Chambers of Art and Wonders
by Gabriele Beßler

As collection rooms based on a universalist approach, the chambers of art and wonders (Wunderkammern) were characteristic of the pre-modern era. In them, artefacts and natural objects were presented as an image of the macrocosm, as a new earthly order in miniature. They must also be viewed as a phenomenon of perception, as their almost endemic spread on the European continent – starting in Italy and becoming especially common in the Holy Roman Empire of the German Nation – was connected with a new consciousness of space. In particular, the discovery of central perspective during the Renaissance played a central role in the emergence of chambers of wonders. The most significant and most valuable collections were accumulated by and in princely residences and at least up to the mid-17th century were primarily for prestige purposes. In contrast to these, smaller chambers of wonders were established by patrician researchers and scholars, who can perhaps be viewed as pioneers of this collection phenomenon. Additionally, increasingly global trade, the rebirth of classical antiquity, an increasingly profane perspective on nature, and an increasing interest in genealogical and cultural roots played a particularly important role in the emergence of chambers of wonders. These universal collections flourished from after 1500 to about the end of the 18th century. The specialist collections of present-day museums, on the other hand, emerged largely independently of holistic models of the world as presented in the chambers of wonders.

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Introduction

It is unclear when exactly the term Wunderkammer (Wunderkamer / Wundercamera), which is now used internationally, first emerged in the German-speaking lands (including the Netherlands). However, it appeared in a number of inventories and descriptions from the mid-16th century onward. Parallel to this term, we encounter terms like thesaurus, museum, studiolo or – already in use at the beginning of that century and particularly suggestive of the staging intention of these display collections – theatrum or theatrum sapientiae / memoriae. The term Kunstkammer was similarly widely used. Initially, these descriptions were seldom used in a mutually exclusive way, as the terms "art" and "wonder" were often used synonymously. The interchangeability of the terms Kunstkammer and Wunderkammer reflects the principle of equal status which governed this presentation of both unworked and scarcely worked natural objects alongside artificial objects and implements. In this way, art and nature were placed in a single context and integrated into a "total system of correspondence" of macrocosm and microcosm. The term "wonders" referred to amazing peculiarities of nature, which encompassed the three Aristotelian realms (flora, fauna, and minerals). Nature was just as present in an artificially worked coconut, which had previously been unknown in this part of the world, as in delicate ornate coral branches or animal skeletons. For example, in the ducal chamber of wonders established in Munich in 1578, there were an aurochs head and deformed horns directly beside "Indian" jars and textiles; "Indian" weapons stood next to lead castings of animals.

The practice of collecting and the impetus to display sacred and precious items was not least a holdover from the Christian cult of relics. Additionally, during the transition to the early modern period, the gradually beginning desacralization of religious, transcendental worldviews and the spread of humanistic knowledge resulted in the emergence of different non-religious rooms for contemplation and
study, so-called studioli. However, the mythical and mystical aura of several objects – and thus also the antagonism between knowledge and faith – remained for a long time. Studioli can be viewed as the basis for the subsequent development of expansive princely collection chambers, which emerged in the mid-16th century. The prevalence of these chambers reached its high point around the mid-17th century. By that point, such chambers were being established by almost all of the elite groups in society – by the nobility and by the clergy and monasteries, by the patricians and by the emerging middle class – though these groups were prompted by different motives.

None of the early collections from the period up to the beginning of the 17th century has survived intact. We do have dependable sources on these in the form of detailed inventories and descriptions, diary entries and travelogues. However, we do not have any historical graphical depictions showing the appointment of the chambers and thus giving information on the spatial contextualization of the objects. The fact that the artefacts and naturalia are no longer to be found also makes it difficult to reconstruct the central emblematic semantic contexts. Authentic reconstructions therefore appear impossible, though attempts are nonetheless commonly made to reconstruct these chambers, particularly in museums. This also gives the impression that present-day museums view themselves as descendants of the chambers of wonders of the early modern period. However, museums must "angesichts [ihrer] strikten Trennung der verschiedenen Gegenstandsbereiche und [ihrer] hochspezialisierten Sammlungen vielmehr als ... Zerfallsprodukt [der Wunderkammern] gelten".

In spite of the fact, or perhaps because the origins of chambers of wonders are obscure, but remarkable, artistic collection pieces have survived as witnesses to these chambers, the phenomenon continues to have an effect in a variety of way up to the present. Both in the physical world in the form of attempted reconstructions in exhibitions, and also in the virtual space of the internet, which itself employs the principle of collecting and interconnecting, there are traces of the ideas on which the chambers of art and wonders were based.

The term "chamber of wonders" tends to be overused. Until well into the 20th century, these diverse models of Weltaneignung (acquiring the world) remained largely ignored in the history of science, viewed as "cabinets of curiosities" that did not have much insights to offer. It was mainly art historians and image studies researchers who recognized the scope and importance of these models of the world in the early- and late-20th century. While Julius von Schlosser (1866–1938), who rediscovered these collections, viewed them as oddities in an age "voll der sonderbarsten Schullen und Grillen" (full of the most peculiar quirks and whims), a broad academic engagement with the topic began from the 1970s. Artists and museum curators also recreated chambers of wonders in miniature or as large installations, thereby at least enabling an adequately comprehensive perspective. The artistic and creative influence and the interpretation of chambers are thus signs of continuity. During the Renaissance, it was artists who were well versed in geometry and arithmetic who through their travels made a fundamental contribution to cross-border cultural exchange. During the baroque period, it was painters and sculptors who made their often unacknowledged contribution to the design and in some cases – to the extent that they were "steeped" in the natural sciences – to the system embodied in chambers of wonders.

Roots in the 15th Century: The Expanded View

Of decisive importance for the emergence of chambers of wonders was the "invention" of central perspective, which makes the ordering structure of space apparent. The studioli of the Italian nobility can be viewed as the departure point for this new perception.

Before perspective view manifested itself permanently in Italian art of the 15th century, medieval optics, which was based on Arabic optical theory, employed perspectiva naturalis. Up to then, the objects of (architectural) drawings were primarily components which involved physical peculiarities, for example human visual processes or optical phenomena, such as the splitting of light. The observer's view could only be expanded after the introduction of the perspectiva artificialis. Natural perceptive impressions could now be represented in two-dimensional form.
The window concept of the modern period in its artistic and philosophical sense cannot be separated from the concept of perspective as a model of perception. A new concept of space belongs, along with the discovery of the horizon, to the context from which perspective emerged.15

Among the first types of rooms which were based on this principle were the studioli of Duke Federico III da Montefeltro (1422–1482) in his palaces in Urbino and Gubbio around the middle of the 15th century. Their inlaid wall panels with depictions of chambers, niches, vistas and objects in trompe l’œil evoke a two-dimensional opening of the three-dimensional interior to the outside.16

The princes north of the Alps were also guided by this idea and their chambers of wonders presaged an expanding world in the form of a model. However, the microcosm was constructed by means of objects which were taken from the real world. The room no longer expanded outward in an illusory manner. Instead, the world itself was brought into the chamber. Through the deliberate way in which the objects were positioned in the chamber of wonders, the infinite macrocosm also appeared capable of being controlled and interpreted. While the perspective-view inlay images in the forerunners of the chambers of wonders captured order in an image and as an image, to a certain extent this structure shifted – in tandem with the discovery of perspective – from the wall panels into the room itself. Through the view and the movement of the observer, the objects of the collection could be related to each other spatially, so that correlations emerged. In the three-dimensional princely chamber of wonders, innumerable containers and models – from large to very small and, of course, vice versa also – were displayed, which were intended to explain the world. These included fold-out cupboards, drawers, shelves and tables, with objects of widely varying sizes in or on them. From small turned objects in ivory, to nautilus mussels and drinking horns encased in silver and gold, to architectural models, to perspective boxes and other optical games or miniature panoramas, amazing things were presented. The panoramas in particular 'should be understood as 'eloquent things' of early modern collecting practice. With their help it was possible to depict specific interests, capacities and action sequences – in this sense they contributed to the experimental and playful investigation of visual perception.' 17

Princely and Patrician Chambers of Art and Wonders in the 16th and 17th Century

The first universal collection rooms were established by princes north of the Alps as a sign of their authority, but also as testament to a humanist educational background. The aim was always to create as complete a microcosmic encyclopaedia of the macrocosm as possible. Every object chosen for these chambers and presented in them represented an unusual unique specimen, but also related in a material – often due only to the way they were arranged – and a symbolic way to the thing next to it. In accordance with earlier collecting habits, precious objects were safely stored in secret treasure vaults, silver chambers or in archive rooms. When travelling or moving from one palace to another, these had been packed in boxes, brought along and only displayed temporarily. Now, however, the collection objects were assigned a fixed, permanently accessible place in study rooms or larger enfilades, where they could be shown at any time.

Order is understood as an analogous principle; the scale of the macrocosmic or microcosmic dimensions is not decisive, but only the reproduction and retention of the perfect order written into creation. It is only this analogous connection between the chamber of wonders and creation that rescues the collection from the objection that it is nothing more than an additive series of objects.18

There was also another ordering aspect: the things were not only placed in a spatial context, but were also anchored in the consciousness or memory of the owner, the so-called Inventor (collector). He thus ruled over a symbolically exaggerated, now manageable miniature realm. An appropriate architectural ambience enabled him to manifest his position quasi-illustratively.

The significance of the individual collection items, which as Horst Bredekamp (1947-) accurately pointed out can be divided into the areas "Naturform – antike Figur – Kunstwerk – Maschine" (natural form, classical figures, artwork, machine)19, resulted from a variety of aspects. They owed their uniqueness either to their material value, their technical
sophistication, a distinctive history (e.g. their provenance, which was reminiscent of the medieval cult of relics), or to the fact that they were largely unknown because of their rarity and for this reason were viewed as "wondrous".

Given their global trade contacts and the imperial prestige of the family, it is not surprising that the most important collectors came from the Habsburg dynasty. The basis of the collections of Archduke Ferdinand of Austria (1529–1595) links and a cultural exchange with the Wittelsbach dynasty of Bavaria. These links proved similarly durable to those with the Habsburgs, though the Fuggers did not provide credit to the Wittelsbachs as often. The Wittelsbachs were among the pioneers of the development of chambers of wonders to the extent that Bavarian Duke Albrecht V (1528–1579) had built in the extended Neuveste in Munich what is believed to be the first purpose-built building, in which he established the chamber of art and wonders referred to above. There were approximately 6000 objects in this chamber, divided between 4 halls and standing on 60 tables and credenzas. Some of the objects came from the collection of Duke Ludwig X (1495–1545), who had probably established a chamber of art in the so-called Italienischer Bau (Italian building) of his palace in Landshut as early as the 1540s. The collection of classical artworks had already been placed in the barrel-vaulted enfilade of the Antiquarium seven years earlier (1571). Its existence was due in particular to the role played by Johann Jakob Fugger (1516–1575) as an intermediary between the Wittelsbachs and the Mantuan diplomat and transalpine liaison man Jacobus Strada (1507–1588). The latter was in the employ of Albrecht V around 1571 as an Antiquarius and, together with Johann Jakob Fugger who was known to be a scholar, was responsible for systematizing the antique coin collection.

Southern Germany, as a central mercantile region, was the main point of departure for the phenomenon of patrician collectors in the 16th century. In addition to the Nuremberg scholars and patricians, it was also in particular their counterparts in Augsburg who could look back on a long tradition of collecting. It is unclear, however, to what extent they provided the impetus for the emergence of collection rooms based on universalist principles, which the high nobility then developed to their highest degree. It is suspected that Raimund Fugger (1489–1535) already had one of the first secular "Studiosammlungen außerhalb der Humanistenkreise" (study collections outside humanist circles) in his private accommodation. This probably formed the basis for the subsequent collection of the Fugger dynasty. The city clerk Konrad Peutinger (1465–1547) was a very prominent humanist collector and scholar. He engaged in the study of inscriptions and the history of the Augsburg area. The core of his collection came together around 1500 and included a library, as well as coins and classical artworks. The studiorien which developed out of this – the spatial arrangement points to the influence of examples which Peutinger had viewed on his extensive documented travels in Italy – were spread over three rooms. These studiorien contained – interspersed with furniture – paintings and drawings, classical artworks, weapons, as well as antlers and stuffed animals.

In the case of the large princely collections and chambers of wonders, it was possible to reconstruct the system involved mainly by means of inventories and theoretical draft plans, rather than the arrangement of the chambers themselves which were more associative. One of the most important early museum-theoretical texts, the Inscriptiones vel Tituli Theatri Amplissimi (1565), was written by the physician Samuel Quiccheberg (1529–1567) from Antwerp. Having previously served as a librarian for Johann Jakob Fugger, he became the curator of the ducal chamber of wonders in Munich after 1557. Trained in the natural sciences, he did not base the development of his ideal design on the reality of the chamber of wonders, but took inspiration from the concept of the theatrum sapientiae, which was based on a mnemotechnical structure. The Italian Giulio Camillo (ca. 1480–1544) had proposed a similar design in L'idea del teatro around 1550. As regards the architectural form, Quiccheberg envisaged a kind of amphitheatre or gallery open on all sides. He also subdivided the objects based on their materials, and divided them into five groups, the subgroups of which followed a planetary order under the rule of Mercury. However, this principle was not implemented in Munich or in any of the chambers built directly after it.
The examples of connections, including personnel, given above emphasize the diverse trends of that period. The chambers of wonders were established at a time when international trade activity was increasing, particularly between Mediterranean Italy and Germany. The initial trade in classical artworks soon expanded to include several types of particularly in-demand goods for art chambers or the initial materials from which they were made, some of which had to be imported from overseas. These included coral, narwhal tusks ("unicorns") and pearls, but also dissected animals and Seychelles nuts (Media Link #b2). These goods could be acquired through the Netherlands, or in the 17th century at markets such as the Foire St. Germain in Paris. Additionally, an unprecedented cross-border transfer (Media Link #b1) of knowledge began at this time. Both the patrician collections and to an extent the princely chambers of art and wonders played a role in this development – a modest one initially, but an increasingly significant one.

In addition to an antiquarium, an armour room, and a library, Archduke Ferdinand II set up an art chamber at Ambras Castle around 1570.\(^{13}\) The artefacts contained in the chamber – from pieces of ore (Handsteine) to musical instruments – were generally sorted according to material groups and presented in different coloured display cabinets. These so-called "Tatten" (compartments) were flanked by a large gallery of portraits of ancestors and of other historical personages, an indispensable element in most collection chambers. There were also a variety of wonders depicted in paintings or in the form of stuffed animals.

Several objects in the collection at Ambras Castle came from the wundercammer of Count Wilhelm Werner von Zimmern (1485–1575) (Media Link #b2) in his castle in Herrenzimmern\(^{24}\) in Swabia as well as from the collection of Count Ulrich of Monfort and Rothenfels (died in 1574) (Media Link #b3).\(^{25}\) Additionally, whole specialist collections were incorporated into contemporary chambers, for example naturalia and exotica from the cabinet of Bernhard Paludanus (1550–1633) (Media Link #b4) of Enkhuizen, where there was an office of the Dutch East India Company (Media Link #b5). These pieces were incorporated into both the Stuttgart art chamber of Duke Johann Friedrich of Württemberg (1582–1628) (Media Link #b6) and the collection of Duke Friedrich III of Schleswig-Holstein-Gottorf (1597–1659) (Media Link #b7). By establishing a "Kunst-Kammer",\(^{26}\) the latter made his palace in Schleswig a unique centre – in terms of its geographical location among other things – for art and science in the high north of Germany. One of the most spectacular acquisitions of this kind in the 18th century was the incorporation of the collections of anatomical and other dissections of the Dutch natural scientists Albertus Seba (1665–1736) (Media Link #b8) and Frederik Ruysch (1638–1731) (Media Link #b9) into the art chamber of Peter the Great (1672–1725) (Media Link #bb).\(^{27}\) The Gottorfer Riesenglobus (giant globe of Gottorf) (Media Link #bc), which was famous because it was large enough to walk on and which was constructed around 1660 by Adam Olearius (1599–1671) (Media Link #bd), the court mathematician and collection curator of Friedrich III, also ended up in the collection of Peter the Great.\(^{28}\)

In the era of Mannerism, collectors such as Emperor Rudolf II with his collection in the Hradčany in Prague and the landgraves of Hessen-Kassel in Kassel established places of research, thereby consciously promoting art and science. In Prague around 1590, not only was a chamber of wonders established, but also laboratories (Media Link #be), artist studios and animal enclosures. In 1590, an art chamber which was largely open to the public was established in Kassel, where an observatory had already been opened in 1560.\(^{29}\) In this period of confessional turmoil, these sites not only served as suitable places for pansophical speculation, but also for the acquisition of specific natural scientific knowledge. Among the scholars who were active in this period were the Jesuit priest Athanasius Kircher (1602–1680) (Media Link #bg) and the Protestant Johannes Kepler (1571–1630) (Media Link #bh), who helped establish modern cosmography (Kepler's Laws) by compiling the so-called "Rudolphine Tables" at the royal court in Prague (Media Link #bi).\(^{30}\)

Apart from the examples given, it is difficult to determine with any degree of certainty what intentions the princely collectors of the Renaissance and the Baroque periods were pursuing in establishing their chambers of wonders. It remains unclear whether they were aiming to acquire knowledge for the sake of progress or whether they were instrumentalizing these institutions for their own purposes purely as a three-dimensional, theatrical representation of a hermetic image of the world or as a mark of their own social distinction. To date, there has also been insufficient research on how many of the numerous collectors were actually engaged with scholarly middle class collectors and artists in a direct intellectual exchange that went beyond patronage for reasons of prestige. However, there are indications that dialogue across social boundaries was more prevalent at the smaller princely courts which had significant libraries compared to courts with splendid universal collections. These included the courts of Count Simon VI of Lippe (1554–1613) (Media Link #bj) in Lippe-Brake, lay astronomer and art agent to Emperor Rudolf II, and of the very learned Duke August of Braunschweig-Lüneburg (1579–1666) (Media Link #bk), who corresponded among others with Athanasius Kircher and Johann Valentin Andrä (1586–1654) (Media Link #bl).\(^{30}\) Thus, while the intentions of the individual collectors remain unclear in many cases, the outward
The library room of the by then dissolved Dominican monastery. By 1625, the book collection in the former monastery, which was now the city council library and possibly some items from the collection were only subsequently amalgamated with the collection housed in the library buildings already in existence in the early-16th century. Purpose-built universals collections already existed in the larger cities in the early 15th century. However, as the funds and display potential available to them were much more modest, they were not comparable with the large chambers of art and wonders of the aristocracy. The objects in these collections also tended not to have such a far-flung provenance. The communal institutions, like those maintained by universities, churches and monasteries, often developed out of libraries and were often housed in the same building. Purpose-built library buildings were already in existence in the early-16th century.

There is evidence that a communal collection existed in Nuremberg from very early on in addition to – and possible connected with – the tradition of patrician collections. The origin of this communal collection may go back to the establishment of the library of the city council in the 14th century. Large donations of books formed the basis for the expansion of the decentralized collection, which was supplemented by means of the selective acquisition of astronomical equipment – such as astrolabes and celestial globes and earth globes – naturalia, coins and paintings by Albrecht Dürer (1471–1528) and Caspar Friedrich Jencquel (1679–1729). However, a portion of the city council library and possibly some items from the collection were only subsequently amalgamated with the collection housed in the library room of the by then dissolved Dominican monastery. By 1625, the book collection in the former monastery, which was now
known as the Stadtbibliothek (city library), had expanded to ten times its former size. The rooms accommodating the books, which were now arranged thematically, also contained a disparate collection of wonders and artefacts; this combination represented a kind of publically accessible city museum. Similar to the chambers of princes, the Nuremberg Stadtbibliothek also had a gallery of portraits, mainly of Protestant scholars such as Philipp Melanchton (1497–1560) (Media Link #nv) and important personages from the history of the city such as Willibald Pirckheimer (1470–1530) (Media Link #bw), who was a confidant of Dürer. A drinking glass belonging to Luther was also kept there as memorabilia, as well as fossil wood from the garden of Willibald Imhoff (1519–1580) (Media Link #bx), another merchant and important art collector of Nuremberg.

Peak and Decline of the Chamber of Wonders at the Beginning of the 18th Century

In this section, three notable examples of aristocratic and middle class chambers of wonders are discussed to illustrate the apogee and simultaneously the turning point of these institutions during the course of, and at the end of, the 17th century. The art chamber in the Wasserkirche in Zurich was established together with a library around 1629 on the initiative of burgesses. The chamber of treasure and wonders of the princely family Esterházy, which was recently rediscovered at Forchtenstein Castle in Burgenland in Austria, was established around 1690. The chamber of art and naturalia of the Francke Foundations in Halle on the Saale was established a little later.

While the Zurich Bürgerbibliothek (burgesses’ library) was open to every citizen as a municipal institution,38 the pietist theologian August Hermann Francke (1663–1727) (Media Link #by) established the Naturalienkammer der Glauchischen Anstalten (naturalia chamber of the Glaucha Institutes) in an orphanage and school. After the turn of the century, however, the naturalia chamber developed into an encyclopaedic teaching collection, and was thus also accessible to a broader public, particularly clergy and students, but also interested lay people.

This was in stark contrast to the chamber at Forchtenstein Castle under Palatine Paul Esterhazy of Galántha (1635–1713) (Media Link #bz). Here, the family archive and an initially disparate collection of valuable gold and silver artefacts, machines and turned ivory objects with filigree were stored in an art chamber which was fitted with cabinets and could only be accessed through a trapdoor. This strict arrangement, which exhibited a greater degree of rigidity than many of the princely collectors of the past, excluded a larger public from the start. There was no scholarly curator in charge of the collection in the way that Adam Olearius – as described above – had been responsible for the acquisition of new items and for cataloguing the collection in Gottorf. The privileged visitor viewed precious gemstones and jewellery in a largely closed cosmos.39

In the early 18th century, the formal appointment, cataloguing and upkeep of such chambers was increasingly entrusted to polymaths and universal artists. In the case of the Wasserkirche in Zurich, it is unclear who – besides the two full-time librarians and the antiquary responsible for the collection of coins which the library initially had – performed the role of curator of the art chamber up to its dissolution in 1779 (Media Link #c0). However, the library had received material support from the start from scholars, the most prominent of whom was the city physician and natural scientist Johann Jakob Scheuchzer (1672–1733) (Media Link #c1). The institution was funded by the city council, the members of the library society as well as generous donations and bequests.

The polymath and artist Gottfried August Gründler (1710–1775) (Media Link #c2) was almost solely responsible for the design and arrangement of the Francke chamber in Halle (Media Link #c3). In 1735, he arranged the collection, which by then had grown to about 4700 objects, in a beautiful chamber of wonders which had been created in the former dormitory of the orphanage for the purpose. The collection consisted of things from the surrounding area and from the workshops of the orphanage itself, with others items being frequently contributed by pietist missionaries serving overseas. Using the taxonomy of Carl von Linné (1707–1778) (Media Link #c4), Gründler systematized the naturalia, arranged models, artificialia (some of which were from the missionary lands) as well as "heilige Sachen" (holy things), presenting each category in 16 glass-covered so-called "Repositorien" (display cabinets). The illusionistic tops of these cabinets were also by him and referred to the contents of the respective cabinet in painted motifs. Today,
paintings, copperplate engravings, dissected animals, bones, landscape models and architectural models, a geocentric model of the world and a heliocentric model of the world are distributed around the room as before, in the "traditional" chamber of wonders display format.

What makes the chamber in Halle so unique is that both the beginning and the end of a development can be observed in it. The glass-panelled cabinet doors point to a demarcation line between two different concepts of the world. On the one hand, there is the universalism of the things which are arranged around the room without any discernible hierarchy. On the other hand, there is the order inside the cabinet, which separates art and nature from one another. It is as though a long-running process of understanding was arrested, or to quote Michel Foucault in the context of these visual modifications in thinking:

The activity of the mind [...] will therefore no longer consist in drawing things together, in setting out on a quest for everything that might reveal some sort of kinship, attraction, or secretly shared nature within them, but, on the contrary, in discriminating, that is, in establishing their identities, then the inevitability of the connections with all successive degrees of a series.  

Echoes in the Present

By the early-18th century, the general decline of the chambers of wonders as a holistic model of the world which one could enter into had long since begun. Their aesthetic principle, which was based on the theatrical presentation of wonders and artefacts as testaments to worldviews and knowledge had become obsolete. "Die einzelnen Sammlungsbereiche beginnen sich zu verselbständigen, so wie sich in der zweiten Jahrhunderthälfte [des 17. Jahrhunderts] die Naturwissenschaften aus dem Kontext umfassend polyhistorisch-humanistischer Gelehrsamkeit herausholen und als autonomes Teilsystem etablieren." The old alliance between art and craft seemed over, 43 as reflected for example in statements like that of Daniel Major in 1674. He advised prospective collectors to henceforth employ only trained treasurers "und nicht einen Uhrmacher / Dräher oder andere Künstler und Handwercks-Mann" (and not a clockmaker/turner or other artist or craftsman). The old alliance between art and craft seemed over, 43 as reflected for example in statements like that of Daniel Major in 1674. He advised prospective collectors to henceforth employ only trained treasurers "und nicht einen Uhrmacher / Dräher oder andere Künstler und Handwercks-Mann" (and not a clockmaker/turner or other artist or craftsman). "Stimmen wie diese", Robert Felfe noted, "markieren eines jener zentrifugalen Momente, die den Mikrokosmos der Kunst- und Naturalienkammer als sinnvolles Ensemble auseinandertreiben sollten."

Unless the collector in question had special interests or had not engaged a (universally) trained artist or curator to look after the collection, the intellectual engagement with the objects and the principles of the chamber of wonders primarily occurred outside the context of the princely collection. While knowledge was perhaps more accumulated than generated in the chambers of wonders, as forums for exchange they were nonetheless important instruments of a more acute perception, the effect of which should not be underestimated.

Split inheritances and the divestiture commitments of heirs contributed to the disintegration and dispersal of previously closed collections, and hardly any of the original collections have survived intact, making it impossible to recreate their historical condition. Most attempted reconstructions therefore at best succeed in producing museumized versions of this lost phenomenon of a universalist view of the world. Then, in spite of the beauty and splendour of the chamber pieces presented, we (often only) see individual objects – and are seldom able to see the world in them (➔ Media Link #c5).

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Appendix

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Minges, Klaus: Das Sammlungswesen der frühen Neuzeit: Kriterien der Ordnung und Spezialisierung, Münster 1998 (Museen, Geschichte und Gegenwart 3).


Notes

1. One of the earliest mentions occurred in the Zimmerische Chronik in the mid-16th century. This referred to the wundercammer of the president of the Imperial Chamber Court, Count Wilhelm Werner von Zimmern (1485–1575), at Herrenzimmern Castle, the castle having been acquired by the count in 1510; cf. Barack, Zimmerische Chronik 1881–1882, vol. 4, p. 88.

2. Other evidence for the contemporaneity of the terms is provided by the inventory list of 1560 for the "Italienischer Bau" of Ludwig X, which contained the location description "Auffm Podn bey der KhunstCamer", cf. Wartena, Bau 2009, p. 90. There are also indications in the will of Archduke Ferdinand of Austria from 1594, which bequeathed the following inheritance to his younger son, Margrave Karl of Burgau: "Kriegsgerüst, Värnus und hauspudler, auch den [sic] KUNST-ODER WUNDER – desgleichen Rüst – und HarnischCAMERN … ", cf. Bauer, Kunstkammer 1976, p. XIV, note 23.


4. See the inventory of the Munich chamber of art from 1598 compiled by the lawyer Johann Baptist Fickler.

5. In the context of the spatial turn, early modern space is at the centre of current cultural historical discussions. On this, see also Friedrich, Die Erschließung des Raumes 2014 (cf. the conference report of the "13. Jahrestreffen des Arbeitskreises für Barockforschung der Herzog August Bibliothek Wolfenbüttel", 2009: "Die Erschließung des Raumes: Konstruktion, Imagination und Darstellung von Räumen und Grenzen im Barockzeitalter").

6. For example, the institutions of the Benedictine Kremsmünster Abbey from 1630 and of St. Peter's Abbey in Salzburg from about 1680.

7. Legge, Museen 2005, p. 5 ("in view [of their] strict separation of the various object areas and [their] highly specialized collections be viewed as … a degenerative product [of chambers of wonders]").

8. See the following links to reconstructed chambers of wonders: http://www.francke-halle.de/die-kunst-und-naturalienkammer-der-franckeschen-stiftungen/angebote-v-60.html?str=wunderkammer [22/05/2015]; reconstructions and chamber of wonders museums: http://www.khm.at/besuchen/sammlungen/kunstkammer-wien/ [22/05/2015]; http://www.schlossambras-innsbruck.at/besuchen/sammlungen/die-kunst-und-wunderkammer/ [22/05/2015]; http://www.skd.museum/de/museen-
institutionen/residenzschloss/gruenes-gewoelbe/index.html [22/05/2015]; http://www.bayerisches-nationalmuseum.de/index.php?id=73 [22/05/2015].


However, the interdisciplinary branch of historical research, which is essential for the investigation of the cross-category phenomenon of chambers of wonders, is one of the newest. For example, the pioneering Max Planck Institute for the History of Science was only founded in 1994.

Schlosser, Kunst- und Wunderkammern 1908, p. 185. However, Schlosser concentrates primarily on artistically worked art chamber pieces (artificialia).


Among these artists were Kurt Schwitters with his Merz constructions, Marcel Broodthaer’s "Musée d'Art Moderne, Departement des Aigles", Joseph Beuys’s display cabinets, and, as a 21st century example, Olafur Eliasson's large-scale arrangements, which are also based on natural scientific knowledge. Among the pioneering curators (modern collectors) and exhibition makers is Harald Seemann (1933–2005), who caused a stir in particular with the "Documenta 5" exhibition in Kassel.

For a detailed discussion, see Beßler, Wunderkammern 2012, pp. 19ff., p. 46.


See also Luther, Naturerscheinung 1980, pp. 46ff., in particular on central perspective, p. 81.

Felfe, Sammlungspraxis 2006, p. 21. On the spatial-visual construction principles of Vredeman de Vries see also Siegel, Die "ganz accurate" Kunstkammer 2006, p. 171. "Der Gedanke von Maß und Zahl und Gewicht wird hier in sichtbare Ordnung des symmetrisch eingerichteten und zentralperspektivisch präsentierten "Museums“ übersetzt. Systematische und visuelle Wohlgemuttheit werden gleichbedeutend." (The thought of scale and number and weight is translated here into the visible order of the symmetrically arranged "museum" which is presented in central perspective. The systematic and the visual sense of being well ordered become synonymous.)

Ibid., p. 159.


Sangl, Kunst- und Wunderkammer 2007, p. 31.


After the chamber of art was moved to the former library, the collection is in a decimated state today, but it can be viewed in the original display cabinets in Ambras Castle.

See also note 1 of this article.


Such specialized and in some cases also systematized naturalia cabinets already existed in the 16th century as "primordial cells" of scientific research, particularly in Italy. One such example is the study collection of the Bologna scholar Ulisse Aldrovandi (1522–1605), who became famous as the author of the pioneering overview Le Antichità della città di Roma of 1566. Large parts of the extensive collection of Aldrovandi was incorporated into the Museo Cospiano of the patrician Ferdinando Cospì in Bologna 60 years after Aldrovandi’s death. What remains of that today can be viewed in Bologna University: http://www.filosofia.unibo.it/aldrovandi/ [22/05/2015].

A reconstruction of the globe, which had a diameter of 3 metres, has been on display in the Neuwerkgarten of Gottorf Castle since 2005. In 1751, a large portion of the collection was incorporated into the Copenhagen art chamber, which had been founded about 100 years earlier.


Härtel, Büchersammler 1979, p. 320.

Daston, Neugierde 1994, p. 55 ("The feeling of curiosity had created […] a framework of moral, aesthetic and emotional elements for early modern science, it predetermined the selection of objects, of content and of approach: strange objects – or familiar ones that had been rendered strange –, which were investigated by people in a state of the most keen concentration,
who were in many cases only connected by a taste for such objects and by the cultivation of this attitude." transl. by N. Williams).


33. ^ For a brief initial overview, see Balsiger, Kunst- und Wunderkammern 1970 as well as – with a broader geographical scope – MacGregor, Eigenschaften 1994.

34. ^ Most of the archetypal depictions of chambers of wonders also come from these. The engravings contained in these can be found in several recent publications, where they are presented as depictions of actual chambers.

35. ^ Cf. Felfe/Wagner, Museum 2010, pp. 10f. A work on library architecture and the architecture of scientific collections is currently in preparation at the ETH in Zurich: see http://www.perspectivia.net/content/publikationen/discussions/5-2010/graeimiger_bibliotheksarchitektur/#sdfootnote13anc [22/05/2015].

36. ^ Murr, Beschreibung 1778, p. 58.

37. ^ These and similar efforts are discussed in the following brief overview: Beßler, Vormoderne städtische Sammlungen 2015, pp. 309ff. (Nuremberg).

38. ^ On the idea behind its foundation, see Rütsche, Kunstkammer in der Wasserkirche 1997, pp. 55ff.

39. ^ There has been no in-depth academic study of this art chamber to date. However, there is a brief overview in Körner, Burg Forchtenstein 2009.


42. ^ Braungart, Utopie 1989, p. 136 ("The individual collection areas begin to become independent, just as in the second half of the [17th] century the natural sciences emerged from the context of comprehensive polyhistoric, humanist scholarship and became established as independent disciplines." transl. by N. Williams).


44. ^ Major, Bedencken 1674, VII, § 3.

45. ^ Felfe, Sammlungspraxis 2006, p. 19 ("Voices like this one highlight one of those centrifugal forces which was to blow apart the microcosm of the chamber of art and naturalia as a meaningful ensemble." transl. by N. Williams).


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Eingefügter unter:
Crossroads › Knowledge Spaces* › Chambers of Art

Indices

DDC: 069 , 500 , 600 , 700

Locations

Antwerp DNB (http://d-nb.info/gnd/4002364-3)
 Augsburg DNB (http://d-nb.info/gnd/4003614-5)
 Austria DNB (http://d-nb.info/gnd/4043271-3)
 Bologna DNB (http://d-nb.info/gnd/4007616-7)
 Central Europe DNB (http://d-nb.info/gnd/4039677-0)
 Copenhagen DNB (http://d-nb.info/gnd/4032399-7)
 County of Lippe-Brake DNB (http://d-nb.info/gnd/16135477-4)
 Enkhuizen DNB (http://d-nb.info/gnd/4218815-5)
 Forchtenstein DNB (http://d-nb.info/gnd/7518191-5)
• Studiolo, ducal palace, Gubbio, Italy
Link #ah

• Coral cabinet, Schloss Ambras
Link #ai

Link #aj

• Nautilus cup
Link #ak

Link #al

Link #am

Link #an

Link #ap

Link #aq

Link #ar

Link #as
• Ludwig X of Bavaria (1495–1545) VIAF (http://viaf.org/viaf/264152041) DNB (http://d-nb.info/gnd/11872939X) ADB/NDB (http://www.deutsche-biographie.de/pnd11872939X.html)

Link #at
• Johann Jakob Fugger (1516–1575) VIAF (http://viaf.org/viaf/3265301) DNB (http://d-nb.info/gnd/181031477)

Link #au

Link #av
• Raimund Fugger (1489–1535) VIAF (http://viaf.org/viaf/77425774) DNB (http://d-nb.info/gnd/130588423) ADB/NDB (http://www.deutsche-biographie.de/pnd130588423.html)

Link #aw

Link #ax

Link #ay

Link #az


Link #b0

Coco de mer or Seychelles nut

Link #b1


Link #b2

Link #b3
• Ulrich of Monfort and Rothenfels (died in 1574) VIAF (http://viaf.org/viaf/61072521) DNB (http://d-nb.info/gnd/133333531) ADB/NDB (http://www.deutsche-biographie.de/pnd133333531.html)
Bernhard Paludanus (1550–1633) VIAF  
DNB  
ADB/NDB

United East India Company

Johann Friedrich of Württemberg (1582–1628) VIAF  
DNB  
ADB/NDB

Friedrich III of Schleswig-Holstein-Gottorf (1597–1659) VIAF  
DNB  
ADB/NDB

Albertus Seba (1665–1736) VIAF  
DNB  
ADB/NDB

Frederik Ruysch (1638–1731) VIAF  
DNB  
ADB/NDB

Peter I of Russia (1672–1725) VIAF  
DNB  
ADB/NDB

Adam Olearius (1599–1671) VIAF  
DNB  
ADB/NDB

Laboratory

Athanasius Kircher (1602–1680) VIAF  
DNB  
ADB/NDB

Gottorf giant globe, copy, Schloss Gottorf
Athenaeanus Kircher (1602–1680), Magnetic Oracle, 1643

Johannes Kepler (1571–1630)

Model of Kepler’s "Mysterium Cosmographicum"

Simon VI of Lippe (1554–1613)

August of Braunschweig-Lüneburg (1579–1666)

Johann Valentin Andréa (1586–1654)

Philipp Hainhofer (1578–1647)

Gustavus Adolphus of Sweden (1594–1632)
Uppsala University Art Collection

Link #bp

Link #bq

Link #br

Link #bs

Link #bt

Link #bu

Link #bv

Link #bw

Link #bx

Link #by


August Hermann Francke (1663–1727)


Link #b2

Johannes Meyer (1655–1712), sketch of the art chamber at the Zurich Wasserkirche, 1688

Link #c0


Link #c1


Link #c2

Art and naturalia chamber, Halle: interior view

Link #c3


Link #c4

Carl von Linné (1707–1778), Folia simplicia, 1737
Fabian Baur, Die Versuche

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