

‘STORIES OF PLANTS’

The Assembling of Mary Capel Somerset’s botanical collection at Badminton

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Mary Capel Somerset, Duchess of Beaufort, began seriously to collect plants in the 1690s. Assembled by such well-known gardeners and botanists as George London and Leonard Plukenet, her collection included seeds and plants from the West Indies, Africa, India, Sri Lanka, China and Japan. Her collections were not of dead plants, however, but of seeds and plants intended for propagation in her gardens at Badminton, Gloucestershire and Beaufort House in Chelsea. Meticulously recorded in manuscripts kept by her and her assistants, these documents given an account of living collections and reflect the enormous expansion of plant materials in this pre-Linnaean period.

AMONG the many collections of Sir Hans Sloane in the Natural History Museum, London, are the twelve folio volumes of the herbarium compiled by Mary Capel Somerset, Duchess of Beaufort, between 1701 and 1714.¹ These volumes contain dried specimens of ‘plants, most rare and some common gathered in the field and gardens at Badminton, Chelsea, etc. etc. dried by order of Mary Duchess of Beaufort’,² a process to which she refers in a manuscript list of 1698–9.³ Writing to her friend Sloane at the turn of the century about the living collection of trees, shrubs and flowers in her garden, she confessed her obsession with this cataloguing enterprise: ‘When I get into storys of plants I know not how to get out’.⁴ Probably not finally assembled into volumes until after the Duchess’s death in 1714, this herbarium represents the culmination of her botanical and horticultural collecting over a period of at least a quarter of a century.

Striking as these volumes are, they are not the only examples of the Duchess’s botanical interests, even in the Natural History Museum.⁵ What they do suggest, however, is the diligence and zeal with which Mary Somerset assembled her collection and sought to identify the plants from a very extensive library of botanical works. The enterprise as a whole puts her on an equal footing with some of the greatest botanists and horticulturists of her age, many of whom were her friends and correspondents. As early as 1715, Stephen Switzer wrote of the ‘Progress she made in Exoticks’ in her garden where ‘the Thousands’ of those foreign Plants (by her as it

were made familiar to this Clime) [were] regimented together, and kept in a wonderful deal of Health, Order and Decency.’⁶

Mary Somerset was born into a family that was to be renowned for its horticultural achievements. She was the eldest daughter of Arthur Capel, Baron Hadham, whose Italianate garden at Little Hadham in what is now Cambridgeshire stretches across the background of the royalist portrait of the family by Cornelius Johnson. In that portrait she is accompanied by four siblings, two of whom were also to make their mark in horticulture: her eldest brother, Arthur, who became Earl of Essex and another brother, Henry, who became Lord Capel of Tewkesbury.⁷

In the early 1670s, Arthur was to create the first garden entirely made with trees at Cassiobury in what is now Watford. Not surprisingly, he consulted the author of *Sylva* (1664), John Evelyn, who later wrote highly of his work there.⁸ And Arthur Capel’s gardener, Moses Cook (the author of *The Manner of Raising, Ordering and Improving Forest and Fruit Trees* (1679) became one of the senior partners in the first firm of garden designers, the Brompton Nursery. Moreover, one of Arthur’s daughters, Anne, was to marry the 3rd Earl of Carlisle, the creator of the gardens at Castle Howard.

In his garden at Kew, on the site of the present Royal Botanic Gardens, Mary’s brother Henry raised and propagated many of the new plants being imported from North America and the Far East: plants that were to revolutionize botany and horticulture in the first quarter of the eighteenth-century.

This was an enterprise that Mary could pursue on an even grander scale. Among her papers is a 'Catalogue of seeds from the East Indies sent by my brother Harry April 1 1693'.⁹

Although Evelyn in his *Diary* records meeting Mary Capel only once, it is not surprising that his presence can be felt at the edge of her acquaintance. Five of his works were among the sources that she consulted for plant identification: his translation of De Bonnefon's *The French Gardiner* (1658), *Sylva*, or *a Discourse of Forest Trees* (1664), *Kalendarium Hortense* (1664), a translation of la Quintinie's *The Compleat Gardener* (1693), and *Acetaria. A Discourse of Sallets* (1699). Evelyn was Mary's virtual contemporary, and his great work on the history of gardens, 'Elysium Britannicum' was being composed throughout the latter half of the seventeenth century.¹⁰ Endlessly revised and augmented right up to the time of Evelyn's death in 1706, the 'Elysium' also functioned as an information exchange about plants, especially exotics. At least three of Evelyn's correspondents – Lord Clarendon, Sir Robert Southwell and George London – were also part of the Duchess's circle. Evelyn, moreover, was one of the founding members of the Georgical Committee of the Royal Society in whose *Philosophical Transactions* were frequently recorded the discovery of horticultural exotica. These were plainly works that she consulted, for a letter from her of July 1706 requests assistance in getting the *Transactions* in her collection brought up to date and bound,¹¹ while another of her lists refers both to 'those seeds that I know of those sent by the Royall Society which the East India Society presented to them' and how well they germinated in her garden (Fig. 1).¹²

It has long been known that Mary Somerset's garden in London, Beaufort House in Chelsea, was a nursery of rare exotics.¹³ In *The Duchess of Beaufort's Flowers* (1983) G. Cottesloe and D. Hurst have drawn attention to the flower paintings of Mary's horticultural collection at Badminton.¹⁴ But the extent and significance of that collection has largely gone unrecognized, partly because her gardens were to a great extent swept away by Capability Brown and partly because some of her more interesting manuscripts lie among the indifferently catalogued papers of Sir Hans Sloane, at the British Library.¹⁵

In the late 1690s, extensive lists were compiled at Badminton of everything growing in the gardens, those lists often citing the source of the plants and making cross-reference to contemporary botanical authorities. There are, for example, three such lists

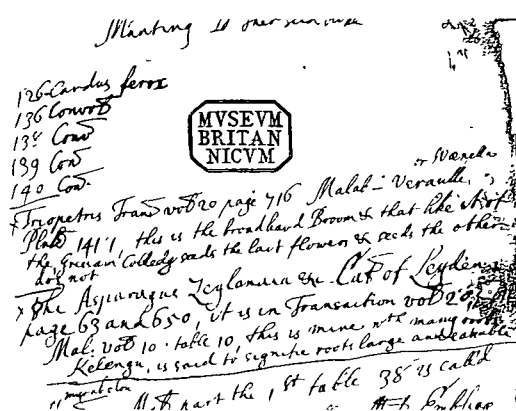


FIG. 1. Seed List labelled 'Planting Professor Sherard Seed Booke', showing the Duchess's use of the Catalogue of the Leiden Botanical Garden, the *Philosophical Transactions* of the Royal Society and the *Hortus Malabaricus*. British Library, Sloane MS 3349 2.

in Sloane MS 4070, fols. 115–85. Although these lists were meant to be discarded once the proper catalogue was made, many of them were not. One manuscript of October 1699 is marked at the beginning 'to be added to the cat.' and at the end 'these papers are of no more use'.¹⁶ Their survival offers an extraordinary glimpse into the compilation of one of the greatest herbaria of its time.

The Duchess of Beaufort's manuscripts are frequently more than lists of collections: they draw upon the collections of others, and so are collections of collections. In so far as these lists accompanied seeds or plants, they also represent a living collection which she proceeded to nurture in her garden. Famed for a 'Nursing Care scarce any Plant (tho' from the most distant Climates) can withstand',¹⁷ in the 1690s the Duchess built up a collection of thousands of plants. In 1701, the botanist William Sherard, whom she retained as tutor to her grandson, wrote that her garden 'being furnish'd with all conveniences imaginable, and a good stock of plants'¹⁸ would soon outdo any in Europe.

What made the greatest impression on her contemporaries was her collection of exotics, and indeed there is a preponderance of these in the twelve-volume herbarium. But she was also interested in domestic plants, for the cataloguing of which she commonly used John Ray's *Synopsis Methodica Stirpium Britannica*, published in 1690. What these catalogues and lists reveal is not only the assiduous

cataloguing of her own collection, but the importance of lists and catalogues generally to a pre-Linnaean circle of botanists and gardeners whose collections were re-shaping the nature of English horticulture.

Like most gardeners, moreover, the Duchess's seed-lists were also the foundations of her collections of living plants, collections of which she took frequent censuses in the last decade of the seventeenth century and the first of the eighteenth. Elaborately cross-referenced to the botanical authorities of the late sixteenth and early seventeenth centuries and numbered in separate lists arranged alphabetically according to place of origin, these lists are also often accompanied by notes on germination and propagation.

This interest in the process of growth sets her apart from many of her contemporary male botanists, who were primarily interested in dried specimens and in classification. Maria Sybilla Merian, an eminent contemporary botanist and entomologist rebuked one of the Duchess's correspondents, James Petiver, on just this score. Planning to 'methodize' Merian's book on Surinam, he received the rebuke that her interests lay 'only in the formation, propagation, and metamorphosis of creatures'. Like the Duchess's, hers was a collection of living specimens.¹⁹

The Duchess could also be sharp about the authorities she used; her annotations were sometimes caustic, 'Lysimachia, the pritty plant that blows all summer', she writes, citing John Parkinson's *Theatrum Botanicum* (1660), before noting 'false' (Fig. 2). Even her incoming lists of plants are frequently annotated with a letter and a number. 'Mark't in my booke', she writes on a list of plants from Portugal and Guinea in 1695, meaning that they were recorded in her numbered alphabetical lists.

Most of these manuscripts at the British Library come from the 1690s and the first decade of the eighteenth century, and at least two of them concern the work of Queen Mary herself in the gardens at Hampton Court shortly before her death. Of these one is a catalogue of exotic plants raised at Hampton Court and another is of 'Forreigne plants raised from seeds' in 1692.²⁰ Between 1689 and 1694, three glass-roofed hot-houses were built there, one of which contained 400 plants brought from Virginia, Barbados, the Canaries and the Cape of Good Hope.

It was in such a climate of botanic experimentation that William III redesigned the Privy Garden at Hampton Court after Queen Mary's death in 1694, and indeed one of Mary Capel's later lists – of 'Seeds sown in a hott bed in the Mellon Grounds att

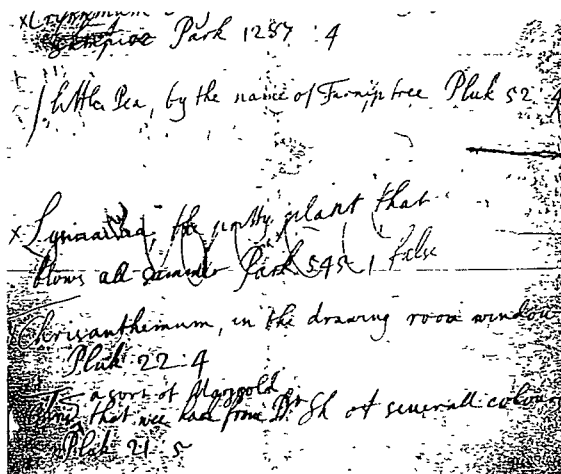


FIG. 2. The Duchess's entry on *Lysimachia* with reference to John Parkinson's *Theatrum Botanicum*. British Library, Sloane MS 3349.1.

Hampton Court 1698 From East India and the Cape [of Good Hope]' (3343: 39) – is from the period of that garden's creation. It was also in the context of these royal connections that Mary Capel Somerset began to work at Badminton after her second marriage in 1657 to Henry Somerset, Earl of Worcester, who was created Duke of Beaufort in 1682. The Somersets had acquired Badminton in the first decade of the seventeenth century, but it was only after the destruction during the Civil War of their principal residence, Raglan Castle in Wales, that they moved to Badminton. The chief garden-making there seems to have begun not long after the acquisition of their town house in Chelsea in the mid 1680s. Famous as Sir Thomas More's house and garden a century and a half earlier, the latter became renowned at the end of the seventeenth century for its collection of exotic plants, closely allied to the collection at the nearby Chelsea Physic Garden.

A letter of 6 August 1695 from William Oram, the gardener at Beaufort House, to John Adams, the gardener at Badminton, reveals how assiduous the Duchess's servants were expected to be in collecting specimens. Writing to accompany the catalogue of the plants he has acquired, he says:

... they are of the newest and most Admiard plants that are about London ... for ther is not a Garden with in 10 miles of London wherther ther is Colexsions of plants but I have ben in ... for I thought fitt since I ame not to know what is

Badminton was as famous as Beaufort House for its gardens. In *The Ancient and Present State of Glostershire* (1712), the Duchess's correspondent, Sir Robert Atkyns, described the grounds just before her death: 'In respect of stately Buildings, beautiful Gardens, large Parks, and whatever can make a place delightful', he wrote, Badminton 'is esteemed one of the noblest Seats in England'.²² Like many of the great estates of the time, it included an extensive orchard of many different fruits (including oranges under glass)²³ as well as gardens containing all the fashionable flowers of the age: tulips, narcissus, ranunculus, anemones, etc. But it too was most renowned for its collection of botanical curiosities from all parts of the world.

Among the Duchess's correspondents and suppliers of seeds was George London, by then one of the principal partners in the Brompton Nursery and William III's gardener at Hampton Court. London not only gave the Duchess extensive advice about how to collect and propagate plants – he also supplied her with specimens. Some of these came from America, where he had many connections. One list from 1694 (3343: 232) and three from 1687 (3343: 55; 57; 58) include curiosities from New England and Virginia.²⁴

A list from London of 27 January 1696 (3343: 287) includes the American dogwood (*Cornus amomum*) which had been introduced only thirteen years earlier. Another, of 14 May 1690 (4072: 202) offers instruction on how to grow 'Laurus Tullipifera Virginiana' (*Magnolia virginiana*):

this is a large shrubb in Virginia, and growes moste times in
their swampishe wett places, the flo're is large and smells
very sweet which flo'res the planters make them into
Nosegays as a great raritie.

to raise them from seeds requires only the naturale heat of the Spring, sowe them in a pott or small Case some times they come up the first year, some times not till the second

When they are up draw them on for two seasons, in which time they will be stronge enough to be planted into a small Case and then keep them in places out of the winds but yett to have the heat of the Sune.

But London also passed on to the Duchess seeds gathered in more exotic locations. Her appetite had no doubt been whetted by what she had already acquired elsewhere and learned from plant lists. One of her lists is entitled 'West India seeds sent by the seeds man 1689' (3343: 152; 153). And among her papers are two such lists from 'James Reed, gardener' in 1690 of

what plants the gardener is
 that I have not at Brompton
 park and the Prince's garden
 at Belgoy
 Angelica tree
 Turpentine tree
 Broad leaved ~~indica~~ ever green
 narrow leaved --
 Cork tree
 Currant tree
 Indian Myrtles with a laurel centre
 Lentiscus tree
 Euphorbium
 Sweet scented rose bread
 the Tulip bearing bay
 a new sort of ~~lemon~~ ~~orange~~ with an orange like
 Geanta frutes.
 true Pelitory
 Benjamin Tree
 Dogs tooth tree
 Long leaved sweet Oleander
 at London

FIG. 3 The Duchess's entry on desirable plants seen by her gardener at Brompton Nursery and the Chelsea Physic Garden. British Library, Sloane MS 4071.309.

plants growing in Barbados (4070: 19–20). ‘What plants the gardener saw that I have not at Brompton Park [London’s nursery] and the Phisick Garden at Chelsy’ forms one of the *Duchess’s* lists (4071: 309) (Fig. 3), and another list of *desiderata* was compiled to send to Jamaica (4072: 193v).

In 1695-6 she received a number of letters from London containing seeds from the West Indies, chiefly the Barbados lily (3343: 65-66; 183; 240; 249-50; 270). By 1698 she was recording 'Barbados Lyllys' as growing with 'Mr Londons great Lyllys' in her stoves or hot-houses. But in fact she had acquired a Barbados lily (*Hippiastrum*) as early as 1691 from Samuel Doody of the Chelsea Physic Garden, and in 1693 she described its growth with all the attention of a trained botanist:

. . . the description of the great Barbados Lyllly given mee by Mr Doody 1691 the root much larger than any tulip root, the leaves have continued winter and summer from Aprill 1691: April 1693 being put into a hott bed it soone shot up a stalk for a flower and bore too flowers (upon one stalk) the later end of June the flowers are a delicate light scarlet the middle of each leafe of them a pure white, the chines are a blush colour with yellow seeds, the stalk was

Jacob Bobart, successor to his father Jacob as curator of the Physic Garden at Oxford in the late seventeenth century, was another regular correspondent both with the Duchess and with her head gardener, John Adams, to whom the collecting of seeds and plants seems also to have been delegated. 'Plants in Mr Bobarts paper that I have not,' she records in a manuscript of 30 March 1694 (3343: 120), among which, rather surprisingly, was any kind

142 sinape
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At least two of the Duchess's lists suggest that she was planting out flowers either in the fields or in the park.³³ Another, probably transcribed from a horticultural work, gives directions for planting trees 'in the Countrey, where they delight in a Large high grown Wildernesse' (3343: 29). It therefore seems not unlikely that many of these trees may have been planted out into the great radiating avenues that can be seen extending from the house and gardens into the surrounding landscape park in Kip and Knyff's plate of Badminton in *Britannia Illustrata* (1707)³⁴ and in a drawing possibly in the Duchess's own hand (Fig. 5). Certainly neither that plate nor the other of Badminton suggests that there was any place near the house where such trees as the cedars of Lebanon (*Cedrus libani*), Lycia, Bermuda (*Juniperus bermudiana*) and Virginia (*Juniperus virginiana*), black walnut

(*Juglans nigra*), black gum or tupelo (*Nyssa sylvatica*), ironwood (probably *Ostrya virginiana*), Spanish ash (manna ash: *Fraxinus ornus*),³⁵ dwarf chestnut or chinquapin (*Castanea pumila*), Chinese medlar, sumach, soap berry, acacia or Robinia (all of them in the Duchess's lists) might be grown.

The paintings of Badminton c.1705, possibly by Thomas Smith (also at Badminton House), show the gardens to the left of the house as being very different in character from those of the engraving by Knyff. The compartments are surrounded with trees and an open centre has a fountain at the middle. The avenues are also different. Two secondary avenues, for example, radiate from the main avenue behind the house as soon as it begins. They at least seem much more like the drawing of them (listing their terminal vistas) that is in the Duchess's manuscripts (4071: 204) and resemble what Roger North describes as 'an Asterisk of Glades, cut through the Wood of all the Country round. Four or five in a Quarter'.³⁶

The Duchess's later plant lists suggest that she had more than average success with propagation with these exotica: a list of geraniums (pelargoniums) in 1700, for example, include one 'from St. Vincents' (3359: 25).³⁷ Perhaps she had had careful instruction in how to do so. Among her manuscripts from the early 1690s is an excerpt from a book about propagation that also gives rudimentary instruction in the system of botanic classification that Ray had only begun to adumbrate (3343: 29).

In a letter of February 1696 to Adams, the Duchess's gardener, Bobart also solicited her support for a Mr Lloyd of Oxford, 'Keeper of our Museum' (the Ashmolean), who was to go botanizing in Wales. This was Edward Lhwyd (or Lloyd), after whom the Snowdon lily (*Lloydia*) was named. Lhwyd's subsequent letter acknowledges the fact that she financed his researches in 1697. A number of her later plant lists include the identification 'snowdown' (Snowdon), and one list is 'A Draught of Plants sent from Lhan Berys in Caernarvonshire June the 16th 1696' (3343: 116). All of them are carefully identified from Ray's *Synopsis* (1690), as Bobart had recommended in the previous February. But the Duchess had already acquired plants from Wales before Lhwyd's botanical trip: 'The plant like purslane that came from Swansy is the *Portulaca marina* sea purslane', she wrote on 21 September 1692 (4071: 142).

She also managed to acquire seeds from Amsterdam, Leiden, Nuremberg, Switzerland and Rome. One of her lists notes besides five of the items, 'out of

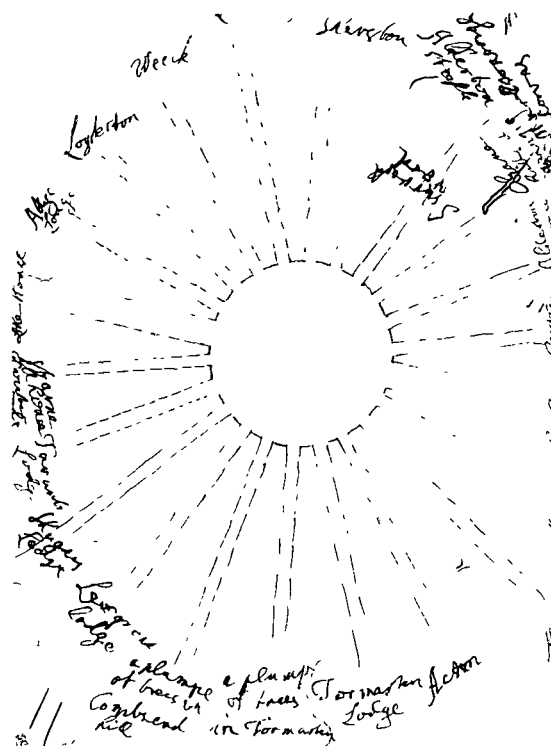


FIG. 5. A drawing, probably in the Duchess's hand, sketching the radiating avenues at Badminton in the late 1690s. British Library, Sloane MS 4071.204.

Amsterdam Garden' (3343: 175), and a plant list in another manuscript is noted 'Horti Medici Amstelodamensis', a reference to Commelin's catalogue of that garden – a work that also appears in the list of books whose illustrations she consulted for plant identification (4072: 210). On the same list of illustrated books is Paul Hermann's catalogue of the botanic garden at Leiden, *Paradisus Batavus* (1698), a work that she had also previously used to identify 'cuts of the plants that I have' (3343: 267).³⁸ 'Seeds from Nurenbourg that are not entered in Doctor Sherards Book' also form a list made in 1701 (3343: 228).

Another list indicates that Hans Sloane acquired plants for her from Switzerland (3354: 54), though the source of these is not so specific as 'Nota Seminum collectum in Horto Medico Sapientia Romanae in hoc anno 1700'. These notes of seeds gathered in the physic garden at Rome in 1700 are adjacent to another list marked 'from Rome March

1st' and are identified on her master-list as items 1518 and 1584 inclusive.

William Sherard, who had been at Oxford in the 1670s and later founded the Sherardian chair of botany at Oxford,³⁹ also appears frequently in the Duchess's manuscripts. Three lists of plants sent by him on 30 December 1699 (when he was on a continental tour as tutor to the son of Lord Russell) are annotated by her with the plant numbers of her master catalogue list. In 1702 he is even recorded as having supplied her with a plant 'from the Streights of Magellane' (3353: 45v) as well as 'Quinox' (*Chincona* or quinine).⁴⁰ Among her plant lists is one in Dutch, of plants from the Cape of Good Hope (3343: 182), and one of c.1703 lists berries from China, Malabar and Madras (3354: 7).

From Bengal and Sri Lanka she also received seeds from the famous Captain Knox, whose narrative of his captivity there in the 1650s was one of the *causes célèbres* of the later seventeenth century. 'Seeds from the East Indies brought over by Captain Knox, 1694' is the title she gives to a list of nineteen specimens, among which she includes:

... a very good fruite about the bigness of a goose egg, round and hard, growing on a large Tree the shell of it fitt for Cupps, grows in Bengala, the name of it in the Chengala language Bellon Giddea [...] leafe like a lemmon. (3343: 234)

Her London neighbour, Samuel Doody, at the Chelsea Physic Garden, was another helpful supplier whose name often occurs as a source of seeds in the careful annual lists that the Duchess kept of her plants in the late 1690s. 'Roots and plants sent by Mr Doody', records an inventory of April 1691, noting that some of these were from the West Indies (3343: 282). A friend of the pioneering botanists James Petiver and Leonard Plukenet (whose names also appear in the Duchess's manuscripts), Doody was praised by Ray, whom he assisted with the compilation of the *Synopsis*.

Doody, who was also on good terms with the Duchess's gardener at Beaufort House, William Oram, was himself part of a large circle of botanizing gardeners that included a Colonel Guy who supplied him with plants from New England. If his list of plants sent from there on 7 February 1688 is correct, he had the black poplar (*Populus deltoides*) nearly a century before it is generally thought to have been introduced.

Another member of Doody's circle was Henry Compton. As Bishop of London, Compton created an effective botanic garden of his own at Fulham

Palace where Doody records Compton's having a magnolia (*Laurus tulipifera*, probably *Magnolia virginiana*) in February 1688. Compton was the brother-in-law of Lady Northampton who is recorded in 1703 as supplying the Duchess with seed of a Judas Tree (*Cercis canadensis*) as well as a 'Lime tree a sort of lemon' (3343: 163), but more than one of the Duchess's lists suggests that she was supplied directly from Virginia, both by the famous Byrd family (3343: 96; 274) (Fig. 6) and by the Governor himself (3343: 7v; 204).

It is hardly surprising that several of the Duchess's relations exchanged lists, seeds and plants with her, though it might strike us as odd that one of the most assiduous of these was her former brother-in-law, Lord Clarendon, long after her sister's death in 1662.

Seeds
sent by S^r Ro
Southwell Apr 13
1699
Cap Bird from
Begins 150 ends 218
from Virginia

FIG. 6 A list of seeds sent by Captain Byrd from Virginia to Sir Robert Southwell and passed on to the Duchess. British Library, Sloane MS 3343 96^v.

A list of plants sent from him succeeds the two lists of exotic plants at Hampton Court in the early 1690s.⁴¹ Less surprising is the fact that her son, the Marquis of Worcester, lent her a book on Tobago from which she compiled a list of 'things that I would have' (4071: 163–4) or that his widow sent her a 'Java bean tree' in 1698 (3343: 107). With her daughter and her daughter's husband, Dr Coventry, the Duchess exchanged seeds and plants (3343: 212–13; 122) as she did with another daughter-in-law, the former Lady Cotton, in 1696 (3343: 52).

But not all of her botanical circle may be so easily identified. It is not clear who 'Dr. Woodards' (3343: 50) was, though it is not impossible that he was Dr John Woodward, the famous virtuoso and collector whom Captain Dampier supplied with specimens from Australia. Certainly one of the plants in the lists of seeds sent by him is described as 'Malay tutty Malva large yellow flor', which suggests a plant from that region. Neither a Mr Cains, who appears early in the 1690s,⁴² nor a Mrs Cranfield, who appears in the list of 1696 (3343: 263–4), can be traced. Not surprisingly, however, there are a number of seedsmen or nurserymen who appear: a Mr Clements, nurseryman and seedsman of Mile End (4071: 246), for example, or a Mr Pierson, who provides a list of twenty kinds of tulips in September 1692 (4070: 75v). And from abroad there are equally untraceable suppliers: a Mr Thomson who sends seeds in May 1699 (3343: 101; 201) from Virginia; a Colonel Russell who sends seeds from Barbados in 1696 (3343: 265); or a Dr Baskervil who appears in an early list of sources of seeds and is recorded as sending seeds that come from Barbados (3343: 276).

Members of the nobility and gentry also make an appearance. The Duchess notes a 'Nux Malabaricus' among 'Plants bought by Mr. Adams from my Lord Weymouth' (3343: 283), the nobleman whose propagation and championing of the white pine led to its being named after him in the eighteenth century. One of Evelyn's horticultural correspondents, Sir Robert Southwell, also sent her seeds, as did her Gloucestershire neighbour, Sir Robert Atkyns, who described her as 'a Lady of great Virtue and Wisdom.'⁴³ The Duchess also kept records of plants in other gardens. One was of exotic seeds (including the yucca) at William Blathwayt's nearby Dyrham Park (3343: 73), another of 'Plants at Sir Ric. Willoughbys' (4072: 30) and a third of 'Sir Francis Leigh's Roses' (4072: 302).

John Houghton, the agricultural reformer, was another source of seeds (3343: 75; 273). In the

1680s he claimed that 'we can make things grow here as if we were three degrees nearer the sun', a claim that the Duchess would have found attractive. Houghton's chief concern was agricultural use, and his zeal to expand the range of English botany chimes with Mary's avid collecting:

Had I a set of gentlemen that would bear the charges, there should hardly be a *tree*, *shrub*, or more tender *plant* in *England*, *Europe*, or perhaps a larger distance, that was likely to prove greatly useful to *England*, but those gentlemen should partake of; for why may we not as well as *flax-seed* from *Eastland*, *onion-seed* from *Strasbourg*, *melon-seed* from *Italy*, and divers others, have *grafts*, *roots*, and *seeds* from *France*, *Spain*, *Italy*, or any other place we trade in the world.⁴⁴

Not all of the Duchess's plants were foreign curiosities, but her desire for the recondite characterizes many of her lists. More importantly so does her desire to catalogue and reconcile her new plants to existing taxonomies and previously recorded instances.

One of the documents in Sloane MS 3349 is 'A Catalogue of some Plants, and some Flowers growing in the Duke of Beauforts Garden at Badminton. September the 30th 1699.' The cataloguer (probably John Adams) goes on to make it clear that that which is aimed at in the garden is what botanic gardens also aspired to: a complete collection of all the species that are available of any one plant. 'Some of the Plants are not very rare, but are to make up a collection of Plants of that Sort, as in the Marjerom and Sage, and whereof some of these are commen' (3349: 6). Indeed, Sloane MS 3354, fol. 37v is a complete list of the various marjorams in the Duchess's garden.

What the Duchess was attempting in her collection, then, was the same 'recreation of Eden' that animated the earliest botanic gardens: an assemblage of all the plants in the world. But such a collection was to proceed in an orderly and scholarly manner. John Parkinson's *Paradisus in Sole Paradisus Terrestris* (1629) is her most common reference, usually cited as 'Park', but Gerard's *Great Herbal* (in the second edition by Thomas Johnson)⁴⁵ and Robert Morison's *Plantarum Historia Universalis Oxoniensis* (1680–99) are cited as well. Morison's alphabetical table of plants is incorporated in her manuscripts (4072: 27–31).

None of these was an entirely satisfactory authority by the end of the seventeenth century, and it is not surprising that the Duchess frequently cites Leonard Plukenet, Queen Mary's botanist, as an

authority for identification. But even Plukenet could be quarrelled with. In one of her descriptive lists, of November 1693, she writes:

Acacia gloriosa is the nicker [*Caesalpina*] sow'd in Aprill it is 2 foot 5 inch high hath 7 branches the second branch from the top is 1 foot 5 inches long hath 8 sprigs with leavs set on each side both stalke and under the leaves very sharp prickles, the description by Plukenet is very short of the beauty of this plant the list has tow [*sic*] names

{ Coembenoe
{ Koddi Kallati⁴⁶

One of her documents is a list of plants from Bauhin and Commelin, obviously in prints intended to assist in the paintings of plants that she was beginning to assemble in 1703 (3343: 114). Like most late seventeenth-century gardeners and plant collectors, she was bedevilled by pre-Linnaean nomenclature. 'Arbor carpinus Virginia florescens fagus [flowering hornbeam beech of Virginia] a sort of Elme' (4071: 167) she writes of *Ostrya virginiana* or ironwood, as it appears elsewhere in her lists. But things were not better closer to home. 'Rhododendron Alpinum Caesalpini, Chamaethodendros Alpini odorata lobelii,' or 'english the sweet mountain rose Gerard 77' (4071: 151) she writes of *Rhododendron ferrugineum*, not said to have been introduced until half a century later. There is the shadow of irritation about this subject in some entries. 'That which Gerrard called Sea Lavender is by Parkinson called Limonium magus [*sic*] vulgatus [*Limonium maritimum*] Sea march buglosse, this is one of the plants that came from Swansy' (4071: 197), she writes in one. And in another, about 'The great Bean Tree' that appears in a list of seeds from Lord Clarendon, she observes: 'The seed that rais'd this plant was given mee by the name of Cowage but it is not that' (3343: 43).

The common names of exotic plants were even more troublesome. With a list of plants that she wanted from Barbados, probably addressed to James Reed, she noted: 'The names of all plants both Indian etc from the Islands differ so much, the English giving them names according to their fancies that it is impossible to send names' (4071: 110). It was a complaint even among plant collectors in the field. At the end of one list of trees and shrubs from America, the botanical collector (probably Banister) has written: 'These with An Hundred more unknowne to mee or the Inhabitants so Farr as ever I did heare For many of These are the names Given of the Natives' (4072: 208).

The Duchess had long recognized the necessity of consulting botanical authorities for the purpose of identifying plants. Sloane, with whom she also exchanged plants and seeds, was obviously invaluable in this work of identification. A letter to him of 28 September 1698 or 1699⁴⁷ thanks him for his help getting her 'a booke bound for my Parchments' and asks his help with identifying the plants:

I will have loose papers put into the booke with those names I thinke belongs to them if you will be troubl'd with them, to see the faults before they are in the booke . . . it beeing pitty to have them after so much charge to bee false nam'd, which may easily bee done by mee, most of them being rais'd from seed which came without names. (4061: 17)

A subsequent letter to Sloane of 17 December sheds further light on how her great herbarium came to be compiled:

I am sorry I did not make the booke bigger, haveing neer as many more as well dry'd, some flowers I have added to embellish the book, I doubt you will find many false names, but they are as my Lords Gardiner [Adams] and I usually calls them, hee has been in this the scribe, and neither hee nor I understand latine so that I feare wee have committed many faults. (4061: 19)

Certainly the 1697 plant lists from Rivinus and Tournefort have been translated for her, and another of seeds sown at Badminton that year reads 'English Dr Sloan' (4071: 243–6).⁴⁸ But plainly she set out to educate herself, and a list of 'Seeds sent by Dr Sloan 1699' has Latin botanical identifications in her hand (3343: 97). Among her manuscripts is a 'Table of Classes of different Species of Plants' (4072: 177–8) and a list of Latin adjectives: 'Pratensis, belonging to a meadow,' 'Angustifolia with narrow leavs' (4070: 199). Nor was her collecting zeal deterred by the need to use Latin botanical works. Two 1697 lists of desiderata – one of East Indian and African plants, the other of American plants (4070: and 4071: 53) – were derived from Commelin's *Horti Medici Amstelodamensis Rariorum Plantarum* (1697–1701).

A list of plants sent by Bobart to the Duchess on 26 May 1695 cites Parkinson, Bauhin, Ray, Clusius, Morison, Plantin and the catalogue of the royal garden in Paris (3343: 144). Another of seeds sown at Badminton in 1697, cites Parkinson, Plukenet, Hughes and Plumier, all translated into English by Sloane.⁴⁹ And the contents of Jean Bauhin's *Historia Plantarum* (1650–1) appears in another manuscript (4072: 181–2).

Her record of receiving the seed of the China rose

from Robert Southwell is typical of her meticulous method. Before noting that it is to be entered in 'my written book page the 3rd' (4070: 200) she notes its number (484) in Ferrari's *Flora, seu de Florum Cultura* (1646), and its appearance in Ray's *Historia Plantarum Species* (1686–74) and Ogilby's *China* (1671). Identifying oriental seeds and plants continued to give her the most difficulty. 'I wish I had a painter that would have better exprest this plant,' she wrote in an undated letter to Sloane of about 1700:

But finding it in no booke that I have, I hope it is a rarity, if it bee worth the keeping it is intended for you, it was rais'd from some East India seed without a name, it was sow'd I thinke 4 yeare past, has blowne twice, the leavs till neer there ful growth stand upright, but assoone as the stalk of the flower apears hang round the pot, but that I most wonder at is the root. (4061: 23)

Her lists are full of references to Rheede tot Drakesteen's famous *Hortus Malabaricus*, published in twelve parts (1678–1703). It is one of the twenty-two 'Books of plants . . . refer'd to the prints and not the descriptions' that she lists in connection with her catalogue of the garden, lists which also include a list of 'Malabar names and words' (3349: 4) (Fig. 7).

By no means all of the works cited by the Duchess in her various lists and catalogues appear in these lists of illustrated and descriptive books she composed in 1699 (4072: 210; 214). Surprisingly, neither Parkinson nor Gerard (or his commentator Johnson) is mentioned. Nor are Abraham Munting, whose *De vera Herba Britannica* (1681) she cites elsewhere (4070: 26), Mattioli's *Commentarii* (1554) (4070: 195), or the catalogue of the Rome physic garden

But the Duchess went beyond the obviously botanical authorities in her quest both for sources of plants and identification. One list of plants from Mount Snowdon is identified by reference to Camden, presumably his *Britannia* (1610). Appended to the 1699 list are references to John Ogilby's *Africa* (1670), *China* (1671) and *America* (1671).⁵⁰ Accounts of travels were among her authorities for identification. A reference to an unidentified *History of the Carribby Islands* refers to the pages describing trees and plants, and travel accounts by John Ovington (*A Voyage to Surat*, 1689), Louis Hennepin (probably his *Nouvelle découverte d'un grand pays situé dans l'Amerique*, published in 1697 and translated into English in 1698) and Dampier are listed among her 'books that give an

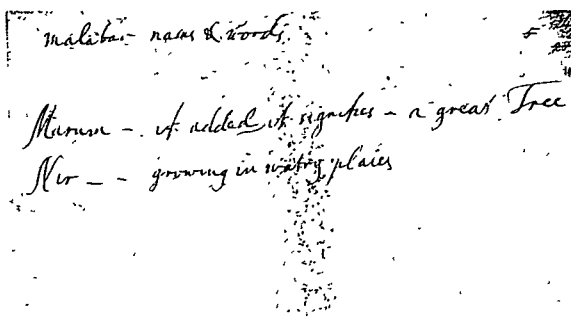


FIG 7 A list of 'Malabar names and words' to assist with plant identification. British Library, Sloane MS 3349.4

account of plants but have no figures' (4072: 214). Indeed, the Duchess cites the account of the Macaw in Ogilby's *America* alongside Ray's description of it in the *Synopsis*.

Roger North records that Badminton in her time was so well run that it 'might have been a Pattern for any Management whatever', and certainly that discipline is reflected in the way the Duchess set about creating and cataloguing her collection.⁵¹ Mary Capel Somerset was also plainly a woman of great resolution and fortitude. At a time when she was nearly sixty and roving bands were attacking great houses just after the flight of James II in 1688, she dealt with a threat to the house and its property.⁵² By the time she came to compile her great herbarium, in the first decade of the eighteenth century, she was a widow in her seventies and no longer well. Troubled with the spleen and suffering from sharp pains (4061: 22; 17v) she resigned herself to illness, but her energy seems not to have diminished and she was actively concerned in her grandson's education and in the care of her children and grandchildren generally.

Throughout the first decade of the eighteenth century, she was assembling the herbarium in its final form, continuing both to collect and to identify. A manuscript of March 1706 notes that she has put 'marks of blew paper' in her reference books where she doubts she has a plant that has been mentioned (4072: 2v). Indeed much of the volume of manuscripts from this period is taken up with the identification of her plants in botanical and other authors.

Working with the instruments of an inchoate discipline – botany – she expanded both its vocabulary and its subject. The process of transforming the information she received is at least as interesting as

the result. How does this process of collecting itself create an order? From papers representing little more than a decade at the end of the seventeenth century we can observe in action the very process of empiricism and abstraction that Locke outlined in the same decade in his *Essay on Human Understanding*.

Considering the magnitude of her labours, it is not surprising that J. E. Dandy thought it remarkable that 'published references to them, other than those by contemporaries, should be so few and so slight'.⁵³ Few, in her own time or since, have done so much to advance the causes of both botany and horticulture or to leave a monument like her herbarium as a legacy. But her other manuscripts, the everyday working papers are almost as interesting. What they reveal is not simply the foundations of modern botanical taxonomy but the process by which an intelligent and inquiring mind creates and orders new kinds of information. That information may be protean, but the results (whatever we now think of their classifications) are not

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Notes and references

1. Natural History Museum, MS H.S. 131-42. See *The Sloane Herbarium*, rev. & ed. J. E. Dandy (London, 1958).
2. Dandy, op. cit. (note 1), p. 211.
3. British Library Sloane MS 4070, fols. 115-34.
4. BL Sloane MS 4061, fol. 25v
5. There are two others: another herbarium of eighty-one folios (H.S. 66) and a small folio volume of fifty folios referred to in BL, Sloane MS 4061, fol. 19 (H.S. 235). See Dandy, op. cit. (note 1), pp. 210, 211.
6. *The Nobleman, Gentleman and Gard'ner's Recreation* (London, 1715), p. 54.
7. Two of her sisters had interesting horticultural connections as well. Theodosia was the first wife of Henry Hyde, 2nd Lord Clarendon, who as Lord Cornbury created an interesting garden at Swallowfield in Berkshire. Elizabeth married Charles Dormer whose family were later to create the garden at Rousham in Oxfordshire.
8. *The Diary of John Evelyn*, ed. E. S. de Beer (Oxford, 1955) [17 April 1680]
9. BL, Sloane MS 3343, fols. 218-25.
10. This unpublished manuscript has recently been acquired along with other Evelyn papers by the British Library
11. BL, Sloane MS 3343, fol. 115. An undated letter from the Duchess to Sloane of about 1700 thanks him for sending her the *Transactions* (BL, Sloane MS 4061, fol. 26).
12. BL, Sloane MS 3343, fol. 130
13. In her article on Beaufort House, Ruth Duthie, who consulted some of the Sloane manuscripts cited here, wrote: 'How much more is still to be discovered in as yet unexplored archives scattered about the country?' 'The planting of some seventeenth-century gardens', *Garden History* 18 (1990), p. 98.
14. These are taken from the 'Draught of Plant's' for which the Duchess asks for Sloane's assistance with the binding in 1706: BL, Sloane MS 3343, fol. 115.
15. Many of the British Library manuscripts identify her manuscripts as her husband's. There are other manuscripts at Badminton as well as the manuscript correspondence of the Duke and Duchess which is now in the Gloucestershire Record Office.
16. BL, Sloane MS 4071, fols. 55-72.
17. Cited by Dandy, op. cit. (note 1), p. 210, from *Philosophical Transactions of the Royal Society* 37 (1712), p. 392.
18. Dandy, op. cit. (note 1), p. 210
19. I am here indebted to the chapter on Merian entitled 'Metamorphoses' in Natalie Zemon Davis's *Women on the Margins: three seventeenth-century lives* (Cambridge, Mass., 1995), p. 181.
20. BL, Sloane MS 3343, fols. 13, 5-7. In that all the manuscripts cited hereafter are Sloane manuscripts, they will be cited in the text simply by the manuscript number, followed by a colon and the folios referred to.
21. Ruth Duthie, who has written on the gardens at Beaufort House, notes that Oram was also a nurseryman in Brompton Lane, Knightsbridge, 'from at least 1708 until 1719'. A number of the auriculas in the Duchess's collection were named after him. See Duthie, op. cit. (note 13), esp. pp. 88-102.
22. Sir Robert Atkyns, *The Ancient and Present States of Gloucestershire* (London, 1712), p. 243. Joseph Trapp's *Aedes Badmintonianae* ([London], 1701) gives an extensive account of the house but mentions the gardens only briefly.
23. Charles Mordaunt, the future Lord Peterborough whose garden at Parson's Green Pope was to praise, sent her 165 orange trees of different sorts from Montpellier (3343 293).
24. It is not always clear whether seed collections came from London himself or whether he was the means by which people in the colonies passed on seeds to her.
25. 4071: 139. Throughout her manuscript of 1691 (e.g. 3343 168-72v) there are notes of how well plants have germinated and prospered
26. Many of the Duchess's West Indian plants were also those with which Maria Sybilla Merian was familiar in Surinam at the same time, among them the silk cotton tree. Like Mary Capel Somerset, Maria Sybilla Merian was also familiar with plants from the Cape of Good Hope. See Davis, op. cit. (note 19), pp. 167, 179, 194-5.
27. This must have meant a massive increase in the Duchess's West Indian plants as there are also two lists of plants from Barbados, sent by Mrs Cranfield and Colonel Russell, recorded as included with the shipment of 26 July 1696 (3343: 263-5). Sir Robert Atkyns also gave her a 'list of seeds that come from Barbadoes' in September of the same year.
28. An undated list of the later 1690s is a Dutch 'Lyste der Laden Van de Caap' that includes 'Conifera' and 'Arbor tulipifera'
29. An inventory of 1696 lists twenty-two rose species in her garden (3356: 22v) Although 'Rosa Sinensis quinque

- folia' appears again in a plant list of 1699 (3349-39) it seems likely that the Duchess was the victim of the botanical confusion that prevailed before Linnaeus's system was established. Another entry in 1701 refers to 'the true Rosa sinensis sow'd June 19' (3343: 112v: item 245), but this is also likely to have been a hibiscus.
30. There is another list of plants from China sent by Sherard on 5 December 1701 (3343: 206-11) and a list of 'The Names of several fine China seeds' is identified in the Duchess's hand as coming from George London on 13 July 1696 (3343: 261-2).
 31. Bobart's ragwort was probably *Senecio squalidus*, a rare native of Mount Etna that subsequently escaped from the Oxford Physic Garden and spread to the surrounding countryside.
 32. Bobart seems to have felt that he was not being paid enough for the plants and seeds he sent. Several letters suggest that he was undercharging the Duchess. See especially 3343: 145.
 33. BL, Sloane MS 4070, fols. 2-3, 225 refer to *colchicum* in the former and *staphylea* in the latter.
 34. This and the other plate were commissioned by the Duchess after the Duke's death.
 35. The Duchess's came from George London in 1695, though the tree is usually said not to have been introduced until about five years later.
 36. *The Life of the Right Honourable Francis North* (London, 1732), p. 133. North also describes how the surrounding landowners 'cut their Trees and Hedges to humour his Vistos'. Hendrik Danckert's views from the late 1670s, show the estate before the laying out of the avenues and are too early to offer useful information about the gardens near the house. See John Harris, *The Artist and the Country House* (New York, 1979), pls 47, 125.
 37. She herself was apologetic about her efforts at propagation (see Dandy, op. cit. (note 1), p. 210), but Sloane declared that under her care plants were brought 'to greater perfection then at Hamton court or any where' (ibid., p. 210).
 38. This had been edited by Sherard.
 39. In the early eighteenth century, he was Consul at Smyrna, during which time he added supplementary material to Bauhin's *Pinas*.
 40. A seed sent by Doody on 20 December 1699 as from Peru is also credited with having 'the same vertue in curing intermitting feavors' (3343: 92). John Evelyn (op. cit. (note 8), iv, p. 462) noted seeing 'the Tree bearing the Jesuits bark', i.e. the chincona, at the Chelsea Physic Garden on 6 August 1685.
 41. 3343: 9v. In Lord Clarendon's correspondence is a letter from the Duchess of 15 September 1685, thanking him for his promise to come to Badminton and addressing him as 'Deare Brother' (BL, Additional MS 15892, fol. 249). Several lists of seeds sent by him in 1693-4 occur in 3343: 43; 123-4; 188 and 226.
 42. He is also credited with acquiring seeds from Persia in 1696 (3343: 246).
 43. Atkins, op. cit. (note 22), p. 246.
 44. *A Collection for the Improvement of Husbandry and Trade*, ed. Richard Bradley (London, 1727), III, p. 13, II, p. 374.
 45. 'Indian plants in Parkinson's Herball' is a note in 3342: 23.
 46. 'Acacia gloriosa' is among the trees listed in 'A Catalogue of Indian Plants growing at Badminton on August 3rd 1694' along with an inserted note of the present height of the trees. And another manuscript dated 1 June 1697 records another 'Acacia without prickles' as coming from 'Capt. Knox from Beng[al]' (3357: lv).
 47. These letters were written before the death of the Duke (in 1699 or 1700) and many of them concern the appointment of William Sherard as tutor to her grandson, an appointment he took up in 1700.
 48. Caspar Commelin, who wrote the standard work on the Amsterdam Botanical Garden, similarly provided Latin identifications to Maria Sybilla Merian. See Davis, op. cit. (note 19), p. 181.
 49. 4070 243-6.
 50. Ogilby's *Jamaica* appears elsewhere.
 51. North, op. cit. (note 36), p. 132.
 52. See Horatia Durant, *The Somerset Sequence* (London, 1951), p. 142.
 53. Dandy, op. cit. (note 1), p. 209.