The emergence of what we have come to recognise as early modernity, roughly the sixteenth and seventeenth centuries in Western and Northern Europe, is intimately tied with the developing desire to accumulate collections of material that were considered to be profoundly significant. Through the practice of gathering things, and the arranging, studying, and simply gazing at them, the universe, and the condition of man within it, could be revealed. How this came to happen had its own curve of process, but the initial, crucial point is a simple one: the relationship between men and material objects started to be seen as one with infinite possibilities for the development of human understanding. The world of things became pre-eminent in the world of the imagination.

The range of things by which the imagination might be fired was rather varied. Men were interested in objects from the ancient past and from more recent history; they wanted fine works of artistic representation and excellent craftsmanship; they desired the odd, exotic, and strange; and they came to value the most mundane of natural plants and animals. We shall trace how and why people accumulated all these things, but first one important point, which relates directly to the new importance that is perceived in the world of objects, must be dwelt with at some length.

The decades either side of 1700 witnessed one of the genuinely critical moments in human history. In north-western Europe, particularly in the cities of London, Oxford, Edinburgh, Amsterdam, Copenhagen, Leyden, and Paris, there took place a critical shift in the human vision of the world, which was to have fundamental consequences for the whole of humanity. For reasons that I shall try to explore in a moment, gentlemen suddenly began to interest themselves in the natural, material world around them in a new way. Up to this time, through the medieval centuries, gentlemen had been engaged chiefly with people, as governors, rulers, priests, judges, and landown-
ers, while the material world of earth and sea, food processing, textile weaving, and the working of wood and metal, had been left to the labouring classes. Quite suddenly, in one long lifetime, men of education became fascinated by the natural world in all its variety and potential. From this fragile beginning was to flow everything that we recognise as modern science, medicine, industry, and agriculture, with all their immense possibilities for both good and harm.

The essence of the shift, although it did not take place all at once, was the move from seeing an arbitrary universe, in which physical, material events could occur randomly without cause or effect as God thought best, to one that was patterned, in which material events were repetitive and reliable, with predictable causes and consequences. God did not work by creating miracles at whim, but rather by creating and sustaining a universe that worked in accordance with rules of behaviour. The medieval world, by contrast, was one in which anything might happen at any time and, as the result of all kinds of random actions, water could and did become wine if God wished it to be so. Repetitiveness meant that material evidence could be collected that could demonstrate the nature of things, and this could then be used as the basis for fresh explorations and for teaching what had already been ascertained.

It is worth remembering that human beings had come close to this revelation once before. The best minds of the classical world of the last centuries BC and the earliest AD had begun to realise that, since the stars followed cyclical movements other things in the universe probably did too, such as the processes of mathematics, through geometry, numbers, and architecture. In the same way, a dose of medicinal herbs had the same kind of effect on all humans, not just those who belonged to a particular group or worshipped one special god. However, as things turned out, these insights could not be pursued. The upheavals of the third century within the Roman Empire, most of which were self-inflicted, disrupted society to a profound extent; and when, around AD 300, the empire recovered, it could only do so by becoming rigid and autocratic, and by denying intellectual freedom. Its society was sustained by the Christian Church, which mirrored the organisation of the state, and that needed a wonderful universe in which God could and did intervene, usually through the operation of special pieces of material culture, such as the bones of holy men. This state of mind was to endure for well over a thousand years, and when it finally shifted, the classical example acted as an inspiration to enquiring thinkers.

Why did the prevailing mind set shift, and the gentlemen in north-western Europe around 1700 start to think differently? The kind of personal effort in the pursuit of salvation required by the Protestant churches is one reason; those who read their own Bibles to sort out for themselves what God intend-
ed, might start to scan the world with the same purpose. A corollary to this for the generation born about 1640 was disillusioned with the fighting over religion that had dominated the lives of their fathers (and often grandfathers), in all its destructiveness, and a determination never again to allow religious differences to be so important. Printing meant that, potentially, books could be produced in very much greater quantities than ever before. Gunpowder, too, meant that gentlemen were no longer required to spend their childhoods learning to control the heavy horse, armour, and lance on the battlefield, and so freed up their education to embrace more book-based study.

However, perhaps the most significant change had to do with the amount of wealth that north-western Europe was beginning to have at its disposal, and the larger middle class that the creation and management of wealth brings. The new philosophy was itself to turn out to be a key that could unlock a previously undreamt level of production and consumption, through the capacity that it provided to manipulate raw materials more quickly and to distribute them more easily, in a virtuous spiral of wealth creation. Its impact is easily visible when wills are compared. A typical will made by a well-off man in England in about 1600 would list perhaps a bed with its hangings, some coverlets, a few small items like three-legged stools, some tools and pots and pans, a cloak, and maybe a small piece of jewellery, like a ring. By the 1850s, such a man would be able to leave substantial furniture and furnishings, such as curtains and carpets, a good many clothes for different occasions, china, glassware, a clock, and a good deal of assorted metalwork. By 1700, northern Europe had been accumulating wealth, chiefly as a result of its textile production, for some five or six centuries. By that time, assisted by the early imperial ventures in the Americas and the East, a critical moment was reached. There were enough ships, enough land travel, enough book production and education, and enough scope for peaceful social gathering to enable crucial human interactions. This chapter will trace the story of these developments.

**DISPLAYING THE GRANDURE OF THE COSMOS**

The later medieval period had seen some significant accumulations of material. Suger became Abbot of St. Denis, the royal church of the Capet kings near Paris, in 1122. He re-built the church in what became, by that act, the famous Gothic style, and he gathered objects splendid enough to reflect the new architecture. Some of these, especially the hard stone vessels, were of Roman or early Byzantine manufacture, following an important trend in collecting, which would continue, and continue to link the contemporary with the classical past. Similar collections were made at much the same time
by men such as Henry of Blois, Bishop of Winchester, and the brother of
King Stephen of England who brought back from Rome antique statues that
shocked his retinue with their nudity. The list of late medieval collectors
continued with men such as the English William of Wykeham, Bishop of
Winchester and the French Duc de Berri in the fourteenth century. The
scene was set for the glorification of the ancient world, understood through
its literature and art.

The collecting habits of men such as these led directly to the aspirations of
Cosimo de Medici (1389–1464), who ruled Florence, gathered a similar, but
huge, collection of antique carved gems, hard stone vessels, and gold and
silver coins and medals. Cosimo was a ‘new man’, whose family had been
bankers, and who would have been despised by the men of long pedigree
who ruled most of Western Europe. He needed the prestige, which the pos-
session of many beautiful and desirable things could bring, in a world where
many of the northern courts were producing men who prided themselves in
valuing such things. Cosimo founded the famous dynasty of rulers and col-
lectors. By the time of his grandson, Lorenzo the Magnificent (1448–92), the
palace collections also included paintings, and rarities, such as the unicorn
horn (probably the tusk of a narwhale), which was valued at 6,000 florins,
one of the most valuable objects Lorenzo possessed. It was this kind of object
that carried the seeds of the future, with a crucial interest in the natural,
rather than artistic, world.
Lorenzo took over the classical word academy, with its associations with Plato, to describe the group of connoisseurs and scholars that he gathered around him; in the same way he appropriated the word museum from Greek Alexandria to describe the collection itself, and the way in which it was kept. Museum as a term thenceforward carried the prestige of the Medici court, with all that this implied. Well into the eighteen century it was only one word among several others – gallery, cabinet, theatre, studio – but museum became the standard term for collections of natural and historical material, probably because it had been used in Florence. The use of Greek terminology takes us to the philosophical underpinnings of the entire enterprise. These drew primarily on Plato’s teaching, which stressed the notion that each aspect of early things was but a pale and imperfect rendering of the true idea, the ideal essence of things, which existed in the cosmos and of which the earthly representative was but a pale shadow. Plato’s own doctrines were used later in Alexandria to develop assorted systems called collectively Neo-Platonism, which greatly elaborated the connections between this world and that of the heavenly ideal. These notions were, obviously, capable of being made compatible with late medieval Christian theology. The savants who gathered at the Medici court took up Platonic teaching by seeing the Florentine court, and its collected treasures, as the earthly counterpart of the ideas in Heaven. It was in the style of a second, very important, contemporary thought, the great cosmos, the macrocosm, created in small, the microcosm; small but perfectly formed, for the microcosm was held to be as (or almost as) divine as the greater cosmos. On earth, as in Heaven ran the saying, enabling the ruler to appear as God below.

The Medicis inspired a number of famous collections made north of the Alps by members of the imperial house of Hapsburg, and these served as models for the hundreds of similar collections made by princes and lesser men across Christendom. These were the Kunstkammer, the German equivalents of the Italian collections. Samuel von Quiccheberg, who was employed by Albrecht V of Bavaria, set out the conceptual basis of these collections in his Theatrum Amplissimum of 1565. Here, he describes the ideal order of a comprehensive collection by setting down, and illustrating with examples, the desirable arrangement of material on display. The first displays are to be devoted to the ruler as the founder of the collection in particular, and as the centre of the early cosmos, around whom all revolves. The remainder of the displays should concentrate upon paintings and sacred objects, in the mid-sixteenth century still much the same thing, objects made of inorganic material, including jewellery, metalwork, woodwork and stone, organic material representing the three realms of earth, air and water, and artefacts from the past. Translated into modern terms, these categories mean fine art, applied art, natural history, and human history. The continuity of distinctions, in the organisation of materially based knowledge, between the sixteenth century and the present day is very striking indeed. It
still structures most universes, courses, and, of course, virtually all major museums. Quiccheberg’s idea of a ‘theatre’ of knowledge was taken from a book by Guillo Camillo (c. 1480–1544) entitled The Memory Theatre, which gave a technique for remembering knowledge by imagining it laid out in order. The Memory Theatre was an actual construction, made of wood and big enough to admit two people, which Camillo built at the court of Francis I of France. It rose in seven steps, representing the seven planets, and the façade was covered in pictures, texts, and little boxes containing more information. All this was intended to present the cosmos as a mystical system held together by neo-platonic ideas into which the viewer could enter.

Collections such as these were intended to demonstrate the prestige of the collector, and to demonstrate the principle that in creating a microcosm of the universe, intellectual power over the whole, the macrocosm, could be displayed. These collections tended to favour works of art, both ancient and modern, arms and armour, coins, gems, and medals. Henry, Prince of Wales, whose early death in 1612 led to the eventual accession of his younger brother as Charles I, had a large collection of such things. The intention was to produce ‘an Italian court at home’ in order to demonstrate how fully the British royal family was participating in the key intellectual and fashionable paradigms of the time. However, in England, especially, this princely style of collecting was to be matched by a parallel urge to accumulate, which was to be accompanied by its own philosophy.

RARITIES AND CURIOSITIES

The burgeoning Northern European middle class, ‘men of the middling sort’ as the age called them, equally desired to join in the new game of collecting, but they could not afford the major objects of art and craftsmanship that were to be found in the royal collections (Arnold 2006). However, the newly-opened trade routes into North and South America, West Africa, the Far East, and Russia offered opportunities for gathering excitingly exotic and strange material, to stimulate the imagination. In southern England, William Tredescant the elder worked all his life as a Head Gardener, first to a series of aristocrats and then to Henrietta Maria, the wife of Charles I. He accumulated a large number of rarities, things such as the lantern Guy Fawkes used in his effort to blow up the king and parliament in 1605 and a pair of Queen Elizabeth’s riding boots. All of these things came his way through his aristocratic patrons, such as the Duke of Buckingham, who was able to let Tradescant have West African material through his connection with the Guinea trade. Tradescant’s rarities were not top-of-the-range collecting items; they were amusing, interesting, or exotic pieces about which it was possible to tell stories. However, as the collection grew it became more
important, and by 1638 he had acquired a house in Lambeth on the south side of the Thames, set up his collection, which he called the Ark, published a catalogue of the whole, and was receiving visitors. At sixpence per person, the Ark became one of the established sights of London. Through the prestige that he accrued, Tredescant was able to see himself as one of the gentry; in due course, he was buried in a chest tomb, with his son who inherited the collection and the fame, in the churchyard of St. Mary’s (Lambeth) close to the London palace of the Archbishops of Canterbury.

The Tredescants were not the only Englishmen who were forming significant collections of the kind that contrasted with the aristocratic desire for works of ancient and modern art. In Scotland, Sir James Balfour (1600–57) was assembling historical and antiquarian materials, and in Leeds, northern England, Ralph Thoresby had a famous museum, which its Catalogue, published in 1713 shows, contained objects such as the arm of the Marquis of Montrose, executed in 1650. John Aubrey, who had a finger in every intellectual pie of the time, formed a cabinet of curiosities; so did Thomas Browne who was also a notable writer; Robert Hubert created a very significant collection of natural history specimens and exhibited it publicly; and John Evelyn spent much of his time gathering his own material and viewing other collections, as well as writing his famous Diary. A very famous collection was formed by the Dane, Olaus Worm, and the engraved picture of the display at the front of the catalogue, Musei Wormiani Historia, published in 1655, gives us a fair idea what his, and other similar, collections looked like. Objects are placed on shelves and in racks on all the walls from floor to ceiling. Stuffed animals, such as crocodiles, are slung from the rafters.

Although some pieces in these accumulations were primarily there to be admired, the key word in the new vision was curiosity. A curious man was interested in the material he and his friends were collecting, interested in how it worked, or why it was so strange, or why it was like and unlike other similar pieces known to the group. This kind of collecting nurtured the capacity to look at specimens in detail, and began to draw attention to all the apparently strange, phenomena that the natural world could produce. In 1642, the English Civil War had broken out, and collecting practices went into enforced abeyance; Hubert took his collection to Leipzig and Hamburg, and did not return to London until after the monarchy had been restored in 1660, and Charles II, son of the executed Charles I, safely on the throne. Charles II’s reign was to see institutions of crucial significance founded in London and Oxford. Perhaps people had time to read during the long boring periods that are a part of any war; at any rate, the prime influence on their thinking was the work of Francis Bacon, much of which had been written before the war, but was not generally published until the early 1640s.
Francis Bacon had been trained in the English tradition of the Common Law, and had risen to be at the heart of the government of King James I. For him, the courtly art-collecting culture was unacceptable because it conferred no public good (Arnold 2006). He could see that, properly pursued, the study of natural history could produce much that was useful and applicable, just as historical material, properly interpreted, could give substance to national history (a subject much debated in his lifetime, in part because the Stuart dynasty had originally been kings of Scots, who had inherited England through a long series of dynastic accidents; the new united kingdom needed to be given some kind of historical rationale). Bacon developed the idea that through the deployment of methodical enquiry, bodies of information could be built up from which reliable procedures could be deduced. These procedures, in turn, would open the way to both further discoveries and workable techniques that industry could employ to the general good. His crucial notion probably owed much to his legal training. Each piece of information was a piece of evidence that is a self-sustaining fact presented by a physical thing, which was not susceptible to undermining. Today, we are very wary of assertions of essence, knowing all too well the manipulations that can stand behind apparently pure facts, but like it or not, Bacon’s assertion is still the fundamental premise on which experimental science is built, and, in the foreseeable future, will remain so.

In following his ideas through, Bacon came to see that a core collection of material evidence was essential to his project. He argued for a grand data-collecting project, which would bring in information from geography, geology, chemistry, magnetism, and natural history. Obviously, a major institution, effectively a national museum with all its appropriate facilities, would be necessary to house the material evidence, which was at the core of the undertaking. In a play, which he wrote in 1594–95, one of the characters proposes four inter-linked institutions – a library, garden, zoo, and aquarium, a ‘still house’ or laboratory, and finally

>a goodly cabinet, wherein whatsoever the hand of man by exquisite art or engine hath made rare in stuff, form or motion; whatsoever singularity of chance and the shuffle of things hath produced; whatsoever nature hath wrought in things that want life and shall may be kept; shall be sorted and included (Arnold 2006: 23).

In his New Atlantis, written around 1617 but not published until 1627, Bacon envisaged a college, otherwise known as Solomon’s House. This would include gardens and lakes, where every kind of field experiments could be carried out, and laboratories for every kind of research. There would also be two large galleries containing examples of inventions and statues of inventors. This is a good description of a museum, but it also takes on board the aristo-
cratic art collections and the rarities, produced by the ‘shuffle of things’. In England, museums had been firmly identified as the spaces and places within which the accumulation and study of evidence-based knowledge would take place.

The new king, Charles I, crowned in 1660, seems to have seen himself as a part of the new philosophy of knowledge; even during his years in exile in the Low Countries, he had interested himself in chemical experiments. One of his first acts, in 1660, was the founding of the Royal Society, which held weekly meetings in London at which performances like the cutting up of a dolphin took place, and maintained a Repository, effectively a museum, where specimens were kept. By around 1663, Robert Hooke had been made Keeper of the Repository, and in 1669, the Society employed Thomas Willissel to go round the British Isles collecting material in order to make the collection more complete. The early members of the Society – men such as Sir Christopher Wrenn and Sir Isaac Newton – were all scientists of the very highest class, who in their speculations and their practical effects transformed the condition of humanity, and that of the planet as well; the gathering together of such a glittering group has only happened a few times in human history.

**Checking with the material gathered in the past is a crucial part of the contemporary process.**
From this milieu emerged what is generally reckoned to be the first public museum, founded by Elias Ashmole in Oxford, in 1683, with royal patronage. The original building is still on Broad Street, now housing the University Museum of Science. The museum had three floors, comprising a laboratory, an exhibition gallery in which the collections were displayed, and lecture rooms. The Ashmolean and the Royal Society Depository were both essentially collections of collections, all of which had their roots in the seventeenth century. The Ashmolean Museum had as its founding collection what was made by the Tradescants, father and son, which, after much acrimony, had come to Elias Ashmole, after his own collection had been largely destroyed by a disastrous fire at his house. The largest group of specimens in the Repository came when the Society acquired Robert Hubert’s collection of natural rarities, and its Europe-wide reputation, in 1666. The British Museum, not opened to the public until 1759, also came from the same milieu. Its founding was possible because Sir Hans Sloane was willing to give it his own, very extensive, collection, but Sloane’s own material was itself a collection of collections. Among others, in 1710 he had bought the famous herbarium of Leonard Plukenet, and in 1711, that of Dr. Herman, Professor of Botany at Leyden. Between 1688 and 1724 John Woodward, another significant member of this loose group, had amassed nearly ten thousand geological and natural history specimens, all of which were deposited in what ultimately became the Sedgwick Museum of the University of Cambridge. All this is important partly simply because the material itself was preserved, but even more significant was the sense of continuity. Some of Woodward’s original fine wooden cabinets, probably commissioned in the 1690s especially to hold his material, still survive in the Sedgwick to this day. Science itself was building up a tradition and a pedigree, in which men remembered their masters, and were themselves remembered by their pupils.

It is no exaggeration to say that what is frequently called ‘the late seventeenth century scientific revolution’ was centred on a handful of men who came to the idea of uniting the carefully observed, concrete natural evidence that was in their collections, with that of the neo-platonic cosmos with its God-given structure, which they had learnt from the esoteric lore of the earlier generation. The significance of concrete evidence came, as we have seen, in large part from Bacon’s view of evidence, while the working through of neo-platonic philosophy, with its stress on hierarchy and structure encouraged the working-out of connections and systems in the natural world. Moreover, all this could be placed within an acceptable natural theology. When Christian Daniel Major’s book, on Kunst- und Naturalien-kammern came out in 1674, he was at pains to stress the idea that nature is a book in which the greatness of God can be read, and the study of nature can reveal the mind of God.
The first effort towards a comprehensive approach to these aspirations was made by the Royal Society: this was why it was so anxious to make its Repository as complete as possible. Nehemiah Grew was charged with the task of producing from the collection classified tables of natural phenomena, the whole enterprise to be expressed in philosophical language. Grew’s Catalogue, Musaeum Regalis Societatis, duly appeared in 1681. Grew and his contemporaries were very conscious of what they were doing, and attacked the culture of rarities cultivated by the previous generation precisely because it concentrated on the odd and strange, which by definition could not (at that time) be incorporated into an overall system, rather than the normal, which if set amongst a whole range of similarly normal specimens, could be. As Woodward put it,

\[ \text{Censure would be his due, who should be perpetually heaping up of Natural History Collections, without design of building a structure of philosophy out of them, or advancing some Propositions that might turn to the benefit and advantage of the world. This is in reality the true and only proper end of collections, of observations and natural history: And they are of no manner of use or value without it (Arnold 2006: 220).} \]

In the Preface to his Catalogue, Grew echoed the same view, by saying that, ‘an inventory of Nature’ should include ‘not only things that are strange and rare, but the most known and common amongst us’. He also criticised the obscurantism and thinness of many existing catalogues, advocating a fullness and precision of description, which he then demonstrated in the Catalogue entries. When it came to the point, the Repository was too frail to bear the cosmic burden placed upon it. However, Grew did manage to organise some of the material, particularly the shells, into family tree type taxonomic diagrams, which expressed the relationship between their forms, something that would be the shape of things to come.

**THE EIGHTEENTH CENTURY**

As we have seen, by 1700 the gaze was no longer fixed on the rare and strange of the earlier generation, but rather on the similarities and differences between standard specimens drawn from across the stretch of the natural world in quantities large enough to enable comparisons. Comparison as a means of creating classifications had become the new explanatory paradigm, one which is still with us, because experience shows that it works, and that it is the key that can unlock both further understanding through ‘blue skies’ thinking and enable the resources of the earth to be exploited to what appears to be human good. By the 1730s, Northern Europe had accumulated very large quantities of collected natural history material, most of it sufficiently well recorded to be useful. There was enough to make possible the framing of grand, overarching, explanatory narratives.
The work of creating the over-arching system, which would explain the natural world, fell to Carl Linnaeus. Linnaeus was a Swede, who made his first collection of botanical specimens in Lapland in 1733, and published it as *Flora Lapponica* in 1737. *Systema Naturae* followed in 1736, and Linnaeus’s reputation was secure. Naturally, he had his rivals and detractors, notably the Frenchman, Buffon. Buffon accepted Linnaeus’s names for plants reluctantly, adding them only to the underside of his own labels. However, it is apparently not true that Linnaeus retaliated by deliberately naming the toad *Bufo-nia*. By concentrating on the outward appearance of plants, especially their flowers, and then effectively counting up similar and dissimilar features, Linnaeus was able to create a series of categories of natural material, which could generate a twofold name establishing each type in its place in the whole. Linnaeus spent time in England, and one of the collections on which he worked was that of Sir Hans Sloane, which, as we have seen, became one of the principle founding collections of the British Museum when it opened to the public in 1759. His method of creating classes did not survive, but his names and the system of nomenclature that he used was, and is still, the basis of plant names today.

Natural history collecting, in all its aspects, became a passion in England, as one way in which the burgeoning middle class could demonstrate its modernity and its social credentials. As the eighteenth and earliest nineteenth century wore on, innumerable natural history societies and field clubs were founded, as the contexts within which collecting could be pursued and, as a very significant by-product, as the public square in which people could learn the political arts of managing meetings and handling committees. Such collecting was seen as morally fine. ‘Nice’, that is middle class, or those who aspired to be so, children began to be encouraged to form their own series of preserved butterflies or seaweeds, as part of their educational and ethical development, and this continued well into the 1950s, when the BBC’s famous daily radio programme, Children’s Hour, often ran collection related features (as I can well remember). Gradually, comprehensive flora and fauna were built up in which the living things of earth were identified, classified, named, mapped and published. Today, the only major area left incompletely studied is the Amazon rain forest, but anybody who wishes, for example, to discover possible new insect species there cannot do so without reference to the collections of the London Natural History Museum, because checking with the material gathered in the past is a crucial part of the contemporary process. The same is true of current, politically difficult projects, such as the efforts to quantify the effects of global warming, or of the impact of genetically modified crops.

Meanwhile, throughout the eighteenth century outside Northern Europe, collections of fine art retained their prime position. Gradually, in tune with the new desire on the part of rulers to educate their people, the princely col-
collections were turned into public museums by the princes themselves, although not the English royal collection, which remained, and is still, the personal property of the monarch herself. The Hapsburg collections moved out of the Stallburg and into the Belvedere Palace, in Vienna, in 1776; the Royal Collection in Dusseldorf and the Dresden Gallery were opened to the public in the middle of the century; and the Uffizi was donated to the state by the last Medici princess in 1743. Appreciation of the pictures in these art galleries came to be seen as the touchstone of spiritual excellence, and as a way into acquiring courtly manners, something the developing bourgeoisie much appreciated. However, they could also be turned into vehicles through which an historical depth could be achieved, often closely linked to the idea of national history, and hence the kind of nationalism that was to be major feature of nineteenth century Europe. In the Belvedere Palace, the imperial pictures were divided into national schools, and art-historical periods. They were put into uniform frames, and probably hung in a single line, rather being used to cover the whole wall, as had been the earlier style. A walk through the galleries was a walk through the history of art, as the accompanying Guide, written by Christian von Mechel made clear. ‘The new museum,’ he wrote, ‘is a repository where the history of art is made visible’ (quoted in Bazin 1979). The Dusseldorf collection had a similar arrangement from 1756, and the Uffizi from 1770. The Louvre, by then a public museum, adopted it in 1810, and it has been the usual scheme in art museums ever since.

However, what of older and less elevated tastes? Old habits die hard, and indeed are not yet dead. During the eighteenth century, there was a developing popular taste for shows, which concentrated on historical and exotic material, and in which old-style rarities and curiosities – the bearded lady, dwarfs, stuffed double headed lambs, animal skins from fabulous lands, the cloak of a famous murderer – were taken around the country and exhibited. While we concentrate on the respectable, high moral ground of collecting and displaying, its less genteel underbelly must not be forgotten. By the 1790s, no visit to York, the capital of northern England, was complete without a visit to the museum in the castle, then the county gaol. Here

are preserved the coining apparatus used by David Hartley, ... a part of the skull of Daniel Clark, the victim of Eugene Aram; the knife and fork with which the rebels were Quartered in 1745 (Brears and David 1989: 7).

It seems that, quite apart from famous collections, like that at York, and the travelling freak shows that went round the country, it was fairly common for coaching inns and the like to keep one or two gruesome pieces with which to entertain their customers. However, the great shift in genteel taste is marked by the fortunes of the word curious. Throughout most of the seventeenth century it had been a term of great respect and value; a curious man was one interested in the workings of the world about him in a way, which redounded
to his credit. However, by the end of the century, the use of the word became increasingly uneasy, as the connotations of this kind of collecting became less secure. Gradually, curiosity descended the intellectual ladder, until by the nineteenth century it was being used by book dealers to mean pornographic literature, a use that it still retains. Curious collections were perceived to be what, indeed, in part they had always been, an undue interest in the distasteful and perverted.

By 1800, there were a number of well-known private collections, which, in some ways, bridged the gulf between the superior public museums with their art and, in England, natural history, and these popular sensational shows. That of John Calvert in Leeds, which opened to the public in 1795 and had a large collection of natural history specimens, is a good example of the type. They were commercial enterprises and, therefore, required a payment at the door, but they offered proper value for money in terms of knowledge gained and genuinely interesting things viewed. The most famous of these collections was that gathered by Sir Ashton Lever, a country gentleman of Lancashire, who assembled a very large collection that included natural history and material brought back from the Pacific by men who had sailed with James Cook, who had commanded three major voyages of exploration to the Pacific, Australia, and the north-west coast of Canada in 1768–71, 1772–75, and 1776–79. In 1774, Lever decided to open the collection in London at Leicester House, charging an entrance fee, partly to offset expenses and partly to discourage undesirables. A letter from Susan Burney to her sister, Mme d’Arblay, dated June 16, 1778, gives a good account of what visiting the show was like. She mentions, among other things, birds, beasts, shells and fossils; a roomful of monkeys; the complete dress of a Chinese mandarin; and a suit of armour said to belong to Oliver Cromwell. Burney’s account shows how collections like Lever’s combined the sensational worlds of the rarities with the more recent understanding of how knowledge could be gained from the ordinary.

By 1806, the museum had exhausted its popularity, and the material in it was disposed of. Much of it came into the possession of William Bullock, another, but more significant, north-country museum entrepreneur. The Bullock family seemed to have been engaged originally in the travelling wax works business, a branch of the rarity collection trade. William himself collected natural history and toured his collection through Yorkshire towns like Wakefield and Sheffield. By 1801, he had opened the show in permanent premises in Liverpool, and he was able to add to his collection by buying exotic material and animal skins from sailors in the port. He published the first of what was to be many editions of his Catalogue in 1808, and by 1812 the collection was substantial enough for Bullock to make the brave decision to move the whole operation to London. He found a site in Piccadilly, which he had done over in Egyptian style. The façade onto the street was modelled
with a battered doorway based loosely on the temple of Dendera, and one of the two main rooms inside was decorated with Egyptian motifs. In the Egyptian Hall, as the building came to be called, Bullock set up his material, listed in the published catalogue. Much of the collection was displayed in the usual style, but the animals and plants were different. Bullock had many animal skins, which were treated with preservative made up to his own recipe (probably mostly arsenic, but baking specimens also seems to have been involved), and stuffed. These were mounted in naturalistic positions within mock-ups of their natural habitat created out of rocks, probably made of painted papier mache, and appropriate vegetation made of wax; the wolves, for example, were in a cave within a rocky knoll, while the seals were on a sea shore. The trees had been made by consulting Sir Joseph Banks about the appearance of tropical flora, and Banks had allowed Bullock to use his own collections and his library, a signal favour. These proto-dioramas made Bullock’s museum something special. They offered a new experience, which combined the genuine knowledge embodied in the displays, with the sensation of being transported in imagination to another world. The collection was sold in 1819, although exhibitions continued to stages at the Egyptian Hall (Pearce 2008).

The increased visibility of the east, the material of which was pouring into Britain, and the historical, steadily being brought before the public by the activities of the Society of Antiquaries among others, created a craving for the ancient and the strange, which sparked off major acquisitive passions in those who could afford them. The classical had become too pure a taste for those who required stronger stimulants, while both the past and the Orient were becoming eroticised into what can be called the Gothic and the Romantic visions. The creation of such visionary ‘other worlds’ was the main-spring of some collecting that aimed at producing a private space within which a particular life could be led; this was at the highest end of what we might call lifestyle collecting (Herrmann 1999). Wealthy men, such as William Beckford, Horace Walpole, and the Prince of Wales in his exotic pavilion at Brighton, created palaces to their own tastes. At Fonthill Abbey, his country house in southern England, Beckford created his feverish dream of Gothic, and it was much admired. A surviving account of 1817 talks of rooms full of minerals and precious stones, Italian bronzes, doors covered in purple velvet embroidered with gold, a chapel – an important element in the Gothic – this heaped with golden candlesticks, vases, and jewel studded chalices, and much, much more. The major-domo of the house was a dwarf, clad in embroidered gold. Eventually, of course, Beckford over-reached himself and, in 1823, most of the collection had to be sold off. Walpole, son of a British prime minister, created a similarly famous house at Strawberry Hill, probably the most influential of all early Gothic creations, and this, too, ended up under the hammer.
While all these developments were taking place, the world of Greece and Rome, and in particular the statuary, which they had produced, was not being neglected. The Medicis had, of course, possessed statues of this kind, which were valued for their own sake and for the inspiration that they could provide for the great sculptors of the day, including Michelangelo. By the early seventeenth century, perhaps the most significant of the classical collectors north of the Alps was the English Thomas Howard, Earl of Arundel, who amassed a very considerable collection, which is now in the Ashmolean Museum. Arundel went abroad first in 1612 and, a year later, he set off again with the architect Inigo Jones, who was to create the hugely influential Banqueting Hall at Whitehall for Charles I. Here, Arundel found his appetite for Italy past and present, and through his network of friends and agents, he amassed the collection of statues, busts, inscriptions, coins and gems, which transformed his home into an Italian palace.

During the period 1618 to approx. 1650 or a little later, France, Britain, and the German lands were all enmeshed in fighting local wars, sometimes very destructive wars, and little collecting of southern material could be undertaken. However, as the eighteenth century dawned, the subject became compelling again. Italians, notably Cardinal Alessandro Albani (1692–1779), accumulated very important collections. The English aristocracy developed the practise of the Grand Tour, which had started in the previous century. This took young Englishmen of the upper class travelling in Italy, often spending over a year on their travels. They visited Venice, Florence, Rome, and Naples, looking at temple sites and museums, and taking part in the local social life. As part of the polite education that it was hoped that they would acquire while travelling, they purchased pictures and sculptures along the way (Black 1992). Most of these acquisitions simply went to adorn the ancestral stately home, now usually re-worked in a classical style, when the traveller returned home, and the results can be seen in properties owned by the National Trust all over England. A few men, and Sir Richard Worsley is a good example, made collections of real significance. In the second half of the century, Worsley took himself abroad following a very scandalous divorce, so when he made his important tour, he was older than most, and had a point to prove to society. He gathered classical marbles, as well as a significant collection of classical gemstones, all of which were displayed at his home at Appuldurcombe on the Isle of Wight.

By the middle of the century, a substantial superstructure had developed to enable Englishmen to travel (reasonably) comfortably and to buy what they wanted. In Rome, both Gavin Hamilton and Thomas Jenkins acted as local brokers in purchases of classical art. Two men, who owned property in Lancashire, Charles Townley and Henry Blundell, both acquired substantial col-
collections. The Townley Marbles purchased for the British Museum in 1805, was one of the principal acquisitions made by the Museum in the period, and the Blundell Marbles were used to create a classical ambience at Blundell Hall, which eventually went to Liverpool City Museum, now National Museums on Merseyside.

A rather different type of collection was made in Italy, mostly in Rome, by Charles Tatham, between 1794 and 1796 (Pearce and Salmon 2005). Tatham was a young architect, who had been sent out by his employer, Henry Holland, to further his artistic education, and to make a collection of architectural fragments, which would be used in the office in London as inspiration and models for contemporary work in the architectural practice. Tatham made a substantial collection of over a hundred pieces, comprising a very mixed bag, all of which are now in the Sir John Soane Museum, London. In 1796, Tatham had to flee Italy because Napoleon was marching down the peninsula, who was the new Corsican general that the French now have, as Tatham put it in one of his letters home. Northern and central Italy was to be closed to the English for nearly twenty years, and attention turned to the home of classical sculpture, Greece herself.

Lord Elgin is the most famous, and the most controversial, of the Britons who gathered up very important temple sculptures in Greece, and brought them home to Britain. Elgin was appointed Ambassador to Constantinople in 1799 and this appointment enabled him to strip off important sections of the exterior of the Parthenon, on the Acropolis in Athens, together with some architectural members. He carried these back to England, where in 1816 they were purchased for the nation, and eventually they were properly housed in the British Museum (Jenkins 1992). Elgin was not the only such acquirer. In 1811, Charles Robert Cockerell, another young London architect, was travelling in Greece with a group of companions, some English, some German. They went to Aegina to make detailed drawings of the temple there, and in the course of the work, stumbled over the fragments of the temple facade, which had perhaps fallen in antiquity. A few months later, when Cockerell himself was in Sicily, lighting struck twice: the group was drawing at the isolated rural Temple of Apollo at Bassae when again they found substantial quantities of sculpture in the rubble on the site. The two temple collections were sold off at Zante in Greece. The Aegina Marbles were bought by King Ludwig of Bavaria, who built the Glyptothek at Munich, especially to house them (finally completed in 1830). The Bassae group were bought for the British Museum.

In the same way, Egyptian material was not neglected. It, too, had been the subject of earlier collecting, and in Italy Athenasius Kirchner, a Jesuit priest, had begun to study hieroglyphics in 1628, and eventually gathered a substantial collection of Egyptian antiquities. The famous English Café in Rome had
been decorated in the Egyptian style, and as this style was made more popular by its fashion in Napoleon’s early empire, following his Egyptian campaign in 1798–1801, it was used in a number of famous interiors, notably in London, which was created by Thomas Hope, and of course for the Egyptian Hall already mentioned. By 1817, Henry Salt, appointed British consul in Cairo, was collecting ancient Egyptian material, which ended up in the British Museum, and his associate was an Italian from Padua, Giovanni Battista Belzoni. In 1817, exploring in the Valley of the Kings, Belzoni discovered the hitherto unknown tomb of Seti I (Pearce 2000). The tomb had been robbed of all its contents in antiquity, except the fabulous royal sarcophagus, which Belzoni took, and which ended up in the Sir John Soane Museum. However, it was covered in wall paintings, brightly coloured in red, blue, white, and gold. The style of the paintings was of the characteristic type now familiar to us from a thousand reproductions, but this was the first time they had been seen by modern European eyes. Belzoni painstakingly copied the paintings throughout the tomb. Back in London, he mounted an exhibition of the copies in the Egyptian Hall in 1821. The exhibition also included a mock-up of two of the most impressive of the tomb’s rooms. The effect, with the figures of the exotic gods emerging in the flickering light cast by the candles was sensational. The exhibition was the event of the season, and, as with Bullock’s animal displays, a new kind of museum experience had been born. Belzoni quarrelled bitterly with Henry Salt, and also with the authorities at the British Museum, who did not treat him well, probably because he was poor and a foreigner. However, a substantial number of the painted copies still survive in the City Museum, Bristol, in the west of England.
These exhibitions, and others, in which the natural world and, especially, the historical world, seem to have contributed substantially to a major shift in perception, which occurred in the years either side of 1800. The eighteenth century collections had been dominated by the twin concepts of connoisseurship and taste. These values were achieved by concentrating on the outward, visual form of an object, which could then be judged by those whose taste had been cultivated by much experience of fine things. It followed that many pieces were used primarily to furnish contemporary rooms and gardens, as in the classical landscapes created at Stow In Buckinghamshire, or the rooms produced by Worsley. In same way, fashions in furnishings and dress were derived from the appearance of ancient material, as in the Roman hairstyles that were fashionable for men around 1800 or the Egyptianising furniture designed by Hope. However, as reconstructions of earlier worlds began to be created, it began to seem that objects held within them the special characteristic of bringing the past into the present, regardless of what the piece looked like, and how it gratified the viewer’s idea of good looks. Because a thing was genuinely of the past, because it had truly been handled by ancient Greek men or ancient Egyptian women, that past was forever within its essential nature, and consequently it brought the true past with it wherever it was in time and space thereafter. We of the twenty-first century do not believe in the existence of essential characteristics, but the nineteenth century did, especially in relation to the objective − note that word − existence of the past. Huge consequences flowed from this kind of historicising. The development of the discipline of archaeology is an obvious one, but the new vision also inspired much historical writing, a new wave of historical fiction, and a taste for pictures depicting historical events. We may not now believe in its premises, but the religion of the object continues to inspire much popular entertainment in the areas of film and television.

SOME FINAL REFLECTIONS

The early history of collecting, as this chapter shows, is not a steady progression of practice from a simpler to a more complex form, or from a primitive to a more sophisticated form, and still less from an ignorant form to that of true knowledge (Pearce 1995). For one thing, we no longer believe that such progressions exist: each age must be taken on its own terms. Equally, when collecting is under review, it is the way in which, although styles may go out of fashion, they do not cease, that is so striking. People today are still forming collections of rarities and curiosities; they are still playing with interiors, which create a vision of the East or of the past; they are still accumulating snail shells or lichens, laid out in taxonomic order; and, of course, they are still buying pictures, clocks, and classical sculpture. The reasons for this lie well beyond the operation of reason. People collect firstly for emotional rea-
sons to do with self-identity and self projection, and what they do, and how they do it, are matters of taste and opportunity. Earlier in this chapter, I suggested that the trigger behind the appearance of the collecting habit in Europe in the fifteenth century had to do with the steady accumulation of wealth, which produced a virtuous cycle that, eventually, sucked in the material of the world. This generated an increasingly important middle class, who needed significant occupation, recognition, and the prestige that comes from making a good show and telling a good, knowledge-laden story. Cosimo de Medici is typical of this process at its beginning, and the Getty family is a characteristic contemporary manifestation.

However, historical progression is never a simple matter of one cultural moment inevitably following another. Put in a different way, individual men of brilliance could see how the materially embodied philosophies of their immediate predecessors could be re-worked to produce a new and different outcome, which might come closer to the nature of the universe and, therefore, in the simplest way ‘work better’. It was these insights that yielded the new scientific practices of those few years around 1700 that I stressed at the beginning, and here we do strike a progression of thought. Sixteenth century neo-platonic ideas that a collection could represent the macrocosm here, below, quickly came to be seen in Northern Europe as an inadequate way of representing a universe now being perceived as much more complex, and governed by physical rules. The following passion for the collecting of rarities was also soon seen to favour the peculiar over the norm, and as natural history collecting and philosophical thinking enriched each other, the idea of the norm was recognised to have great explanatory power, particularly when narratives were constructed by comparing and contrasting one norm with another. A crucial point here is the fact that this kind of understanding depends upon setting out your material – say ammonite fossils – side by side and line by line in a kind of chessboard, and then moving individual pieces so that the whole in turn comes to form a satisfactory taxonomic lattice work. When the results are put for permanence within glass cases, necessarily set up in the same way, we have the characteristic museum arrangement, with which we are all deeply familiar. Such knowledge is embodied in the very specimens and their positioning itself; if the display did not exist, the knowledge could not do so either.

This underlines the point with which we started, the mental shift that put the material world at the centre of human understanding of ourselves, and of the universe. As the nineteenth century began to unfold, the narrative was sustained, and showed itself to be capable of very significant developments.
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The books cited here all have extensive bibliographies, which those interested may wish to pursue.