Turning natural objects into drinking cups: Studying the role of ornament in early modern drinking vessels

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INTRODUCTION

The room of my eleven-year-old son holds quite the collection: a cow bone found in the dunes near our home, several insects in tiny jars, stones in all shapes and sizes, seashells, dried leaves, chestnuts, and acorns. He also has a stack of encyclopedias, a gigantic atlas, and a globe (one that glows in the dark and shows the constellations). Collecting is a way for him to understand the world, and to marvel at its wonders. The practice of collecting has always been fascinating me and was the reason I enrolled in the course Early Modern Cultures of Collection at Leiden University. Here, I learned that the practice of collecting has had a similar function for past centuries: to make sense and create an image of the world we live in. For me, the culture of collecting finds itself at the core of humanities, and this is the reason that in this thesis I chose to explore a topic related to the early modern practice of collecting.

Characteristic for the early modern period (c. 1500 - 1800) are the discoveries of new areas and expanded global cultural encounters, increased colonization, and intensified trade networks.[1] In Europe, this was the period that saw the emergence of the *Kunstkammern, Wunderkammern* and cabinets of curiosity. The topic of the *Wunderkammer* is extensively researched by art historians Lorraine Daston and Katherine Park. In their work, Daston and Park consider the *Wunderkammer* to be the early modern center of knowledge, and the showcased objects blur the ancient opposition between art and nature and form a stepstone for the development of a natural philosophy.[2] Naturalists, princes and scholars alike collected a diverse range of objects and artefacts, depending on the social group they were a part of and on the money they were able to spent.[3] Despite differences in what was collected and for what reasons, the *Wunderkammer* almost always showed the combination of *naturalia* (objects from nature) and *artificialia* (objects made by man).[4] These collections aimed to display the wonder of art and the wonder of nature combined.[5] The common goal of these collections was to evoke awe and wonder in their beholder, whether this was for the purpose of learning, or showcasing the power and wealth of its patron.[6] Emblematic for a *Wunderkammer* object was the interplay between the features of the natural object and the craftmanship of the artisan.[7]

This paper focuses on one type of *Kunstkammer* objects that features this interaction

[1] Martin and Bleichmar, "Introduction: Objects in motion," 606
[2] Daston and Park, *Wonders of art*, 260.
[3] Ibid., 266
[4] Ibid., 269
[5] Ibid., 260
[6] Ibid., 267
[7] Ibid., 261

between that what is nature-made and man-made: European drinking vessels made from exotic or rare *naturalia.* European drinking culture has a long history and drinking alcohol was thoroughly embedded in the culture of early modern life.[8] In his *Symposium* (c. 385 - 370 BC), the Greek philosopher Plato (c. 428 - c. 348 BC) sets the example of men discussing ideas, while drinking together. [9] A legend of the Greek god of wine, Dionysus, led to the belief that the god died every year when the grapes withered, and resurrected in spring when the cycle of the grapes started anew.[10] Bacchus, the Roman equivalent for Dionysus, was often glorified in drinking ceremonies in early modernity. In the Old Testament, vines are portrayed as Divine gifts, and drinking wine and sharing bread together was symbolic for the sacrifice of Christ.[11] After the invention of the printing press in the fifteenth century, books on health and diet became one of the popular genres. Often written by physicians, these books dealt with the topic of food and drink, and wine and beer are frequently portrayed as important nutrients.[12] In early modernity, guests were often welcomed with a drink which they were expected to empty. Often these drinking welcomes took place in dedicated rooms withs a special vessel for the occasion or were in the form of a drinking game.[13] This was certainly the case at the courts, usually this custom also included a welcome book in which the guest could write a note, mostly something lighthearted that resonated with the effect of drinking of alcohol.[14] Drinking rituals and games were also common for early modern hunting gatherings, ceremonies and celebrations.[15] Considering these drinking customs of early modern Europe, it is not surprising that drinking vessels, cups, tankards, goblets were made in large numbers during this period.[16]

The main research question for this thesis is: To what extent does the ornamentation of early modern drinking vessels that are made from a natural object, function as a frame and what other role does the ornamentation have? In order to answer this question, this study focuses on four case studies from the early modern period that feature a specific natural object at their core. The selection is based on the different naturalia used in the vessels, the uniqueness of the object

[8] Glanville and Lee, *The Art of Drinking*, 6
[9] Ibid.
[10] Ibid., 24
[11] Ibid.
[12] Phillips. *Alcohol : a History*, 95
[13] Jordan-Gschwend, "Treasures for Archduke Ferdinand," 429 . A famous example of a drinking game is captured in a sixteenth century guestbook, the Ambras *Trinkbuch*. This drinking game took place at the Bacchus grotto of Archduke Ferdinand of Tirol. Guests were 'trapped' in a chair and only released after drinking a great quantity of wine in one sitting. When they succeeded they were allowed to write their name in the book under that of the Archduke and his wife, but if they failed, they had to start over.
[14] Seelig. "Willkommensgruß und Willkommtrunk,"137
[15] Ibid.
[16] Seling,. "Enleitiung," 22.

or the notion that an object challenges earlier ideas. All objects chosen in this paper are made in Southern Germany in the sixteenth century and were part of a Habsburg collection. The aim is to study these objects and answer the question how these objects might have functioned and what meanings they held. The approach used in this paper follows the scholarly interest in the role of the object and is built on the concept of the 'cultural biography of a thing' introduced in an essay by anthropologist Igor Kopytoff in anthropologist's Arjun Appadurai's important work *The Social Life of Things*.[17] Works like the *The Social Life of Things* prompted a turn toward objects and materiality. Not only in the field of anthropology but also in art history. This 'material' turn was followed by the examination of the circulation of objects across regions and cultures, and the movement of the people, techniques and materials involved in the manufacturing of these objects.[18] The leading principle of a 'biography of a thing' is to follow an object and examine its social contexts. This thesis follows a similar framework to study where these drinking vessels were made, and for what proposed purpose. It also explores the context of use and how the objects were experienced.

The early modern world was preceded by the late medieval period, and it is interesting to study whether the objects chosen for this thesis show similarities or differences with the way in which natural objects are handled in this earlier time period. Therefore, the first chapter will provide background on ornamented *naturalia* in the late middle ages and explores how natural objects were viewed and incorporated into artificial objects in the period preceding the early modern era. The second chapter focuses on the context of the *Kunstkammer*, and the collection of Archduke Ferdinand of Tyrol (1529 - 1595) serves as an example of a princely early modern collection. This chapter also aims to explore the modes of display and questions the knowledge that was actually acquired in the *Kunstkammer* as a place of knowledge. The third chapter explores the concepts of frame and ornament. In her work on objects in frames, art historian Anne Grasskamp studies display practices in early modern Europe and China, and analyzes how objects, both natural and foreign, were framed in these contexts. In her research she points out that exquisite foreign artworks in intricate frameworks, made by Europeans for display in European settings, is a form of cultural appropriation. Grasskamp points out that making a separation between the frame and what is the work that is framed can be challenging. She states: 'To the extent that a natural object becomes the by-work to an artistically designed

[17] Kopytoff, "The Cultural Biography of Things," 67
[18] On this genre see for instance: Findlen, Paula. *Early Modern Things*. Milton: Taylor and Francis, 2021. Gerritsen and Riello. *The Global Lives of Things*. Cooke, Edward S. *Global Objects : Toward a Connected Art History*.

centerpiece.'[19] Therefore, chapter three will focus on the concept of the frame and ornament and serves as a framework to examine the case studies in the following chapter. In the last chapter the selected case studies are examined against the themes discussed in the previous chapters, a comparison with the late medieval period, a focus on what is new in the *Kunstkammer* context it was created for and what role the frame and ornament have in these specific objects. With a theoretical framework that incorporates both the aspects of framing and ornament and an understanding of what has been done before the early modern period, this thesis explores the objects in a context broader than the *Kunstkammer* and with these case studies, this paper examines whether object-driven inquiry can provide new insights on these objects.

[19] Grasskamp, *Objects in Frames*, 92

CHAPTER ONE

The Hereford *Mappa Mundi* is a remarkable example of how the world was perceived in thirteenth century Europe. (Fig. 1a) This medieval map of the cosmos shows the three continents that were known at that time; Europe, Asia and North Africa.[20] This map also offers an insight into the Christian worldview which dominated much of European culture during this period. This is evident by the placement of Jerusalem, in the map's center and Christ depicted on top of the map, overseeing all of mankind. Additionally, the garden of Eden is portrayed as an isolated island located beneath Him, completely inaccessible to humans. The East is portrayed at the top half of the map. It was where the sun rose and where Christians looked for signs that could point to the second coming of Christ.[21]

During the Middle Ages the relations western Europe had with the 'East' were subject to changing attitudes.[22] In early medieval literature, the 'East' is represented as a threatening adversary, and fear and imagination at some point even intermingled to create representations of this enemy mixed with monsters and mythical creatures.[23] Later centuries saw a significant positive impact due to the establishment of peace with the Mongol empire, which facilitated increased levels of travel and commerce between the eastern and western regions and this period allowed for the growth of trade routes and the exchange of goods, leading to the flourishing of commerce and cultural exchange. [24] In the thirteenth and fourteenth centuries there was an upsurge in European missionaries and explorers journeying to Asia, which often resulted in written accounts of their journeys and experiences. This latter development responded to the growing fascination and interest in marvels and wonders from faraway lands.[25]

Visible at the fringes of the Hereford map, in the places beyond the known borders of the world at that time, there are strange creatures such as Cynocephali, men with the heads of dogs, and Sciapods, a race with one very large foot, that inhabited the lands beyond the borders. (Fig. 1b and 1c) These extraordinary people were considered to have a place in the world and were seen as a part of God's creation. They were arranged symmetrically on the map and the idea behind this was that the Creator had populated both corners of the world in a

[20] https://www.themappamundi.co.uk/index.php
[21] Ibid.
[22] Daston and Park, 27
[23] Classen, "Imagination, Fantasy, Otherness," 15-16
[24] Ibid., 26
[25] Ibid., 32

balanced manner.[26] The influence of the Church and religion loomed large within medieval society and had a profound impact on all facets of human life and the idea that God could intervene miraculously or create saints was thoroughly explored by authors and artists.[27]

An example of the influence of the Christian religion in medieval works, is to be found in the 'book of beasts', the bestiary. The bestiary was immensely popular in the Middle Ages, evidenced by its frequent presence in medieval libraries.[28] The appeal of the bestiary lay in the vivid and concrete descriptions it provided which were easily remembered due to their straightforwardness; these descriptions reminded their readers of Christian dogma or moral teachings they should heed. The bestiary served a purpose similar to that of a sermon: it taught Christian ethics and had a strong emphasis on memorability.[29] By providing clear and captivating illustrations and stories, it ensured that its lessons would be remembered by those who heard, saw, or read them.[30]

Besides unfamiliar races, beasts also have their place on the Hereford *Mappa Mundi*. On the right part of the map, near the camp of Alexander the Great, is an image of a unicorn. (Fig. 1d) The placement of the unicorn is not random, stories of Alexander the Great encountering these creatures were known well in the Middle Ages. In the Middle Ages, the unicorn was a popular symbol in Christian art and literature, often representing Christ. [31] The horns of the unicorn were believed to possess healing powers and were used to treat a variety of illnesses. They were also believed to have the power to purify water and neutralize potion and therefor these 'unicorn horns' were often used in chalices and drinking vessels. [32]

For medieval artists and viewers, every single figure or form - no matter how grotesque or seemingly absurd - had a spiritual significance, guiding the observer back to the realm of religion.[33] Every artistic endeavor was made with the goal of achieving spiritual enlightenment, which could be understood when it was viewed through a spiritual lens. Through these works, people were able to comprehend how all things in existence were interconnected within a larger cosmic order, all governed by God.[34] Objects from the late medieval period are the manifestations of concepts that had been derived, in part, from

[26] Lugli. *Naturalia et mirabilia,* 51
[27] Classen, 37
[28] Rowland, "The art of Memory," 12
[29] Ibid.
[30] Ibid.
[31] Humphreys, "The Horn of the Unicorn, 17
[32] Ibid., 18
[33] Classen, 58
[34] Ibid.

imagination.[35] These physical representations can be understood as the material image of values, ideas, spirituality and even a higher power such as God. [36] One aspect of this paper is to explore the similarities and differences in the way natural objects were handled during the early modern period in comparison to the preceding late medieval period. In order to gain a better understanding of this topic, the following paragraph studies the role of ornamented *naturalia* in the late medieval period and uses the unicorn horn as a case study to answer how natural objects were viewed and incorporated into artificial objects.

NATURALIA IN THE LATE MEDIEVAL PERIOD

As the chapter introduction illustrates, *naturalia* were often viewed as evidence of the existence of mythical creatures in faraway lands. These natural wonders frequently serves as metaphors that illustrated religious teachings. According to the story told in the bestiary, the only way to capture a unicorn was with the help of a beautiful maiden.[37] Attracted by her aroma and virginity as she sits in the woods, the animal would come to her, and fall into a spellbound state in her lap, providing the opportunity for it to be killed. The consensus among scholars is that the depiction of the virgin in the story symbolizes Virgin Mary and the unicorn represents the figure of Christ.[38]

In reality, the horn of the unicorn was the long spiraled tusk found on the heads of narwhals, a whale species that lived in Arctic waters, and these 'horns' were transported to Europe through shipping routes from Greenland and Iceland to Northern Europe.[39] The tusk of the Narwhal was taken out of its original setting and reidentified as the horn of a unicorn. This type of misidentifying happened frequently in medieval times due to the way animals were evaluated and compared based on their physical characteristics. Since it was often used for teaching it was important that an object was easy to identify. [40] The white ivory color and spiral twist of the unicorn horn began to appear in medieval art during the twelfth century and had become an established iconographic motif by the fourteenth century, perhaps confirming to the appearance of the Narwhal tusk.[41]

When medieval artisans altered natural objects, they often preserved the key morphological features that were needed for identification by its audience. [42] The Victoria &

[35] Ibid., 20
[36] Ibid., 50
[37] Benton, *The Medieval Menagerie,* 76-77
[38] Ibid.
[39] Ibid.
[40] Stein, "Medieval naturalia," 4
[41] Benton, 76-77
[42] Stein, 5

Albert museum is home to one out of two remaining medieval narwhal tusks with carved decorations.[43] (Fig. 2a) The distinctive spiral twist was one of the identifying characteristics of a unicorn horn and is accentuated by the carvings in the ivory. The eye follows this spiral movement, which dictates the visual experience of the object. The ornamentation on this piece feature a blend of foliage and animals, the lower section shows curling vine scrolls with naked figures and birds and beasts, while the upper part has dragons and foliage.[44] Additionally, small holes for attaching strips of valuable metal are visible on the untouched parts of the horn. These were likely made of gilded copper.[45] The use of foliage as a decorative motif can be understood as a reference to church reform or allude to the creation of the world, as a form of praise for the act of Creation. [46]

Medieval *naturalia* were often embellished with precious metals and gems. This type of adornment served a similar purpose as reliquaries, which housings held sacred relics. The decoration of these natural objects was seen as a way of making them more valuable and meaningful [47] The skills of the medieval craftsman who created these objects and the material he used were considered of equal significant importance. [48] The understanding of materials throughout the Middle ages had a dual meaning, they were seen as simultaneously divine and mundane.[49] The phrase "gold and gems" suggested great value in medieval times, but medieval writers and viewers were not always vague about specific materials, they often had a detailed understanding and perception of materials, and could identify them easily.[50] They also saw material as carrying various and intricate meanings. [51] Gold was seen as pure, natural, and unchanging. In ancient and medieval times, metals were recognized for its unique characteristics and colors due to impurities. [52] These variations in metal were noticeable for the trained eye, and alloys found in nature were considered superior to those made artificially.[53] Gold's resistance to fire made it highly valued in medieval times, and made it the most prized metal. Silver, brass and iron also had a status as valuable metals, due to reference of these metals in scripture.[54] Silver was seen as slightly inferior to gold in terms of

[43] https://collections.vam.ac.uk/item/O96516/ceremonial-staff-unknown/
[44] Ibid.
[45] Ibid.
[46] Stein, 9
[47] Stein, 9
[48] Hahn, *Strange Beauty*, 32
[49] Hahn, 38
[50] Ibid.
[51] Ibid.
[52] Ibid., 40
[53] Ibid.
[54] Ibid.

purity, symbolizing Christ's humanity instead of his divine nature. This metal was perceived as unstable and prone to corrosion, and therefore could not embody the divine essence. Rather, silver served as a medium for humans to express their devotion and connect with the spiritual realm. In the Bible, silver was often paired with gold, reflecting the union of divine and human aspects.[55] Different materials can enhance each other's qualities; for example, a ruby's value is enhanced when set in gold.[56] Gems in themselves also carried significant meaning. [57] Besides their bestowed symbolism, they were prized for their rarity, beauty and supposed healing and protective powers. [58] Gemstones were believed to balance the bodily fluids and protect the owner or wearer against disease. Each gem was linked to a specific Christian virtue, serving as a connection between the earthly and heavenly realms. [59]

Narwhal tusk, "unicorn", cups are rare and many of the original goblets were literally consumed over time, as they were believed to have medicinal properties and were taken in powdered form by their owners. A few dozen of these goblets still exist, but none of them date back to the medieval period.[60] However, unicorn goblets are mentioned in the inventories of princes from the late Middle ages. [61] The Greek physician Ctesias (5th century BC), offers the initial western account of the unicorn horn, along with its supposed medicinal uses: "Whoever drinks from the horn is immune to seizures and the holy sickness and suffers no effects from poison, whether they drink wine, water, or anything else from the cup either before or after ingesting the drug".[62] In 14th century it was a widespread belief that unicorn horns could detect poison by 'sweating', and that they could neutralize substances.[63] The horns were commonly used at court by placing them near food or touching them to food and drink before a meal. The horns were often kept on the table, were used in tableware or worn as amulets. Healing pots, which were usually made of gold, had a fragment of unicorn horn on a chain, that was dipped in the pot before drinking.[64]

This chapter examined the function of ornament in *naturalia* during the late medieval period to understand how natural objects were perceived and integrated into crafted objects. For medieval artisans and viewers, each piece held a spiritual significance, connecting the

[55] Stein, 11
[56] Ibid., 15
[57] Hahn, 41
[58] Stein, 14
[59] Ibid.
[60] Schoenberger, "A Goblet of Unicorn Horn," 285-286
[61] Ibid., 286
[62] Duffin, "The Danny Jewel," 7
[63] Ibid.
[64] Stein, 15

audience to religious themes. *Naturalia* were frequently augmented through techniques such as carving, incorporating other materials or by adding embellishments. These precious materials and ornamental features were meant to reflect the value of the object and draw attention to it, granting it meaning and visual importance. The layering of materials often meant adding symbolism to the object. In the Middle Ages, the medieval treasuries served as the storage of both spiritual riches. [65] They kept items that could be shown or if necessary traded, for monetary gain. Incorporating precious natural objects into these religious and noble collections helped preserve their sacredness and believed powers and it was believed that these mystical properties were controlled by their owners. [66] Owning rare and unique wonders represented wealth and power, reflecting these properties onto the owner. European monarchs used these objects to solidify their social, political and religious status and this practice stayed and gained in importance in the early modern period. In religious settings, these valuable objects were often kept alongside sacred remains in designated places of worship, only accessible to high ranking individuals and those who financially supported the abbeys or churches. These treasures would only be shown to the general public during special events. This precautionary measure protected the items from being stolen or that they were depleted of their supposed power, and also reinforced their exclusivity.[67] This secluded use and method of 'display' differs from the early modern period and the following chapter focuses on the period that follows the Middle Ages and saw the emergence of the *Kunstkammer*.

[65] Ibid., 12
[66] Ibid.
[67] Ibid.

CHAPTER TWO

This chapter explores the context of the *Kunstkammer* in the early modern era and the intended use of objects made from *naturalia.* In this chapter introduction the collection of Archduke Ferdinand of Tyrol which he assembled at Ambras Castle will function as an example of a princely collection. The Ambras collection is exemplary for an early modern *Kunstkammer* collection as it is well-preserved and consists of a wide range of objects, reflecting the interests and tastes of its patron. Another reason this collection is chosen as an example in this paper, is that the collection is arranged according to specific categories and reflects the intellectual interest, not only of the collector but also of the ruling elite of the time. The *Kunstkammer* has been considered a source of knowledge, therefor this chapter also aims to answers the question what knowledge was actually acquired in the Kunstkammer.

Following the voyages bringing home goods from newly discovered geographical areas, the collections that were assembled in the sixteenth century were unparalleled in their scale and scope.[68] These collections were encyclopedic by nature and reflected the collectors' desire to understand and collect the world in its entirety. These collections encompassed both artificial and natural objects, and they were a reflection of the collectors' belief that God was represented in the *macrocosm* and that nature was seen as His creation.[69] The *microcosm* represented humankind, and the objects that were created by human hands were also seen as manifestations of the power of God on earth. The distinction between nature and men showed itself in the existence of the division between *artificialia* and *naturalia.*[70] Despite the commonly shared interests of collectors, no collection was quite like the other and often patrons focused specifically on certain types of objects, depending on their interests. This diversity in the collections serves as a testament to the vastness and complexity of the world and the human experience of it.

Archduke Ferdinand of Tyrol was the second born son of emperor Ferdinand I (1503-1564) and as was the custom, his older brother Maximilian II (1527 – 1576), was heir to their father's titles.[71] After his father's death, Ferdinand II became the sovereign leader of Tyrol and this new position as archduke initiated the implementing of Ferdinand II's image of the interests and activities of an ideal Renaissance monarch. The most important of these activities was the expansion of his collection. [72] Collecting was not only a reflection of the

[68] Findlen, *Early Modern Things*, 230
[69] Hooper-Greenhill, *Museums and the Shaping*, 14
[70] Ibid., 89-90
[71] Bůžek, "The Arrival," 120
[72] Ibid., 42

mastery of the collector and his family, but it was also considered a virtue, equal to the virtue associated with battle, and indicative of the morality of the patron.[73] The collection of Ferdinand of Tyrol at Ambras castle centered around armor, the wonders of nature and natural objects turned into art.[74] The common feature of early royal collections was that they had an important function in representing the mastery, power, wealth and characteristics of its owner.[75] The collection of Ferdinand of Tyrol had an immense diversity, it was not only its universal content and the meaning it conveyed, but also the methods of the collection's display, that formed a reflection on the majesty of the Archduke himself, and therefor on the whole of the Habsburg dynasty.[76] This latter is confirmed by the procurement of the collection after Archduke Ferdinand's passing, by Emperor Rudolf II who left the collection almost the way he acquired it. [77]

An engraving made by Matthäus Merian (1593 – 1650) gives an impression of the immensity of Ambras Castle. (Fig. 3) It shows the castle, the surrounding grounds and buildings such as a guesthouse, winery and library. A sketch by Joris Hoefnagel (1542 – c. 1600) from around 1580 also shows the castle and inscribed above the palace it says: "Castrum Ameras a sereniss[imo]: Archiduce Ferdinando Austriaco extructum, in quo et eius bibliotheca et Musaeum." Ambras Castle with its library and museum, build by Archduke Ferdinand of Austria. (Fig. 4) [78] Archduke Ferdinand II expanded his collection with exclusive goods, from the southern regions of Europe and from the foreign territories that were discovered overseas. He was able to acquire these curiosities with the help of privileged connections, such as that with his cousin, King Philip II of Spain. (1527 – 1598) [79] Inspired by his father and other members of the House of Habsburg, Archduke Ferdinand II started his collection, and his patronage was for a part fueled by rivalry with his brother Maximilian II. With his collection activities, he aimed to imitate and surpass his older brother's activities.[80]

The *Unterschloss* (lower castle) at Ambras Castle was specifically designed and built for Archduke Ferdinand's collection, and consisted of four, interconnected buildings.[81] This pairing of the *Kunstkammer* with a library reveals similarities with Samuel von Quiccheberg's (1529 - 1567) treatise *Inscriptiones vel tituli theatri amplissimi* (1565), as do the grouping of

[73] Scheicher, "Historiography and display," 78
[74] Smith, "Collecting Nature," 117-118
[75] Ibid.
[76] Kaufmann, "Sculpture Collecting," 28-32
[77] Ibid., 29
[78] Sandbichler, " The reconstruction, " 401
[79] Jordan-Gschwend, "Treasures for Archduke Ferdinand," 431-432
[80] Uličný, "The architecture of Prague Castle," 169-170
[81] Scheicher, 69

tools and weapons and the separation of religious and historical objects. The treatise Quiccheberg wrote is considered the first written theory on museology and it is of significant importance in the history of collecting.[82] In the *Inscriptiones,* Quiccheberg describes how a collection should be formed and how it should be systematically organized. Quiccheberg theorizes that an encyclopedic museum is to be built in the shape of a theatre, a concept that was well known during the time because of the emergence of the anatomical theatre, and its reference to Giulio Camillo's (1480-1544) memory theater.[83] According to Quiccheberg, the most important purpose of the arranged objects and images showcased in this museum theatre, was to acquire knowledge, and he made the implication that the physical space in which this knowledge was obtained formed the basis for the organization of this knowledge.[84] Michel de Montaigne (1533-1592) a humanist philosopher writes in one of his essays: '[...]in my opinion, of the most ordinary, common, and known things, could we but find out their light, the greatest miracles of nature might be formed, and the most wonderful examples, especially upon the subject of human actions'[85] Quiccheberg's treatise and thoughts like the one Michel de Montaigne formulated, indicate that the emergence of the *Kunstkammer* collections could be perceived as proof of the thirst for humanist learning, and that they are a representative product of the era.[86]

The 1596 inventory of Archduke Ferdinand's properties and possessions, drawn up after his death in 1595, gives an overview of his collection at Ambras Castle. It was written by administrative officials, who were not in possession of in-depth knowledge and their descriptions are ambiguous and incomplete. This makes the identification of the specific objects a difficult task, and most of the specifics that are mentioned are for the extensive armory. [87] There were eighteen cabinets, painted in different colors, in which the *Kunstkammer* objects were stored.[88] In 1974, under the supervision of curator Elisabeth Scheicher, Archduke Ferdinand's *Kunst- and Wunderkammer* and the arrangement of the cabinets in this collection, was represented in Ambras Castle in 1974. (Fig. 5) Decades later, in 2017, in celebration of a jubilee exhibition, Archduke Ferdinand's *Kunstkammer* collection was reconstructed again, this time following the 1596 and 1621 inventories and using visual

[82] Kuwakino, "The Great Theatre, " 303
[83] Bolzoni, "The Memory Theatre," 66. Giulio Camillo was an influential Italian philosopher whose treatise L'Idea del Theatro (1550) concerned his desire to realize a memory theatre in which one could store, and re-activate at will, all the knowledge contained in a universal mind.
[84] Kuwakino, 303-304
[85] Montaigne, "Of Experience," 1922
[86] Koeppe. "Collecting for the Kunstkammer."
[87] Sandbichler, 402
[88] Ibid., 402-404

media such as photographs of existing objects and graphic placeholders for unidentified items (Fig. 6 and 7). The descriptions in the inventories reveal that the cabinets were arranged back-to-back in an extensive room. This set-up made it possible for the visitor to make a full round. The installation not only exhibited the known and unknown objects in the collection, but it also showed the size of cabinets and details of the display.[89] (Fig. 8) The objects in the collection were not all displayed on individual shelves or in separate cases, like they are now in the Kunsthistorisches museum, but they were densely showcased. Sometimes objects were even displayed in boxes or on the inner side of doors. If the individual objects were capable of astonishing their beholders, cabinets filled to the brim with marvelous objects could only heighten the experience of bewilderment and awe.[90] Inside cabinets, the objects in the Kunstkammer were thoughtfully sorted and showcased, but they did not need to be visible all the time. Lastly, the objects in the collection were not only to look at, and it was possible to take items from their place to study them more closely on long *Repositorien* tables which were especially designed for studying objects. [91] The next paragraph examines what kind of understanding and information was gained through the collection and display of items in the *Kunstkammer*.

MAKING KNOWLEDGE IN ROOMS OF WONDER

Collecting was not just a mere act of acquiring and owning objects, but it was seen as a process of actively seeking knowledge and understanding of the world. This was particularly true for the collections of learned men, who not only collected objects, but also studied and researched them in order to gain a deeper understanding of their historical or scientific significance. These scholarly collections were more than a display of wealth or status, but also a reflection of the collector's dedication to the pursuit of knowledge.[92] The expansion of the known boundaries of the world and intensified global trade and expansion of networks, brought natural wonders close to home. The patron who possessed the collection, in a metaphorical sense, gained the prestige and respect that was commonly associated with men who possesses a high level of knowledge and education. This was because owning a collection of valuable and rare items was often seen as a sign of intelligence and intellectual refinement. Thus, the patron was able to elevate his status in the eyes of others and be

[89] Ibid., 403-407
[90] Daston and Park, "Wonders of Art," 260
[91] Sandbichler, 408
[92] Findlen, *Possessing Nature*, 3

recognized as a learned individual. [93] Also, owning wondrous objects transferred a certain respect for the collector who acquired the work.[94] The *microcosm*, the small scale universe, of the *Kunstkammer* made it possible for the collector as well as for his visitors to see and touch and wonder about the whole world, be it on a smaller scale.[95]

Recently, the validity and authenticity of the knowledge obtained through various settings has been brought into question by art historian Daniela Bleichmar in her examination of the concept of worldmaking and the production of knowledge in her essay titled, "The Cabinet and the World: Non-European Object in Early Modern European Collections". In her work, Bleichmar examines the ways in which non- European objects were collected and displayed in early modern European collections and delves into the potential biases and inaccuracies that may have been present in the knowledge and understanding of these objects.

Kunstkammers and cabinets of wonder elicited the promise that the world outside Europe could be experienced in the safety of a collection. [96] Bleichmar researches how collections were actually used to acquire knowledge of this outside world and argues that collections were a site of 'worldmaking'.[97] Worldmaking is defined as a process wherein self-awareness plays an important role in the making of new theories, ideas and interpretations and imagery of the world, and it was a pre-occupation in early modernity.[98] Bleichmar writes: "Collecting, depicting and imagining other places and other peoples around the globe served to define both the other and the self."[99] However, Bleichmar argues that during the sixteenth and seventeenth centuries, there were two distinct methods of creating a representation of the world. On one hand, there was the meticulous and detailed geographical information used in the making of maps. On the other hand, there was the less accurate and more abstract representation of the world found in the cabinets of curiosity and *Kunstkammer* collections.[100] Even though these approaches contrast with each other they are still two sides of the same coin and serve the same purpose of inventing and imagining the world.[101] In early modernity, the creation and development of maps and cartography played a significant role in shaping the way the world was perceived and understood. These tools allowed for the exploration and discovery of new lands, making it possible for them to be reached, known, claimed, and

[93] Ibid.
[94] Daston and Park, 267, 280.
[95] Bleichmar. "The Cabinet and the world," 435
[96] Ibid.
[97] Ibid.
[98] Ibid
[99] Ibid.
[100] Ibid.,443
[101] Ibid.

settled. However, the process of world making in the collection was a form of domesticating and contextualizing items that came from exotic and distant locations.[102]

During the early modern period, scholars like Samuel Quiccheberg believed that studying and handling an object from a collection would lead to a deeper understanding and provide knowledge of the world, However, the reality was not as straightforward as this idea suggested.[103] The interpretation of objects from foreign, non-European origin was often fraught with uncertainty and ambiguity regarding their places of origin and the cultures and societies that produced them. As a result, the primary impact of these foreign objects within a collection seemed to have been more to distinguish them from European objects rather than to gain a greater understanding of the cultures and societies they came from.[104] Terms such as "Moorish" and "Indian" may seem to indicate a specific place or culture, but they were often used with a certain level of flexibility and ambiguity. Rather than referring to a specific geographical or cultural location, these terms were more frequently employed to describe those who were perceived as foreign or different.[105] For example, the term "Moor" was particularly broad in its usage, and could refer to a wide variety of groups, including Muslims, Native Americans, and Indians. Essentially, it was often used as a general term to describe those who were considered ethnically, culturally, and religiously distinct form the white European population. In other words, the word "Moor" was used to signify the "other".[106] "Moor" carries with it a certain level of opposition and otherness, often associated with different skin type and color, as well as different physical appearance and culture, in comparison to the white European population who believed in God.[107] The same vagueness could be applied to the concept of "Ethiopia", the place early modern society believed to be the origin of coral. For the early modern visitor or collector "Ethiopia" probably not pointed to a specific geographical location on the world map but was more of a fantastical place, and above all: it was not Europe.

In an earlier essay, Bleichmar also argues that objects in early modern collections are not meant to be understood individually, but rather as part of a narrative created through display strategies and visit protocols. These collections were experienced as a group of multiple objects, with meaning constructed by both collector and visitor.[108] The gaze, moving

[102] Ibid.
[103] Ibid.
[104] Ibid.
[105] Ibid., 436
[106] Hall, *Things of Darkness*, 7
[107] Ibid., 11
[108] Bleichmar, "Seeing the world," 16-17

from object to object creates a narrative and the collector guides the visitor's experience by telling stories about the objects on display, making the collection not just an accumulation of objects, but also a narrated social experience.[109]

During the early modern period, the desire to acquire and possess foreign objects was a driving force behind the formation of princely collections. These collections, such as the one Archduke Ferdinand of Tyrol assembled at Ambras Castle, were not necessarily established with the intention of gaining a deeper understanding of the culture or society from which the objects originated. Instead, the primary motivation was the acquisition and ownership of these exotic items, which were perceived as a symbol of prestige and status. The ambition of early modern princely collections was more about owning and experiencing foreign objects, than it was a true means to gain knowledge of the place where they came from or the people they represented.[110] The collection was considerably more than an accumulation of precious objects, it also provided a social experience, that could be accompanied by a chosen narrative. The next chapter further examines how foreign objects for European collections were framed and focuses and the role of ornament.

[109] Ibid., 30
[110] Bleichmar, 443.

CHAPTER THREE

This chapter focuses on the concepts of ornament and frame to study the decoration of the *naturalia* of the case studies in the following chapter. This section aims to provide insight and understanding into where the line between 'ornament' and 'frame' is drawn in regard to natural objects set in man-made mounts or casings.

The modernist perspective on ornamentation is frequently defined as that which is non-essential or insignificant to an artwork. Ornament is considered to be a decorative element that serves no other purpose than to enhance the appearance of a piece of art, and only functions as decoration. According to this viewpoint, ornament can be considered optional and can be removed or excluded by choice by the artist.[111] In contrast to these contemporary perspectives, the views on ornament during the early modern period were quite distinct. During this time, ornament was viewed as a tool that could enhance the aesthetic appeal of an artwork and ornamentation had the power to elicit a strong emotional response from its audience. It was considered an essential component of the creative process and was used to imbue artwork with a sense of elegance and refinement. Ornamentation was also believed to possess spiritual and symbolic significance, serving as a means of expressing deeper meaning and evoking heightened emotions in the viewer. The early modern understanding of ornament was one that placed great value on its ability to elevate and enhance the beauty of an artwork and to evoke powerful emotional responses in those who viewed it. [112] In the sixteenth century, the concept of ornament was not viewed as a superficial addition to a work of art and was instead considered more than peripheral embellishment.[113] Although ornament is not always an essential component of an artwork, it can greatly enhance the visual appeal of an artwork and made it more desirable to own. Ornamentation serves as a decorative element that adds to the overall aesthetic of the work, without being necessary for its purpose or functionality.[114] In this context, the experience of pleasure was considered a legitimate purpose and incorporating ornamentation was solely done for the function of enjoyment. [115] The relationship between ornament and functional form is always a dynamic one. There is a certain dialogue, where ornament and functional form interact and enhance each other.[116]

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[111] Hammeken, Ornament and Monstrosity, 3
[112] Ibid. 18
[113] Ibid. 20
[114] Trilling. *The Language of Ornament*, 12
[115] Ibid., 14
[116] Ibid., 62

ON FRAMES

In her research on displaying foreign collectibles in early modern China and Europe, art historian Anne Grasskamp studies the methods and techniques used to showcase and frame foreign objects, artifacts and natural items as valuable collectibles in both European and Asian cultures. Often, exotic objects were adorned with precious mounts, visually transforming the objects and serving as a bridge between the foreign item and the collection in which it was displayed. According to Grasskamp, the addition of European mounts on Asian porcelain for instance, can be viewed as a form of aesthetic appropriation, as it fundamentally alters the way in which collectors and their visitors interacted with and perceived these foreign objects. By modifying the surfaces of these objects, these mounts serve to Europeanize the tactile experience of handling porcelain, promoting a sense of cultural hegemony over the objects.[117]

The use of gilded mounts, pedestal and cases by goldsmiths for instance, not only ensured that the object was presented in a unified manner, but it also significantly enhanced the value of the object in three important areas: economic, social, and aesthetic. By incorporating these decorative elements, the object becomes not only more visually striking and appealing but also more valuable from a financial perspective. The use of gilded mounts and other embellishment could elevate the object's status in terms of social and cultural significance, further adding to its overall value.[118] Importantly, mounting objects in this way was also a common way to contextualize natural treasures for the *Kunstkammer* collections.[119] Grasskamp's research on objects in frames clearly points out that: "Metal mounts embodied the unifying and site specific framework of individual collections. The fittings function as frames of appropriation, an appropriation of the foreign through the indigenous as well as an appropriation of nature through art." [120] Grasskamp states that the analysis of surviving works of art from the sixteenth century, along with a thorough examination of terminology used during this period, indicate that mounts can be perceived as frames. These frames represent the *parergon*, an expression used in the context of the Kunstkammer to refer to peripheral adornments. [121] In his treatise Quiccheberg defines the *parergon* as: 'Parerga are things that transcend the conventions of embellishment added because of charm: such as trees, small birds, florets, scenic view, turrets and the like.'[122]

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[117] Grasskamp, "*Objects in Frames,*" 9-18
[118] Ibid., 89.
[119] Duro, Framing the Fragment," 1082
[120] Grasskamp, 165
[121] Ibid., 51
[122] Ibid., 40

Parergon now has a more far-reaching meaning according to philosophers Immanuel Kant's (1724 – 1804), and Jacques Derrida's (1930-2004) writings on the subject.[123] According to Kant, ornament can be understood in two ways: as a means to enhance the tastefulness of a piece, or as a purely decorative element. [124] For Kant, ornament has the ability to provoke a physical response from the viewer and can potentially serve as a distraction.[125] In Kant's philosophy, ornament is *paregon* and therefor considered to be an addition to the central work, the *ergon.*[126] This peripheral ornamentation serves to enhance the overall aesthetic of a work, but is not essential for its purpose or meaning. Derrida sees the *parergon* not as something outside the main work but views it as a broader phenomenon.[127] The *parergon,* according to Derrida, is crucial to the central work, the *ergon*.[128] He writes in his work *The truth about painting* (1978):

"I do not know what is essential and what is accessory in a work. And above all I do not know what this thing is, that is neither essential nor accessory, neither proper or improper, and that Kant call parergon, for example the frame. Where does the frame take place. Where does it begin, Where does it end. What is its internal limit, its eternal limit."[129]

The mount of an object serves as a decorative element that can incorporate a wide range of motifs, from mythological creatures to botanical designs and foliage. Although these embellishments are often intricate and imaginative, they are typically considered secondary in importance, arranged around a central focal point. The mounts serve as a frame for the object it presents, highlighting its foreign shape and displaying associated iconography. The placement of the mount on the periphery of the artifact creates a sense of separation between the collectible and its European context, the *Kunstkammer,* acting as a mediator between the two worlds. The use of metallic materials in the mounts further accentuates this sense of in-betweenness, adding an element of shimmering reflections. [130] Metal mounts serve as both a constraint and a conduit for the objects they encase. They bridge the gap between the foreign object and the European framework of display, connecting the object to its beholder. One of the most significant ways in which an object is opened up to its user is through its handle.

[123] Grasskamp 51
[124] Hammeken, 18
[125] Ibid.
[126] Ibid.
[127] Ibid., 19
[128] Ibid.
[129] Ibid.
[130] Grasskamp, 40-41

This handle serves as a tangible link between the artifact and the viewer, stressing the distinct nature of the objects as a touchable item in contrast to other forms of art. The handle serves as a physical and visual mediator, allowing for an intimate connection between the object and its audience.

Grasskamp writes in her chapter about coral: 'The incorporated coral fragments would be complete early modern collectibles without their metal frames, but the crafted figures would be incomplete without their respective coral antlers, coral forks or ostrich eggs, supporting the interpretation of the mount as by-work or parergon.'[131]. In this interpretation, everything but the natural products, can be seen as *parergon*. *Parergon* can be seen as a framework in the widest sense and surrounds or supports the main work, the *ergon.* It can also function as embellishment to the main work.[132]

In the context of early modern objects for the European Kunstkammer collections, ornament refers to decorative elements that enhance their appearance. The frame, on the other hand, refers to the physical structure or container in which the natural object is displayed. The frame, mount or handle, serves as mediator between the objects and its audience, highlighting the object and making it literally accessible to its audience, the frame can be ornamented in its own right.

The drinking vessels that are case-studies in this paper, were part of a princely collection, and they functioned in dining room settings and were being displayed in the cabinets of the *Kunstkammer*. The following chapter explores the context of manufacturing these objects, studies their alchemic value, and examines the function of ornament and frame.

[131] Grasskamp, 106
[132] Duro, "What is Parergon?," 27

CHAPTER FOUR

The print from the copperplate made by French goldsmith and engraver Étienne Delaune (c.1518-1583) in 1576, gives a glimpse, albeit staged, of an early modern goldsmith's workshop in Augsburg. (Fig. 9). Neatly hanged pliers, arranged knives, files and other instruments decorate the walls of the workshop. Two apprentices are mending the fire. In the center of the print, around the table, two other apprentices are at work, concentrated on their craft. On the far end of the table, near the windows, we see the master at work, talking to a well-dressed man through the open window, who might be a customer. This print shows some of the facets of goldsmithing that match the realities of the early modern practice of the craft. The master supervised all the work of the apprentices and oversaw the entire process of production in order to operate his workshop as an independent tradesman.[133] There are no women in this picture but research has shown that master's wives and daughters did perform tasks in the workshop such as the preparations of raw material and the sale of finished goods.[134]

Early modern Europe was a place where princely patronage and collecting reached a high point and in Central Europe, the acquiring of luxury products boasted the development of the goldsmith and jewelers' industries of cities such as Nuremberg and Augsburg. [135] All four drinking objects chosen in this paper come from the collection of important Habsburg rulers, now housed in the Kunsthistorisches museum in Vienna. They were made in South Germany, three in Augsburg or Nuremberg, in the sixteenth century. These drinking vessels combine a natural treasure with early modern German artistic craftmanship. The small-scale social context wherein these objects were made, was a master's workshop which was the central and most important part of the economic system of the city.[136] But this social context served within the bigger context of strict guild life. Guilds had a system for training, dividing work, the checking of the quality and being part of the guild served as protection from outside competition and formed a cornerstone for city life.[137] This prominent position of Augsburg and Nuremburg as centers of goldsmithing was not only because of the skills of the artisans but also thanks to the relative religious harmony and the political and economic situation.[138] The economic situation was influenced by important merchant companies, most importantly

[133] Häberlein and Reith, "Urban Society," 276
[134] Ibid., 277
[135] Kaufman, *Court, Cloister & City*, 185-186
[136] Ibid.
[137] Morall, "The Arts," 496
[138] Seling, "Enleitiung," 17

the Augsburg' Fugger company, which loaned large sums of money to the monarchs of Europe, and in return received silver and copper from the Tyrolean mines.[139] Access to the precious materials from the mines stimulated the progress of crafts that specialized in luxurious items, such as the making of cabinets and instruments, and the work of goldsmiths.[140] Because of their extensive trade connections throughout Europe and beyond, these merchant companies ensured access to an international customer market.[141]

In this chapter four case studies are explored to answer to what extent the ornamentation of these early modern drinking vessels made from *naturalia*, functions as a frame and explores what other role the ornamentation can have. An important aspect three of the case studies have in common is that medicinal powers were attributed to the incorporated *naturalia*. Therefore, it is interesting to closer examine the concept of alchemy and medicine. The first paragraph of this chapter studies this concept before exploring the drinking vessels in regard to ornament and frame. The first case study is an ostrich egg cup made by Clement Kicklinger (1561-1617) around 1570/1575. (Fig. 10) which features not only an ostrich egg, but also has coral as a natural element. The second case study is a unique drinking horn fashioned by Cornelius Groß (1534 - 1575), around 1560-1570. (Fig. 11). The third case study is a ewer made from a Seychelles nut, by an unknown South German goldsmith in the fourth quarter of the sixteenth century (Fig. 12). The nautilus shell cup made by goldsmith Bartel Jamnitzer (1548–1596) in the late sixteenth century, is the last case study. (Fig. 13). For every case study a visual analysis is given, it is also explored what elements refers to earlier, medieval times, and what roles ornament and frame play in these objects.

§ 4.1 Not for Drinking

Alchemy has had a place at courts since the fifteenth century and kept this place well throughout the sixteenth century. [142] It is mostly known for the practice of the transmuting of base metals into gold, but it also had an important religious aspect, and its practitioners sought to truly understand the work and nature of God.[143] Alchemy was considered a divine knowledge that was only meant for a select view, and the practice also reflected on the patron who made the work possible. Alchemy was not only for transmuting base metals but was considered a medical aid and viewed as key in the understanding of natural processes. In this

[139] Häberlein, "Production, Trade and Finance, 109
[140] Morall, 513
[141] Ibid.
[142] Smith, "Alchemy as a Language," 2
[143] Ibid., 3-5

regard, the works of Paracelsus (Philippus Aureolus Theophrastus Bombastus von Hohenheim) (1493-1541) are important.[144]

Paracelsus was a sixteenth century physician who played an important role in the transformation of medicine. As a physician, he was known for being a practitioner of a new, controversial method of healing, and for his use of alchemically prepared medicine.[145] The dominant theory in sixteenth century medicine was the humoral theory and Galenic medicine. In this theory, a body was believed to be made out of four humors: blood, phlegm, yellow and black bile. These humors were related to four temperaments: sanguine, melancholic, choleric, phlegmatic, and to the elements earth water, air and fire. The four elements each had their own qualities (hot, cold, dry and wet).[146] Paracelsus was a fierce opponent of the humoral theory and considered the human body to work more individually. He believed that a human body had the possibility to have an individual illness instead of a disbalance in his or her humors. According to Paracelsus, in the stomach of each body existed an *archeus*. This *archeus* was a small alchemist who had connections with every organ, and was responsible for separating the pure from the impure inside the body. If negative outside influences entered the body and the *archeus* was unable to make the pure/impure distinction on his own, a person becomes ill. A physician then had the task to prepare an alchemic cure to help the body back to health. [147] Paracelsus' theories and works gained immense popularity after his death, and many editions of his works were written by important physicians who were followers of his ideas. The medicinal properties of natural resources such as plants, metals and minerals stood central in these works.[148] During the early modern period, there was a specific interest in the field of medicinal alchemy, which focused on using natural substances to create remedies and treatments for illnesses. Alchemy, as a mimic of nature, showcased methods for purifying matter and bringing about the salvation of humanity by separating impurities from their essence.[149] The powers attributed to natural treasures at the early modern court were part of the reason precious *naturalia* were acquired and showcased in a collection. Such objects held a unique position in the field of tension between pharmacology, belief in miracles and natural science.[150] An additional reason for owning these objects could be because of their believed

[144] Purš, "Scientific and literary activity," 346
[145] de Vries, "The Paracelsian Impetus, "102
[146] de Vries, 130
[147] Ibid.,128
[148] Purš, 346-348
[149] Smith, 7
[150] Scheicher." Zur Ikonologie von Naturalien," 118

healing properties and the perception of these objects as a medical aid.[151]

§ 4.2 An Ostrich egg and Wonder from the Sea

Looking at the ostrich egg cup, the eye is immediately drawn to the smooth surface of the large ostrich egg. (Fig. 10) It exceeds the other elements in size and the untouched shell and light color form a color contrast with the gilded silver, and the deep red hue of the coral. The smooth texture of the shell contrasts with the intricate metal work encapsulating it. The cup slightly slopes to one side, but the movement is directed by the vertical axis of the object, it starts broader at the base and narrows toward the crown topped with coral. The stems of coral are vertical, the golden leash held by the man follows the same line, as do the gilded bands around the egg. Even though all the separate elements demand the attention of the viewer, the goldsmith still succeeded in making the cup into an integral whole. The gilded silver runs from top to bottom, the coral is repeated on various levels and the sculpture in the middle is also an intrinsic part of the object**.** This ostrich egg cup has two marks. One is the mark of the master, Clement Kicklinger, and the other is the Augsburg city pinecone mark from the time this cup was made. (Fig. 14 and 15) Central in this ostrich egg cup is a sculpted group representing a Black man in a golden armor, handling an ostrich on a shackled chain. The large bird stands on a golden base supported by a gilded- and coral pedestal, and it carries a horseshoe in its beak and a real ostrich egg on its back. The ostrich is made of silver, but that this is not easy to notice because the whole surface has been painted.[152] The metal is the pure paint support, and the linseed oil paint is directly applied to the surface.[153] The paint used on the figure of the Black man is of a different category and the figure has been painted with brisk strokes. Here, the paint also covers the whole figure, and the painted breastplate of the man imitates enameling.[154]

The ostrich was known since the early days of Mediterranean travel and the birds were imported from the African continent for the Roman games.[155] Pliny (Gaius Plinius Secundus AD 23/24- 79) describes the African ostrich in his *Naturalis Historia* (AD 77).[156] Following

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[151] Ibid.

[152] Begov, *Paints on Gold and Silver, 135*. In 2018, an interdisciplinary research project on color settings on goldsmith work examined certain objects from the *Kunstkammer* of the Kunsthistorisches Museum in Vienna, including Clement Kicklinger's ostrich egg cup.

[153] Ibid.

[154] Ibid.

[155] George, "New Animals," 95.

[156] Plinius, *Natural History*, Book X, 293. "The ostrich of Africa or Ethiopia, exceeds the height and surpasses the speed of a mounted horseman, its wings being bestowed upon it merely as an assistance in running, but otherwise it is not a flying creature and does not rise from the earth. It has talons resembling a stag's hooves, which it uses as weapons; they are cloven in two and are useful for grasping stones which when in flight it flings with its feet

his text, the image of the iron eating ostrich became a common representation throughout the Middle ages and the early modern era. In his *Ornithologiae* (1599) the Italian naturalist Ulisse Aldrovandi (1522-1605) draws upon Pliny in his observation of the bird and in one of his drawings of the 'Struthio Camelus' the horseshoe is clearly distinguishable. [157] (Fig 16). In early modern emblem books the motif of the ostrich with a horseshoe in his beak refers to the virtue of strength and the perseverance of the religious spirit. [158] (Fig.17) The quality of the bird's strong stomach and spirit is likened to strong men with great courage even in the face of difficult adversaries. *(*Fig. 18) [159] The ostrich is also mentioned several times in the Bible. A passage in the book of Job led to the belief that the ostrich hatched her eggs by intensely staring at them.[160]

The iron eating ostrich is guided by a Black man in a golden armor, carrying a quiver for arrows on his hip. The man evokes the image of an African hunter, who caught the wild bird and leads him on a chain. The Black man, treading on coral, and the ostrich, native to Africa, also indicate the location where the egg and bird came from.[161]

Ostrich eggs have been found in prehistoric tombs in Greece and Italy, as well as in Persia and China. [162] In pharaonic Egypt, the eggs were treasured natural objects and were used as grave goods and in funerary art. [163] From this early stage, ostrich eggs were attributed with medicinal and magical properties.[164] Part of their value also came from the materiality, their symmetrical form and strong shell. [165] Ostrich eggs also feature in cults and legends.[166] An important legend is that of the egg of the Dioskouroi. [167] Associated in antiquity with the protection of the city of Sparta, a large silver egg was hung by a ribbon from the ceiling of the city's temple dedicated to the Dioskouroi. [168] The practice of hanging ostrich eggs from the

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against its pursuers. Its capacity for digesting the objects that it swallows down indiscriminately is remarkable, but not less so is its stupidity in thinking that it is concealed when it has hidden its neck among bushes, in spite of the great height of the rest of its body."

[157] Aldrovandi, *Ornithologiae*, 592-593.

[158] Camerarius, *Symbolorum & Emblematum,* 17

[159] Boria, *Emblemata Moralia*, 178-179

[160] Green, "Ostrich Eggs and Peacock Feathers,"34

[161] Grasskamp, 87

[162] Laufer, *Ostrich Egg-Shell Cups of Mesopotamia*, 3

[163] Green, "Ostrich Eggs and Peacock Feathers," 30

[164] Green, 31

[165] Koeppe, "Exotica and the Kunstkammer," 87

[166] Laufer, 3

[167] Green, 32 The Dioskouroi were the twin sons of the king of Sparta and the sons of Zeus. It was believed that this paradoxical nature, humane and divine, was because one son was entirely human and the other divine, but they were both viewed as Gods. According to legend, their mother Leda finds a large egg, and from this egg hatches Helen, who is raised and adopted as sister of the Dioskouroi. The myth tells the story of Nemesis who changed into bird form to outrun Zeus, who wants to sleep with her, but fails while in bird form, and as result lays an egg.

[168] Ibid.

ceiling, found its way into medieval Christian churches and monasteries where ostrich eggs were suspended from the ceiling as a reminder to pray regularly. [169] In *the Rationale Divinorum Officiorum*, a popular liturgical text written by Bishop Durandus (1230-1296), two other explanations are offered for suspending ostrich eggs from church ceilings. [170] The first was that people would come to see the ostrich egg, considering it was a rare phenomenon. The other explanation was that it was a metaphor for the abandonment of man by God due to their sins, but it also signified His return, showing that the mercy of the Holy Spirit returns to those who return to God and do good. [171] Ostrich eggs were interpreted as the true sun *(sol verus)* and served as a reminder to worship God. [172] Besides emphasizing to pray often, the egg held multiple other meanings in Christian iconography. It was symbolic for fertility and for the Virgin Birth, a sign of the Resurrection of Christ and eternal life. In certain medieval churches, during Easter, an ostrich egg was retrieved from the treasury and showed to the congregation as symbol for the Resurrection.[173] Ostrich eggs were also known to be mounted as reliquaries and images of these 'cups' were incorporated in early printed pilgrimage books. [174] (Fig. 19).

The cup features another natural element, red coral. At the base of the cup, the blood red coral has thick branches and some thinner ones. On the next level, the Black man and the ostrich seem to walk through a landscape where coral grows. Coral here is a signifier for "Ethiopia," then an exotic place, where it was widely believed that the natural wonder came from.[175] In reality, red coral was fished from Mediterranean waters.[176] Coral was a profitable exchange product that in the fifteenth and sixteenth centuries was traded for spices and other wares in Asia. [177] In sixteenth century Europe, coral was also considered a natural wonder, and was highly sought after by collectors who admired it for the visual and transformative qualities. Besides being a topographical indication of exotic "Ethiopia", coral carried multiple meanings to the sixteenth century collector. Coral was a wonder of nature, and hard to categorize, considering there was debate whether it could be a plant, or stone, or even animal.[178] Coral was layered in symbolism. Most importantly, it was linked to mythology, to

[169] Ibid., 88
[170] Gilbert, ""The Egg Reopened" Again," 253
[171] Ibid., 254 This story draws upon the fable from the Physiologus, a medieval text of animal lore. It was said that the ostrich leaves her eggs in the earth but returns to them when a certain star is visible in the sky.
[172] Koeppe, 89
[173] Ibid., 87-89
[174] Green, 37
[175] Grasskamp,. 87
[176] Trivellato, *"Familiarity of Strangers,"* 225
[177] Ibid., 225
[178] Rijks, "Unusual Excrescences of Nature," 140

the story of Perseus and Medusa in Ovid's *Metamorphoses* (8 AD).[179] Pliny also writes about coral in his *Natural History*, and attributes a range of powers to coral: protective powers, as remedy for sickness, ulcers, and scars. It also was believed to keep off thunderbolts and whirlwind.[180] Due to its origin, coral had strong connections to the sea and was not only a metaphor for change and a rare wonder. As an emblem, it formed a linkage to the maturation of men.[181] Coral was also an allegory for the Blood and Passion of Christ, and its petrification process was an analogue for death and immortality at the same time. [182]

It was not unusual for goldsmiths to incorporate the origin of the work into their design.[183] And it is likely that the sculpture of the Black man holding the iron eating ostrich on a leash, walking through coral shaped landscape referred to the exotic origin of the egg and the coral. The ostrich egg and coral were believed to have medicinal and magical powers and together with the cup's rich symbolism, from virtues of strength to resurrection and eternal life, this cup gave its early modern beholder much to think and converse about. And it would require a knowledgeable 'reader' of the object to make sense of it.

The mount and straps highlight the form of the egg, and hold it in a vertical position. In a way, the goldsmith competed also with the qualities of the natural object. With the creation of this cup, he had to take into account the fragility of the shell and the oval form of the egg. Ornament and frame have a highly practical function, without it there would be no cup. Ideally, functional and ornamental form are held in a perfect balance, but ornament can have the power to cover the functional form and can in some cases even function on its own.[184] Extracting the ostrich egg from Clement Kicklinger's cup would leave an incomplete mount, and a sculpted group that supports nothing, but it can probably still stand and be displayed. Even then, the ornament is not entirely without function, even if this function

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[179] Miller, *Metamorphoses*, 230-231 According to this myth, after Perseus beheads Medusa, and frees Andromeda, he takes the head of the Gorgon to a beach and lays it on a bed of weeds from the sea, in 'Ethiopia'. The seaweed absorbs the power and hardens when they come into contact with the drippings from the head of Medusa. This spectacle was witnessed by sea nymphs, who then planted the changed coral across the seas, where the plant still holds this quality. A line in *Metamorphoses says*: "And even till this day the same nature has remained in coral so that they harden when exposed to air, and what was a pliant twig beneath the sea turned to stone above."

[180] Plinius, *Natural History*, Book XXXII, 479 "Branches of coral, worn as an amulet by babies, are believed to be protective, and reduced to powder by fire and taken with water are helpful in gripings, bladder trouble and stone; similarly, taken in wine, or, if fever is present, in water, coral is soporific. Coral resists fire for a long time, but they say also that taken in drink repeatedly as medicine it consumes the spleen. The ash of Coral branches is good treatment for bringing up or spitting of blood. It is a component of eye salves, for it is astringent and cooling, fills up the hollows of ulcers, and smooths out scars."

[181] Rijks, 137

[182] Ibid., 138-139

[183] Seelig, "Die Kunstkammer als Mikroskosmos," 221

[184] Trilling, *The Language of Ornament*, 63

differs greatly from its intended use. Ornament in Clement Kicklinger's cup is not only decorative, it is clearly also a compositional device. The primary emphasis is on the large egg. There is a contrast between the color of the sculpted group and the gilding but also in the scale of the ostrich egg and its ornamented mount and the sculpture supporting it. The horizontal planes create a symmetrical arranged structure, while the walking Black man, and the wavy shape of the coral suggests hints of movement. There also exists a relationship between ornament and artistic license. [185] With Clement Kicklinger's cup it is unknown if there were specific demands in the requirements of the design, by a middlemen or patron, other than the existing tradition of mounting *naturalia*. Creating the lavish decoration of the cup in gilded silver required the hands of a master goldsmith and even though it is likely that the established practice in which *naturalia* were mounted played a role, imagination certainly also played a part in the design. In Clement Kicklinger's cup, ornament is the means by which the difference between artificiality and nature is highlighted. It creates tension between what is made by man and what by nature, precisely the feature that instilled wonder in an early modern audience. The artificial ornamental frame and ostrich egg are mutually depended on one another. They can both function in a way without the other, but not without losing the concept of a cup. But what then is to be said about the coral? Coral was a highly prized natural treasure, rich in symbolism, but to showcase this in full potential it was expected to be presented in a context, such as its incorporation in a small artificial landscape hinting at its exotic origin. [186] If the gilded silver mounting is considered as the ornamental frame for the ostrich egg, the coral finds itself on the outside of this frame, ornamenting the *artificialia* of the goldsmith. This ostrich egg cup is generously decorated, it has a gilded pedestal, a lid, mounts, and a painted sculpture. Coral branches sprout on every level, and in the center is the ostrich egg. In Kant's way of thinking the gilding of the ostrich egg cup, and painted sculpture belong to the decorative category, and has the power to distract the eye from the actual work.[187] This ostrich egg cup was likely used as a salt vessel. [188] The cup form had a symbolic function, alluring to drinking, without it being used as drinking device.[189]

§ 4.2 The Horn of a Dragon

From the thirteenth century on, an important element of dining customs and traditions was the use of the detectors of poison, which were also known as épreuves. The use of poison as a

[185] Ibid., 20-23
[186] Grasskamp, 87
[187] Ibid.
[188] Ibid.
[189] Rainer, "Chasing Marvels, Revealing secrets," 54 -55

means of achieving political goals became prevalent in the fourteenth century, and was continued to the sixteenth centuries, causing widespread fear among the aristocracy. These épreuves played a role in ensuring the safety of the food and drinks consumed during meals and were responsible for detecting poison.[190] During the early modern era, a wide range of materials and objects were used to identify poison. These included: the horn of the unicorn, the bezoar stone, the horn of a cerastes snake, snake or adder's tongue, griffin's claw, terra sigillata, crystal and Venetian glass, eagle stone, ophite or snake stone, toad stone, rhinoceros' horns, walrus tusks, parrots and various horn-like limestone formations. [191]

During the medieval period, it was believed that a griffin's claw had the ability to detect poison and this belief lasted into the early modern era.[192] In medieval as well as early modern times, the claws of the griffin, were crafted form the horns of various animals such as the ibex, buffalo, ox and bison.[193] The European legend of the griffin finds its origin in Asia, specifically in the folklore of nomadic tribes from Central Asia. These tales of the griffin made their way to the ancient Greeks as early as the seventh century BC.[194] The griffin was known and depicted as a four-legged predator with a strong, sharp beak. It was said to have a strong association with gold, and it was believed that the creature used gold in building its nests.[195] In his writings, Pliny portrays the griffin as a creature with a distinct physical appearance. He also describes the griffin as having a hooked beak, wings and long ears.[196] From around 170 AD, the griffin began to be recognized as a mythical, hybrid creature that was a combination of a lion and an eagle. This perception of the griffin remained unchanged for several centuries. However, in the mid-seventeenth century, this belief was challenged by scholars who argued that the griffin was not an existing creature.[197]

The griffin's claw was considered a valuable collectable object.[198] When fashioned into a drinking vessel, the claw of a griffin served as an anti-poisonous object, and every substance drank from it, was safe.[199] A beautiful, but mostly interesting, example of such a drinking horn is the 'dragon' horn by the Augsburg' goldsmith Cornelius Groß made around 1560-1570. (Fig. 11) This horn was showcased in the silver cabinet of the Ambras castle

[190] Stark, "Mounted bezoar stones", 69
[191] Shepard, *The Lore of the Unicorn*, 99
[192] Ibid.
[193] Ibid.
[194] Mayor rand Heaney, "Griffins and Arimaspeans," 40
[195] Ibid.
[196] Ibid., 42
[197] Ibid., 42-44
[198] Shepard, 99
[199] Ibid.

Kunstkammer, right next to a medieval 'griffin's' claw. [200] But in contrast to its medieval predecessor, this early modern drinking horn was made out of a different material than a buffalo or ibex horn. The horn was made from a tortoise shell. [201] The goldsmith, in his creation, incorporated elements that symbolized the legendary origin of a griffin's claw. He utilized the claws of a large bird to mimic the ferocity of the mythical creature. Additionally, he added wings on the side of the horn, further emphasizing the creatures features. The horn that was crafted from a tortoise shell forms the body of the hybrid creature. Despite its reference to a griffin, it does not represent a griffin exactly. The creature presented in the horn has no body of a lion and no beak. The lid is actually the head of the beast but does not resemble that of a lion or other feline predator. This object possesses a number of distinct features that contributes to its overall appearance of a dragon. Firstly, it has scales, which are typically associated with reptiles, such as snakes and lizards. Secondly, it has nostrils, which adds to the dragon like aspect of the horn. But the most prominent feature that contributes to the serpentine appearance is the curled tail. These features give the whole object a snake-like appearance and this horn is not a griffin's claw but presumably represents a dragon. Supporting this presumption is the fact that in the open mouth there used to be an 'adder tongue'. This was a fossil shark tooth that was widely believed be the tooth of a dragon. It was also held in high esteem and was attributed with anti-poisonous powers.[202] The top half of this object represents a dragon to match the natural material of the fossil shark tooth, that was originally in in its open mouth. But this dragon still has the claws and wings of a bird, alluding to its griffin' reference. It stands on the shell of a gilded turtle, serving as a visual reference to the material that was used in the crafting of this horn. The oval golden plate where the turtle with his open mouth emerges from, represents the sea, showing waves and sea creatures in the gilding. The aquatic origin of the turtle is also reflected in the triton riding the creature and is seated on a gilded band that attaches the horn to its pedestal and wings. The presence of traces of red paint in the mouth of the creature, and the red and green enamel traces on the gilding hint that the original work was once more vibrant and colorful, giving the horn a more striking and visually appealing appearance.[203] This dragon horn not only mimicked the griffin's claw in another material, it also echoed the original function, because the low angle of the mouth made it impossible to drink from this horn. [204] Tortoise shell was

[200] Scheicher." Zur Ikonologie von Naturalien," 118
[201] Ibid.
[202] Baumstark, *Silber und Gold*, 238
[203] Ibid., 238-240
[204] Scheicher.119

exquisite and rare and made this drinking horn into a perfect *Kunstkammer* object. The creation of this horn shows an awareness of the historical connotation of the 'griffin's' claw and uses this concept in a new way, for a different audience. The gilding, besides adding prestige and value, might also refer to the griffin's story of building and guarding its nests of gold .

The mounts serve to frame the horn as a drinking horn, holding it upright and creating a handle for it to be lifted. Ornament here, shows the origin of the material of the horn and stresses the iconography of the natural objects. The gold surface contrasts with the dark color of the horn, but once was partly covered in paint, emphasizing the appearance of the mythical creature the horn represented. Even more than with the ostrich cup, the ornamental frame and the tortoise shell horn are codependent, the horn without its frame loses its reference to any mythical creature, and it loses the ability to stand. The origin story of the horn's material, tortoise shell, is derived from the gold frame, and is not easy to 'read' without the iconographical elements. The ornamentation adds value to the horn, but also functions as lid (the head of the dragon) handle, (the triton) and the literal base on which it stand. As was the case with the ostrich egg cup, the shape and presentation of this drinking horn served a symbolic purpose, inviting the act of drinking without actually being utilized as a drinking vessel.

§ 4.3 A NUT FROM THE OCEAN

Another early modern drinking vessel was fashioned in the last quarter of the sixteenth century, from a Seychelles nut. (Fig.12) This ewer is also from the collection of Ferdinand II at Ambras castle and according to the 1596 inventory of this *Kunstkammer,* this Seychelles nut cup was housed in the second cabinet.[205] This Seychelles nut ewer from Ferdinand's collection at Ambras is one of six still in existence and is in the collection of the Kunsthistorisches museum in Vienna. Additionally, it is remarkable that all of these extant objects are crafted from a halved nut that has been transformed into a container capable of holding liquid, either as a fountain or as a ewer. [206] This particular ewer is presumably made in Augsburg. This assumption is based on that the vertical strap mounts in this ewer show likeliness and similar design with the decorative motives used in the Seychelles-nut ewer from the *Kunstschrank* of Gustavos Adolphus of Sweden (1594- 1632) which was made in Augsburg between 1625 and 1631. [207]

[205] Seidl, "Potato flowers and lemon trees," 385
[206] http://wb.britishmuseum.org/MCN2392#ref-3
[207] Ibid.

According to traditional Malay folklore, the Seychelles nut, also known as the coco de mer in French, has an interesting origin story. This myth tells that the nut originated from a palm tree that grew from the depths of the sea, and was guarded by a fearsome bird or dangerous dragons.[208] This tale, along with the large double nuts, was brought back to Europe by Portuguese merchants in the middle of the sixteenth century, where this "nut from the sea" became a highly sought after marvel and prized item. [209] The nut's unique appearance and mysterious origin made it a popular item among collectors. This exotic natural treasure was not only valued for its exotic provenance, but it was also believed to have healing properties, in particular as antidote for poison. [210] In reality, the giant double nut came from a palm tree (the Lodoicea Maldivica) that could grow up to a hundred feet and age over a hundred years old. The only place where these trees grow, are two small islands, the Seychelles but this island group was not discovered by Europeans until the eighteenth century.

The Seychelles nut for the ewer from Archduke Ferdinand's collection was cut in half and set on a two- tier high pedestal, fastened with two gilded decorated bands and covered with a lid shaped as a heart. The pedestal has been crafted through casting, and is adorned with an embossed design, pressed into a surface, creating a relief effect. On both strap mounts, there are representations of a woman with serpent limbs. Sea creatures such as monsters, turtles, nymphs, fish, tritons, mussels feature richly throughout the gilding.[211] The iconography clearly shows what was believed to be the origin of the nut and reflects the Malay myth. In the gilding there are palm trees that grow from the sea and monsters, a reference to the guarding birds and dragons.[212] Above the heads of these figures, floats a bat with its wings spread wide. The depiction of the bat with open wings is meant to symbolize a sense of foreboding and danger. To further enforce the ominous atmosphere, an owl is nestled between the crawling limbs of the figures. In the sixteenth century, the owl was believed to be a bearer of evil, and like the bird, the bat was also considered to be a dark omen. The iconography of the straps of the ewer, not only possesses a decorative aspect, but it also alludes to the presumed anti-poisonous powers of the Seychelles nut.[213] The ornamental frame mediates between the object and its user, while emphasizing the power and origin of the Seychelles nut in the iconography. The gilded pedestal and straps and additions such as lid

[208] Stark, "Mounted Bezoar Stones,"77
[209] Ibid., 77
[210] Ibid., 69-70
[211] Seidl, 385
[212] Stark, 80-83
[213] Ibid.

and pouring tout, highlight and enable the vessel's function and provide a handle to hold the object, and an opening to pour liquid from the ewer.

4.4 Nautilus Shell

During the early modern period, shells were highly sought after by collectors. The beauty and diversity of shells, with their intricate shapes and variety, were seen as a reflection of Divine creation.[214] However, the fascination for shells was not a phenomenon that finds its origin in early modernity, shells were already used for decorative purposes since the Stone Age, where they were incorporated into jewelry.[215] The aquatic origins of shells contributed to the belief that all life found its origin in the sea. The Aristotelian belief was that shells spontaneously generated because the sun warmed up the mud on the seabed. This theory was still alive in the sixteenth century, and even though it got rebutted eventually in the seventeenth century, the shell remained a wanted valuable object.[216] One of these prized shells, was the Nautilus shell.

The Nautilus shell finds its origin in the Indian Ocean. These spiral shaped natural wonders had to go through a rigorous process before they could be shipped to Europe, where they were highly sought after by collectors. [217] The first step was to locate these shells in their natural habitat, deep in ocean waters. After they were caught, the creature that lived inside had to be removed, and the shell needed to be cleaned.[218] The original shell is white with brown stripes, but when this is scraped and polished off, a shiny mother of pearl layer appears. The shells were transported from Asia in Portuguese, Spanish and Dutch ships. [219] During transport on board, shells were carried alongside porcelain objects, and for the European collectors, shells and porcelain shared more than their origin, and were often visually paired in still life paintings, and were experienced in a similar sense when touched.[220] This natural oddity differs from the Seychelles nut, the ostrich egg, and dragon horn, because it also was a scientific marvel. Every chamber inside the nautilus shell was slightly larger than the next, and exemplary for a logarithm which proved, to the early modern beholder, the mathematical order of nature.[221] The shell also had small channels that interconnected the chambers and illustrated nature's way of hydraulic engineering.[222] This was one of the

[214] Jorink. *Reading the Book,* 261
[215] Goldgar. "Introduction: For the Love of Shells."
[216] Leonhard, "Shell Collecting," 177–214
[217] Swan, "The nature of Exotic shells." 25
[218] Ibid.
[219] Grasskamp. *Art and Ocean Objects,* 25
[220] Ibid., 26
[221] Kehoe, "The Nautilus Cup," 282
[222] Leonhard, 205

reasons that for the early modern collector cups made from this exotic shell were highly valuable objects. But long before these shells were mounted into cups in Europe, the practice was already known in premodern and modern China, were the decorated nautilus shell cups were called 'parrot cups'.[223] In Europe, the pearly inside shell of the nautilus was regularly carved with monsters or mythological gods, adding not only literal value to the natural object but also trying to compete with nature's work.[224] But often shells were already carved by Chines craftsmen when they were shipped to Europe. One of these, already decorated shells, is visible in the nautilus cup made by goldsmith Bartel Jamnitzer (1548–1596) in the late sixteenth century. (Fig. 13).

The outer surface of this nautilus shell is completely scraped off and shows the mother of pearl layer. The degree of polishing of the shiny surface differs, creating subtle visual differences.[225] The incised decoration show flowers and birds, a motif that was commonly used in China.[226] Similar to the other case studies in this paper, the practical function of the silver gilded mount and straps is to create the form of a cup. At the base a round plate symbolizes the ocean, recognizable through the depiction of waves. The pedestal is shaped as a female, her upper body is bare- breasted, while her lower body has scales and a fishtail. Like the nautilus she carries on her head as a crown, this mermaid was a female figure associated with the ocean on the far side of the world, where the shell came from. Grasskamp argues in her book *Art and Ocean Objects of Early Modern Eurasia : Shells, Bodies, and Materiality* that European mounts of nautilus shell showed a projection of the eroticization of the 'other' by depicting fishtailed or 'foreign,' 'wild' women.[227] In this cup, this erotic meaning is hard to deny, considering the half-naked mermaid serves as the handle of this cup. Lifting the vessel would automatically mean touching the figure. The strap mounts that hold the nautilus shell in place have subtle ocean imagery. The rim of the shell is decorated with a delicately ornamented band, making it possible to drink from the cup. The iconography of the mount of this nautilus cup is linked to its origin: a sea in a foreign area.

The nautilus shell was a scientific wonder and mounted into a cup was a symbol of the exotic and the erotic that was associated with its provenance. Art historian Marsely Kehoe explores the nautilus cup as an object that unites the domestic and foreign into an object, and reinforces the identity of the seafaring Dutch nation, wherein the foreign reaches of the Dutch

[223] Grasskamp, 27
[224] Daston and Park, 273 and 281
[225] Grasskamp, 37
[226] Ibid.
[227] Ibid., 24

Republic were essential. Shells and porcelain were not only transported together, they were also paired in still-life paintings, evoking the "dream of wealth" and presenting the exotic. Even though Marsely Kehoe's essay is exemplary for the early modern Dutch Republic, it does reflect that the nautilus shell was more than just a valuable object and could instill deep meaning in its audience and could symbolize the global reach of its owner.[228]

All of these drinking vessels have in common that they were collected for more than their rareness and value as prized *naturalia*. Another similarity is that the iconography depicts elements that hint or show the believed origins of the natural treasures at the core of these objects. The open metalwork of the ostrich egg cup stands out compared to the denser metalwork in the other vessels. Objects like the dragon horn, the Seychelles ewer, the nautilus cup and the ostrich egg cup piqued the interest of collectors because of their rare exotic nature, displayed in exquisite mounting made by talented goldsmiths. Owning these items reflected in their own prestige, but when you take into account the alleged attributed powers, these objects could add to their owner's protection as well. This intrinsic meaning as protection against poison was another reason for including them in the collection.

The mounts of these early modern drinking vessels made from *naturalia*, function as a frame to the extent that they are the mediator between the object and the broader setting of the *Kunstkammer*. The frames of these vessels present the *naturalia* at their core and provides the handle with which they can be lifted, and used, thus directing the haptic experience of these objects. The ornamentation: the gilding, the iconographic elements, the sculptures and paint, add value, story and symbolism to the objects. The goldsmiths are in collaboration with the material of the *naturalia* and at the same time compete with nature's rarity. There is no clear distinction between what is the work and what is the frame, the whole point of the ornamentation seems to be to make this problematic. The ornamentation serves a practical device, since without it, there would be no 'cup' or vessel. The ornamental frame aids to narrow the space between the object and its audience, providing a literal handle by which it can be held and studied. Ornament also plays a compositional goal, to create unity, contradiction, movement and tension. In other words, it does precisely what was expected from a Kunstkammer object and shows the play between the work of nature and that of man.

Cornelius Groß' dragon horn and Clement Kicklinger's ostrich egg cup were both made in the last quarter of the sixteenth century in Augsburg, and both were acquired for the Ambras collection of Ferdinand of Tyrol. Both of the cups were initially made from two

[228] Kehoe, "The Nautilus Cup," 275-285

natural components. In the ostrich egg cup, there are the egg and the coral. Originally, the dragon horn also had two natural treasures: the horn made from tortoise shell, and an 'adder tongue.' The iconography of both cups allude to the origin of the natural treasures, and both incorporated a small landscape. The landscape with coral and sculpture in the ostrich egg cup is more elaborate than the gilded plate that represents the sea supporting the dragon horn. The gilded silver of the dragon cup functions less as an ornamental frame and is mostly there to support the iconography of the horn. The casting of the horn's silver also contrasts with the open, finer crafted metal work of the ostrich egg cup. The most striking similarity is that both this horn and ostrich egg cup were not meant to drink from and mostly owned for their symbolic interpretation as anti-poisonous, and rare natural features.

The Seychelles nut differs from the ostrich egg cup en the nautilus cup in the iconography of the strap mounts. The ostrich egg cup has bands made out of ornamental plant and flower design and the bands holding the nautilus have maritime imagery, whereas the thicker straps on the Seychelles ewer have an iconographical meaning indicating its anti-poisonous powers. In case of the nautilus cup, the strap mounts that secure the shell features subtle imagery inspired by the ocean, the dragon horn's mounts are more integral and forms the wings of the creature it represents. The anti-poisonous quality of the ostrich egg and coral is indirectly implied in the symbolism of the *naturalia* as this is in contrast with the reference of it in the straps of the Seychelles ewer. In regard to the dragon cup, the anti-poisonous feature is merely implied by its reference to the initial griffin claw that served as épreuve in early modern dining culture. The nautilus shell cup is the only vessel without a direct link to healing or medicinal power, but its mathematical value adds another layer of value on this object. The Seychelles ewer's pedestal is cast and embossed with design, while that of the ostrich egg cup is made of open ornamental metal work. In the case of the Seychelles nut ewer, this ewer would been quite functional. In contrast to the ostrich egg cup and drinking horn, the Seychelles nut-ewer has a pouring sprout, and the half nut was designed to contain fluids, suggesting that it was likely used as vessel. The nautilus cup could also have functioned and be used, the ornamented gilded rim of the shell providing the means to do so. *Naturalia*, in their 'natural' state were already wonderous, but their frames and ornamentation increased this wonder. The *naturalia* in these vessels are juxtaposed with their mounts, placing man-made and nature-made into one object to elicit wonder in its beholder, mediating the space between the foreignness of the object in the context of the European *Kunstkammer*. The ornamental mounts, pedestals and straps, appropriate the foreign objects into a familiar European contextualization, changing the haptic experience, the way it is

presented, and perceived. And with the added silver and gilt, its literal value.

Gold has been revered to as the most precious of all metals since the medieval period, and it continued to hold this position in early modernity. Gold added value on more than one level, it elevated the aesthetic, monetary, and maybe even spirituality value, of the objects. Where in medieval art every element of an artwork was spiritually important and could be understood religiously, these vessels for the *Kunstkammer* have an extra layer in their meaning, alluding to the extension of the world, imagining faraway places and exotic people or cultures. In the Middle Ages, ostrich eggs were, on occasion, assumed to be the eggs of griffins, and fashioned into vessels known as 'gripesy'.[229] Despite the existence of ostriches being known since ancient times, their eggs remained scarce during the Middle Ages and the understanding of them was largely derived from illustrations in bestiaries. The associated symbolism from bestiaries remained into early modernity. Ostrich egg reliquaries are exemplary for contextualizing the ostrich egg as a cup, as is visible in the printed ostrich egg reliquaries. (Fig. 19) *Kunstkammer* objects were the means though which the observer could define themselves and the other. These objects were able to showcase the power and reach of its owner. And, as was the case in the middle ages, the *naturalia* in these vessels were seen as evidence of the existence of mythical places.

[229] Stein, 3

Conclusion

In this paper I conducted an examination of four distinct early modern drinking vessels that were fashioned from a treasured natural object. The purpose of this study was to examine the extent to which the ornamentation that adorn these vessels function as a frame. Additionally, I also sought to explore other roles the ornamentation might have played. The four drinking vessels that I studied were chosen based on their unique design and intricate ornamentation. Each of these vessels was crafted from a natural object such as coral, an ostrich egg, the shell of a tortoise and a nautilus shell. Through visual analysis this paper sought to understand the role the ornamentation played.

The mounts of these early modern drinking cups, ewer or horn serve as a framework in the sense that they are the connector between the artifact and the wider context of the *Kunstkammer*. The vessels are framed by ornate mounts that serve as intermediaries between the objects and their surroundings, and these frames showcase the natural material at the core of the vessels, serving as a means of handling and engaging with them. The gilding, iconography, sculptural elements and paint embellish the objects, adding value, narrative and symbolic meaning. The goldsmiths work is in harmony with the natural materials while also challenging nature's rarity. There is no clear differentiation between the object and its frame, with the ornamentation intentionally blurring this distinction. The ornate frames serve a practical purpose, transforming the natural materials into vessels, and drawing the audience closer by providing a handle for examination. Ornament also fulfills a compositional function, unifying, contrasting, animating and tensioning the objects. This ornate framing embodies what was expected of a *Kunstkammer* object, displaying the interplay between nature and human creature. The valuable metal mounts, pedestal and straps are a traditional way of displaying natural marvels, and in these vessels they form an ornamental framework that function as a means to domesticate the foreign natural objects, and appropriate nature though art. The ornamental frame is at the same time a practical addition, creating a 'cup', horn or ewer that can be handled, an encouragement to be picked up and bridge the divide between the object and its beholder. This ostrich egg cup, dragon horn and Seychelles nut were bestowed with magical powers, especially for warding off evil spirits, illness and poison. In a time where the humoral theory and Galenic medicine were questioned by physicians practicing and writing about alchemic medicine, the inherent healing qualities of natural objects gained in importance. Alchemy was a precious practice and required the wealth of a rich patron. Possessing such an object, displayed in a cabinet or set as a centerpiece on a table,

made its potential restorative protective qualities readily available for its owner. The nautilus shell was also prized for its exotic origin, but also had scientific implications and the knowledge this object held and the status of the knowledge implied, transferred to its owner.

Drinking customs at early modern courts in Europe, boasted the production of drinking vessels such as cups, ewers, tankards and goblets. The object driven inquiry led from often exotic location to the context of a goldsmith master's workshop in south of early modern Germany, to their display in a cabinet in the princely collection of a Habsburg ruler. These case studies have shown that the multiple layers of meaning and interests is fundamental to a *Kunstkammer* item. The believed provenance of the natural items is reflected in iconography of all the drinking vessels reviewed in this paper.

Early modern Europe was the place where princely patronage and collecting reached a high point and sixteenth century collections were exceptional because of their sheer scale and scope. Following the discoveries of new geographical areas, the expansion of global cultural interaction an trade networks, more exotic wares were brought back for the European markets. K*unstkammer* objects were meant to reflect the wealth and prominence of the patron who owned the collection, and marvel his visitors. *Kunstkammers* housed collections of an encyclopedic nature, reflections of the effort of the collector to understand the world, and have been indicated as centers of knowledge. This knowledge however was not as specific as the knowledge that was implemented in the making of maps of the world, a preoccupation of the sixteenth century. Worldmaking in the *Kunstkammer* was a way to domesticate the items that came from exotic places. Objects from foreign, non-European origins were ambiguously characterized, and often not representative about the places they came from or the people who created them. The main effect of foreign objects in a collection seemed to have been more to differentiate than to acquire knowledge . The ambition of early modern princely collections was more about owning and experiencing foreign objects, than it was a true means to gain factual knowledge. The *Kunstkammer* collection was more than a compilation of valuable or rare objects, it also had a social function. Visiting the collection was a social experience, one that could be accompanied by a chosen narrative. The exotic origins of the natural treasures in this paper's case studies are framed as a way of cultural appropriation, nature framed by art, and the complete object was framed within the cabinets of the *Kunstkammer*.

Medieval artisans imbued objects with a sacred significance, linking them to religious motifs and connecting the audience to a deeper spiritual meaning. These pieces with *naturalia* were often crafted using techniques such as carving and embellishments with precious materials, enhancing their visual impact and reinforcing their importance. This practice

continued into the early modern era, with the belief that God and his creation were at the root of understanding everything in the world. Despite the emergence of the display in the *Kunstkammers*, and its contrast to medieval treasuries, much of the symbolism was the same in comparison to the middle ages. The contextualizing of these naturalia as cups, the use of silver and gold, and the iconography referring to its believed origin. However, while medieval art was filled with religious symbols, objects in the *Kunstkammer* went a step further, serving as a means of exploring end imagining far-ff lands and cultures. Through these objects, viewers were able to define themselves and others, adding a layer of mean and significance beyond the mere religious.

The findings presented in this paper show that an approach that focuses on the examination of objects can reveal multiple angles and allow for a deeper understanding of not only these objects themselves but also of the larger context in which they existed. The vessels that were the focus of this research paper, are currently on display at the Kunsthistorisches museum in Vienna. Despite the fact that their original early modern interpretations are no longer accepted by modern, contemporary audiences, these objects still manage to evoke a sense of awe and elicit wonder. Moreover, they continue to possess the power and ability to impact and influence the understanding of those who view them. I find it incredibly fascinating how objects that are over four hundred years old can serve as a bridge between the past and present, connecting us to a time that has already passed an yet still holds a certain significance in our memories or thoughts. The mere presence of these items allows us to reflect on how the world and the perception of this world have changed or, in some cases, remained unchanged since then. These objects have the ability to mediate between ‘then’ and now and provide a unique glimpse of a world that once was. For further research and in order to gain a deeper understanding of the topic, I would be interested to delve deeper into the role that cabinets of curiosity and *Kunstkammers* served as a means of organizing and presenting the objects they housed, and study the meaning of making knowledge in the early modern collection. By taking a closer look at these structures I would hope to gain a better insight into how they served as a framework or framing device for the objects it showcased.

Appendix A: Declaration of Originality

Universiteit Leiden

Declaration of originality

By submitting this test, I certify that:

- ✓ this work has been drafted by me without any assistance from others (not applicable to group work);
- ✓ I have not discussed, shared, or copied submitted work from/with other students
- ✓ I have not used sources that are not explicitly allowed by the course instructors and I have clearly referenced all sources (either from a printed source, internet or any other source) used in the work in accordance with the course requirements and the indications of the course instructors;
- ✓ this work has not been previously used for other courses in the programme or for course of another programme or university unless explicitly allowed by the course instructors.

I understand that any false claim in respect to this work will result in disciplinary action in accordance with university regulations and the programme regulations, and that any false claim will be reported to the Board of Examiners. Disciplinary measures can result in exclusion from the course and/or the programme.

I understand that my work may be checked for plagiarism, by the use of plagiarism detection software as well as through other measures taken by the university to prevent and check on fraud and plagiarism.

I understand and endorse the significance of the prevention of fraud and I acknowledge that in case of (gross) fraud the Board of Examiners could declare the examination invalid, which may have consequences for all students.

30 January 2022

Irene van Stein

Illustrations

Figure 1 a. Unknown maker. *Hereford Mappa Mundi.* Ca. 13th century. Ink on Vellum. 1,59 m x 1,34 m Hereford Cathedral, Hereford, England.

Figure 1 b. Detail of the Hereford *Mappa Mundi* showing Cynocephali


q

Figure 1 c Detail of the Hereford *Mappa Mundi* showing a Sciapod

Figure 1 d Detail of the Hereford *Mappa Mundi* showing a unicorn.

Figure 2 a Unknown artist. Ceremonial staff. Carved narwhal ivory. Second quarter of the 12th century. Length 117 cm, diameter 4,5 cm, weight 1,86 kg. Victoria and Albert Museum, England.

Figure 2b Detail of Ceremonial staff showing carved decoration in the narwhal ivory.

Figure 3. Matthäus Merian. *Schloss Ambras in Topographia Provinciarium Austriacarum* 1649, engraving.

Figure 4. Joris Hoefnagel after Alexander Colin, *View of Innsbruck and Ambras Castle.* Ca. 1580, engraving. Vienna, Kunshistorisches museum.

Figure 5.View of the former library of Archduke Ferdinand with original *Zwerchkasten.* Schloss Ambras.

Figure 6. Kunst-and Wunderkammer of Archduke Ferdinand II, a reconstruction of the gold and crystal cabinet. Ambras Castle.

Figure 7. Kunst-and Wunderkammer of Archduke Ferdinand II, a reconstruction of the silver cabinet. Ambras Castle.

Figure 8. Kunst-and Wunderkammer of Archduke Ferdinand II, reconstruction of the former appearance of cabinets in the original room at the exhibition Archduke Ferdinand 2017. Ambras Castle.

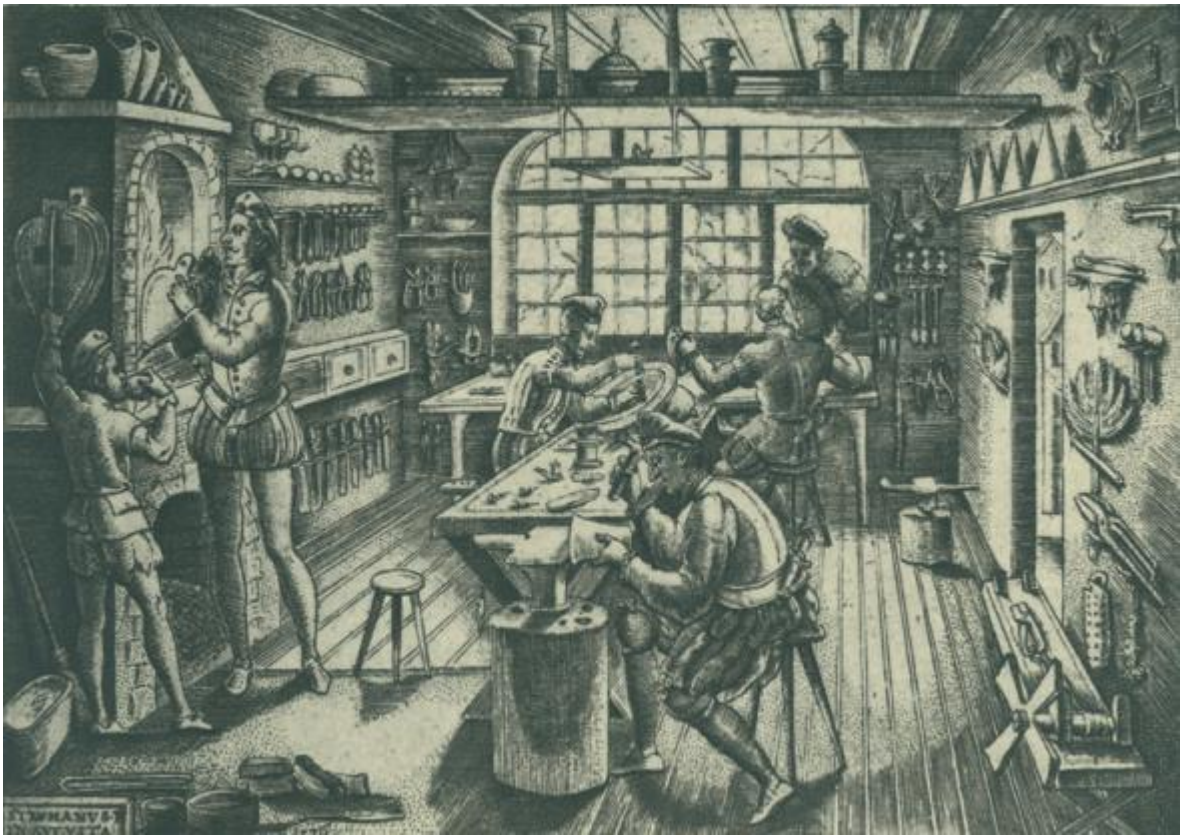


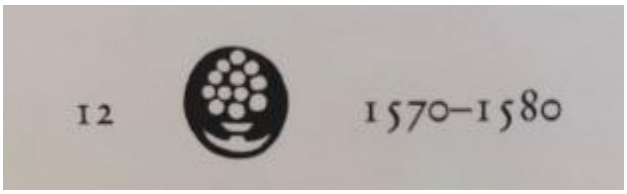
Figure 9. Étienne Delaune. *Goldsmith's workshop in Augsburg.* Copperplate.1576. Augsburg, Städtische Kunstsammlungen, G 20955.

Figure 10. Clement Kicklinger. *Lidded cup with ostrich egg*. 1570/1575. Ostrich egg, coral, silver, partially gilded and painted. H 56,8 cm. (Kunsthistorisches Museum, Vienna. Kunstkammer, 897).

Fig. 11 Cornelius Groß. *Vessel. Drinking Horn. Dragon Horn.* c. 1560/70 Augsburg. Tortoise shell, gilded silver, enamel, traces of paint. H. 29,5 cm, L. 35 cm Kunsthistorisches Museum Vienna.

Fig. 12 Unknown South German (Augsburg?) Artist. *Ewer with Seychelles Nut.* 4ht quarter 16th century. Seychelles nut, gilded silver. H. 41cm x L. 34,3cm x B. 17,5cm. Kunsthistorisches Museum, Vienna.

Fig. 13 Bartel Jamnitzer. *Nautilus cup*. Incised Nautilus shell probably made in China before 1590, gilded silver mounts made in Nuremberg, ca 1590. 22 x 15.3 x 8.4 cm. Landesmuseum Württemberg, Stuttgart.



Left: Figure 14.Master mark of Clement Kicklinger. (Seling 735)

Right: Figure 15: Pinecone mark of the city of Augsburg. 1570-1580. (Seling 12)

Figure 16. Ulisse Aldrovandi. *Struthiocamelus.* Manuscript drawing in *Ornithologiae, Hoc Est de Auibus Historiae Libri XII.* Bologna , 1599. P 591

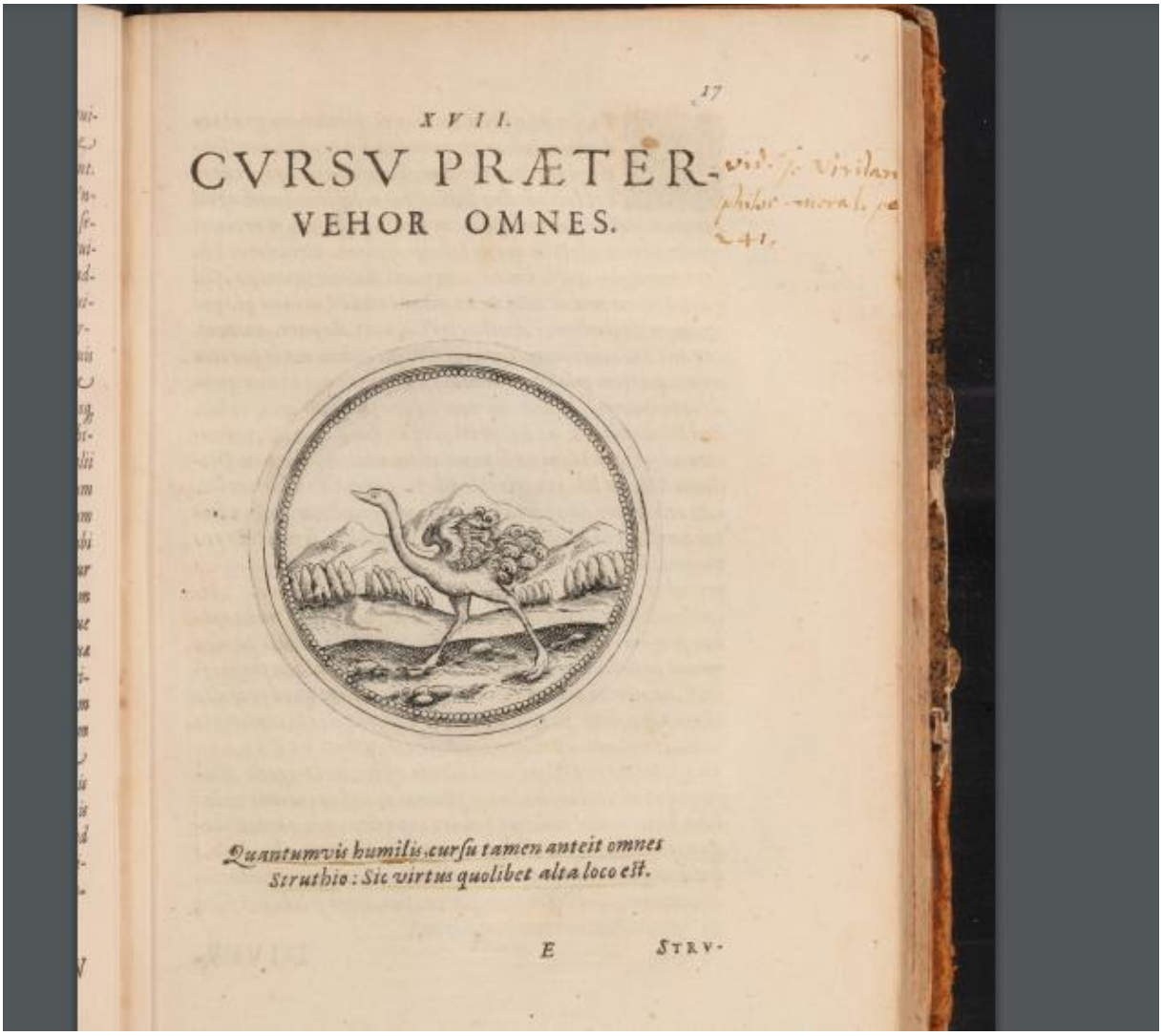
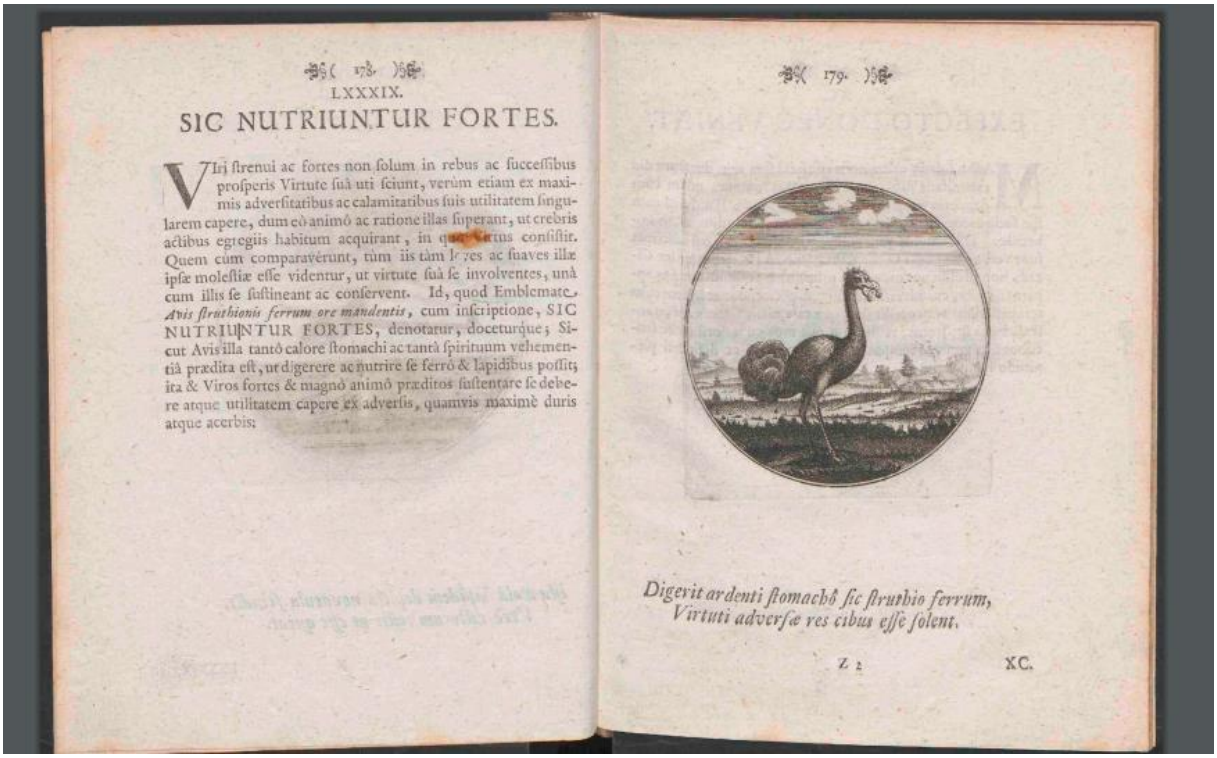


Figure 17. Joachim Camerarius, Manuscript drawing in *Symbolorum & Emblematum*, 1605



LXXXIX.

SIC NUTRIUNTUR FORTES.

Viri strenui ac fortes non solum in rebus ac successibus prosperis Virtute suâ uti sciunt, verùm etiam ex maximis adversitatibus ac calamitatibus suis utilitatem singularem capere, dum eò animò ac ratione illas superant, ut crebris actibus egregiis habitum acquirant, in quo certus consistit. Quem cùm comparavérunt, tùm iis tàm leves ac suaves illæ ipsæ molestiæ esse videntur, ut virtute suâ se involventes, unà cum illis se sustineant ac conservent. Id, quod Emblemate, *Avis struthionis ferrum ore mandentis*, cum inscriptione, SIC NUTRIUNTUR FORTES, denotatur, docetúrque; Sicut Avis illa tantò calore stomachi ac tantâ spirituum vehementiâ prædita est, ut digerere ac nutrire se ferrò & lapidibus possit; ita & Viros fortes & magnò animò præditos sustentare se debere atque utilitatem capere ex adversis, quamvis maximè duris atque acerbis:

Digerit ardenti stomachò sic struthio ferrum,
Virtuti adversæ res cibus esse solent.

Z 2 XC.

Figure 18. Juan de Borja. *Sic Nutriuntur Fortes.* Manuscript drawing in *Emblemata Moralia*, 1697.

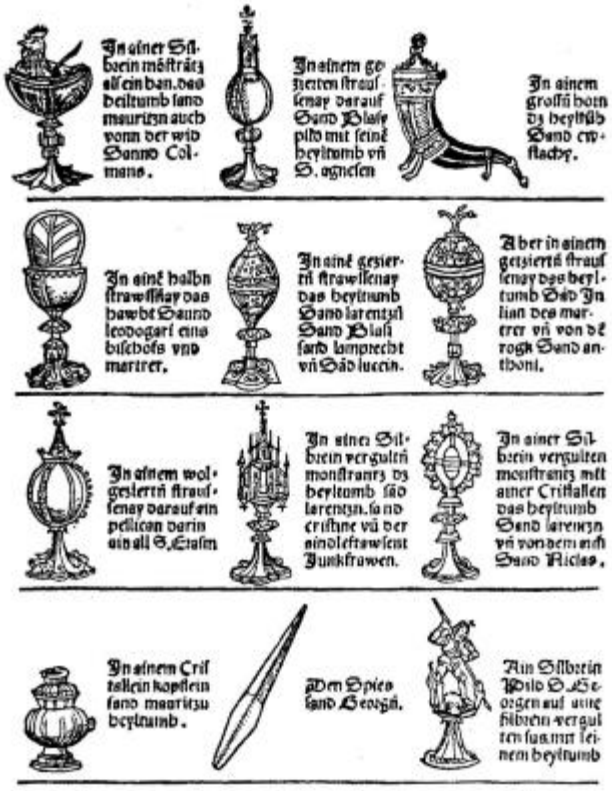


Figure 19. Printed ostrich egg reliquaries, 1502.

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Fig. 2 (a-b) Downloaded 19-01-2023.
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Fig. 3 Downloaded 10-08-2022.
https://www.habsburger.net/en/media/matthaus-merian-topographia-provinciarium-austriacarum-1649-view-schloss-ambras#o-7054
Fig. 4 Sandbichler, " The reconstruction, " figure 1, 401
Fig. 5 Sandbichler, " The reconstruction, " figure 3, 405
Fig. 6 Sandbichler, " The reconstruction, " figure 5, 408
Fig. 7 Sandbichler, " The reconstruction, " figure 6, 408
Fig. 8 Sandbichler, " The reconstruction, " figure 4, 406
Fig. 9 Häberlein and Reith, "Urban Society," figure 12.1, 278
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Fig. 13. Grasskamp, *Art and Ocean Objects,* Figure 1.8, 40
Fig. 14 Seling, *Die Kunst der Augsburger Goldschmiede (III),* no 735, 61
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Fig. 19 Green, "Ostrich Eggs and Peacock Feathers, Figure 3, 37

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