Medical Use and Material Matters
Rhinoceros Horn as a Museum Object
By Camilla Mordhorst

I have begun the establishment of a collection of natural curiosities, particularly those of the rarest kind; several of my friends have made contributions to this end. If you find yourself in places where a large amount of things of this kind occur, I therefore ask you kindly to remember me. I ask you to send me everything on offer, whether from the animal kingdoms of land, sea, or air, or of stone, metals, shells, or other things of that kind (Worm 1623/1624).[1]

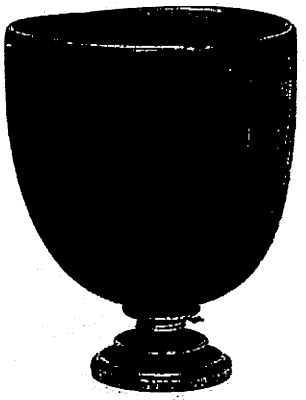
More than 350 years ago, the learned Danish physician and antiquarian Ole Worm (1588–1654) began to assemble objects for his collection. As the quotation above shows, the objects were mainly gathered by Worm's friends and colleagues aboard, to whom he wrote requesting rarities of all kinds. His efforts were so successful that the museum was already acknowledged in his own days far beyond Denmark, because, as Jens Lauritzøn Worl wrote in 1654, it contained: "very unusual and strange rarities and diverse objects never before seen, which many princely persons and emissaries who come to Copenhagen ask to see on account of the great fame and repute in foreign places" (Hermansen 1951:23). The large museum catalogue,[2] which appeared in 1655, the year after Worm's death, shows that the museum comprised a multitude of stones, plants, and animals, as well as man-made artefacts: art and ethnographica, historical objects and antiquities. On Worm's death in 1654 there were at least 1,663 items in the collection (Schepelern 1971:200). Of these, 39 still exist, mostly in the collections of the National Museum in Copenhagen. They are a motley collection. Among the objects are a horse's jaw with the root of a tree growing around it, a pair of Chinese silk shoes, a show carved out of a cherry stone, and an impressive reliquary made out of a piece of Norwegian rock crystal.

In this article I shall look closely at a modest cup and a little bowl (figs. 1 and 2), both of rhinoceros horn, not because they are especially rare as museum objects or because their long "afterlife" in the museum collections makes them noticeably different from the other objects. On the contrary: the two artefacts of rhinoceros horn have been selected because they are typical representatives of how much interpretations of the same object can change over time. The constant interpretation and reinterpretation can give us insight into how new meanings are added, and how earlier descriptions are corrected. Moreover, we gain a glimpse of what has fallen away through time: what was once thought worth mentioning and describing, but has, so to speak, evaporated from the descriptions. In other words, the lost significance.

It is in the nature of things that this evaporation has not been easy to condense, because the evaporation is a consequence of historical shifts of the scientific gaze, whereby new ways of knowing can make central aspects peripheral, and formerly obvious connections incomprehensible. The method has been not just to follow the interpretation of the *same* objects back in time, but to search within the different periods to discover the contemporary priorities and categorizations in order to see what was considered important then and why.

The Archaeology of Knowledge

The method is inspired by Michel Foucault's investigations in the archaeology of knowledge. Foucault's comprehensive studies and his pioneering thinking in fields such as the relationship between discourse and power,

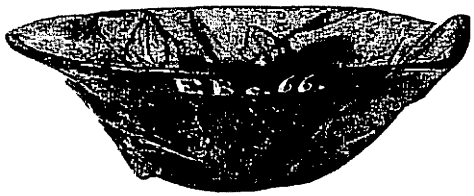


1. The cup of rhinoceros horn, now kept in the stores of the Danish Medieval and Renaissance Collection, Inv. no. 9078, National Museum, Copenhagen.

technologies of the self and disciplining, and studies of discontinuity in scientific thought have set their stamp on a broad spectrum of humanistic disciplines for almost 30 years. In this context, however, I shall consider just a small part of Foucault's great *œuvre*, his archaeology of knowledge, because this not only presents a method for investigating the rationality of the past on its own premises, but also gives scope for including the significance of material objects in historical research.

In *The Archaeology of Knowledge and the Discourse on Language* Foucault presents his methodological and theoretical thoughts behind the archaeology of knowledge. In the book he objects to what he calls "traditional history", which has foc-used on just one specific kind of source material and used it in a specific way, namely, as documents.

Of course, it is obvious enough that ever since a discipline such as history has existed, documents have been used, questioned, and have given rise to questions; scholars have asked not only what



2. The bowl of rhinoceros horn, now kept in the stores of the Ethnographic Collection, Inv. no. Ebc66, National Museum, Copenhagen.

these documents meant, but also whether they were telling the truth, and by what right they could claim to be doing so, whether they were sincere or deliberately misleading, well informed or ignorant, authentic or tampered with. But each of these questions, and all this critical concern, pointed to one and the same end: the reconstitution, on the basis of what the documents say, and sometimes merely hint at, of the past from which they emanate (Foucault 1972:6).

The eagerness of traditional history to judge the statements of historical sources as true or false had the consequence that just one type of source was found interesting: those containing a statement that could be evaluated, in other words, the written sources.

Traditional history has thereby, according to Foucault, ignored the fact that the historical sources can also be interpreted in a different way, namely, as monuments. If a source is used as a document, the truth of its testimony is investigated, but if it is viewed as a monument, its actual appearance is considered: what it looks like, where it has been, and what relation it has had to other contemporary sources. This method is not unlike the archaeologist's interpretation in connection with excavations, hence the name the *archaeology* of knowledge. In this process the non-written historical evidence is in principle equated with the written evidence, so that an object of rhinoceros

horn can say just as much about the past as a letter by virtue of its special design, and where, when, and how it was included in a collection.

In conjunction with my study of the objects from Worm's collection and the history of their interpretation, this coordination immediately gives meaning, because the objects themselves, their design and their changing concrete placing in different museum contexts, are just as charged with meaning as the written catalogues, inventories, letters, travel accounts, minutes, and other material in which the interpretation of and occupation with the objects can be read.

Going to the study of material culture thus does not exclusively mean relating to the objects. This would be the same as if I had used only the two artefacts of rhinoceros horn as sources. From their design I could possibly say something about aesthetics; a little hole in one of the objects, the bowl, might suggest that it had been hung; a chemical analysis might have allowed the material to be dated; the colour and condition of the horn could perhaps tell us about the effect of light and climate through the ages; and marks of wear might say something about the use or non-use of the object. This information is by no means without interest, but how could I say something about the *historical context* – how the objects were regarded, why they were collected, or how they have been exhibited – if I had not *also* looked at the links between the objects and the written source material? The study of material culture, in other words, is not a study of artefacts in themselves but a study of the *relationship* between words and things and our interaction with them.

The Order of Things

It is only to a limited extent, however, that Foucault's own investigations use the potential of the method of the archaeology of knowledge to coordinate the non-written sources with the written ones. For Foucault the aim of the method is primarily to *use* the mainly written sources as monuments. Instead of making a vertical section through history, whereby statements from the past are evaluated according to present-day rules for rational systematism and rational discourse, the aim is a horizontal section whereby the testimony and appearance of the objects are assessed in relation to each other in order to find repetitions, patterns, focuses, and logics, which do not necessarily give rational meaning in the contemporary scientific context, but evidently constituted the "space of order" that in a given period dictated the conditions for possible knowledge. Foucault calls this the *episteme* of the period.

The archaeology of knowledge thus consists of a method aiming at liberation from reading today's rationality into past actions, because the researcher "merely" orders the sources according to what they say, without evaluating their testimony from a contemporary context. In epistemological terms the method can be criticized as problematic, bordering on the naïve: that just reading the sources as monuments would mean being able to transcend subjectivity and overcoming one's own interpreting presence in the scientific process. Bearing this in mind, the archaeology of knowledge has nevertheless made a convincing impact, especially in research on the history of museums. This is particularly due to Foucault's great study of the human sciences in *The Order of Things: An Archaeology of the Human Sciences*,

where he shows how it is possible to deduce a series of different epistemes from the historical material from the Renaissance until our times. It is not just Foucault's basic concepts that a number of historians of museums have found interesting and useful, but also the concrete historical "map" that Foucault unfolds, which has been applied to the changing history of museums.

As the French title, *Les mots et les choses*, indicates, the book is fundamentally about the relationship between words and things, as expressed in the human sciences. More specifically, Foucault investigates the three fields of science dealing with language, economics, and living beings, and how the relationship between words and things has changed from the Renaissance until the present. The relationship between words and things is dictated by the episteme of the time, which defines with which knowledge and in which way one considers this relationship. It is reasonable to think that the relationship between words and things must find direct expression in museum collections: What designates the period as relevant to collect, and by what criteria should things be arranged? It is therefore hardly by chance that attempts have been made to take the three essentially different epistemes that Foucault highlights from the Renaissance to the present, and read them into the changes that museum collections have undergone, in terms of chronology and content.

An example is Eilean Hooper-Greenhill's *Museums and the Shaping of Knowledge*, which is an attempt to apply Foucault's epistemes to the history of European museums. Foucault's ideas about the Renaissance episteme, where words and things were intertwined in a whole consisting of different reflecting relationships, are seen by her in the seemingly strange arrangements in Renaissance museums. In the same way she sees the eighteenth-century quest for a universal nomenclature, which Foucault calls the classical episteme – whereby the proper names of things can be charted on the basis of established taxonomies of visible similarities and differences between things – in the numerous eighteenth-century collections of natural objects and taxonomically ordered cabinets. Finally, she views the modern episteme, whereby historical development and man himself become the crucial fulcrum for our understanding of the relationship between words and things, in relation to the rise of museums of natural *history*, cultural *history*, and art *history* and their chronological ordering principles.

Shortly after Hooper-Greenhill's museum history appeared, there was a major exhibition at the National Museum in Copenhagen, *Museum Europa*, which presented the history of museums in the same way by applying Foucault's epistemes to the history of museums and thereby trying to explain changing European exhibition principles from the Renaissance to the beginning of the twentieth century (Becker *et al.* 1993). Both the catalogue and the exhibition have been of great significance for research on museum history (at least in a Danish context), particularly because, by using Foucault's epistemes, they have opened people's eyes to just how different systematization and collection criteria can be, yet each is logical in terms of its historical context. The formerly condescending attitude to the first museums, which resulted from their being assessed according to contemporary scientific

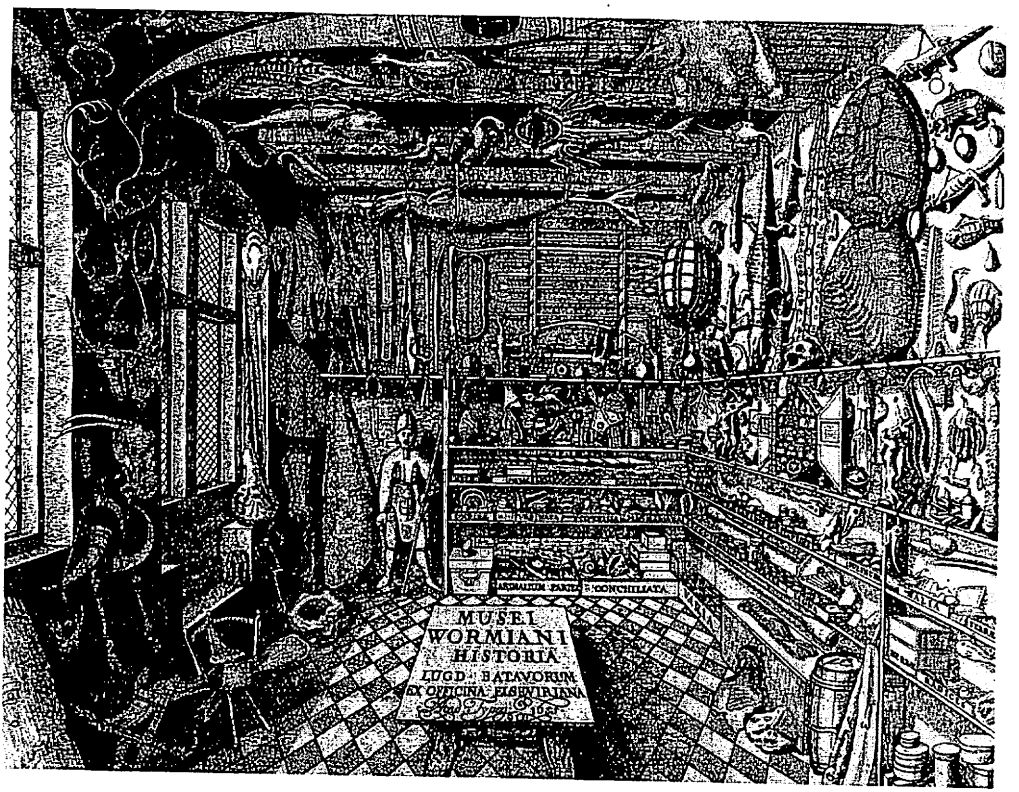
criteria, would thus be virtually unthinkable today, and the following quotation from the museum historian David Murray seems outdated: "Exhibits were, however, badly placed, and were nearly always arranged in relation to their accidental and not their distinguishing features" (Murray 1904:206).

Foucault's share in the reassessment of the ordering principles and artefact interpretations of bygone times can scarcely be underestimated, but the direct application of his epistemes that is often seen is not without problems. Foucault's project was to dig deep to find the very way of knowing: How do people argue? What criteria apply for scientificity? What can be rationally linked? In other words, he searched for the space of order within which the scientific knowledge of the time could unfold. This deep foundation for scientific knowledge, however, is not always reflected directly in a scientific praxis, for example, in the way in which things were exhibited.

Worm's collection and its further destiny are an example of how Foucault's thought at once creates a framework for understanding the strides that have been taken in interpretation, but without delineating the historical content in detail. For this, other factors have to be considered.

Worm's Museum

The big catalogue of Worm's museum from 1655 contains an outstanding picture[3] of



3. Worm's museum. The picture is the frontispiece of the museum catalogue from 1655. Photo: Lars Kann-Rasmussen, National Museum.

the interior of the museum (fig. 3).[4] At first glance it seems undeniably chaotic, a tightly packed and motley collection of shells, skis and shields, fishes and figures. The objects are clearly visible, and so meticulously rendered that several of the surviving items can be identified in the picture. Everything is arranged on shelves, on the ceiling, along the floor, and on the wall, and gradually a picture emerges of a system determined by material. In the open cases on the shelves are the objects from the three kingdoms of nature – mineral, vegetable, and animal – placed after each other. Each case even has a name written on it, clearly stating the content. Hanging on the left wall are objects of animal materials: horn, teeth, bones, and skin, and on the back wall can be seen objects of vegetable material, chiefly wood. This is actually a comprehensible and direct mode of categorization: wood by itself, animal material by itself, and so on. After having observed this order, which also provides the main categories for the museum catalogue, I looked further for the *real* order, a victim as I am of the "trap" of traditional history, which always looks behind the testimony of the sources, as if there were some hidden historical reality there. In my eagerness to understand the logic of museum people in the Renaissance, I did not see what I had already seen, that the scientific gaze of the time focused on the *materials* in a completely different way, thereby guiding the arrangement of Worm's museum, as well as a great many of the other famous museums of the time in Europe.[5]

Master of Materials

It was a detail from a letter written by Worm that made me realize that the materials were not just a simple means of classification for him, but were in fact the very fulcrum for Worm's study of the objects. In a letter of 5 June 1646 he comments on a book by his good friend and nephew Thomas Bartholin's book about the unicorn (1645). The comments refer to the different pages in Bartholin's book. Worm writes:

> *page 140.* I have a phiala of rhinoceros horn, very finely made in India; in colour it resembles yellow amber, apart from the fact that it displays some black spots at the root. I would have sent you a picture of it if the painter had done me the favour.
>
> *page 141.* Of the same animal I have a back tooth which the man who brought it here from India praised as being very good against toothache.
>
> *page 142.* I should like to know why you let the unicorn's horn have a porous substance when it is just as hard as that in the horns of our oxen. When it is made into a cup, it does not let the liquid contained flow through or seep out. The bad smell that comes when it is heated is something it has in common with all horn. I can scarcely believe that it can be contracted, extended, and pressed flat, as the animal desires, since this conflicts with the firm, hard, and horny nature (Worm 1645).[6]

The phiala, or perhaps we should call it a bowl, to which Worm refers is still in the National Museum. It is part of the Ethnographic Collection, among the Chinese objects. If one wants to find the object today, one must therefore know that it is from China. It could be said that priority is thereby given to a cultural/geographical interpretation of the objects. For Worm, on the other hand, the most interesting thing is not what it was used for or where it came from (he mentions an imprecise origin in India), but rather what it looks like and the properties of the material from which it is made. This gaze on the objects is also found in the description in Worm's museum catalogue. There we read that the bowl comes

from East India, but what it may have been used for remains uncertain. However, there is an accurate description of its design and the nature of the material, which in this case sets the framework for the form: "almost oval in the form as far as the horn itself permits" (Worm 1655:381).

Right after the bowl the catalogue mentions the other surviving object of rhinoceros horn, the little cup, whose measurements and simple design are carefully described, just as it is noted that the rhinoceros horn here is "of a more black and compact matter" (Worm 1655: 381). There is no mention of how old the beaker is, where it comes from, or what it was used for. The material-oriented approach is underlined by the way both objects are described in a chapter about objects worked up from animals (Worm 1655:376–381), which gives ample opportunity for comparison.

Worm owned many objects of different kinds of horn. In his museum catalogue they are found both in the chapter about artificial objects made from animals and in a chapter about "the cloven-footed animals" (Worm 1655:336–341). The former chapter particularly describes the form of the objects, the main concern being the working of the material. In the latter chapter, in which nature herself has "worked up" the material, it is the more fundamental properties of the material that are important. The chapter describes what the animal used the horn for, the natural variation in size and colour of the horn, and its medicinal benefits (Worm 1655:336).

On the print of the interior of the museum, objects of horn are not separated. Artificial objects of horn hang side by side with antlers. This mixture might not seem immediately comprehensible, unless one regards it as two different ways of working the same material, one by nature, the other by culture, which can shed light on different aspects of the properties and possibilities of the material.

The Renaissance Episteme and Worm

Applying Foucault's interpretation of the Renaissance episteme to Worm's description and interpretation of objects would be an almost impossible exercise and scarcely a fruitful one. According to Foucault, the Renaissance way of thinking was moulded by the absolute precedence given to the Scriptures (Foucault 1970:38) in the relationship between language and things. The world can be read because God has put things there with legible signatures, which are part of a complicated system of relations of similarity, in which the world enfolds itself, is duplicated, reflected, or interlinked, so that it is possible to gain insight into the macrocosm through the microcosm.

In her history of museums, Hooper-Greenhill cites an example of how this kind of thought may have set its mark on the collections of the time. Antonio Giganti's museum in Bologna from the end of the sixteenth century exhibited

> a horizontal row of things which combines starfish and portraits on a repeating basis, which was crossed by a vertical row of repeating torpedo fish and starfish. The rules of place and image seem to be in operation here, articulating the relations of *resemblance* and *sympathy* that are characteristic of the Renaissance *episteme*. The stars are reflected in the faces of men through analogy (Foucault [*The Order of Things*]: 22), and portraits and starfish possibly evoke this relationship, while also reminding the viewer of the universal '*convenientia*' that there are as many stars in the sky as there are fish in the sea (ibid.: 18) (Hooper-Greenhill 1992:124).

Cosmological analogies may have influenced the way some contemporary collections were arranged, but by focusing almost exclusively on the patterns of thought that constituted the deep foundation of the rationality of the times and applying it directly to a concrete praxis, there may be a tendency to overlook more practical and situated circumstances which may explain better why starfish were placed between works of art, and why it gave meaning to mix natural and artificial objects. Worm's collection does not seem to be particularly shaped by these similarities. On the other hand, Foucault's study of this virtually all-embracing linkage of the diversity of the world can give us an understanding of the encyclopaedic tendency of the time, which also applied to Worm's collection and interpretations, when nothing in principle was irrelevant for learned thought.

Rational Praxis in Worm

Worm's interest in materials should primarily be viewed in relation to a concrete praxis. Apart from being a learned antiquarian, a good philologist, and much besides, he was also a physician. For the last 30 years of his life he occupied the chair of medicine, and alongside this he practised as a doctor. Subjects in the seventeenth century were not as specialized as they are today. Things could be connected in a network of relationships. Part of the study of medicine involved studying botany, mineralogy, and chemistry (Findlen 1994:246). The aim was rarely to obtain knowledge about the phenomena themselves, but to study only their utility: for the botanist to find medicinal plants; for the zoologist to provide animal material for the pharmacy; for the chemist to extract useful medicine; and for the mineralogist to investigate the health-giving properties of precious stones (Garboe 1915:4). The medical significance of rhinoceros horn was a matter of concrete interest for Worm, as is evident from a letter from a fellow physician in Stralsund, Johann Conrad Saur, who sent him a cup of rhinoceros horn for "prophylactic purposes". Saur writes: "For you know already how it can be successfully used against diseases, palpitations, paralysis, apoplexy, etc., when chemically prepared" (Saur 1650).[7] In Worm's other descriptions of objects in the museum catalogue there are also frequent references to their medicinal utility; for example, Worm regarded unicorn horn (which he knew came from the narwhal) as an effective antidote, and he himself had tested its effect in experiments on pigeons and kittens (Worm 1655:286–287); similarly, he believed that precious stones could be very useful for medicinal purposes (Worm 1655:104–105).

In *The Order of Things* one notices the same intimate link between description and use as in Worm, when objects were to be described scientifically in the Renaissance, and Foucault emphasizes the great Renaissance naturalist and collector Ulisse Aldrovandi's (1522–1606)[8] "inextricable mixture of exact descriptions, reported quotations, fables without commentary, remarks dealing indifferently with an animal's anatomy, its use in heraldry, its habitat, its mythological values, or the uses to which it could be put in medicine or magic" (Foucault 1970:39). That the mixture was inextricable should not be understood in the sense of being opaque. One should rather view the "inextricable" approach of Aldrovandi and Worm as an intimate and highly concrete link between

description and use for naturalists who were also practising physicians.

This link simultaneously indicates a way to understand Worm's focus on the material of which objects were made, as in the example of the two artefacts of rhinoceros horn. It is the material that determines the grouping of the objects in the catalogue, and it is the material that indicates the main system for ordering in the museum. In this way the material of the objects becomes the quintessence of knowledge and utility; from the material it is possible to systematize both the "natural" and the "artificial" variations in form in a single motion provided by the divine order of nature, while simultaneously putting the observer in a good position to compare and explore various possible uses of the same material, with "use" comprising both nature's own use and man's use and products.

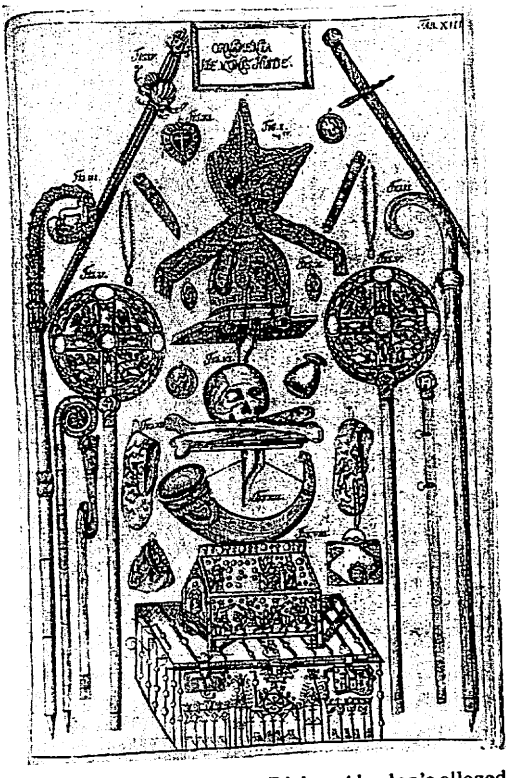
Rhinoceros Horns in the Royal Kunstkammer

Worm died in 1655. His will (Worm 1654) mostly concerns the future of his famous museum. His immediate wish was that his eldest son should take over the collection, but if this were not possible, then it should be sold to some learned man. Worm himself suggested the king, Frederik III (1609–70), who, unlike many other kings, really was learned. As a newly crowned king and with the insight afforded by learning, it was natural for him to adopt the great fashion among princes, and he set up a *kunstkammer*, in which he himself was greatly involved, as regards both the arrangement and the many purchases of objects, including the acquisition of Worm's collection.

Frederik III and Worm had shared a passion for collecting rarities from nature and the world of art alike. They were scholars busy investigating God's diverse creation, but right from the beginning it was clear that it was now no longer a physician's practice, but that of a king, that the collection became part of. The medicinal utility of the objects and the investigation of the fundamental properties of the materials did not engage the king's interest in the same way, and the comparison of the possible uses of the materials slipped into the background. There was no longer the same reason to place artificial things side by side with natural objects. Worm's collection was divided.

Only the learned Frederik III had any direct interest in the scientific potential of the collection. It was only to a limited extent that later kings bought objects for the collection, using it primarily to provoke admiration for the monarch's exquisite taste, his wealth, and the extent of his royal power. This development is also reflected in the composition of the collection, which was mainly increased with works of art, princely gifts, and rare coins. Figuratively speaking, the collection thus increasingly changed character from being an encyclopaedic laboratory to become a part in the staging of autocratic power.

The changed use of the collection is reflected in the interpretation of the objects. In Worm's catalogue one can read the instructive presentation of the eager inquiries by Worm and other scholars into the nature and form of each object. In the two catalogues of the Royal Kunstkammer, *Museum Regium* of 1696 and the later revision *Museum Regium* of 1710 one does not find the same inquiring attitude to the objects. The description of the bowl of rhinoceros horn in the first edition of



4. The picture shows how Bishop Absalon's alleged possessions may have been arranged in the Royal Kunstkammer. Note the cup of rhinoceros horn, hanging just to the right of the skull. Picture from *Museum Regium*, catalogue of the Royal Kunstkammer, 1696.

Museum Regium is more or less a transcript of Worm's catalogue. In the second edition of *Museum Regium* the description of the bowl is incorrectly combined with the description of a completely different object of rhinoceros horn. The cup of rhinoceros horn loses its separate description in the catalogues of the Royal Kunstkammer, but it is perhaps to be found among the "cups" mentioned among Bishop Absalon's alleged possessions in the Chamber of Antiquities in the Royal Kunstkammer. At any rate, it is unmistakably like the cup that is seen among the objects supposedly belonging to Absalon on one of the beautiful pictures in the catalogue, illustrating selected parts of the collection (see fig. 4).[9]

The difference between Worm's way of interpreting the objects and that of the later king's, however, was not just a difference between the gaze of a physician and that of a king, but a difference in the very way of thinking. The close connection between the worlds of nature and culture that is seen in the study of material can no longer be found at the end of the seventeenth century. In *The Order of Things* Foucault describes this change as the appearance of a new classical episteme, which was to prevail for most of the eighteenth century. Briefly, everything was excluded from the scientific gaze except one aspect: the visible. The standard-bearer of the new age was Carl von Linné (Linnaeus, 1707–1787), whose great project to chart the world of plants proceeding from their visible similarities and differences set the standard for ordering and collecting principles in virtually every sphere. Nature was given all at once by God and could therefore be charted in all its universality. The time of herbaria had begun, and private cabinets of natural specimens became widespread among the nobility and the upper bourgeoisie. Figuratively speaking, everything could now be put behind glass and mounted, because only what was visible was interesting for scientific investigation. This would have been unthinkable in Worm's time, when the physical materiality of the things was to be investigated; in other words, besides being observed they were also weighed, felt, and tested to determine their effects and properties.

The Royal Kunstkammer cannot be said to be a direct reflection of the classical

episteme. The increasing charting of the objects from the natural kingdom and the works of art had the result that these two realms drifted apart, the objects were split up in separate rooms in the museum, and the fondness of the earlier epistemes for the total description of objects, which also included their potential uses, slipped into the background together with the whole study of materials. However, the order of the museum was not dictated by pure taxonomic principles, neither in the exhibitions, which seem from the plates in the catalogues to have been aesthetically ordered, nor in the selection of objects that were too rare, curious, and unique to be incorporated in the typological and ideally total hierarchies of the taxonomies.

The two objects of rhinoceros horn were separated from each other and placed in different rooms. The little bowl remained in the Artificial Chamber, a room mainly containing pieces of fine decorative art. The material still meant a little, in that the bowl was put in a cabinet with other artworks of ivory and horn, but by being separated from the natural specimens it now showed what fine objects worked from these precious materials the king possessed. The cup was placed in the Antiquities Chamber, which also included antiquities from Nordic prehistory, weapons, mechanical instruments, and religious objects. The composition indicates that the gallery that contained both the famous golden horn and Bishop Absalon's "personal" belongings, was envisaged as a tribute to the nation's history and the innovations of civilization in general. Why the cup ended up in this chamber, on the wall among Absalon's items, is uncertain, but at least it indicates that a new aspect of the object had been highlighted, namely, its function as a splendid drinking cup.

What had previously been perceived as the most essential feature of the two objects, that they were made of rhinoceros horn, was in both cases pushed into the background in favour of their artificial aspect, that they were beautifully worked and had a specific function. Just like many of the other objects in the Royal Kunstkammer, they were thus part of the magnificent equipment that documented the king's exquisite taste and his historical and economic power.

The Centrifugal Force of History

Around 1800 yet another fundamental shift took place, according to Foucault, in the epistemological structures of the human sciences. The modern episteme, which became predominant from now on, was primarily characterized by a huge interest in history. All science became in a sense historical science, because everything was subject to the passage of time. A knowledge of things became a knowledge of their history, their inner evolution, and their place in the great historical development. It was in the nineteenth century that the founder of the Museum of Northern Antiquities, Christian Jürgensen Thomsen (1788–1865), developed his three-period system for prehistory: Stone Age, Bronze Age, and Iron Age; the naturalist Charles Lyell (1797–1873) rejected the prevailing catastrophic theories of the origin of the earth and of man; and the young scientist Charles Darwin (1809–1882) made his round-the-world voyage, which was to confirm the evolutionary laws of nature. Together they inscribed themselves in the great project to investigate the individual details of evolution

(Jensen 1993:25–26). In a period like this, the dating of objects is of course crucial, and this is directly reflected in the reordering and reinterpretation of the two objects of rhinoceros horn.

Travellers who saw the Royal Kunstkammer at the end of the eighteenth century and the start of the nineteenth century all expressed disapproval of the "disorder" that prevailed in the collections. The Englishman William Rae Wilson, for example, concluded his description of the museum with the following salute: "This leads me to express regret, that from the accumulation of this great store of antiquity so many precious objects and collections of pictures should be thrown aside, in consequence of the several apartments not being sufficiently large to admit their being properly classed and arranged. Many of the objects, in short, that are shewn in the vast collection, carry a spectator back to past times, and shew him the manners and customs of former ages" (Wilson 1826: 399).

It was not just the constant growth of the collection that had made the arrangements disorderly and too crowded, as Wilson notes, but the ideas of a new age which had made the classification system of the Kunstkammer antiquated. The gap between nature and culture had now become so deep, in the name of specialization, that all the objects could not even be contained in the same building. In the course of the eighteenth century, small portions were separated from the museum, but this development gradually gained momentum, and in the 1820s the natural specimens were completely detached from the artificial objects by being delivered to the newly established Royal Museum of Natural History. The remaining collection, however, continued to bear other traces of the universalist ambitions of former times, and the old "artificial objects" were sorted by six expert commissions. Some of the objects were distributed among a number of new, more specialized museums, while the majority were transferred to the new Royal Art Museum in Dronningens Tværgade, ordered and numbered in five strictly separated groups. These were: 1 Antiquities; 2 Objects from Nordic Prehistory and the Middle Ages; 3 Beautifully worked objects of art; 4 Objects of precious metal; and 5 Ethnographica.

Besides being separated, the vast majority of the objects were rearranged in a chronological order that satisfied the important dating needs, or else in geographical order. Perhaps chronology and geography were really two sides of the same thing. The desire for a geographical division of the objects may be seen in the light of the overall mapping project, intended to place cultures in their context in the evolution of civilization. Even the Ethnographic Museum, which was separated from the Art Museum in 1845, was initially ordered chronologically according to the degree of civilization (Gilberg 1988:9–10).

The two objects of rhinoceros horn came first to the Royal Art Museum. The cup was placed in main department B, which contained "Nordic antiquities and curiosities from the Middle Ages", more specifically in "Class B.B.", which included things from the Catholic culture (i.e., the Middle Ages) and the Renaissance. When the Royal Art Museum became further specialized and divided into the Ethnographic Museum, the Museum of Northern Antiquities, and the Antiquities Collection, the cup came to the Museum of Northern Antiquities. The description from 1845 in the museum's

catalogue, *Fortegnelse over de til Museet komne Oldsager*, is sober and lucid: "A little cup of horn, 4 inches tall with a turned foot. The upper part is slightly compressed. The form is beautiful, but simple." Interestingly, this description is very similar to Worm's, but the context has changed completely, from "representing" an artificial object made of rhinoceros horn, it had become a representative of a particular period in historical development.

The bowl of rhinoceros horn likewise came to the Royal Art Museum when the Royal Kunstkammer was broken up. It was transferred to the Ethnographic Department at the National Museum, which was further divided into a number of geographical areas. The bowl ended up among the Chinese objects, which were subdivided according to their original function: worship, weapons, household objects for utility and pleasure, and objects of art. The bowl was placed in the latter category. It was then transferred to the Ethnographic Museum in 1845.

Objects in the National Museum Stores

Today both the objects of rhinoceros horn are in the National Museum Stores. According to Foucault's thought, we are still in the modern episteme, founded at the start of the nineteenth century, which is in good agreement with the fact that the major museum institutions from that time, for example, the National Museum, are still the main ones. Moreover, the historical dating of the objects is still crucial for the understanding of the objects. This reflects the placing of the two objects of rhinoceros horn.

The bowl is in the stores of the Ethnographic Collection, among the Chinese artefacts from the seventeenth century. On the computer screen in the permanent exhibitions of the Ethnographic Collection one can find it among the Chinese objects of horn. The cup of rhinoceros horn is also in the stores, but among artefacts belonging to the Danish Middle Ages and Renaissance. In the register of artefacts in the collection it is in the category "Drinking vessels of other material", more specifically, of "Ivory and rhinoceros horn, bezoar." The actual description of the cup is extremely brief: apart from an artefact number and a photograph of the object it just says "*kunstkammer*". All the words that Worm used to capture the form and use of each individual object have vanished.

It is, however, more precise to say that, in the course of the more than 350 years during which the objects have been preserved, there has been a virtual reversal in what is found important. In the seventeenth century the material was decisive for Worm's interpretation. The geographical and historical origin of the objects was mentioned, but only as secondary information which could illuminate the description of the material. Today the geographical and historical origin is crucial, and although the material still plays a part, it is mostly as a specifying characteristic which can shed light on aspects of the historical and geographical placing. This reversal has changed our outlook and hence the placing of the objects. Foucault's episteme idea cannot show exactly what these stages of historical development looked like, but it can provide a framework for an understanding of how these stages are connected with greater, more fundamental changes in the relationship between words and things.

Camilla Mordhorst
Ph.D. student
The National Museum of Denmark, Research and Exhibitions
Frederiksholms Kanal 12
DK-1220 Copenhagen K
e-mail: camilla.mordhorst@natmus.dk

Translation: Alan Crozier

Notes

1 The letter is from Ole Worm to his friend Johan Rhode, a Danish physician in Padua, dated 7.11.1623 / 11.1.1624. Letter no. 147 in *Breve fra og til Ole Worm*, vol. I, p. 84. Translation from the Latin by H. D. Schepelern.

2 The full title of the catalogue is: *Museum Wormianum seu historia rerum rariorum tam naturalium, quam artificialium, tam domesticarum, quam exoticarum, quæ Hafniæ Danorum in ædibus authoris servantur.* It is often simply referred to as *Museum Wormianum.*

3 There are perhaps 5–6 prints that offer a visual impression of the first museums in the Renaissance. They are frontispieces in the museum catalogues of the time, such as the one of Ferrante Imperato's museum in the catalogue *Historia naturale* 1599, Francesco Calceolari's museum in the catalogue *Museum calceolarium* 1622, and Ferdinando Cospi's museum in the catalogue *Museo cospiano* 1677.

4 A more detailed survey of the print will be found in Mordhorst 2002.

5 Barbara Jeanne Balsiger (1970) provides a survey of a great number of the most famous museum catalogues of the time, with a translation of their tables of contents. This shows that the material-based system predominated, although it was not all-prevailing.

6 Letter from Ole Worm to Thomas Bartholin in Leyden, dated 5.6.1646. Letter no. 1419 in *Breve fra og til Ole Worm*, vol. III, p. 186. Translation from the Latin by H. D. Schepelern.

7 Letter from Johann Cornad Saur in Stralsund to Ole Worm, dated 7.3.1650. Letter no. 1680 in *Breve fra og til Ole Worm*, vol. III, p. 423. Translation from the Latin by H. D. Schepelern.

8 Worm knew Aldrovandi's collection and a large number of his books on natural history, to which he refers frequently in his museum catalogue.

9 Whether these "plates" give a concrete impression of what selected parts of the collection appeared like in the Kunstkammer is an open question. The realism of the plates, however, is reinforced by the way that the objects are suspended on strings and nails, as is clearly seen on the print.

References

Balsiger, Barbara Jeanne 1970: *The 'Kunst- und Wunderkammern'. A Catalogue Raisonné of Collecting in Germany, France and England, 1565–1750.* Ph.D. dissertation, University of Pittsburgh.

Bartholin, Thomas 1645: *De unicornu observationes novæ. Accesserunt de aureo cornu Olai Wormii eruditiorum iudicia.* Padova.

Becker, Annesofie, Arno Victor Nielsen & Willie Flindt 1993: *Museum Europa.* Copenhagen: Nationalmuseet.

Bruun, Chr.: Ole Worms Testament. In *Danske Samlinger* Series 1, Vol. 5, pp. 377–378.

Findlen, Paula 1994: *Possessing Nature. Museums, Collecting, and Scientific Culture in Early Modern Italy.* Diss. Berkeley/Los Angeles/London: University of California Press.

Forklarede Cataloge over Gjenstande i Kunst-Museets Ethnographiske Afdeling 1825. Copenhagen: Nationalmuseet (unpublished).

Fortegnelse over de til Museet komne Oldsager 1844–48. Copenhagen: Nationalmuseet (unpublished).

Foucault, Michel 1970: The Order of Things. An Archaeology of the Human Sciences. London: Routledge.

Foucault, Michel 1972: *The Archaeology of Knowledge and the Discourse on Language.* New York: Pantheon Books.

Garboe, Axel 1915: *Kulturhistoriske studier over ædelstene med særligt henblik paa det 17. aarhundrede.* Diss. Copenhagen & Kristiania (Oslo): Gyldendalske boghandel/ Nordisk Forlag.

Gilberg, Rolf 1988: Det Kongelige Ethnographiske Museum blev til Etnografisk Samling. *Natmusen* 10.

Gundestrup, Bente 1991: *Det kongelige danske Kunstkammer 1737* I–II. Copenhagen: Nationalmuseet/Nyt Nordisk Forlag Arnold Busck.

Hermansen, Victor 1951: Fra Kunstkammer til Antik-Cabinet, In *Antik-Cabinettet 1851,* Copenhagen: Gyldendal.

Hooper-Greenhill, Eilean 1992: *Museums and*

the Shaping of Knowledge. London & New York: Routledge.

Jacobæus, Holger 1696: *Museum Regium.* Copenhagen.

Jensen, Jørgen 1993: C. J. Thomsens Museum. En Guldaldervisjon. *Nordisk Museologi* 1.

Kristensen, Jens Erik 1993: Det kuriøse og det klassificerende blik. Naturens indsamling og forordning fra Renæssancens samlere til det moderne naturhistoriske museum med *Museum Wormianum* som udgangspunkt. *Den jyske historiker* 64.

Laverentzen, Johannes 1710: *Museum Regium.* Copenhagen.

Mordhorst, Camilla 2002: Systematikken i Museum Wormianum. *Fortid og Nutid* III.

Murray, David 1904: *Museums. Their History and their Use*, vol. I. Glasgow: James MacLehose and Sons.

Schepelern, H. D. 1971: *Museum Wormianum.* Diss. Copenhagen: Wormianum.

Wilson, William Ray 1826: *Travels in Norway, Sweden, Denmark, Hanover, Germany, Netherlands &c.* London.

Worm, Ole 1655: *Museum Wormianum seu historia rerum rariorum, tam naturalium, quam artificialium, tam domesticarum, quam exoticarum, quæ Hafniæ Danorum in ædibus authoris servantur.* Amsterdam.

Worm, Ole: Will, see Bruun, Christian.

(Worm, Ole) 1965–68: *Breve til og fra Ole Worm 1607–1654*, vols. 1–3. Copenhagen: Munksgaard.

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www.etn.lu.se/ethscand/index.htm
Editor: *Jonas Frykman,* Lund
E-mail: jonas.frykman@etn.lu.se
Assistant editor: *Margareta Tellenbach,* Bjärred
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Cover illustration: "Schleswig"-type farm from Sønder Sejerslev, West Schleswig, now in the Danish Open Ailr Museum in Sorgenfri.

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