.[3]

Molyneux next described a visit to Ashmole in Lambeth, and then continued:

But to return now again to his museum in Oxford; to which, as Dr. Plot told me, one Mr. Cole, an apothecary in Bristow, and Dr. Lister of York, design very suddenly to add their collections. Under this rome is the *Schola Hist. Nat.*, very spacious and high, curiously wainscoted; at the end a very pretty white marble chimney-piece stained up and down with red, inch deep, (as Dr. Plott assured me,) by an art invented by one at Oxford. In this place Dr. Plott reads lectures to all that goes thro' a course of the chymistry with him, and to those only, till there a public salary be settled upon him for it. Under this is the *Officina Chymica*, the greatest part of which is under ground, and therefore it is very cold, even in the summer time, according to the small judgement I have in those sort of things; as yet it is very well contrived with great variety of furnaces, and those very convenient for all the operations in chymistry . . .

[1] Bod. Lib. MS Wood's Diaries 27, f. 26v; Josten 1966; 4. 1720–1.

[2] Magrath 1913, p. 90; Josten 1966, 4. 1718.

[3] Anon. 1841, p. 324; Josten 1966, 4. 1727–8.

Molyneux's description shows that the principal method of display of the larger Tradescant rarities was to hang them round the walls. The portrait of Ashmole with a frame by Grinling Gibbons is frequently referred to by later visitors. (It is now in the Founder's Room, where portraits of Charles II and James II also bear frames attributed to Gibbons.)[4] Lister's gifts to the museum are well documented, and earned him an honorary MD from the university in 1683, but this is the only source to mention William Cole of Bristol as a potential donor. He is not listed in the Ashmolean's Book of Benefactors (see Microfiche 1), though an entry of £2. 3*s*. in the Vice-Chancellor's accounts for October 1695 to October 1696 may be relevant, being recorded as 'Item to Mr Lloyd for a Journey to Bristol'.[5]

Plot acted as guide to another visitor, the collector Ralph Thoresby of Leeds, on 26 May 1684.[6] After visiting several colleges, he admired the Sheldonian Theatre and then viewed the Arundel marbles displayed in the open air around it: 'Was much taken with the ancient altars, and inscriptions and statues, Greek and Latin, given by the Lord Howard, and was courted for my own.' The courting was presumably the work of Thoresby's host and guide, Nathaniel Boys of University College. The party next visited the Bodleian Library, and then continued to:

> the Anatomy Schools, where, besides the skeletons and stuffed skins, were many considerable rarities; but the chief of all was in the *Museum Ashmoleanum*, which is absolutely the best collection of such rarities that ever I beheld, amongst which is the most entire mummy (sent by Dr. Huntingdon from Egypt) in Europe. Could have contentedly spent a long time in a thorough view of the several rarities, which the ingenious Dr Plot (to whom I was singularly obliged for his extraordinary civilities) has almost promised to print the catalogue of, with Mr. Ashmole's picture before. Then was shown the rarities that ditto most courteous Doctor had collected for his history of Staffordshire; as likewise the *Scrinium Listerianum* presented to the University by my father's ingenious friend Dr. Lister, formerly of York, now of London. I was exceedingly courted for some of my coins, and almost won upon by his most obliging carriage, but kept off promising till I see how it please God to dispose of me as to marriage, posterity, &c. After a stately treat at University College by Mr Boyse, (the Proctor this year) where we had ditto ingenious Dr Plot's company, with much ado got out of town, but rode unreasonably hard to reach our journey's end at Banbury.

Thoresby never became a donor to the Ashmolean, his collection being inherited in 1725 by Ralph, his eldest son; nor did Plot publish the Ashmolean's catalogue. The donor of the mummy was Aaron Goodyear, but Huntington gave other Egyptian antiquities to the Museum. Ralph Thoresby paid a second visit to the Ashmolean on 30 May 1695,[7] which was marred only by the absence of the 'excellent Mr. Llhydd', whom he had hoped to meet.

The first published description of the Ashmolean and one freely used by subsequent writers appeared in Edward Chamberlayne's *Angliae Notitia*.[8] It must have been printed early in 1684, as the election of the Proctors in April of that year is placed in the *Errata*.

[4] Josten 1966, 4. 1711–12.
[5] Oxford University Archives, Vice-Chancellor's Accounts, 1666–97, WP *β*/21/5, *sub anno* 1695–6; Josten 1966, 4. 1727 n. 7.
[6] Hunter 1830, pt. 1, p. 174; pt. 2, pp. 428–9.
[7] Ibid., pt. 1, p. 303.
[8] Chamberlayne 1684, pt. 2, pp. 325–8.

The description reads like an official prospectus and may have been supplied by Plot, as Gunther suggested:[9]

The Museum, a large and stately Pile of squared Stone, was built at the Charge of the University, who found such a Building necessary, in order to the promoting, and carrying on with greater ease and success, several parts of useful and curious Learning, for which it is so well contrived and designed.

It borders upon the West end of the Theatre having a very magnificent Portal on that side, sustained by Pillars of the Corinthian Order, with several curious Frizes, and other Artificiall Embellishments. The Front about Sixty Feet, is to the Street, Northward, where is this Inscription over the entrance in guilt Character *Musaeum Ashmoleanum, Schola Naturalis Historiae, Officina Chimica* . . .

It consists of ten Rooms,[10] whereof the three principal and largest are Publick, being each in length about 56 Feet, and in Breadth 25. The uppermost is properly the *Musaeum Ashmoleanum*, where an Inferior Officer always attends, to shew the Rarities to Strangers. The middle Room is the School of Natural History, where the Professor of Chemistry, who is at present Dr. Plott, Reads 3 times a Week, on Mondays, Wednesdays, and Frydays, during the time of the Chymicall course, which continues an entire Month, concerning all Natural Bodies, relating to, and made use of in Chymical preparations, particularly, as to the Countries, and places where they are produced, and found, their Natures, their Qualities and Virtues, their effects, and by what Marks and Characteristicks they are distinguished one from another, Natural from Artificial, true from Sophisticated, with their several mixtures and preparations in Tryals and Experiments, with the entire process of that Noble Art, very necessary to the cure of Diseases, when carefully managed by Learned and skilful Persons.

The Lower Room, to which there is a descent by a double pair of Stairs, is the Laboratory, perchance one of the most beautiful and useful in the World, furnished with all sorts of Furnaces, and all other necessary Materials, in order to use and practise. Which part is with very great satisfaction performed by Mr. Christopher White, the skilful and industrious Operator of the University, who by the direction of the Professor, shews all sorts of Experiments, chiefly relating to that course, according to the limitation established by the Order of the Vice-Chancellor.

Near adjoyning to the Laboratory are two fair Rooms, whereof one is designed for a Chymical Library, to which several Books of that Argument have been already presented: the other is made use of as a Store-room for Chymical preparations, where such as stand in need of them, are furnished at easie rates: the design of this building being not only to advance the Studies of true and real Philosophy, but also to conduce to the uses of Life, and the improvement of Medicine. Near the *Musaeum* is a handsome Room fitted for a Library of natural History and Philosophy. The other remaining Rooms, are the lodging Chamber and Studies of the Keeper of the *Musaeum*, whereof one, which is most convenient, is sometimes employed and made use of for private courses of Anatomy.

Accessions are continually made to the *Musaeum* by several worthy Persons as Dr. Robert Huntington, who hath given Hieroglyphicks, and other Ægyptian Antiquities: Mr. Aaron Goodyear, to whose generous favour they owe there an entire Mummy:[11] and the eminently Learned, Martin Lister, Dr. of Physick who has presented the University with a large Cabinet of Natural Rarities of his own Collection, and of several Roman Antiquities, as Altars, Medals,

[9] Gunther 1925, p. 308.

[10] There are now eight rooms.

[11] This mummy had been given to the Bodleian Library in 1681 but was transferred to the Ashmolean in 1683 (Macray 1890, p. 149 and n. 2). It is no longer in existence.

Lamps Ec. found here in England: So that it is justly believed that in a few years it will be one of the most famous Repositories in Europe.[12]

Huntington and Goodyear's donations both appear with Lister's in the Book of Benefactors. Chamberlayne's description formed the basis for the accounts given by two foreign visitors, one in 1711 by C. H. Erndtel,[13] who had letters of introduction to Lhuyd, but was conducted round 'all the Rarities' by Lhuyd's servant, as the Keeper was not then in Oxford. His brief description of the museum, however, is totally dependent on Chamberlayne. An earlier visitor to the museum was H. L. Benthem, who recorded his impressions in 1694.[14] He mentions seeing a portrait of a man 152 years old, (No. 275), Henry VI's iron cradle (No. 210), Anne Boleyn's straw hat,[15] and Augustine's bishop's crook,[16] but otherwise his descriptions are equally derivative.

In view of this tendency to rely on a standard description we are fortunate to have a very detailed early account by a wealthy German scholar, Zacharias Conrad von Uffenbach. Born in Frankfurt-am-Main in the year that the Ashmolean was opened, he travelled extensively over northern Europe, staying in Oxford in August and September 1710 during a tour of Lower Saxony, the Netherlands, and England. His account, clearly intended as a private record, was published at Ulm in 1754,[17] twenty years after his death. He had perfected the useful art of taking detailed notes without being detected, by writing within his coat poacket, and his record may thus be particularly accurate. He was not, however, impressed by the rarities: 'For England the natural history specimens are to be found here in fair order. But on our first entrance we wondered not a little that there should be such talk made over this museum outside this island, and more particularly of course within it. For to take one instance, Herr Burgmeister Reimers in Lüneburg, who is only a private person, has certainly as many specimens again as one meets here and far more important ones.'[18] Elsewhere he adds that:

The specimens in the museum might also be much better arranged and preserved, although they are better kept than those in Gresham College, London,[19] which are far too bad considering their splendid description. But it is surprising that things can be preserved even as well as they are, since the people impetuously handle everything in the usual English fashion and, as I mentioned before, even the women are allowed up here for sixpence; they run here and there, grabbing at everything and taking no rebuff from the *Sub-Custos*.[20]

It is clear from Uffenbach's account that clause 11 of the statutes (see p. 54) of 1686 was not being observed, for when he and his brother attempted to visit this Museum on the afternoon of 23 August, the upper room was so crowded with country folk (*Manns- und Weibsleute vom Lande*), as it was market day, that they thought it better to come another day.[21] This overcrowding was a result of financing the museum solely from admission

[12] See Macray 1890, pp. 325 8.
[13] Erndtel 1711, p. 52.
[14] Benthem 1694, pp. 329 30.
[15] Possibly the straw hat listed in Tradescant 1656, p. 50, which is not, however, attributed to Anne Boleyn.
[16] Ash. Lib. AMS 2. Given by Lady Dorothea Long in 1683.
[17] Von Uffenbach 1753 4, vol. 3; Quarrell and Quarrell 1928.
[18] Von Uffenbach 1753 4, 3. 121 2; Quarrell and Quarrell 1928, p. 26.
[19] Belonging to the Royal Society of London. See p. 87 below.
[20] Von Uffenbach 1753 4, 3. 129; Quarrell and Quarrell 1928, p. 31.
[21] Von Uffenbach 1753 4, 3. 118; Quarrell and Quarrell 1928, p. 24.

charges, but the failure of the museum's staff to keep order was only one aspect of a lack of diligence. Lhuyd had died on 30 June 1709 and had been succeeded as keeper by one of his assistants, David Parry. The Uffenbach brothers had an appointment with Parry on the afternoon of 6 September which Parry failed to keep, and he was late for a second appointment on 13 September.[22] Uffenbach commented that:

the present Proto-Custos, as he is called, Mr. Parry, is too idle to continue it [i.e. a catalogue begun by Lhuyd], although he is little inferior to his predecessor Lloyd in natural history or in the knowledge of Cambrian, Anglo-Saxon and other languages. But he is always lounging about in the inns, so that one scarcely meets him in the museum, as I have already said; if it were not for this he could yet do well as he is still a young man a little over thirty.[23]

Parry was not to live up to the promise he had shown as Lhuyd's assistant, but Uffenbach was far more scathing about Parry's *Subcustos*, describing him as a 'ridiculous fellow'.[24] Uffenbach considered the catalogues to be:

a bad description consisting, it is true, of six volumes in 4, each a finger in thickness, but with the specimens only designated by one word. The first volume is a *catalogus librorum quos prima vice donavit Elias Ashmole an. 1685* and with it a *catalogus animalium*.[25] The second volume is a *catalogus numismatum*, including 398 *recentiora*, several Roman and three hundred pure English, though many are entered twice over.[26] Vol. 3 is *materia medica*.[27] Vol. 4 is *fossilia & vegetabilia & lapides terrae, conchae*.[28] Vol. 5 is *catalogus lapidum pretiosorum*.[29] Vol. 6 is *de cochleis tam terrestibus fluviatilibus quam marinis*.[30]

One could wish that the catalogues or indices, bad as they are, were published, or, better still that an accurate description of this museum could be made, like that of the Royal Society Museum in London,[31] although as far as the *lapides* are concerned, Lloyd, the former learned and diligent *Custos* of this museum, has, I believe, commenced one.[32]

Uffenbach was able to examine for himself Lhuyd's catalogue and collection of figured fossils on 13 September:

When Mr Parry arrived he showed us the stones down in the hall of the Ashmolean. They are in three very large low presses. There is a splendid quantity and variety of these stones, such as I have never in all my life seen together before. It is unnecessary to describe them here; moreover it would be impossible, as this has been very well done by the collector himself, Mr. Lluyd in his *Lithophylacium*[33] in octavo: as only 125 copies of this book were printed for some of his own friends,

[22] Von Uffenbach 1753–4, 3. 153–4; Quarrell and Quarrell 1928, pp. 48–9.

[23] Von Uffenbach 1753–4, 3. 128–9; Quarrell and Quarrell 1928, p. 31.

[24] Von Uffenbach 1753–4, 3. 127; Quarrell and Quarrell 1928, p. 30.

[25] Catalogue of the first instalment of books given by Elias Ashmole in 1685; catalogue of animals. Ash. Lib. AMS 11.

[26] Catalogue of coins; 'modern items'. Ash. Lib. AMS 9, AMS 11.

[27] Remedial substances used in the practice of medicine. Ash. Lib. AMS 10, AMS 11.

[28] Fossils, plants, stones, earths, and shells. Ash. Lib. AMS 10, AMS 11.

[29] Catalogue of precious stones. Ash. Lib. AMS 8, AMS 11.

[30] Of terrestrial, riverine, and marine shells. Ash. Lib. AMS 7, AMS 11.

[31] Grew 1681.

[32] Von Uffenbach 1753–4, 3. 128; Quarrell and Quarrell 1928, p. 31.

[33] Lhuyd 1699. The refusal of the university to finance the publication of the museum catalogue resulted in it being published privately at the expense of a number of Lhuyd's friends including Hans Sloane, Samuel Pepys, and Isaac Newton. He dated the preface 1 November 1698 at Montgomery, and his absence from Oxford resulted in the limited edition of 120 copies containing many printing inaccuracies. Lhuyd prepared a second edition before his death in 1709, but this was not published until 1760; see Gunther 1945, pp. 21–4. See *Dictionary of National Biography*, s.v. Lhuyd.

at a cost of one guinea, and none of these are now available, Mr. Parry, who helped Mr. Lluyd in his collating, is going to publish it again, and in a greatly augmented edition. I must just say of the classification (of the stones) that following the description in the book they are faultlessly arranged according to class and species, and also so conveniently that the larger stones are to be seen uncovered in the big drawers, the smaller ones in round boxes according to size. Those placed there together are numbered, so that one can find them in the catalogue, and also that they might not get mixed up with each other, as might happen if they were lying loose.

In the last cupboard was also a large drawer with all manner of antiquities, likewise collected by Mr. Lluyd, and excavated in England. These consisted of various *fibulae*, lamps, sacrificial knives, and so on. Especially curious were the remains of a beautiful urn of red pottery, on which appear a number of designs illustrating the rites at Roman burials.[34]

Uffenbach gives by far the most detailed description of the early arrangements, noting also the positions of the small library rooms off the staircase:

. . . the natural history specimens . . . are in the biggest and most important room or hall in the house, which, however, looks more dignified from outside than from inside. Below is a spacious place of honour or vestibule, and, on the left, the library of Thos. [*sic*] Wood.[35] Down in the vestibule stands the great iron cradle of which Benthem makes mention.[36] On the walls of the staircase hang many pictures but they are nothing very special. Arrived at the top of the stairs one sees another door which leads into the little room in which is the *Bibliotheca MSta Ashmoleana*.[37] But this time as stated, we only saw the museum. This in the hall at the top of the stairs to the left . . .

We noticed various very large goats' horns, one of which was four span in circumference. For this realm is everywhere very prolific in horn, and moreover all horned creatures are extraordinarily well furnished with them. We also saw two of the white *caudae setosae vaccarum*, such as Borrichius, and we too, had observed in the *Schola Anatomica*.[38] Then we noticed different *Cornua Ammonis* [ammonites], such a size as I have never seen before. Farther on was the head of a ram with four horns for, as I have remarked above, England is a *terra maxime cornifera*,[39] and the cows have terrific horns, as large indeed as our oxen. There is also a very beautiful stuffed reindeer. It has antlers like an elk, but otherwise resembles a stag in size and form, with hair nearly the length of one's little finger and almost as stiff as horse-hair, picked out or sprinkled with grey-white or black and white. Here, also, is a stuffed Indian ass, white with dark brown stripes or rings, such as I had already seen in Berlin. Likewise we saw an extraordinarily big tortoise as also the skin of a Turkish goat: it is very large, yellowish-white with very long, soft and rather crinkled hair, inches in length and as soft as silk. In the windows stood about thirty glass vessels with all kinds of Indian botanical specimens, plants and flowers in spirit. As inscribed on them in gold lettering, they are *ex dono Cl. Viri D. Jacobi Pound, M.B. (Med. Baccalaurei)*.[40] We further noticed a very large *dens molaris* [molar tooth] over a finger in length and two inches thick. The accompanying memorandum: "This is supposed to be one of the teeth of the Danish Giant

[34] Von Uffenbach 1753–4, 3. 128; Quarrell and Quarrell 1928, p. 49. This samian vessel, which was illustrated in Camden's *Britannia* (1586), still survives in the museum collections.

[35] See Bod. Lib. MS Wood's Diaries.

[36] See n. 14 above, and No. 210.

[37] The Ashmolean Manuscript Library.

[38] 'Bristly cows' tails'. Borrichius talks of a 'cauda vaccae Indicae alba, setosa instar equinae, eaque duplo major' (quoted in Gunther 1925, p. 255). For the Anatomy School collections see below, p. 88.

[39] 'A land very productive of horns'.

[40] See Ash. Lib. AMS 2; Ayliffe (1714, p. 476) described this donation thus: 'The Rev. Dr. Pound has also given hereunto many excellent collections of Plants and Animals brought with him from China, and preserved in Spirits of Wine, etc.'

Warwick found by M. Brown near pont freat Castle an. 1700." is a prodigious supposition. *Credat Judaeus Apella, non ego.*[41] Also, a very long and wide skin of a *serpens candisorius* [?white snake], white with brown spots, about twelve feet long and one and a half wide. In several of the glasses, in brandy, were sundry strange creatures, likewise presented by the above mentioned Pound, such as a few snakes and amongst them a small rattle-snake. Also a crocodile, a salamander, etc. In one corner stood a cabinet in which were many beautiful *lapides pretiosi* [precious stones], such as I have seldom seen in such profusion and in the centre were several fine *lapides florentini* [Florentine stones], an uncommonly good *glosso-petra*,[42] about seven inches long and two wide at the back, a lovely light green stone almost like jasper and various beautiful crystals also, amongst them two pieces with moss imbedded in them. A splendid topaz, bigger than a walnut. An amethyst, as large again as the above, but faulty. In the cabinet were also some drawers containing about thirty specimens of old and new, but bad, coins.[43] Furthermore the Knight of St. George and the Dragon well cut in amber.[44] Likewise the Crucifixion of Christ, very delicately carved on a peach-stone with the signature N. B.[45] Again the Birth of Christ in just the same style, as also a representation of the Saviour. Further cherry-stones carved in the same way. Also Apollo fairly well cut in coral,[46] a *calendarium runicum*[47] on eleven little wooden tablets, (the remaining one having been lost), each a finger in length and not quite two fingers in breadth. An *abacus indicus*[48] which consists of a little wooden box in which are some round bullets [balls] that can be moved with [along] a wire. Earrings of dyed straw, the size of a nut and shaped like pearls such as women are said to have worn in Spain in by-gone years.[49] Also several artistic objects of turned ivory.[50] Several beautiful *rosaria* in crystal and other materials.[51] Various curious specimens of all sorts of *succinum* [amber],[52] amongst them some with flies and one specially beautiful with a spider. Two gold chains, one of which was presented to Ashmole by Friedrich Wilhelm Elector of Brandenburg,[53] the other by the King of Denmark,[54] together with the coins (medals) suspended from them.

We were then shown a very curious stone, for when it was struck a piece of money [coin] was found in the centre, which had grown into the stone, or rather the stone had grown around it.[55] Also a very large Indian writing tablet with leaves of black paper and a cover beautifully lacquered in red.[56] An extraordinarily curious horn which had grown on the back of a woman's head.[57] It was exactly like a horn, except that it was thinner and browner in colour. It is certainly somewhat of a curiosity, and it appears that men-folk bear their horns in front and such women theirs behind. It was noted on a label that it originated from a Mary Davis of Saughall in Cheshire *an aet. 71 an. Dn. 1668.*[58] No doubt it will have been mentioned in the *Transactiones Angl.*, or in the *Hist. nat.* of Cheshire, and can be looked up there. The horn was blackish in colour, not very thick or hard, but well proportioned.

[41] 'Apella the Jew may believe it, but I don't.' (Horace, *Satires*, 1. 5. 100.) Von Uffenbach's favourite term for expressing scepticism.

[42] Fossilized shark's tooth. For a discussion of such teeth as these, see Murray 1904, pp. 68–73.

[43] See Ash. Lib. AMS 9.

[44] No longer surviving.

[45] No longer surviving: but see discussion of extant fruitstones under No. 186 below.

[46] No longer surviving.

[47] The runic calendar given by John Heysig in 1683 (see Microfiche 1). Only ten tablets now survive (see No. 194 below).

[48] The Russian bead calculator or *schety*. See No. 193 below.

[49] No longer surviving.

[50] See the ivory balls, Nos. 239–48 below.

[51] See the rosaries, Nos. 121–3 below.

[52] See the amber objects, Nos. 120, 123, 177–80 below.

[53] Bod. Lib. MS Ashmole 1136, f. 61^{v}; MS Ashmole 1131, f. 369^{v}; Josten 1966, 4. 1670–1.

[54] Bod. Lib. MS Ashmole 1136, f. 50^{v}; MS Ashmole 1131, f. 369; Josten 1966, 4. 1389–90.

[55] No longer surviving.

[56] See the Burmese manuscripts, Nos. 80–3 below.

[57] No longer surviving. Von Uffenbach (1753–4, vol. 3, fig. 1) illustrates the horn. An engraving of Mary Davis with horns intact appears in Ormerod 1882, p. 566.

[58] 'At the age of 71 in the year 1668'. John Pointer described it as 5 inches long in 1749 (Pointer 1749, p. 105).

At a window was a very large *cochlea bivalvis* [bivalve shell], but only one half of it was there. Further a cabinet with five drawers full of great shells.[59] Another cabinet with smaller shells, none of which were perfect, or which one could not see better in Holland. Near this cabinet stood an enormous cabbage-stalk from five to six feet in height and over an arm in thickness. By the windows hung several sorts of carved and printed panels, and amongst these was the portrait of John Tradescant, curiously painted as though he were standing out from the clouds – perhaps because of the name, *quasi transcendat coelos*.[60] Amongst the carvings was Andromeda with Perseus, incomparably carved in alabaster on a black wooden panel.[61] It is a pity that this beautiful old work of art is so badly mounted; also that several pieces are missing. There was still another cabinet with a *materia medica*,[62] in which were all manner of *gummi*, *boli*, *terrae sigillatae* [medicinal gums, clays, and 'stamped earths'], together with some fossils and drugs. With them (for what reason I do not know) was a stone stated to be a petrified heel of a shoe,[63] and certainly very much resembling one; although it is difficult to believe, since the hole in the middle through which heels were formerly fixed to the shoe quite obviously had been recently bored.

Further on we saw all kinds of Indian weapons, and articles of clothing.[64] A number of nails which had been melted into a lump by lightening were lying in a basket on a table.[65] In a case I found a very well-wrought Indian idol, or, as the *Custos* called it *Brachmanus*.[66] He declared that the stone was unknown, but it appeared to me as a sort of steatite, from which the Indians normally make their gods, although it had red veins (which I had not seen before) and was very lightly polished. The ridiculous fellow who was showing us the specimens and who is a *Sub-Custos* and Scholar of a College (the *Custos* himself, Mr. Parry, cannot show strangers over the museum for guzzling and toping) announced in all earnest that the material for these gods was made of rice, boiled and then dyed.

In a cupboard were all manner of foreign costumes, amongst them curious caps made of different kinds of very beautiful grey-coloured feathers, such as the upper classes in India wear for protection against the sun. On the wall next to this cupboard were hanging many more dresses in particular foreign fashions in shoes;[67] further an Indian lantern without glass or horn: that is to say made of plaited and painted reeds or rushes, quite transparent and prettily made.[68] They may be all very well in India where there is no wind, but not in England where it is never calm. In the centre of the hall hangs the portrait of the founder Ashmole, life-size, standing before a table, one hand holding a book in folio entitled *History of the Garter*, which he had written and published. He wore one of the chains mentioned above to which, doubtless, the words under the picture refer: *praemia honoraria* [honourable rewards].

Uffenbach also described the classical reliefs and inscriptions around the Sheldonian Theatre, noting that as well as the 169 pieces kept in the open air 'there were several more statues at the Ashmoleanum'.[69]

[59] See Ash. Lib. AMS 7.

[60] 'As if they rise above the sky'. The portrait was of John Tradescant the Elder. See No. 253, Pl. CXXIII.

[61] No longer surviving.

[62] Ash. Lib. AMS 10 lists the *materia medica* present *c.*1685. No longer surviving.

[63] No longer surviving.

[64] The term 'Indian' was used indiscriminately at this time (see p. 96). For North American Indian material see Nos. 2–4, 10–13 below.

[65] Described by John Pointer (1749, p. 160).

[66] i.e. Brahmin; a 'Brackmans vest of Leaves of Aloes' is among the garments listed at Lambeth by Tradescant (1656, p. 47). Probably the Burmese Buddha, No. 79 below.

[67] See the various items of footwear, Nos. 20–1, 47–59, 107–13 below.

[68] Possibly one of the Chinese lanterns listed in Ash. Lib. AMS 25.

[69] Von Uffenbach 1753–4, 3. 121–6; Quarrell and Quarrell 1928, pp. 26–30. For the history of these marbles see Haynes 1975; von Uffenbach 1753–4, 3. 98; Quarrell and Quarrell 1928, p. 10.

The most distinguished thing about the theatre is on the walls outside: namely the excellent *Marmora Arundelliana* or *Oxonienia*, a description and explanation of which exists in folio,[70] rare even in England. They are certainly unusually beautiful, and I doubt whether in their open air positions they are enough prized or suffiently protected from destruction, though it is true that they are partly in niches. Another wall has been built around the theatre, on which the iron-work and pagan busts as also a statue of *Sheldonianus*[71] are to be seen; but this is left open at times and mischievous youths might easily do damage, to say nothing of wind and weather.

The other busts and decorations on the outer wall are so badly and so coarsely fashioned that I was astounded, and indeed they look better in the book frontispieces than in fact. This time we only took a general look at the superb sculptures, as I wanted first to look up the description of Prideaux, and also because our time was short. We found there were 169 of them, placed in the following order. Towards the *Museum Ashmoleanum* 60, on the right of the chapel 6, left of the chapel 7, and on the wall next to the printing-house 92. Prideaux, it is true, only describes 150 as far as I can remember, but he omitted several busts on which there is no inscription.[72]

On August he visited the laboratory at the Ashmolean after attending a lecture on bone structure given in English by Dr Lavater:

The place which has been allotted to him for this *cursus anatomicus* is under the Ashmolean, a small vaulted room behind the *laboratorium*, very well suited for anatomy on account of the low temperature. After the lecture was over, he had intended to see the *laboratorium*, all the more so because we could ask Dr Lavater to explain everything and especially to show us the use and purpose of everything; but he excused himself on the plea that he could not know what everything was for. . . . But to return to the *laboratorium*, I must admit that it is very well built. It is as long or as deep as the Ashmolean though not so wide. It is vaulted throughout and fitted with many really curious furnaces with architectural and other embellishments of the most costly description, most of them planned by Boyle.

It should be remarked that this *laboratorium* was much used by the Royal or London Society in its early stages, when it was in its most flourishing state, and many valuable experiments and discoveries were made here. But after the Society had become proud and great and had established itself in the capital, as usually happens, it deteriorated, and this shall be told in its proper place.[73] At the same time, it is lamentable that, after the Society had changed to London for good, this excellent *laboratorium* has not been maintained in the condition so praised by Benthem, p. 350 seq.[74]

The present Professor of Chemistry, Richard Frewyn, troubles himself very little about it. The operator, Mr White (who is said to be very much debauched) still less. The result is that the furnaces look entirely uncared for, though, as mentioned above, they are still fairly intact and not only are the finest instruments, crucibles and other things belonging to the place almost all of them lying in pieces, but everything is covered in filth. Who could imagine that so fine and worthy an undertaking should receive so little attention? Indeed who would believe such a thing of England, which we foreigners hold so much in awe that we believe all subjects, and chemistry in particular, to be passing there through a golden age? Is it not marvellous that Gottfried in

[70] Prideaux 1676.

[71] Archbishop Gilbert Sheldon of Canterbury (1598–1677).

[72] Von Uffenbach 1753–4, 3. 97–8; Quarrell and Quarrell 1928, pp. 9–10.

[73] See von Uffenbach 1753–4, 2. 545–52; Quarrell and Mare 1934, pp. 97–103.

[74] See Bentham 1694, pp. 350–1; Quarrell and Quarrell 1928, pp. 37–8.

London, a German by birth, and a Venetian Jew, also in London have far finer and better *laboratoria* than the Royal Society and the Apothecaries who have such a high reputation especially in Kew near London and elsewhere.[75]

Uffenbach was not alone in detecting signs of neglect. On 9 June 1711, Hearne noted that Dr Richard Middleton Massey had donated to the Bodleian Library 'divers things also formerly in the *Muséum Ashmol*, but he complains yt he cannot find them; & indeed several other things are there Missing'.[76] By the middle of the eighteenth century Dr Rawlinson complained, on 7 February 1753, 'how ill your natural curiousities had been preserved in the Museum & that the famous Tredescants Collection was much the worse for wear, and ever worse if possible by the conduct of some Keepers and their understrappers'.[77] Rawlinson was describing the keepership of Dr George Huddesford, President of Trinity College, a man according to Hearne 'reported to be tinged with ill principles', and whose election in 1732 appeared highly irregular, having the 'very pernicious consequence' of turning Sir Hans Sloane against the university.[78] Gough wrote in 1780 that 'Nothing can equal the negligence with which the Ashmolean Museum was kept. The librarian being one of the Heads [of a College] put in a scholar for 5*l.* who made a perquisite of shewing the curiousities, which lay in the utmost confusion. Lhwyd's fossils were tumbled out of their papers, and nobody regarded or understood them till his catalogue of them was republished by Mr Huddesford the late librarian, son of Dr Huddesford'.[79]

William Huddesford in fact proved more conscientious than his father, and his keepership (1755–72) saw several important additions to the museum's collections including a collection of crystals, minerals, and metallic bodies from Cornwall given by William Borlase in 1758.[80] It was no doubt as a measure of reform that the Visitors of the Ashmolean decided on 8 January 1755 that a number of damaged or decayed specimens should be removed from the museum.[81] In this they were invoking clause 8 of the statutes of 1686 (see p. 54), though there is no evidence that they made any attempt to replace the specimens removed with new ones. In the case of the dodos they were in any event too late, for the species was extinct.[82] One of them had come from the Tradescant collection in Lambeth, where it was catalogued in 1656,[83] and noted by the naturalist John Ray: 'We have seen this Bird dried, or its skin stuft in Tradescant's Cabinet'.[84] The other was probably that mentioned by T. Crossfield on 15 July 1634 in his diary when discussing the activities of 'm^{r} Gosling, sometimes schollar to m^{r} Camden, Engineer who bestowed the Dodar (a blacke Indian bird) upon ye Anatomy Schoole'.[85] Of these two specimens a charred skull and bones of the foot remain in the University Museum, Parks Road, Oxford (see No. 419).

[75] Von Uffenbach 1753 4. 3. 136 9: Quarrell and Quarrell 1928, pp. 36 8.

[76] Doble 1889, 3. 174.

[77] Bod. Lib. MS Rawl. C.989, f. 188.

[78] Salter 1921, p. 31.

[79] Gough 1780, p. 134, note *p*. Such neglect was not unique, for Pennant (1771, p. 53) notes that at Edinburgh University 'The *Musaeum* had, for many years, been neglected; but, by the assiduity of the present Professor of natural history, bids fair to become a most instructive repository of the *naturalia* of these kingdoms.'

[80] See Microfiche 1.

[81] Gunther 1925, p. 361.

[82] The specimens had at least been recognizable as late as 1749, when Pointer (1749, p. 157) noted the presence of 'Dodar-Birds, one of which watches, whilst the other stoops down to drink'.

[83] Tradescant 1656, p. 4.

[84] Ray 1678, pp. 153 4, pl. XXVII.

[85] Queen's College Library, Oxford, MS 390, Diary of T. Crossfield.

Neglect must have resumed in the later years of William Huddesford, or during the keepership of his successors, for nothing appears to have been done with Borlase's collection, no specimens of which survived into Gunther's day, when, furthermore, only two out of nearly 1,800 fossils collected by Lhuyd, Plot, and Lister could be found. As Gunther commented, 'Borlase might as well have sent his treasures to Twickenham to add to the decorations of his friend Pope's grotto'.[86] The museum was not thoroughly reorganized until the appointment of John Shute Duncan in 1823, when the collections were redisplayed following the plan of Dr Paley's Natural Theology. The work of J. S. Duncan and his brother P. B. Duncan, who succeeded him as keeper in 1825, enshrined in the first printed catalogue of the Ashmolean Museum collections published in 1836, marks a watershed in the history of the Ashmolean, anticipating the end of its function as a centre of scientific teaching and research as conceived by Ashmole, Plot, and Lhuyd.

[86] Gunther 1925, p. 223.

COLLECTORS AND COLLECTIONS OF RARITIES IN THE SIXTEENTH AND SEVENTEENTH CENTURIES

Arthur MacGregor

Prior to the sixteenth century, collections amounting to what we should now call museums were unknown.[1] Certainly there were royal treasuries in every country of Europe, containing regalia alongside precious vessels, plate, coins, and gifts from foreign princes and dignitaries which, had they been publicly displayed, would have formed very splendid exhibitions. The idea of public exhibition was, however, as foreign to the curators of these treasure-houses as it was to those responsible for their enrichment.

Among the later medieval secular princes, Jean de France, Duke of Berry (1340–1416) was an exception to this general rule. Schlosser has drawn a contrast between the activities of Jean's brothers, who all possessed immensely richer treasuries and were lavish patrons of the arts, and those of the Duke of Berry himself, generally recognized as the forerunner of the great princely collectors of the Renaissance.[2] His taste embraced antique coins, sculpture, and vases, which he procured via agents dispatched to Italy specifically for this purpose, and paintings which he acquired through a dealer (one of the earliest recorded examples of such a person). Engagingly, the scope of his collecting activities extended beyond aesthetic refinement to include some of the elements which were to become commonplace in bourgeois collections of the succeeding two centuries, articles which to the modern eye approach the category of bric-à-brac, but which were then held to be truly rich and strange: whales' teeth, ostrich eggs, and coconuts lay next to the horn of a unicorn, and the entire Gospel of St. John could be seen written on a piece of paper smaller than a silver coin.[3]

While Jean de Berry's collection was amassed with the intention that it should be contemplated and enjoyed, those admitted to see it must have been few. A greater degree of public accessibility was afforded by other collections which grew up within certain medieval cathedrals and churches, some of which, notably at Saint-Denis,[4] were fabulously rich. Religious houses were also repositories of large numbers of relics, objects which were enthralling not only for their saintly associations but also for the rich mounts or shrines with which they were often invested. From an inventory of St. Omer, dated 1346, it can be seen that purely secular objects capable of inspiring public awe could also

[1] Certain Roman period collections are admittedly remarkably similar to their Renaissance counterparts. The Renaissance taste for collecting, however, does not appear to stem from emulation of classical forerunners.

[2] Von Schlosser 1908, p. 23.

[3] Taylor 1948, pp. 50 f.

[4] For the treasures of Saint-Denis see Fezensac 1973; id. 1977; Fezensac and Gaborit-Chopin 1977.

find their way into these collections: as well as a drop of the Virgin's milk and a fragment from a martyr's shroud, St. Omer boasted a crystal goblet from King Solomon's temple, griffins' eggs, giants' bones, and 'thunderstones'.[5] At special festivals associated with some German medieval cathedrals, the contents of the treasuries were periodically placed on public display, commonly on a seven-year cycle. From the descriptions which survive[6] it is clear that there was a similar mixture of holy and secular objects and that these occasions had enormous appeal.

In England too, churches and cathedrals formed a focus for the kind of public appetite now catered for by museums. In addition to the richness of stone and wood carving, stained glass, plate, and relics, the public could occasionally wonder at objects of purely secular significance: Stow records seeing in St. Lawrence Jewry 'the shanke bone of a man (as it is taken) and also a tooth of a very great bignes hanged up for shew in chaines of iron uppon a pillar of stone', and mentions that in the cloister of St. Mary Aldermanbury 'is hanged and fastned a shanke bone of a man (as is said) very great and larger by three inches and a halfe than that which hangeth in St. Lawrence Church in the Jury, for it is in length 28 inches and a halfe of assisse'.[7]

In the course of the sixteenth century the secularizing influence of Protestant strictures on the veneration of relics coincided with a dramatic increase in the flow of exotic material reaching Europe from the New World and from the Orient, producing a climate in which private collections could grow and flourish. By the end of the century there were in England a sufficient number of them to attract the attention of less scrupulous dealers and the irony of the sceptical: Thomas Nashe writes of these gullible magpies that 'a thousand guegawes and toyes have they in their chambers, which they heape up together, with infinite expence, and are made beleeve of them that sell them, that they are rare and pretious thinges, when they have gathered them upon some dunghill'.[8] Whatever the critical shortcomings of the 'wise Gentlemen of this musty vocation', they stood at the threshold of England's 'museum age'. Their activities and those of their seventeenth-century heirs did not, however, take place in isolation from the rest of Europe, for the same processes can be traced from the Mediterranean to Scandinavia.

In Italy collecting gratified the nobility's educated tastes and fondness for rich display, and its origins owed much to their interest and involvement. The well-developed system of patronage which extended from the princely courts to the principal artists and intellectuals of the day also aided the development of scholarly collections which formed an essential part of the activities of natural scientists and others. Mechanical wonders, applied arts, and antiquities were also to be found in Italian collections of the sixteenth century. Contemporary painting and sculpture, however, tended to be separated from these more prosaic items in a manner which was not to be emulated in northern Europe until the later part of the following century. Apart from this feature, much can be found in common between the earliest Italian collections and those in the north, which drew from them at least some of their inspiration. Of particular importance to the development of museological interest in Italy were what have been called 'the

[5] Altick 1978, p. 6.
[6] Wittlin 1949, pp. 91–2.
[7] Stow 1971, i. 275, 291.
[8] Nashe 1910, i. 183.

encyclopaedic efforts of the Medici to capture the essence of the New World'.[9] Cosimo de Medici (1519–74) is known to have obtained South American objects, in some instances via Spain, and under his sons, Francesco and Ferdinand, the scope of the collection was widened to include material from Africa, India, China, and Japan. Natural history specimens were added, and, to an increasing extent, antiquities. However, by the time the Treasure-House or *ceimeliarcha* of the Medicis was visited by Evelyn in 1644, its character was predominantly that of an art-historical collection: Evelyn saw there 'hundreds of admirable Antiquities, Statues of Marble & Mettal, Vasas of Porphyry . . . Pictures . . . of the famous Persons & Illustrious men, whither excelling in Arts or Armes to the number of 300'.[10] Many smaller precious items were disposed within and upon richly ornamented cabinets, while some remnants of the formerly more mixed character of the collection were to be distinguished in the armoury: here were 'many antique habits, as that of Chineze Kings, the sword of Charlemain: an Italian lock for their wanton Wives or jealous Husbands . . . such rare tourneries in Ivory, as are not to be describ'd for their curiosity'.[11]

Among those to whom the Medicis, to their credit, were patrons, was Ulisse Aldrovandi (1522–1605), a polymath like themselves. In his native Bologna, Aldrovandi was successively Professor of Botany and of Natural History, and was responsible for the founding of a botanic garden in 1567. Compiling an impressive collection of his own, he published thirteen illustrated folio volumes on zoology and mineralogy which were to become standard works of reference for collectors,[12] as well as being of immense scientific value.

The catalogue of another Bolognese museum, that of Ferdinando Cospi, was published in 1677,[13] together with an illustration of its internal arrangements (Pl. CLXXXI), following the example of the similarly illustrated guide to the museum of Francesco Calceolari (*fl.* 1566–86) in Venice.[14] In Naples the collections of Ferrante Imperato (*c.* 1550–1631) reflected its owner's interest in natural history and formed the basis of a publication by him in 1599.[15]

Michele Mercati (1541–93), physician and curator of the Vatican botanic garden, formed a collection there which embraced both natural rarities and antiquities, including mummies and flint implements (whose true significance he was among the first to recognize).[16] While the basis of Mercati's collection was purely secular, it has been suggested that in the galleries of another Roman museum, painted to represent the terrestrial and celestial spheres, Athanasius Kircher (?1601–80) sought no less than to form a microcosm of the entire realm of the intellect and of the spirit.[17] Kircher, a Jesuit priest, wrote widely on science, art, music, and philology; he was particularly well supplied with ethnographic material, sent to him from every part of the known world which had been penetrated by members of his society.[18]

[9] Heikamp 1972, p. 45.

[10] Evelyn, *Diary*, *c.*24 October 1644. The historical paintings are said to have been taken out of the museum of Paulus Jovius.

[11] Ibid., *c.*24–5 October 1644.

[12] Reference to Aldrovandi can be found, for example, in Tradescant 1656 (pp. 10, 12–14, 16–17).

[13] Legati 1677; Murray 1904, p. 89.

[14] Ceruti and Chiocco 1662; Murray 1904, pp. 83–4.

[15] Imperato 1599; Murray 1904, p. 85.

[16] Mercati 1574; Murray 1904, pp. 29, 81.

[17] Bazin 1967, p. 62.

[18] Bonanni 1709, with an illustration of the interior; Bazin 1967, pp. 86–7.

Among the best-known of the private collections formed by the Roman gentry was that of Francesco Angeloni (*ante* 1575–1652). He too received a visit from Evelyn, on whose authority we have it that Angeloni had one of the best collections of medals in Europe, in addition to Roman and Egyptian antiquities, Indian habits and weapons, dried animals, shells, and a 'Sea-mans Skin'.[19]

By the time of Evelyn's Italian tour the establishment of small private museums had become a fashionable pursuit followed by numerous citizens: it has been calculated that by the end of the sixteenth century there were already some 250 *musei naturali* in Italy.[20]

Switzerland was the home of several collections of considerable historical importance. Most famous of these was that of Conrad Gesner (1516–65), successively Professor of Greek at Lausanne and of Physic and Natural History at Zürich. He was a prodigious writer on mineralogy, zoology, and botany, interests which were reflected in the composition of his natural history collection.[21] This collection was acquired on Gesner's death by Felix Platter of Basel (1536–1614), who added it to his already considerable cabinet of art, coins, and curiosities.[22] Basel also claims the earliest municipal museum in Europe, dating from 1671, when the city and the university put on display an important collection which they had jointly inherited from Basilius Amerbach, and which included drawings, paintings, sculptures, and medals. Part of this collection had formerly belonged to Amerbach's father and part to Erasmus. As early as 1578 Amerbach had built a special gallery to house the collection, to which a select number of the public were admitted.[23] By the middle of the seventeenth century the Zürich municipal library also possessed a collection of paintings, scientific instruments, and natural history specimens, gathered together in a cabinet of curiosities.[24]

North of the Alps the influence of the Hapsburgs was as important to the development of collecting as that of the Medicis was in Italy. Their contribution was, however, in the nature of example rather than in patronage, for several members of the imperial family founded collections which were to become models of their type.

The commonly used name for collections of this type was in German *Kunstkammer*, yet works of art as we understand the term (and indeed as it was understood by the Medicis) played only a minor role in them: the alternative terms, *Wunderkammer* and *Raritätenkammer*, more accurately described their character. Wherever paintings and sculpture did occur, they were to be found stored or catalogued along with other 'artificial rarities', and were frequently valued more for content than artistic excellence, particularly those concerning historical subjects. Only in the later seventeenth century was there a general move towards the establishment of specialized art collections.[25]

One of the most renowned collections was that of Archduke Ferdinand of Tirol (1529–95). Ferdinand acquired Schloss Ambras near Innsbruck from his brother, the Emperor Maximilian II, in 1563, and proceeded to fill it with a remarkable collection of rarities of

[19] Evelyn, *Diary*, 10 November 1644; ibid., 13 February 1645.

[20] Bazin 1967, p. 62.

[21] Murray 1904, pp. 24–5.

[22] Ibid., p. 97. The collection, which was dispersed in the eighteenth century, received a visit from John Ray in 1663. At this time it still contained 'a good collection of minerals, stones, metals, dried fish and other natural and artificial rarities . . . disposed in a good method, the names being set to each one' (Ray 1738, p. 85).

[23] Lapaire 1969, pp. 10–11.

[24] Ibid., p. 11.

[25] As, for example, at Dresden under Augustus the Strong (Menzhausen 1977, p. 12).

all kinds. The bulk of the collection was housed in eighteen pine cabinets. Most categories of exhibit found in other collections of the age were represented: there was an impressive array of gold and silver plate (including works by Cellini), bronzes, ironwork (including tools), coins, uncut and worked minerals, alabasters, corals, porcelain, glass, and ivory. One case contained a collection of musical instruments ranging from lutes and zithers to alpenhorns. Arms and armour filled another case. A further special feature of the Ambras collection was its woodcarving, representing one of the principal arts of the Tirol: the collection included an entire series of saints honoured by the Hapsburg house. There were also historical portraits representing emperors from the imperial Roman and German dynasties, the Hapsburgs themselves naturally featuring prominently. The ethnographic collection was well-provided with Far Eastern, African, and American material.[26] Elsewhere in Austria, Karl von Steirmark (d. 1590) had a collection of some importance at Graz. Musical instruments formed a significant element in his cabinet, which also contained a number of Mexican objects.[27]

At Munich, Duke Albrecht V of Bavaria (1528–79), brother-in-law of Ferdinand of Tirol, possessed a most impressive collection. It had been founded by his father, William IV, but was expanded by Albrecht to include some 3,500 items.[28] A patron of music and the arts, Albrecht centred his collection on aesthetics and on antiquities, including some 400 bronzes, mostly collected on a historical basis; hence the quality of his Roman imperial and other busts, for example, was of less concern to him than the completeness of the set. Scherer indeed noted that of almost 200 busts in Albrecht's collection, many were fakes or clumsy restorations, and the majority were misidentified.[29] As well as numerous coins, medals, and gems, which provided further sources of historical interest, the collection included weapons of Turkish and local manufacture, tools, utensils, and costumes. Albrecht's historical bent was again detectable in exhibits such as the costume and sword worn by Francis I when he was captured at Pavia, and other items belonging to the Winter King. Another personal obsession manifested itself in series of plaster casts of deformed limbs and paintings of dwarfs, human deformities, bearded women, and convicted criminals, the latter complimented by an inventory enumerating their crimes – one such person was said to have been wholly or partially responsible for the murder of 745 people.[30] Much of Albrecht's collection was lost in the sack of Munich by the Swedes in 1632.

Rudolf II (1552–1612) established at the Hradschin Palace in Prague one of the most impressive artistic centres of his time. As well as being an outstanding patron, Rudolf built up a truly remarkable collection which has frequently been likened to his own personality in its immense richness and lack of purposeful direction. In it he sought emotional and aesthetic gratification, rather than an expression of scientific order. Paintings predominated: he was said to have had some 800 pictures of high quality, probably the largest collection in northern Europe.[31] Sculpture also formed an important element. If an original work of art which took his fancy could not be bought,

[26] Von Schlosser 1908, pp. 35–72.
[27] Heikamp 1972, p. 8.
[28] Bazin 1967, p. 72.
[29] Scherer 1913, pp. 12–13.
[30] Ibid., p. 19.
[31] Händler 1933, p. 76; Evans 1973, pp. 176–83.

he would have it copied by skilled artists.[32] Curiosities of nature were to be found alongside those of art in the four vaulted rooms which housed the collection: misshapen and weird animals were strangely at home with instruments of magic, alchemy, and astrology, which formed another obsession of this most ambiguous of princes. During the first half of the seventeenth century the collection was very largely dispersed during a succession of disasters: in the calamities of the Thirty Years' War some pieces had to be sold off to meet expenses; fifteen wagon-loads of treasures were carried off to Munich by Maximilian of Bavaria; in 1631 the Saxon occupying forces sent fifty cart-loads to enhance the collections of the Elector in Dresden; and finally much of the remainder was seized by the Swedes in 1648.[33]

Apart from the Hapsburgs, many heads of principalities had their own splendid collections. Among the most important was that of Augustus of Saxony (reigned 1553–86). Augustus's *Kunstkammer* was founded at Dresden *c.* 1560, and by the time an inventory of its contents was drawn up in 1587 by his successor, Christian I, the list filled 317 double pages.[34] The originality and vision which led Augustus to this initiative were manifested throughout the collection. Many of its features were purely practical: implements, tools, scientific instruments, and books were richly represented and formed an important pool of resources for the scholars, scientists, and craftsmen who were at the forefront of Saxony's industrial expansion in the sixteenth century. Surgical instruments were displayed along with lists of sufferers cured with their aid; a cabinet in the form of a stag was provided on one side with an apothecary's chest containing medicaments derived from the stag, along with prescriptions for their use.[35] Protestant mistrust of the representational arts led to their neglect in the earliest Dresden collection and it was only around the middle of the seventeenth century that this aspect came to be developed, though even then exhibits were grouped along with those already mentioned, in traditional *Kunstkammer* style. At Dresden technical virtuosity was more highly prized than abstract aestheticism. Lathe-turned ivories and other pieces were produced to a standard which is hard to match even today. Micro-carving, particularly that carried out on nuts and fruit-stones, was cherished for the skill it expressed. As a result, the lathes, tools, and magnifying glasses associated with the production of these objects were equally venerated in the collection and frequently were themselves provided with ornately worked mounts. In the same manner as the Italian collectors venerated artistic objects, the technical wonders of the Dresden collection were invested with an almost mystical significance, gained from the belief that as expressions of complex mathematical principles they reflected something of the divine principles on which the entire universe depended.[36] Natural rarities were also represented in Augustus's museum: alongside unicorn and rhinoceros horns there was an impressive collection of minerals, including a collection of emeralds found occurring naturally in the Indies.[37] The whole collection of rarities was housed in a series of attic rooms above the Elector's living-quarters in the

[32] Von Schlosser 1908, p. 78.
[33] Ibid., pp. 78–82; Händler 1933, pp. 68–76.
[34] Menzhausen 1977, p. 12.
[35] Scherer 1913, pp. 23, 27.
[36] Dr J. Menzhausen, personal communication. I am grateful to Dr Menzhausen for discussion of this aspect of the Dresden *Kunstkammer*.
[37] *Zeitschrift für Museologie und Antiquitätenkunde* 2, no. 2 (1879), p. 9.

Dresdener Residenz Schloss. Under Augustus the Strong (reigned 1697–1733) the importance of the *Kunstkammer* was reduced in favour of a series of more specialized collections, particularly the famed 'Green Vaults' where masterpieces of applied art were displayed in a series of mirror-lined rooms. Fine arts were given their due prominence in separate galleries at this time. Large parts of the seventeenth-century collections of paintings, scientific instruments, and applied art can still be seen in Dresden today.

At Kassel the collection founded by Elector Wilhelm IV (1567–92), containing both natural and artificial rarities, attracted widespread interest. Among its admiring visitors were von Uffenbach, who particularly noted two stuffed human skins, one of them a most realistically preserved army deserter.[38] In the early years of the following century, by which time the collection had been inherited by Wilhelm's son, Moritz the Learned (1572–1632), the young Ole Worm (see p. 80) also visited it and may have been influenced by what he saw in the formation of his own collection in Copenhagen.

At Heidelberg the Elector Karl Ludwig (1632–80) founded a cabinet which he added to by purchases of coins and other antiquities from Italy.[39] John Ray was impressed both by the collection and by the Elector's understanding of it: on a visit to Heidelberg in 1663, he records that 'after dinner his highness was pleased to call us into his closet, and shew us many curiosities, among others . . . a purse made of Alumen plumosum . . . two unicorn horns each eight or ten foot long . . . an excellent and well digested collection of antient and modern coins and medals of all sorts, in which the Prince himself is very knowing'.[40] In 1685 Lorenz Beger, librarian and antiquary to the Heidelberg electors, published an account of the collection.[41] The same year saw the death of Karl II, who left the collection to the Elector of Brandenburg. Beger, who was charged with the task of delivering the collection to its new owner, was taken into employment by him as counsellor and librarian, with charge of the combined collection at Berlin.[42]

The earliest collections of the Electors of Brandenburg, amassed during the sixteenth century, were entirely lost during the period of the Thirty Years' War, together with the inventories of them drawn up in the early 1600s.[43] They were refounded in the seventeenth century under the Great Elector, Friedrich Wilhelm, (ruled 1640–88), perhaps with encouragement from the enthusiastic Johan Maurits of Nassau (see p. 78), who was appointed governor of Brandenburg in 1647. The collections contained a marked number of antiquities, gathered initially from the elector's own territories: Roman finds in particular came from Cleve, some perhaps as a result of excavations carried out by von Heimbach, employed there as official *antiquarius*.[44] They were further enlarged by purchase: the collection of Erasmus Seidel was acquired in 1642 and was later joined by twenty-two sculptures formerly belonging to Gerrit Reynst of Amsterdam (see p. 79), so that by the time a new inventory was made in 1672 the collection boasted sixty-two bronze statuettes, eighty-seven bronze vessels and utensils, ninety-five brooches, 100 gems, numerous vessels of pottery and glass, and other antiquities.[45] To these

[38] Von Uffenbach 1753–4, 1. 13.
[39] Murray 1904, p. 99.
[40] Ray 1738, p. 71.
[41] Beger 1685.
[42] Heres 1977, p. 97.
[43] For accounts of the early history of the Brandenburg collections see Heres 1977 and Hildebrand and Theuerkauff 1981.
[44] Heres 1977, p. 95.
[45] Ibid., p. 96.

were added in 1680 the collections of Hermann Ewich of Xanten.[46] The Elector also had a keen interest in ethnographic material: as Crown Prince he had visited the collection at Leiden (see pp. 78–9) and from there had sent his father some East Indian rarities. After his succession he employed the services of a Dutch army officer named Polemann, stationed in Batavia, to procure numerous weapons and other specimens, including Chinese lacquerwork, ivories, and porcelain.[47] In 1685, with the death of the Elector, the entire Heidelberg collection fell to the Brandenburgian Elector, together with its curator, Lorenz Beger. Finally, in 1698, the collection of the Roman antiquary Bellori was added as a crowning glory.[48] Under Beger's care a massive three-volume inventory was compiled, detailing not only the contents but also the disposition of the Duke's exhibits; it showed that a number of them were scattered around the living-quarters, while others were grouped in a sumptuous *Kunstkammer* (see Pl. CLXXXIII).[49] With its rehousing in three chambers on one of the upper floors of the Berliner Schloss in 1703, the collection reached a climax which was, unfortunately, to be short-lived, for after the accession of the 'Soldier King' (Friedrich Wilhelm I) in 1713, the collection was plundered as a source of revenue (as on one occasion when the best part of the gold medal collection was melted down), or of gifts, notably for Augustus the Strong who prudently preserved them at Dresden.[50]

At the close of the Thirty Years' War, ended by the Peace of Münster in 1648, a new collection was founded at Schleswig by Friedrich, third Duke of Gottorp (1597–1659). Much of the credit for its success is due to Adam Olearius (1603–71), appointed keeper of the ducal library and *Kunstkammer* in 1649. Olearius, a widely travelled Dutch mathematician and astronomer, added a great many ethnographic and other items to the collection, and in 1651 travelled to Holland to oversee the transfer to Schloss Gottorp of the collection of Paludanus, purchased by the Duke after the latter's death.[51] In addition to important collections of Eskimo material from Greenland, there were items from other regions including a necklace of animal teeth and claws from South America (cf. Nos. 14–15), and natural history specimens from South America and Africa: among these were horns of various animals, including bezoar, wild ox, and rhinoceros, and the antlers of elk. A catalogue was published by Olearius in 1666[52] and the collection was eventually annexed to the Danish royal *Kunstkammer* in the mid-eighteenth century.[53]

Elsewhere in Germany collections began to be formed by private citizens, important early examples being the Praun and Imhoff collections, both in Nürnberg.[54] Others had an academic basis, one of the most interesting being that founded by August Hermann Francke (1663–1727) at Halle.[55] Although it was begun only in the last decade of the seventeenth-century, the Francke collection preserved the essentially varied character of earlier German cabinets of rarities. This was at least partly assured by the way in which

[46] Ibid., p. 95.
[47] Scherer 1913, p. 36.
[48] Staatliche Museen zu Berlin, 1973.
[49] Heres 1977, p. 98.
[50] Ibid., pp. 105–6.
[51] Dam-Mikkelsen, in Dam-Mikkelsen and Lundbæk 1980, p. xx. On Paludanus see p. 79.
[52] Olearius 1666.
[53] Dam-Mikkelsen, in Dam-Mikkelsen and Lundbæk 1980, p. xxxiii.
[54] Scherer 1913, p. 41.
[55] Storz 1962; id. 1965.

the collection was built up: its principal contributors were missionaries, many of whom had trained under Francke at Halle and whose activities took them to all corners of the known world. The collection reflects this: for example, Malabar is represented by a distinct category of *res malabaricae*. The exotic ethnographic material which forms the bulk of this collection was complemented by objects of more local origin and by natural history specimens including minerals, shells, and animals, the latter either dried or preserved in spirits and including a number of deformed specimens.

In Holland the taste for collecting was pursued with no less vigour than in Germany. In Leiden was to be found one of the most dramatic and best-known collections of its day: this was the Kabinet van Anatomie en Rariteiten belonging to the medical faculty of the university.[56] It was housed in a lecture-hall in the form of an amphitheatre, the Theatrum Anatomicum, built within a former church, the Falibagijnenkerk, and completed in 1593.[57] An important element in this collection was formed by the series of skeletons, restored as in life and disposed about the lecture theatre itself (Pl. CLXXXIV).[58] In addition to various animals, ranging from a ferret to a horse, the rearticulated skeletons of a number of notorious criminals could be seen. These included the remains of a sheep-stealer from Haarlem and of a woman strangled for theft; more impressively, one could see 'The Sceleton of an Asse upon which sit's a Woman that Killed her Daughter' and also 'The Sceleton of a man, sitting upon an ox executed for Stealing of Cattle'.[59] Four human skins, including one of a 'Molacca Woman above 150 Yeares old' were also displayed here.[60] During the summer months, when the anatomy hall was open to the public, two skeletons formed a set-piece on the centre of the dissecting-table, symbolizing Adam and Eve on either side of the Tree of Knowledge. These exhibits were not merely of anatomical interest: they symbolized the transience of human life, a point emphasized by the pennants bearing moralizing inscriptions carried by several of them, while Adam and Eve alluded to the awful consequences of original sin.[61] Other human and animal remains were displayed on the beams above the theatre and in various chambers and cupboards in other parts of the building. Of particular interest were many specimens of natural history from China, Africa, India, and the Americas,[62] the latter mostly originating from the Brazilian expedition of Count Johan Maurits of Nassau.[63] Numerous ethnographic specimens on display included material from the Americas, the Far East, Africa, Scandinavia, and Russia.[64] Antiquities were also represented here, including a series of mummies and shawabtis from Egypt and Roman antiquities from Nijmegen.[65] Paintings included a series illustrating the Four Humours and various portraits including one of Rudolf II;[66] there were also exhibited

[56] A. Klasens, 'Universiteit, Universitaire Collecties, Musea' (MS of oration delivered to University of Leiden, 1970. University of Leiden Library, A 10 3206).

[57] Scheurleer 1975, p. 217.

[58] Such animated skeletons achieved widespread popularity following the publication of Vesalius's illustrated *Fabrica* (Heckscher 1958, n. 179). They also made an impact on contemporary painting, as in Salvator Rosa's *Humana Fragilitas* (Fitzwilliam Museum, Cambridge: Salerno 1963, p. 110, Tav. XV).

[59] Witkam 1980, p. 39.

[60] Ibid., p. 42.

[61] Scheurleer 1975, pp. 221–2.

[62] Barge 1934, p. 57.

[63] Whitehead 1979, pp. 430–1. Johan Maurits was Governor-General of Brazil for the period 1637–44.

[64] Witkam 1980, pp. 40–2.

[65] Schneider, in Rijksmuseum, Amsterdam, 1975, pp. 113–22.

[66] Barge 1934, pp. 43–4.

moralizing engravings alluding, like the skeletal exhibits, to the transience of life.[67] So popular did the anatomy school display become that successive editions of catalogues in a variety of languages were produced almost annually: over sixty editions are known, but the total number may have run into hundreds.[68]

A second museum in Leiden, situated in the Physic Garden, was visited by Dr Edward Brown in 1668, who found there 'many natural and artificial curiosities, and many sorts of optic glasses',[69] and later by Northleigh,[70] who describes and discusses several natural history specimens.

Older than both these Leiden collections was that which the physician Bernard Paludanus (Berent ten Broecke) (1550–1633) compiled in his native Enkhuizen. Paludanus had been a student at Padua and had travelled widely in the Levant and in Egypt. Some rarities in his collection originated in those travels, but others were acquired from travellers and merchants, most famous among whom was Jan Huygen van Linschoten, who worked as an agent of the Portuguese in India. From him Paludanus received examples of oriental writing-materials and other items.[71] Among the many visitors to Paludanus's cabinet was Duke Friedrich I of Württemberg (ruled 1593–1608). The Duke's secretary, Jakob Rathgeb, compiled a descriptive inventory of the collection during their visit in 1592 and eventually published an account of it.[72] From this we learn that it comprised some eighty-nine cabinets and chests of carefully identified minerals, plants, animals, and birds, together with arms, costumes, ivories, and other artificial rarities from China and from the East and West Indies.[73] Following Paludanus's death, part of his collection went to the anatomy school in Leiden,[74] but the bulk of it was bought for the collection at Schloss Gottorp.

Amsterdam was the home of a number of important private collections, no doubt encouraged by the many commercial links which developed during the sixteenth and seventeenth centuries between the Netherlands on the one hand and the Americas and East Indies on the other. The Reynst brothers for example were the sons of a wealthy shipowner who had made a fortune in trading with the Indies. The fame of their cabinet of rarities stemmed less from oriental objects, however, than from its incorporation of the collection of the Venetian doge, Vendramin.[75] Another well-known Amsterdam collection was amassed by Jacob Swammerdam (1606–78) and his son Jan (1637–80); the father was a druggist and the son a qualified physician, although ill health prevented him from practising.[76] From a sale catalogue prepared after the death of the younger Swammerdam we learn that the collection was composed approximately of one-third natural history specimens, one-third artificial curiosities, and one-third coins.[77] The

[67] Schleurleer 1975, pp. 223–4.

[68] Witkam 1980, p. vi and *passim*. See also descriptions by Evelyn (*Diary*, 28 August 1641) and Northleigh (1702, pp. 36–8).

[69] Brown 1677, p. 6.

[70] Northleigh 1702, pp. 31–6.

[71] Lach 1970, pp. 20–1.

[72] Rathgeb and Schickhart 1603; see also Lack 1970, pp. 20–1. The published account deals in detail only with natural curiosities, but a manuscript catalogue in the Royal Library, Copenhagen (Gl.k.S. 3467, 8) includes *artificiosa*: an account of this manuscript has recently been published by Dr H. D. Schepelern (1981).

[73] Hunger 1928, pp. 360–1.

[74] Paludanus had earlier been offered a professorship at Leiden on condition that he should bring with him his collection of rarities: see Hunger 1928, p. 360.

[75] Bazin 1967, p. 83. On Vendramin see Wittlin 1949, p. 83.

[76] Engel 1939, pp. 320–1. The elder Swammerdam is recorded as a benefactor of the Royal Society (Grew 1681, p. 5).

[77] Murray 1904, p. 111.

Indian curiosities of Matthys de Boer were sufficiently renowned to attract a visit from Cosimo de Medici in 1667.[78] By the end of the century there were in the region of sixty zoological cabinets alone in the Netherlands, some of which changed hands for large sums of money: after acquiring the cabinet of Albert Seba (1665–1736) in 1717, the Czar of Russia paid 30,000 florins for the anatomical and zoological collections of Frederik Ruysch (1638–1731).[79]

In Denmark two important collections eclipsed all others, namely those of Ole Worm and of the royal household in Copenhagen. Worm (1588–1654) has been justifiably compared in museological importance with Aldrovandi and Gesner.[80] His formal education included the study of philosophy, theology, and medicine at the universities of Marburg, Giessen, Strasbourg, and Basel. While in Basel, he may have seen Gesner's collection, by then in the possession of Felix Platter. More certain are his recorded visits to Ferrante Imperato in Naples in 1609 and to Paludanus in Enkhuizen in 1610.[81] During 1611 he spent six weeks at Kassel, where he became well acquainted with Moritz the Learned's *Kunstkammer*.[82] The collection which Worm eventually formed in Copenhagen (Pl. CLXXXV), where he became successively Professor of Latin and of Medicine, is of interest not only for its content but also for its utilization as a source of reference material in Worm's medical treatises and as a teaching aid.[83] It has been suggested that the foundation of the collection was rooted in an attempt to realign the basis of scholarship from a speculative to a practical and demonstrative basis, somewhat akin to English Baconian principles.[84] A summary catalogue of the collection, dated 1642, was followed by a more sumptuous volume published the year after Worm's death, which also contained an exposition of his museological theory.[85] From this catalogue we learn that the collection included fossils, plants of general as well as medicinal interest, animals (including sawfish, 'sea unicorns', and parts of mermaids), Egyptian and other antiquities,[86] and ethnographic material. Many additions came in response to the publication of the 1642 summary catalogue, while others were gifts from students, notably Icelanders.[87] The reputation of the collection was enormous: a contemporary source[88] recounts that 'many royal persons and envoys visiting Copenhagen ask to see the museum on account of its great fame and what it relates from foreign lands, and they wonder and marvel at what they see. As evidence of having seen it they testify with their own hand in a book remaining with him.' After Ole Worm's death his son Willum (1633–1704) appears to have had no ambition to maintain the collection on a private basis and therefore, under provision of the will, it passed to the royal cabinet.[89]

Although some interest in collecting had been manifested by earlier monarchs, credit

[78] Engel 1939, p. 259.

[79] Engel 1939, no. 727. One of Ruysch's macabre anatomical exhibits is reproduced by Whitehead (1971, fig. 35). Both collectors went on to build up important new cabinets after the sale.

[80] Schepelern 1971, p. 369.

[81] Ibid., p. 371.

[82] Ibid., pp. 371–2.

[83] Ibid., p. 367.

[84] Cf. ibid., p. 382; it seems, however, that Worm was unaware of Bacon's work.

[85] Worm 1655, *passim*.

[86] Worm also occupies an important place as the founder of antiquarian and runological studies in Denmark.

[87] Schepelern 1971, p. 376.

[88] Quoted by Dam-Mikkelsen in Dam-Mikkelsen and Lundbæk 1980, pp. xix–xx.

[89] Ibid., p. xxxiii.

for the foundation of the Danish royal *Kunstkammer* must go to Frederik III (1609–70).[90] Frederik's upbringing had been directed towards a career in the Church rather than on the throne; hence he absorbed more scholarship than the average monarch. He travelled in the Netherlands and in France from 1628 to 1630 and served as Archbishop of Bremen between 1634 and 1644, during which time he was exposed to the mainstreams of European taste in which collecting was now thoroughly fashionable. A further impetus came in 1645 when he was installed as governor of Schleswig-Holstein, just as his cousin, the third Duke of Gottorp, was planning his *Kunstkammer* at Schleswig. Within five years Frederik had acceded to the Danish throne and had begun his own collection which, by 1653, already occupied several rooms in the royal palace: a later inventory mentions that one room contained natural rarities, another art objects, and another guns; there were also cabinets of mathematical instruments, medals, East Indian objects, and architectural models. It quickly became overcrowded with acquisitions, notably the entire Worm collection which arrived in 1655, and was eventually transferred in the late 1670s to the upper floor of a new building, designed to house the collection along with a library and an arsenal. An illustrated catalogue was published in 1696,[91] and later inventories of the early eighteenth century demonstrate continuing expansion, culminating in the absorption of the Gottorp collection *c.*1750.

The interest taken by the French royal court in collecting exotic ethnographic material can be traced from the time of the three exploratory voyages to North America carried out between 1534 and 1541 by Jacques Cartier (1491–1557). Cartier brought back to François I not only tales of his discoveries but also physical evidence in the form of weapons, clothing, and even Indians.[92] The idea quickly developed that these 'nouvelletez' should be housed together, and subsequently they were placed under the control of the Cosmographer Royal, André Thévet (1502–90).[93] Thévet had himself already made a successful expedition to Brazil and was responsible for introducing to the collection a number of items from that area, including a wooden club and a feather cape. Towards the end of the century, Jean Moquet, apothecary to Henry IV, was placed in charge of a 'cabinet de singularitez' which was installed at the Tuileries, and in his dual capacity made several transatlantic voyages in search of both plants and rarities.[94] All the surviving material from these earlier collections was in turn transferred to the Cabinet du Jardin des Plantes Medicinales,[95] established in 1633 by Louis XIII, and there they remained for the entire seventeenth century, largely subordinated to the interests of the apothecaries whom the garden and the collection principally served.

Among the nobility were some who took a more positive interest in collecting. A remarkable collection was possessed by the Duke of Montmorency (1493–1567), and is well known from inventories compiled in 1556, 1560, and 1568.[96] Its composition reflected vividly the interests of its owner. In keeping with his distinguished military career, weapons were particularly well represented: they included English, Spanish, and

[90] This account of the Danish royal *Kunstkammer* is based on Dam-Mikkelsen in ibid., pp. xix–xxxiii.
[91] Jacobæo 1696, *passim*.
[92] Fardoulis 1979, pp. 16–19.
[93] Ibid., p. 17.
[94] Ibid., p. 18.
[95] Ibid., p. 19.
[96] Mirot 1920, *passim*.

Turkish bows; crossbows; English, German, and Turkish swords; pikes, halberds, and even Brazilian clubs. Similarly, there were many large diagrams and charts illustrating military formations, sieges, naval battles, and fortifications, and a large collection of maps. Montmorency had also a collection of paintings of kings, emperors, and other notables, and a magnificent library concerned with history, genealogy, heraldry, military matters, and navigation.

From the following century the collection of Gaston, Duke of Orleans (1608–60) may be singled out. His collection of coins and medals,[97] which eventually formed the basis of the Cabinet du Roi, was seen in 1644 by Evelyn,[98] who also admired the Duke's 'incomparable collection' of shells and agates. On Evelyn's authority we have it that the Duke was very knowledgeable not only in medals but also in plants, so that 'nothing of that kind escapes him'. This latter interest led him to found a botanic garden at Blois as a compliment to his natural history collections, which were eventually bought in 1660 by Colbert and which were to form the foundation of the Cabinet d'Histoire Naturelle.[99]

Among the earliest of the French bourgeois collections was that of Bernard Palissy (1510–90), the Huguenot potter and philosopher.[100] As well as enamels and pottery, in which he was a craftsman and innovator (see Nos. 214–16), Palissy's collection included by *c.*1575 a wide range of natural history specimens on which he partly based his philosophical views. His large shell-collection contained foreign as well as local varieties, and fossils were also richly represented. One of Palissy's particular interests was petrifaction, the basis of which he discussed: no doubt his interest was fuelled by the tales he records of whole companies of men and animals and even entire villages turned to stone.[101]

Petrifactions were also well represented in the cabinet of Jean Savaron (1566–1622), including a snail, an egg, a mushroom, several nuts and fragments of wood, and an antique salt-cellar with the salt still in it.[102] More important, however, were his collections of medals in bronze and precious metals: over 7,000 are mentioned,[103] representing kings, emperors, popes, consuls, and other historic persons.

The most considerable French collector of the early seventeenth century was undoubtedly Nicolas-Claude Fabri de Peiresc (1580–1637), a councillor in the parliament of Aix-en-Provence and an authority on natural history, astronomy, antiquities, numismatics, and linguistics.[104] He maintained agents in Asia, Africa, and the Americas, who kept him supplied with a stream of fresh material. One of these, named Samson, acquired a collection of classical statuary which would have formed the crowning glory of Peiresc's collection had it not gone astray at Smyrna, eventually to be purchased there for the Earl of Arundel (see p. 84).[105] From another agent, a Franciscan friar who was dispatched on two occasions to the East, came large numbers of manuscripts, coins, antiquities, and natural history specimens.[106] Indeed it was said that hardly a ship entered a French port without some strange animals, exotic plants, antique

[97] Murray 1904, pp. 91–2.
[98] Evelyn, *Diary*, 1 April 1644.
[99] Murray 1904, p. 92.
[100] Morley 1852, pp. 86–7; Murray 1904, p. 90.
[101] Morley 1852, pp. 175–6.
[102] Vernière 1892, pp. 60–2.
[103] Ibid., p. 62.
[104] Bonnaffé 1884, pp. 245–7; Bazin 1967, p. 87.
[105] Bonnaffé 1884, p. 245.
[106] Murray 1904, p. 91.

sculptures, inscriptions, manuscripts in Coptic, Arabic, Hebrew, or Chinese, or fragments of antiquity unearthed from the Bosphoros or the Peloponnese, which was not destined for Peiresc.[107] Surrounded by these treasures in his mansion at Aix, which also contained a remarkable library and an observatory, Peiresc carried on a correspondence with leading artists and scholars, including Rubens, William Camden, and Sir Robert Cotton.

Peiresc's contemporary, Paul Contant (*c.*1572–1632), combined a professional interest as an apothecary with a taste for natural and artificial rarities which led to his founding a botanic garden with a cabinet of natural history in his native Poitiers. A catalogue of this collection was published with the title of *Le Jardin et Cabinet Poétique de Paul Contant*,[108] but its somewhat fanciful character belies the seriousness of Contant's pursuits, which took him on several extended journeys through France, Germany, and Italy, visiting established cabinets and building up his own. In the process he acquired a number of zoological specimens including a sawfish, a swordfish, and an armadillo, together with several deformed specimens and others of fabulous nature such as a dragon and a remora (see p. 93). The Contant collection was not merely of natural history, however, including also much ethnographic material such as clothing, weapons, and a canoe, the latter eulogized in the catalogue.[109]

Pierre Borel (1620–71) of Castres also deserves attention, not only for his natural history collection (which included relics of giants and unicorns, rare herbs such as tea, and also powder to turn water into wine), but also for the list of over 200 contemporary cabinets which he published in his catalogue.[110] In addition to the location of each cabinet, together with the name of its owner, this guide gives some instances of particular specializations: hence under Paris are listed collections famed for antiques (those of the King and the Duke of Orleans), antiquities (M. Gau), flowers and shells (including that of M. Robin, surgeon), plants (including that of the three Messieurs de Morin)[111] and some sixteen others, mostly specializing in painting and ranging from 'le petit patissier vis à vis de S. Germain' to the abbots of Saint Ambroise and Lumagne, and M. Feydeau, canon of Notre Dame.

An important collection founded with predominantly academic aims towards the end of the seventeenth century was housed in the library of the abbey of Saint Geneviève. In the preface to a catalogue of this collection published in 1692, its creator, Father Claude du Molinet, explains that he strove to collect and to exhibit only items which would be of value in the study of the sciences: astronomy, mathematics, and, above all, history, whether natural, ancient, or modern.[112] The collection quickly grew to an impressive size, helped by the fact that it incorporated the bulk of the former Peiresc collection. Facing the entrance to the Sainte Geneviève collection was an alcove containing examples of foreign clothing and weapons, principally Persian, Indian, and American, above which were three tiers of urns, figures, lamps, and other antiquities (Pl. CLXXXVI). By the alcove were two cupboards with shelves full of exotic birds, animals,

[107] Bonnaffé 1884, p. 245, quoting Naudé.
[108] Contant 1609.
[109] Ibid., pp. 68–9.
[110] Borel 1649, pp. 124–31.
[111] Cf. vol. 2, p. 132, n. 3 of de Beer's edition of Evelyn's *Diary*.
[112] Du Molinet 1692, preface.

and petrifactions, together with ornaments and footwear from various countries; above were a further two shelves displaying Chinese vases and figures, and various sorts of coral. Other cabinets disposed about the gallery held respectively large numbers of medals, coins, weights and measures, scientific instruments, intaglios, deities, and various other antiquities, while rare animals, birds, and fish stood on and under cupboards. Around the walls were portraits of kings of France. Lister found plenty to admire there during a visit in 1698,[113] though nothing pleased him more than the opportunity of seeing what remained of Peiresc's collection. By this time there were many cabinets in Paris to attract the visiting savant: Lister particularly mentions those of Boucot, Morin, Butterfield, and Tournefort;[114] the latter is also singled out for mention by Brice, along with the natural history cabinet of the brothers Geoffroy.[115] Further information on these and other collectors in seventeenth-century France is given by Bonnaffée.[116]

Seventeenth-century British cabinets of rarities were almost exclusively in the hands of the wealthy middle classes or of academic institutions. There seems to have been little taste for them among the nobility, who were essentially collectors of fine art. A royal coin-cabinet was formed in 1609–11, however, under the influence of Sir Robert Cotton (whose own interests were more particularly centred on manuscripts and inscriptions),[117] and Charles I acquired in 1627 the entire Gonzaga cabinet of Mantua, through the intervention of Daniel Nys, a Flemish dealer in Venice.[118] Some part, at least, of Hubert's collection is said originally to have belonged to Charles I.[119] On Lister's authority we know that Charles II received 'many curious presents . . . (as one of shells from the states of Holland many of which I have seen in other hands) but he suffered them all to be dissipated and lost'.[120] Thomas Howard, second Earl of Arundel (1586–1646), dubbed by Horace Walpole the 'Father of Vertu in England', is remembered for his outstanding collections of statuary, engraved gems, paintings, and manuscripts, but showed no recorded interest in rarities. The Duke of Buckingham, one of the foremost arbiters of fashion of his day, was again not primarily interested in this aspect of collecting, although the appeal for specimens written on his behalf by the elder Tradescant (see pp. 19–20), three years before Buckingham's death, implies at least a nascent interest.[121]

As outlined above, the Tradescants' museum was by no means the earliest in London, although it was for a time the best known. A catalogue to another collection of somewhat similar character appeared within a few years of the publication of *Musæum Tradescantianum* and shortly after the death of the younger Tradescant.[122] This gave 'The names of the Rarities that are to be seen at that place formerly called the Music House, near the West End of St Pauls; You may see every afternoon that which hath been seen by those that are admirers of God's works in Nature, with other things that hath been seen by Emperours, Empresses, Kings and Queens and many other sovereign

[113] Lister 1699, pp. 121–3.
[114] Ibid., pp. 57–63, 77, 80, 130.
[115] Brice 1752, pp. 163–4, 381–2.
[116] Bonnaffée 1884, *passim*.
[117] Piggott 1976, p. 12.
[118] Bazin 1967, p. 83.
[119] Murray 1904, p. 127, n. 2.
[120] Lister 1699, p. 58. Lister was at the time describing the collection of Boucot, which contained 'an Hippocampus about 4 inches long; it was given him by my Lady Portsmouth, possibly out of King Charles's collection'.
[121] The cabinet of 'Monsieur le Duc de Bouckingan', listed by Borel (1649, p. 128) was presumably that of the second Duke (1627–87).
[122] Hubert n.d., p. 1: an undated (?earlier) edition of Hubert 1664.

princes.' The collection was quite clearly open to the public, for the catalogue goes on: 'the Gentlemen of these Rarities can show thousands of other rarities of Nature besides the things aforementioned, to those that are more curious, and will be at some more charge: on Mondays & Thursdayes things of the sea; Tuesdays and Fridays things of the land; Wednesday and Saturdays things of sea land and air'. Private parties and foreign ambassadors were catered for 'in three or four tongues'.[123] This collection belonged to one Robert Hubert, alias Forges, and was amassed by him, in his own words, 'with great industry, cost and thirty years travel in foreign countries'.[124] The varied exhibits included a 'sea morce of Greeneland [which] does sleep hanging on the Rocks by the great teeth of the upper jaw', a 'king crab of the Moluccos Island', two sorts of armadillo, and 'a piece of oaken wood turned into jasper . . . that a cardinal had in Rome for a great rarity'. The list of benefactors to the museum is even more astonishing than its contents, including Charles I, Charles II, several members of ruling Scandinavian and German families (some of them, like the Elector of Saxony and the Duke of Holstein, with cabinets of their own), the Duke of Orleans, and Monsieur de Believre, 'Great President of France', university professors from Strasbourg, Heidelberg, Prague, and Utrecht, and physicians in Hamburg, Nürnberg and Augsburg. Among the other names are two which figure among the Tradescants' benefactors: Sir Thomas Roe and Mr Povey, 'Treasurer to His Royal Highnesse the Duke of Yorke'. Not mentioned in this list but credited in the text with former ownership of certain specimens are James I, the King of France, Johan Maurits of Nassau, the Duke of Florence, and Cardinal Richelieu. Clearly Hubert well understood the inherent appeal vested in his collection by its aristocratic associations. Another of Hubert's benefactors, 'Esquire Courtine, a lover of vertue and Ingenuity', was a West Indies merchant with an important cabinet of his own.[125] His son, William Courten (1642–1702), who also adopted the alias Charleton, inherited his debts as well as his collection and as a result was forced to leave the country. For some twenty-five years Courten travelled around Europe on what has been described as 'in effect one long collecting expedition', before returning to England under his assumed name around 1684.[126] His rarities, installed in ten rooms at the Temple, attracted the attention and admiration of scholars as well as society: Ray took a week in 1687 to examine this 'repository of rare and select objects of natural history and art so curiously and elegantly arranged and preserved that you could hardly find the like in all Europe';[127] Evelyn found it in 1690 'one of the most perfect assemblys of rarities that can be anywhere seene';[128] Thoresby judged it 'perhaps the most noble collection of natural and artificial curiosities, of ancient and modern coins and medals, that any private person in the world enjoys . . . there is, I think, the greatest variety of insects and animals, corals, shells, petrifactions, &c. that ever I beheld'.[129] The fact that Thoresby's enjoyment of the collection was interrupted by a visit from the Countess of Pembroke and other ladies from

[123] Ibid., pp. 25–7.

[124] Ibid., p. 27.

[125] Altick 1978, p. 14. He appears also to have been a benefactor to the Tradescant museum (see p. 39).

[126] Ibid.

[127] Raven 1950, p. 229.

[128] Evelyn, *Diary*, 16 December 1686; ibid., 11 March 1690.

[129] Hunter 1830, pt. 1, p. 299. Thoresby valued the collection at some £7,000–£8,000. Courteen eventually bequeathed his collection to Sloane, but also gave natural history specimens to the Ashmolean (see Microfiche 1).

the court is evidence that the collection's appeal extended far beyond narrow specialist circles.[130]

Many less-illustrious cabinets had by now been built up in London, each with a flavour of its own. James Petiver (1663–1718), a wealthy apothecary of Aldersgate, had a particular interest in botany, entomology, and zoology: his collection was augmented by many contacts he maintained in the East and West Indies. In an appeal somewhat akin to that issued by Tradescant, Petiver issued the following statement: 'I humbly entreat that all practitioners in Physick, Sea-Surgeons or other curious persons, who travel into foreign countries, will be pleased to make collections for me of whatever plants, shells, insects & c they shall meet with, preserving them according to directions that I have made so easie as the meanest capacity is able to perform, the which I am ready to give to such as shall desire them'.[131] These 'directions' showed how specimens could be preserved in 'Rack, Rum or brandy'.[132] Petiver was judged to have 'taken great pains to gather together the productions of nature in England, and by his correspondents all over the world procured . . . a greater quantity than any man before him'.[133] Unfortunately, 'he did not take equal care to keep them, but put them into heaps, with sometimes small labels of paper, where they were many of them injured by dust, insects, rain, & c.'[134] Both Petiver (described as 'wretched both in looks and actions') and his collection aroused the displeasure of von Uffenbach: 'Everything is kept in true English fashion in prodigious confusion in one wretched cabinet and in boxes . . . He offers all foreigners who come to him a sample of his collection; but he takes care to ask a vast sum for it, so I declined with thanks'.[135] A series of catalogues of the Petiver collection was eventually published between 1695 and 1717.[136]

The interests of another apothecary and collector, John Conyers, who had premises in Shoe Lane, were different in nature. He was described by Aubrey as possessing 'a world of Antique curiosities' found during excavations in the Ruines of London.[137] He is known to have made records of Roman and other finds made in digging the Fleet ditch and to have observed kilns found under the north transept of St. Paul's, producing drawings of the pottery and descriptions of the stamps encountered.[138] His collections, built up over some thirty years,[139] were reorganized in 1691 and a proposal made to open them 'to such as shall be curious to see them'. Having had a somewhat equivocal judgement passed on them by the Athenian Society, however, Conyers appears to have sold them about two years later.[140]

Part of the Conyers cabinet was bought by Dr John Woodward (1665–1728). Woodward's interests were primarily in minerals, fossils, and shells, his collections of which were ranked among the very best in England. He published a scholarly account of English and foreign fossils and made a particular study of petrifaction. Roman and other antiquities were also represented in his collection. One of these items, an iron shield which

[130] A point noted by Altick (1978, pp. 14–15).
[131] Brooks 1954, pp. 180–1.
[132] Whitehead 1971, p. 52.
[133] Brooks 1954, pp. 179–80.
[134] Ibid.
[135] Von Uffenbach 1753–4, 2. 583; Quarrell and Marc 1934, pp. 126–7.
[136] Petiver 1695–1703; id. 1716–17.
[137] Bod. Lib. MS Top. Gen. c24, f. 244^{v}, quoted in Munby 1977, p. 420.
[138] Ibid.
[139] Murray 1904, p. 135.
[140] Ibid., pp. 134–6.

had previously belonged to Conyers, created a notable controversy among antiquaries who were unable to agree about its age; it brought scorn upon Woodward from many (justified) sceptics, notably Pope.[141]

One of Woodward's contemporaries, Sir Hans Sloane (1660–1753) was to set new standards in amassing what ultimately became the foundation collection of the British Museum. His combination of scientific ability and considerable wealth enabled him to form a collection of some 100,000 specimens,[142] including some 32,000 coins and medals, and 12,500 botanical specimens, in addition to material from the collections of Courten (left to Sloane in a bequest) and Petiver (for which he paid £4,000).[143]

By this time, however, the first institutional museum had already been founded in London under the auspices of the Royal Society, which had gained its charter in 1662. Within a few years of this date the Society's 'Repository' of natural and artificial rarities was being formed at Gresham College, taking the form of 'a theatrical building resembling that of Leyden in Holland'.[144] The acquisition in 1665 of a ready-made collection, purchased for £100 from a certain Mr Hubbard, soon put it on a firm footing, while donations from individual members ensured its continuing growth. Murray recognized that 'Mr Hubbard' was almost certainly Robert Hubert (see pp. 84–5) and pointed out several points of coincidence between Hubert's catalogue and that of the Royal Society collection published in 1681 by Nehemiah Grew (1628–1711), a botanist and physiologist.[145] The performance of scientific experiments and the compiling of rarity cabinets were twin pursuits which appealed equally to the early members of the Royal Society, interests which were reflected in the character of the museum. Grew's catalogue combines descriptions of 'artificial matters' with those of animals, plants, and minerals, encompassing 'not only things strange and rare but the most known and common amongst us', preferring 'clear and full descriptions' to 'mystick, mythologick and Hieroglyphick matters'.[146] Despite this bold declaration of intent in the catalogue, the basis of the collection itself could hardly be described as rigorous: Ned Ward found it a 'Ware-house of . . . Antiquated Trumpery . . . Rusty Reliques and Philosophical Toys', incorporating 'an Aviary of dead Birds . . . sundry sorts of serpents . . . Abortives put up in Pickle, and abundance of other Memorandums of Mortality'.[147] Grew's catalogue had led von Uffenbach to expect much from the Repository, but he was to be disappointed: 'It consists', he writes, 'of what appear to be two long narrow chambers, where lie the finest instruments and other articles (which Grew describes), not only in no sort of order or tidiness but covered with dust, filth, and coal-smoke, and many of them broken and utterly ruined. If one inquires after anything, the operator who shows strangers round . . . will usually say: "A rogue had it stolen away," or he will show you pieces of it, saying: "It is corrupted or broken".'[148] Even allowing for von Uffenbach's customarily jaundiced eye, one must agree with Altick that 'it is doubtful if the nation gained much when the decrepit collection was presented to the British Museum in 1779'.[149]

[141] Ibid., pp. 120–2; Levine 1977, *passim*.
[142] Whitehead 1971, p. 53.
[143] Altick 1978, p. 15.
[144] Gunther 1925, p. 286.
[145] Murray 1904, pp. 131–3.
[146] Grew 1681, preface.
[147] Ward 1699, pt. 3, pp. 9–10.
[148] Von Uffenbach 1753–4, 2. 545–6; Quarrell and Marc 1934, p. 98.
[149] Altick 1978, p. 14.

Outside London other museums had developed both in private and in institutional hands, most notably in Oxford. In addition to the Ashmolean Museum, there were collections belonging to the Anatomy School, the Bodleian Library, and St. John's College. Evelyn records a visit to the Bodleian in 1654 where, in addition to many rare books and manuscripts, he was shown a number of rarities. 'In the Closset of the Tower', he writes, 'they shew Josephs parti colourd Coate, a Muscovian Ladys Whip, some Indian Weapons, Urnes, Lamps: &c: but the rarest, is the Whole Alcoran written in one large sheete of Calico, which is made up in a Priests Vesture or Cape after the Turkish, & the Arabic Character so exquisitely written, as no printed letter comes neere it: Also a rolle of Magical Charmes or Periapta, divers Talismans, some Medails'.[150] Progressing to the 'Physick Or Anatomie Schole', which occupied part of the first floor of the Bodleian quadrangle, Evelyn found it 'adorn'd with some rarities of natural things; but nothing extraordinary, save the Skin of a Jaccal, a rarely Colour'd Jacatroo, or prodigious large Parot, two humming birds, not much bigger than our humble bee'. On an earlier visit, in 1638, Stirn was shown West Indian and Egyptian idols, a portrait of Queen Elizabeth in featherwork, 'a piece of the salt pillar' (which may have been intended for Lot's wife), and a coat attributed to Joseph 'which he wore when he was sold to the Egyptians'.[151] The French traveller Monconys also left a record of his visit to the Anatomy School in 1663:

there are several sorts of animals, fishes, birds and other curiosities; but there was nothing that I had not seen in thousands of places. There is a skin of a man, and one of a woman, and they show a small cube of wood, in which, though no joint is perceptible, there is a thick copper ring, without sign of soldering, passed through the middle of one of the faces . . . In a small room they showed us a skin robe of many colours, so they have to say that it was Joseph's. And there too we saw a black marble in the middle of which was a lizard, formed so perfectly that it appears to be petrified: but I believe it to be merely a *lusus naturae*, that has shaped the animal in white marble, unless it be a drawing 'par une filament'.[152]

Further accounts of the Anatomy School collection and lists of its exhibits (including human anatomy, zoology, botany, mineralogy, and artificial rarities) are reproduced by Gunther.[153] At St. John's College Evelyn saw 'the Library, & the 2 Skeletons, which are finely clense'd, & put together: observable are also the store of Mathematical Instruments, all of them chiefly given by the late A: Bishop Lawd, who built here an handsome Quadrangle'.[154] One personal collection at Oxford which attracted Evelyn's attention was 'that most obliging & universaly Curious Dr. Wilkins's, at Waddum', which included:

Transparent Apiaries . . . adorn'd with variety of Dials, little Statues, Vanes &c . . . He had also contrivd an hollow Statue which gave a Voice, & utterd words, by a long & conceald pipe which went to its mouth . . . He had above in his Gallery & Lodgings variety of Shadows, Dyals, Perspe[c]tives . . . & many other artif[i]cial, mathematical, Magical curiosities: A Way-Wiser, a

[150] Evelyn, *Diary*, 10–11 July 1654.
[151] Hager 1887, p. 452.
[152] De Monconys 1666, 2. 52; translated in Gunther 1925, p. 254. The wooden cube incorporating the copper ring is illustrated in Gunther 1925, p. 277.
[153] Ibid., pp. 252–79.
[154] Evelyn, *Diary*, 12 July 1654.

Thermometer; a Monstrous Magnes, Conic and other Sections, a Balance on a demie circle, most of them of his owne & that prodigious young Scholar, Mr. Chr: Wren.[155]

John Bargrave (1610–80), a canon of Canterbury Cathedral, built up a collection which is of particular interest here on account of its similar character to the Tradescant collection. Included in Bargrave's collection were, for example, 'native Viginian money' including 'Ranoke' and 'Wapenpeake', and other North American material such as a 'cravat', a girdle, and a small pair of gaiters made of porcupine quills, 'sent to me by Mr Tymothy Couley, now a merchant in London, by way of gratuity, he being one of the 162 slaves I redeemed from Argeers when I went thither by King Charles 2 commission.'[156] As well as these slaves, Bargrave acquired from Algiers a pair of 'red leather buskins' and a 'miniature painting of the King of Argeers'. His varied cabinet included other categories of material: classical antiquities and other items from Italy; natural rarities such as a petrified toadstool, 'a large sea-horse's tooth, said to be good against poison, next to an unicorn's horn', an 'eagle stone, propitious for childbirth, and the finger of a Frenchman',[157] artificial rarities such as a cutaway model of a human eye, steel cylinders for optical experiments and for viewing *trompe l'œil* pictures, other optical devices, and manuscripts including 'A fair book in folio with effigies of Alexander 7th and all the College of Cardinals'.[158]

In Norwich could be seen the cabinet of Sir Thomas Browne (1605–82), antiquary, natural historian, and philosopher. Visiting Norwich in 1671, Evelyn found Browne's house and garden 'a Paradise & Cabinet of raritics, & that of the best collection, especially Medails, books, Plants, natural things'.[159] It has been suggested that Browne's whimsical *Musaeum Clausum*, published in 1684 but composed at an earlier date, may have owed its inspiration to the *Musæum Tradescantianum* of 1656.[160]

Ralph Thoresby (1658–1725) of Leeds was an assiduous collector whose cabinet attracted the attention, the covetousness, indeed, of many of his contemporaries, not least at Oxford (see p. 60). It included numerous coins and medals, manuscripts and autographs, zoological, botanical, and mineral specimens, and a wide range of British and foreign artificial curiosities. One of the latter was a 'Tomahaw, or fighting Club from North-Carolina: it is a yellowish hard Wood like Box, above two Foot long, tapering from a little more than an Inch broad at the Handle, to three Inches at the other End, where it terminates in a Knob or Ball eight Inches round: Upon one side is drawn an odd Figure supposed to represent one of the Idols whose assistance they implore'; it was brought to Thoresby by the Attorney-General Christopher Gale.[161] Under the category of 'Humane Rarities' were to be found such diverse specimens as one of the horny excresences which grew on the thumbs, fingers, and toes of one Nathaniel Hulme of

[155] Ibid., 13 July 1654.

[156] Robertson 1867, pp. 137–40. Bargrave (who was a contemporary of the younger Tradescant at the King's School, Canterbury) undertook his well-known mission to Algiers in 1662.

[157] Bargrave records that while in France he had been offered the entire body of a child by the Franciscans, but refused it, being then 'outward bound for the grand tour of France' (Robertson 1867, p. 131).

[158] Ibid., pp. 117–39.

[159] Evelyn, *Diary*, 18 October 1671.

[160] Heckscher 1958, n. 191.

[161] Thoresby 1715, p. 472.

Bolton, and 'a pugill of the dust (unmix'd with earth) of a noble Countess, not easily distinguished from common dust and ashes'.[162]

Three Scottish collectors may serve to complete this brief and necessarily selective survey. Sir James Balfour (1600–57), having compiled a library of excellent quality and antiquarian flavour, and appreciating (in the words of his biographer) that 'things and events involved in obscurity are often illustrated by ancient coins, rings, collars, bracelets, seals, and other remains of a former age, he carefully collected this precious antiquarian material, and arranged it in cabinets as a supplement to his library'.[163] His younger brother, Sir Andrew Balfour (1630–94), returned to Scotland about 1667 after some fifteen years of foreign travel, bringing with him a collection in which were represented costumes and weapons, natural history, mathematical and surgical instruments, and a cabinet of *materia medica*, which he continued to augment in later years.[164] After Balfour's death his collection passed to his countryman, Sir Robert Sibbald (1641–1722), who had already built up a cabinet of his own and had published the first systematic natural history of Scotland. Murray recounts that in 1697 Sibbald presented Balfour's collection to the University of Edinburgh, adding numerous specimens of his own and publishing a handbook to the combined display for the use of students, although it was his hope that it would be open to the public at large.[165] Visiting it within a few years of its opening, Defoe found that the museum contained 'a vast Treasure of Curiosities of Art and Nature, domestic and foreign, from almost all Parts of the World; and is greatly valued by the Virtuosoes, containing some Rarities that are not to be found, either in those of the Royal Society at London, or the Ashmolean at Oxford'.[166] Sadly, it failed to survive to form the basis of a permanent collection, and within fifty years had been almost entirely dissipated.[167]

Plainly the collection built up at Lambeth by the Tradescants was by no means unique; it was, rather, a characteristic product of its age, similar to many other cabinets of rarities to be found over a large part of the European continent. The elder Tradescant's methods of acquisition – by personal contact with ambassadors and overseas merchants,[168] by written appeal (in the name of the Duke of Buckingham) and by foreign travel on his own part – can all be paralleled elsewhere. Missionary priests figure prominently in the formation of other collections such as Kircher's in Rome and Francke's at Halle; Evelyn records the passage through London of a vast collection of rarities 'as in my life I have not seene', collected by Jesuits in China and Japan and destined for display in Paris.[169] Shops sprang up in the course of the seventeenth century to cater for this increasing appetite: Borel mentions a 'Magasin des Indes' in Lisbon,[170] while Evelyn records purchases made in Pozzuoli, and in the Piazza Navona in Rome, the latter thronged with merchants selling antiquities, medals, and other curiosities;[171] other purchases were made at shops selling shells, Indian artefacts, and maps in

[162] Ibid., p. 431.
[163] Sibbald, quoted in Murray 1904, p. 151.
[164] Ibid., pp. 151–2.
[165] Ibid., pp. 153–5.
[166] Defoe 1748, pp. 79–80.
[167] Murray 1904, p. 155.
[168] Witness his contacts with, for example, Sir Peter Wyche and Sir Thomas Roe, and the letter from Virginia referred to on p. 12, n. 82.
[169] Evelyn, *Diary*, 22 June 1664.
[170] Borel 1649, p. 128.
[171] Evelyn, *Diary*, *c.*8 February 1645; ibid., 20 February 1645.

Amsterdam, while natural and artificial rarities, particularly those made of tortoise-shell and ivory, were freely available in Dieppe.[172] One such shop was to be found in Paris, called 'Noahs-Arke, where are to be had for mony all the Curiosities naturall or artificial imaginable, Indian or Europan, for luxury or Use, as Cabinets, Shells, Ivorys, Purselan, Dried fishes, rare Insects, Birds, Pictures, and a thousand exotic extravagances'.[173] By the beginning of the eighteenth century at the latest there were similar merchants in London: von Uffenbach was pleasantly surprised to find one at Charing Cross in 1710, who displayed 'an extremely elegant cabinet of coins . . . a superabundance of statues', had two rooms full of antiquities, and 'as many as 200 to 250 of all kinds of statuettes, idols, "utensilibus" and other such things'.[174] Gifts and exchanges are known to have taken place between collectors of like tastes: letters survive which were written by Francke in the hope of acquiring unwanted duplicate specimens from other collectors,[175] the generosity of the Medicis in distributing South American and other rarities amongst some of the European ducal courts is well recorded,[176] while Friedrich Wilhelm's eagerness to bestow gifts from the Berlin *Kunstkammer* on Augustus the Strong of Saxony verged on the prodigal.[177] Occasionally entire cabinets would change hands for cash, as when Petiver's was sold to Sloane or when Peter the Great bought outright the cabinets of Seba and Ruysch. Other instances have been given of collections which, like that of the Tradescants, were bequeathed more or less intact on the death of their creators, as when the Heidelberg collection passed to the Elector of Brandenburg, when Sloane acquired Courten's cabinet, and when Sibbald inherited the collection of Sir Andrew Balfour. Yet others were dispersed or assembled in time of war, as witnessed by the destruction of Rudolf II's cabinet or the annexation of the Gottorp collection by the Danish crown. Hence there was great mobility of collectable material between different individuals and different centres, which helps to account for the traits in common which can be traced through several collections. Certain examples may be drawn from the various categories of material in the Tradescant collection to illustrate this point.

The Tradescants' collection of birds was impressively widespread in geographical origin, ranging from a penguin, through Brazilian, Virginian, and other New World species, to peacock, cassowary, birds of paradise, and northerly specimens such as a 'Gorara'[178] or Colymbus' from Muscovy and a soland goose (gannet) from Scotland. Perhaps the best-known exhibit was the 'Dodar, from the Island of Mauritius', a species also represented by a leg in Hubert's collection and by more complete specimens in the Anatomy School at Oxford, at Leiden, and at Gottorp.[179] More widely appreciated (and collected) were the 'Barnacles', of which the Tradescants had four sorts. Barnacle geese attracted the curiosity of collectors on account of the tradition, enshrined in their name,

[172] Ibid., *c.*21–4 August 1641; ibid., 21 March 1644. In describing the beak of a rhinoceros bird, seen in a collection at Delft, Ray (1738, p. 25) mentions that it would be worth twelve florins at Amsterdam.

[173] Ibid., 3 February 1644.

[174] Von Uffenbach 1753–4, 2. 464–5; Quarrell and Mare 1934, p. 37.

[175] Storz 1962, p. 195.

[176] Heikamp 1972, p. 11.

[177] Heres 1977, p. 106.

[178] Hamel (1854, p. 292) gives the Russian word 'Gagara'. This specimen could have been brought back from Russia by the elder Tradescant.

[179] For the London specimen see Hubert 1664, p. 9; the Royal Society's catalogue (Grew 1681, pp. 60–1) later records what is probably the same item. The Oxford dodo is mentioned by Gunther (1925, p. 360), that at Leiden by Ray (1678, 2. 153), and the Gottorp specimen (which, according to Hamel, originally belonged to Paludanus) by Olearius (1666, p. 23).

that they sprang from barnacle shells adhering to driftwood and trees rather than from eggs (Pl. CLXXX). As late as 1678 renewed credibility was given to this theory by Sir Robert Moray, President of the Royal Society, who claimed to have observed such shells, 'having within them little birds perfectly shap'd . . . making up a perfect Sea Fowl'.[180] Borel had the bill and wing of a barnacle in his collection, along with a piece of wood which had acted as host to the shells,[181] and the collection in the Physic Garden at Leiden also boasted 'Barnacles, a sorte of Geese sayd to grow in Scotland on trees'.[182]

The Tradescants' collection of animals compares favourably with any of its day in variety and in diversity of origin: Brazil,[183] Virginia, the West Indies, Greenland, Ireland, Cape Verde, 'Ginny' (West Africa), Arabia and India are all mentioned as sources. One further source, St. James's Park, is also of some interest: although the doe's head and horns from St. James's would have been from a native species, it may be noted that others (like the cassowary already mentioned, which 'dyed at S. James's, Westminster') may have been imported live to one or other of the zoos then well known in London[184] and been acquired after they had died there.

The 'Bucks head with one horn double branched' and the 'Rams head with an upright cloven horn' recorded in the Tradescant catalogue are gentle reflections of a taste which manifested itself in more gruesome form in several contemporary collections. It was perhaps in continental collections that the taste for *Misgebohrte* (deformed foetuses) was particularly prevalent: Schloss Ambras had its share of freakish and misshapen specimens, both in the form of foetuses and as subjects for paintings, such as a deer with four ears, giants, and *Haarmenschen*;[185] Albrecht V's penchant for pictures of freaks, criminals, and severed heads has already been mentioned, and the Munich collection also included plaster casts of deformed limbs.[186] The Francke collection at Halle had a number of such *Naturspielen* ('freaks of nature'), including one chicken with two beaks and four others each with four legs.[187] The taste for specimens of this sort extended beyond these Germanic collections and manifests itself also in the Danish royal collection,[188] and in the Borel collection at Castres.[189]

Swordfish, from which the Tradescants had several swords, were understandably popular on account of their appearance, as were the snouts of sawfish. The fact that the 'Unicornu marinum' is recorded among the fish in the Tradescant catalogue shows that the origin of the long tusks which had formerly commanded exceptional interest (and

[180] Quoted in Whitehead 1971, p. 51, n. 8.

[181] Borel 1649, p. 534: 'Le bois ou s'engendrent les Oyes d'Escosse, qui naissent de la pourriture des navires, l'aisle & le bec d'un de ces oyseaux'.

[182] Murray 1904, p. 32.

[183] Dr Peter Whitehead has observed (personal communication) that several of the Brazilian specimens listed in the Tradescant catalogue for which Markgraf is cited as the authority are identified with greater precision than the *Historia Naturalis Brasiliae* which he published with Piso in 1648 would have allowed. One possible explanation for this might be that the Tradescants acquired actual type specimens, duly identified, brought back by Markgraf following Johan Maurits of Nassau's governor-generalship of Brazil from 1637 to 1644 (see Whitehead 1979).

[184] Frederik, Duke of Württemberg, visiting London in 1592, saw a wolf and six lions and lionesses at the Tower, 'two of them upwards of a hundred years old' (Rye 1865, pp. 19–20). Paul Henzner visited the same zoo in 1598, recording one lion and three lionesses, a tiger, a lynx, a wolf, a porcupine, and an eagle (ibid., p. 297), and Stirn adds a leopard to the exhibits seen in 1638 (Hager 1887, p. 449).

[185] For further details and for a portrait of these hair-covered people, see Gamber and Beaufort-Spontin 1978, pp. 29, 48–9, Abb. 3–4.

[186] Von Uffenbach (1753–4, vol. 3, fig. 4) illustrates a cast of a deformed foot formerly preserved at Oxford.

[187] Franckesche Stiftung, Halle, MS Catalogue, p. 167, nos. 14–15.

[188] Jacobæo 1710, pp. 5–8.

[189] Borel 1649, p. 133: 'un chat à deux testes'.

fabulous prices) as unicorn horns were here recognized as coming from an aquatic species (the narwhal).[190] Another favourite exhibit represented here is the remora, a sucking fish (*Echeneis remora*) anciently believed to have the power to bring ships to a halt by attaching itself to the keel. Contant praises the properties of a specimen in his own 'Cabinet Poétique';[191] another is to be found in the catalogue of the Gottorp *Kunstkammer*, where its power to stop a ship is again alluded to;[192] and Platter makes the same observations concerning a specimen in Sir Walter Cope's collection.[193]

Under the heading of minerals (*Fossilia* in the text), the Tradescant catalogue lists a typically varied assortment of materials, including not only true fossil and other mineral specimens such as ammonites, belemnites, and various rock samples, but also rarities such as 'carbones ex Ætnâ'; two varieties (*orientalis* and *occidentalis*) of Bezoar stone, a calcareous concretion produced internally by the Bezoar goat (and other animals), greatly valued for antidotal or talismanic purposes; 'mummia', a resinous substance from mummies, also invested with medicinal powers;[194] and a selection of medicinal earths from various sources, usually made up into small cakes and sometimes, as in the case of the Lemnian earth listed in the catalogue, stamped with a device indicating the place of origin and sold under the name of *terra sigillata*.[195]

Among the artificial rarities are several which fall into well established categories occurring in other collections. Some are there by virtue of their association with historical persons: these include Edward the Confessor's gloves, Ann Boleyn's veil and gloves, Henry VIII's gloves, stirrups, hawk's hood, and dog-collar, a 'Trunion' of Captain Drake's ship, Count Mansfield's pole-axe, called Pussacon, the knife 'wherewith Hudson was killed in the North-West passage, or Hudson's Bay', and Little Jeffrey's boots and masking suit.[196] These may be compared with such items as Francis I's sword and various objects associated with the Winter King which were held in the Munich *Kunstkammer*,[197] Maximilian I's lathe which was preserved in the Wilczek collection,[198] and a great many of the items in Hubert's collection whose previous associations were carefully catalogued (see p. 85).

Other entries in the Tradescant catalogue refer to items whose particular interest lay in technical virtuosity, such as the 'nest of 52 wooden-cups turned within each other as thin as paper' and various miniature objects: some of the latter were purely technical *tours de force*, such as 'Halfe a Hasle-nut with 70 pieces of housholdstuffe in it', one cherry-

[190] The term is that used in Worm's catalogue (Worm 1655, pp. 282–7), which is also cited elsewhere in the *Musæum Tradescantianum*. Ashmole's copy of the *Museum Wormianum* is in the Bodleian Library, Oxford (Ashmole 1713). Tradescant the Elder's interest in such horns is recorded in a letter from one Mr Pory to Sir Thomas Lucy, in 1632. The author relates that 'two Bristol men, after the expense of two summers in discovering a North West passage, are returned back *re infecta*; only I heard John Tradescant tell my Lord of Ca. that they had discovered an island where were store of unicorns' horns, long and wreathed like that at Windsor, which I have heard to be nothing else but the snout of a fish, yet very precious against poison' (Williams 1848, p. 189).

[191] Contant 1609, p. 71.

[192] Olearius 1666, p. 41, Tab. XX.

[193] Williams 1937, p. 173.

[194] Various authorities on the virtues of 'mummy' are quoted in Murray 1904, pp. 53–3.

[195] A selection of such tablets is illustrated in Valentini 1704, p. 1, Tab. 1.

[196] 'Little Jeffrey' was Jeffery Hudson (1619–82), a dwarf who entered the Duke of Buckingham's household at the age of nine. At a dinner given by Buckingham in honour of Charles I and Henrietta Maria, Hudson emerged from a pie, much to the delight of the Queen, into whose service he later passed. For his remarkable career see *Dictionary of National Biography*, s.v. Hudson.

[197] Scherer 1913, pp. 19–20.

[198] Von Schlosser 1908, fig. 81.

stone 'holding 10 dozen of Tortois-shell combs, made by Edward Gibbons' and another 'with a dozen of wooden-spoons in it', a 'set of Chesse men in a pepper-corn turned in Ivory', and 'Flea chains of silver and gold with 300 links a piece and yet but an inch long'.[199] Others, including 'A Cherry-stone, upon one side S. Geo: and the Dragon, perfectly cut: and on the other side 88 Emperours faces' (Pl. CLXXIII), and those still surviving which are discussed below (Nos. 181–4), had some artistic pretensions. Some at least of these are of English workmanship (see p. 294), but they were also much favoured on the Continent. The best-known collection is in the 'Green Vaults' at Dresden, where there is one particularly famous cherry-stone carved with 180 heads.[200] Menzhausen has characterized these pieces as typical *Kunstkammerstücke*, pieces in which technology, science, and art are combined in harmony, here manifested respectively by needle-fine tools to carry out the carving, optical magnifiers for use by the craftsman, and his inherent skill.[201] Their appeal was not limited to Germany, however: while viewing the Count of Lyons's collection in Paris, Evelyn noted 'a Chaplet of admirable invention, the intaglias being all upon fruite-stones'.[202] Variations on this idea, in the form of finely carved nuts made to contain prayers in miniature and probably of Dutch origin, are to be found in the Nationalmuseum in Copenhagen, the Rijksmuseum in Amsterdam, and at Dresden.[203]

Ethnographic material forms a major part of the surviving collection. Discovery of the Americas and the development of contacts with the Far East had revolutionized the European concept of the world, and cabinets of rarities provided excitingly tangible displays of physical evidence of its lesser-known inhabitants. Every continent then known is represented in the Tradescant collection. The material from North America is some of the earliest to survive. One entry in the 1656 catalogue, referring to 'A Canow & Picture of an Indian with his bow and Dart, taken 10 leagues at Sea. Ano.-76', must surely relate to the Eskimo brought back on Frobisher's first voyage in search of the North-West Passage in 1576,[204] or to one of the series of drawings of a man, woman, and child brought back by him the following year.[205] Its loss, along with several other items of Greenlandic and Canadian origin,[206] is a major mishap. Other objects relating to early exploratory voyages in this area reached Schloss Gottorp, some of them in the company of abducted Eskimos, and others formerly in the Danish royal collections can still be seen in Copenhagen.[207] For material from Virginia the Tradescants may have benefited from

[199] Tradescant 1656, pp. 36–9. Altick (1978, p. 7) quotes a reference of 1578 to a London smith, Mark Scaliot, who produced 'a lock, of iron, steel, and brass, of eleven several pieces, and a pipe key, all which weighed but one grain of gold. He also made a chain of gold, of forty-three links, which chain being fastned to the lock and key, and put about a Flea's neck, the Flea drew them with ease. Chain, key, lock, and flea, weighed but one grain and a half'.

[200] Heres 1980, pp. 2–8.

[201] Menzhausen 1977, p. 26.

[202] Evelyn, *Diary*, 1 March 1644.

[203] Menzhausen 1977, pp. 125–6.

[204] Cheshire *et al.* (1980, p. 31) conjecture that John White may have been among those who made pictorial records of this Eskimo; Lucas de Heere certainly did and one of his drawings still survives (reproduced in Hulton and Quinn 1964, 1. 142; ibid., vol. 2, pl. 146a).

[205] Rye (1865, p. 206) suggests that the 'dead Indian' who caused so much excitement among the 'holiday fools' in Shakespeare's *Tempest* may have been one of three Eskimos imported by Frobisher in 1577.

[206] These include 'A Greinland-habit' and a 'Match-coat from Greenland of the Intrails of Fishes', together with boots, shoes, snow-shoes, and weapons (Tradescant 1656, pp. 45–8). Of historical interest is the 'Knife wherewith Hudson was killed in the North-West passage, or Hudson's Bay' (ibid., p. 46).

[207] Meldgaard, in Dam-Mikkelsen and Lundbæk 1980, pp. 3–4.

the friendship of the father with Captain John Smith[208] and, more certainly, from the several visits to the area by the son. It would appear that the elder Tradescant had some correspondence with resident Americans[209] but none of the Virginian rarities surviving or lost can be shown to have been acquired through any of these channels. With increasing colonization during the sixteenth and seventeenth centuries, notably by the Dutch and Portuguese in the southern part of the continent and by the French and English in the north, an ever-increasing flow of material came back to European collectors. Regrettable losses among the Tradescants' Virginian material and that from Central or South America include Amazonian and Indian crowns made of feathers, a match-coat of feathers, 'Divers sorts of pictures wrought in feathers', a 'Bracelet made of thighes of Indian flyes', and Amazonian and Virginian tobacco pipes. Similar objects survive from other early collections, however: in Copenhagen, for example, are feather crowns and cloaks and a necklace of flies' wings from Brazil.[210] It is noteworthy that Cosimo de Medici sent the Duke of Bavaria in 1572 'a portrait of Our Lady made of all kinds of feathers' recently arrived from Mexico, and others reached the cabinets of Rudolf II and Ferdinand II of Tirol.[211] Other items from the Americas, notably weapons and garments, were to be found in many of the collections discussed above, including the Medici and Ambras collections, the Anatomy School at Leiden (which exhibited 'A Mallet, or hammer that the Savages in New Yorke kill with'),[212] at Sainte Geneviève in Paris, and in Bargrave's cabinet at Canterbury.

During the sixteenth and seventeenth centuries European contact with Africa was for the most part limited to coastal trading in the east and west, with more intensive commercial intercourse along the Mediterranean littoral. The Portuguese, and later the Dutch, were the major powers involved in African commerce and in the slave trade with the southern parts of the Americas. Two pictures by Albert Eckhout, now in the Nationalmuseum, Copenhagen, but painted during Johan Maurits of Nassau's Brazilian expedition, show Africans transported to an American landscape.[213] More generally, the impact of Africa on European collections was registered in the form of West Coast material, principally from the area between Senegal in the north and the Congo estuary in the south, with Portuguese-held Sherbro in Sierra Leone playing an important part in supplying carved ivories and other collectable items for the European market. This was the area identified by the elder Tradescant in his plea for material from 'Gine or Binne or Senego', and represented in the 1656 catalogue by items such as bows, arrows, darts, quivers, knives, drums, bracelets, plates, drinking-cups, and a lantern. The ivory trumpet (No. 26) and spoons (Nos. 22–3) in the present catalogue are typical collectors' items. A collection of similar trumpets survives among the remnants of the Copenhagen royal collection,[214] and both spoons and a trumpet are represented at Schloss Ambras.[215] East African material was much scarcer, but a drum, possibly from Madagascar, still

[208] Tradescant was certainly left a share in a trunk full of books in Smith's will (reproduced in Deane 1867, pp. 2–4).

[209] See p. 12, n. 82.

[210] Nationalmuseet, Copenhagen. See Due, in Dam-Mikkelsen and Lundbæk 1980, pp. 24–30.

[211] Heikamp 1972, pp. 11, 16.

[212] Witkam 1980, p. 41.

[213] Nationalmuseet, Copenhagen. See Due, in Dam-Mikkelsen and Lundbæk 1980, pp. 40, 43.

[214] Nationalmuseet, Copenhagen. See Lundbæk, in Dam-Mikkelsen and Lundbæk 1980, pp. 48–9.

[215] Von Schlosser 1908, p. 59, fig. 47.

survives in the Copenhagen collection.[216] The possibility that Tradescant the Elder may have collected such items as the Barbary shoes and spurs and the 'Moores cap' listed in the catalogue has already been mentioned, but Moorish and more especially Egyptian antiquities were among the most heavily traded collectors' items. Among the earliest imported specimens which survive today are those which reached Leiden in the early 1620s from Sakkara and elsewhere in Egypt.[217]

The Turkish conquest of Constantinople in 1453 and the subsequent northerly expansion of the Ottoman empire in the sixteenth century brought Europe into more direct contact with the Middle East. Weapons were particularly sought-after acquisitions among early collectors, but the commercial contacts which developed and the diplomatic activities of ambassadors such as Sir Thomas Roe led to wider relationships. Tradescant's Turkish vest, tooth-brush, ink-horn, and various items of clothing are of interest in this context, as well as more exotic specimens such as the 'Rich vest from the great Mogull'. Ole Worm describes two forms of Turkish quiver in his collection, one of which held a bow as well as arrows.[218]

There seems little doubt that most of the material reaching early European collections from the Far East and the Pacific islands would have arrived on merchant ships, principally those of the Portuguese, whose trading stations, established successively in Malacca, in Japan, and at Macao, had given rise to a flow of oriental material to the west since the mid-sixteenth century. Dutch East India merchants were to share in this trade from the beginning of the following century, and Spain too had a hand in it: Hakluyt records among the cargo of the *Madre de Dios*, taken by the English fleet in 1592, 'elephants teeth, porcellan vessels of China, coco-nuts, hides, eben-wood as blacke as jet, bedsteds of the same, cloth of the rindes of trees very strange for the matter, and artificiall in workmanship'.[219] The English failed to establish a successful foothold in Japan,[220] but first Portuguese and Spanish, and later Dutch ships kept the west supplied with Japanese commodities. Although the term 'Indian' was used without precise meaning by the Tradescants and their contemporaries, material from the Indian subcontinent became increasingly common in the West following the establishment of Dutch and English stations there in the early seventeenth century. The specimens of oriental epigraphy, Indian paper, various musical instruments, weapons, and vessels, together with Chinese armour, dishes, and 'Birds-nests from China', Japanese weapons, and more southerly specimens such as the 'Molocco sword' and shield may all have resulted from these contacts.

In its varied constituent elements, therefore, the collection built up by the Tradescants at Lambeth was not unique, but was, rather, in the mainstream of European collecting in the sixteenth and seventeenth-century tradition. It was by no means the earliest of its kind, nor was it 'the most extensive in all Europe'.[221] There can be no doubt, however, that the rarities inherited by Ashmole and later dispatched by him to Oxford in twelve cart-

[216] Nationalmuseet, Copenhagen. See Lundbæk, in Dam-Mikkelsen and Lundbæck 1980, p. 62.
[217] Schneider, in Rijksmuseum, Amsterdam 1975, pp. 113–22.
[218] Flindt, in Dam Mikkelsen and Lundbæk 1980, p. 73.
[219] Hakluyt 1904, pp. 116–17.
[220] For reference to the short-lived English factory in Japan, see under No. 42 below.
[221] Allan 1964, p. 156.

loads represented the best-known and most catholic collection of specimens assembled in Britain to that day. Furthermore, at a time when the doors of other private museums were closed to all but the most socially acceptable, the Tradescants' collection had been open to any who cared to make the journey to Lambeth, an accessibility which was happily maintained when the Ashmolean Museum opened in 1683 as the first public museum in the country.

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