At the end of 1695 two workers dug colossal bones out of a sand quarry in the dukedom of Saxony-Gotha and unleashed a lively pamphlet war: were these the bones of a unicorn? Or those of an elephant carried hither by the Flood, or perhaps the bones of a giant human being? Or were they simply evidence of the playfulness of nature—an overactive power of generation in the guise of a congealing or fossilizing ‘water’ that lodged itself in the sand and formed into the shape of bones? The Gotha Collegium Medicum saw the find as the result of generative ‘water’ and recommended its healing powers. In contrast, Wilhelm Ernst Tetzel, the curator of the Duke’s Kunstkammer, compared the bones to similar finds stored in other collections around Europe, and concluded that they belonged to an elephant which had been deposited in Gotha during the biblical Flood. After Tetzel sent a letter and some bones to the London Royal Society for the Improvement of Natural Knowledge, the Fellows argued among themselves, finally agreeing with Tetzel and recommending that the bones be added to their own collection of objects. Tetzel’s theories were discussed in Italy, France, and throughout Germany. Gottfried Wilhelm Leibniz suggested that the bones were the relicts of a giant sea creature, perhaps now extinct, whereas Robert Hooke asked himself

wether some species of animal substances found might not be lost, they not being to be found now? Wether the latitudes of places were not changed so that elephants might have been here inhabitants in former ages? . . . Wether the bottom of the Sea might not have been dry Land & what is now Land might not have been Sea? (p. 178)

This controversy seems to point to the triumph of empiricism in late seventeenth-century Europe, especially in the comparative use made of Kunstkammer objects. With this attention to the things themselves, rather than the learning of books, we appear to be witnessing the power of empiricism overturning the medieval Aristotelian-
Christian worldview. One of the virtues of this marvellous book by Dominik Collet is to demonstrate just how wrong appearances can be.

Kunstkammern—collections of paintings and natural and artistic objects, sometimes called cabinets of curiosity—have received a great deal of attention in recent years from historians of science arguing that the practice of collecting is evidence of a turn away from words and books as authoritative to the authority of things, eyewitness, and experiment. In addition, museum curators have begun to re-arrange their early modern ‘decorative arts’ collections as latter-day Kunstkammern (a very successful example can be found at the Walters Art Museum in Baltimore, Maryland), thus bringing these collecting practices and the earlier systems of thought they represent to the attention of the general public. In claiming that collecting played a part in the Scientific Revolution, historians have compared Kunstkammern to the laboratory that became a hallmark of modern science, and have drawn an analogy between collecting and experimenting as practices that transformed views of the natural world in early modern Europe. While Wilhelm Tetzel’s use of the objects held in the Gotha Kunstkammer seems to point in this direction, Dr Collet’s research indicates that Tetzel’s action was an almost completely isolated instance in the seventeenth century of a scholar making use of objects to prove a scientific argument (although in the service of conventional natural theology). In contrast to previous historians of science who have mainly examined theoretical treatises about collecting or have extrapolated from the objects themselves, Collet combed the archives—diaries, account books, and travellers’ reports, among other sources—for evidence of the quotidian uses made of the collections in the last half of the seventeenth century. He concentrates in particular on three collections, first, in great and captivating detail on the Kunstkammer of the Dukes of Saxony-Gotha, and, then, in somewhat less detail on the Cabinet of Curiosities of the London gentleman, William Courten (aka William Charleton), and the Repository of the Royal Society. In addition, Collet looks particularly closely at seventeenth-century attitudes to the extra-European objects, or exotica, contained in these collections. He singled out these three collections because they represent different social contexts—noble, bourgeois, and ‘scientific’—which, according to previous historical analyses of collections, should be reflected in different contents, aims, and
epistemes in each of the collections. What Collet finds is unexpected and entirely fascinating, both in what it shows about collecting in general and about European attitudes to other parts of the world, but also about the glacial pace of epistemological change. In the process, he overturns many of the accepted views among historians about Kunstkammern.

In his lengthy treatment of the ‘daily’ uses of the Gotha Kunstkammer, Collet shows that this ‘encyclopedic’ cabinet had multiple goals: first as part of a pedagogical reform in which Realien would replace empty words; second, as a demonstration of natural theology which claimed that God could be found in nature; and, finally, because the collection was supposed to contain examples of manufactures and useful natural products, it was seen as capable of leading to economic reform of the territory. In practice, the cabinet was a meeting place for noble and bourgeois visitors (Prince Friedrich of Saxony-Gotha first met his bride-to-be here), where conversations were triggered by the curiosities surrounding them (from 1656 laid out on tables, and after 1700 displayed in specially made cabinets). The cabinet also served as an archive of family portraits, court visits, mementos of their travels, as well as a reservoir out of which noble gifts for other courts might be selected.

The collection was arranged more or less according to the material out of which the objects were composed, although a higher-order organizing principle was the binary categorization of European and non-European, or, more accurately, Christian and non-Christian. Barely Christianized Lapland, for example, was included as part of the non-European world. Moreover, Collet finds that despite its landlocked position, the Gotha Kunstkammer contained a ‘canonical’ assortment of exotic objects in direct and careful emulation of other European collections. The canon of exotica included Indonesian Kris daggers, Brazilian bows and arrows, birds of paradise, swordfish swords, horns listed as unicorn despite the fact that Olaus Worm had already declared these horns to be derived from narwhals, poison and anti-venom substances, Chinese games of dice, and East Indian icons, among other objects. Collet shows that this list was remarkably standard among European collections because, by the second half of the seventeenth century, the exotica trade was big business. Such objects were in demand across Europe and they were relatively easy to come by (with exotica peddlers going from court to court across all
of Europe), but more significantly, these objects had a long pedigree in the very first European reports of the East and West Indies and were part of categories of thought that in many cases went back to Antiquity. Thus they formed a true ‘canon’ of exotic objects.

Recently, historians have made much of the ‘decontextualization’ of exotic objects when they arrived in Europe. Mayan religious objects, for example, were taken from their religious culture and sent to Europe as generic ‘curiosities’ (one Central American figurine in the Wittelsbach collection being labelled a ‘Turkish idol’). At first glance, Collet’s researches seem to have produced a refutation of this decontextualization theory because the objects generically labelled fremd in the Gotha collection were accompanied by an extensively detailed and illustrated catalogue compiled by the first curator of the collection, Caspar Schmalkalden (1616–73). Schmalkalden had travelled in the service of the Dutch West and East India Companies for ten years before he returned to Gotha to regale the court with tales of his adventures and the curiosities he had brought with him. Quickly appointed Kanzlist by the Duke (exotic objects literally made his career, as they did for others whom Collet examines), Schmalkalden began to organize the collection and write a report of his travels. His account of his journeys in fact provides the long-lost context for the objects in the collection. In this travel report, we see that the objects are, in fact, the tip of an iceberg; they stand in for a whole complex of ideas about foreigners and foreignness. But, as Collet convincingly demonstrates, Schmalkalden’s descriptions of these objects all rely upon sources at least a century old which largely reflect categories of thought or objects that had fascinated writers since Pliny (for example, savages characterized by wild dancing and drinking). Schmalkalden’s travel account is beautifully illustrated, but not a single illustration stems from his own experiences. Every last one of his illustrations is copied from earlier travellers’ tales. And he is not the first to make such copies: almost every illustration having to do with the New World goes back to a single and often completely fictitious portrayal of peoples or places. Not surprisingly, the objects in the Duke’s collection fit perfectly into this world of fictional context. Even when Schmalkalden wrote about places of which he had first-hand experience, he drew his descriptions from previous sources; even when he had an object from the Duke’s Kunstkammer in front of him, even then he illustrated it by copying an image from an earlier source. In one
case, he possessed a drawing of a rhinoceros that he had received from a Chinese man, but in the illustration accompanying his travel account, he replaced it with the well-known illustration by Albrecht Dürer. Over time, less and less actual information adhered to the objects: an object labelled with provenance and some details in early catalogues of the collection was often relabelled as generically ‘Indian’ or ‘foreign’ in later descriptions. First-hand experience, eyewitness, scepticism, even curiosity seem to have had little place in this Age of Curiosity! In this world, knowledge still meant book learning, and authority was still firmly in the hands of authors, the older the better.

Collet shows that the same was true for the London collections, perhaps more surprisingly in the Royal Society, which was known for its motto—‘Nothing in words alone’—and for its proclamations about the promises of the new experimental philosophy. But Collet recounts how, in the Society’s experiments on the fabled exotic Macassar poison, in which the members injected an animal with the allegedly lethal substance to no perceivable effect, the Fellows concluded that the poison must not have been authentic, rather than that the reports of its power were wrong. Moreover, the Royal Society sent out extensive questionnaires to travellers and inhabitants of foreign parts, but received back standard tales and samples of canonical exotica, with which the Fellows seemed to have been mightily satisfied. No traveller seemed to notice or be able to comprehend a New World that by the late seventeenth century was hybrid and mestizo. The world in the Kunstkammer was a static, homogeneous one, and rigidly dualistic, divided between fremd and eigen. It was a world that mirrored the increasingly hierarchical European society, divided between civilized city-dweller and rude peasant (who was also regarded as subject to fits of wild drinking and dancing), a theme visible in the Dutch genre paintings so beloved by collectors in the same period. The exotic objects of the Kunstkammer tell us more about an internal European conversation than about the cultures with which the Europeans came into contact.

These collections of curiosities were not without effect, Collet argues in his conclusion, for they did provide a space for trans-confessional sociability, and they popularized and visualized for all levels of society (by means both of generally easy access to the cabinets as well as travelling shows of curious objects) this binary worldview,
which helped to establish the colonial ideology of later centuries. And, surely, Collet’s account also shows that the idea of objects was important in the new philosophy even if the objects themselves did not yet have a place in proving knowledge claims. I hope Collet will subject sixteenth-century collections to his meticulously researched appraisal in order to examine the world before curiosities became canonical (perhaps we would have to go back before Pliny). And, I wish he had told us more about the emotion of curiosity, for, as Caspar Schmalkalden enthused, ‘I felt such a fiery desire and longing’ to see the objects ‘with my own eyes’ about which he had heard tales (p. 98). How did this come to be a socially sanctioned desire?

Collet’s conclusions are not completely without precedent, as they have much in common with claims made by postcolonial scholars, but until recently those claims have not been subjected to rigorous examination on the basis of archival documents and material objects, although in her recent Sacred Gifts, Profane Pleasures, Marcy Norton provides a nuanced history of the introduction of new and exotic objects into Europe. The story that Collet reveals through his research is emphatically not about the power of seventeenth-century empiricism, but rather it demonstrates the power of empirical research on the part of the historian.


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