

An ostrich egg depicting a scene of an enema, as an example of a curiosité and a manifestation of a certain era

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An ostrich egg depicting a scene of an enema, as an example of a curiosité and a manifestation of a certain era
This article presents an interdisciplinary analysis of a rare and intriguing artefact, a decorated ostrich egg held in the Zamoyski Museum in Kozłówka, Poland, setting it within the tradition of curiosités and early modern European material culture. The object, engraved with figural scenes, including a notably explicit depiction of an enema procedure, is interpreted through the lenses of iconography, the history of medicine and the social conventions of seventeenth-century Dutch culture. The study explores how the enema, beyond its medical function, operated as a metaphor for sexual desire, moral correction and corporeal control, reflecting the period's complex attitudes toward gender, the body and propriety. The egg is also considered in relation to the broader phenomenon of luxury ostrich eggs as objets croisés – cross-cultural artefacts that blend exotic material origins with European craftsmanship and emblematic content. Through visual and literary analysis, the article demonstrates how this single object embodies multilayered narratives of curiosity, discipline, eroticism and social satire, while becoming a compelling testament to the symbolic richness and ambiguity characteristic of early modern visual culture.

Keywords: Dutch material culture, medical imagery in art, iconography, engraved ostrich eggs

Introduction

Situated within the collection of Zamoyski Museum in Kozłówka, Poland¹ is a unique object in the category of *curiosités* that filled *Kunstkammern* or *Wunderkammern* (Cabinets of Curiosity) – namely, an ostrich egg with engraved depictions (Fig. 1, Fig. 2).² Unfortunately, the artefact crumbled into pieces in unknown circumstances. The remaining loose fragments of eggshell were transferred to the Department of Conservation of Architectural Elements and Details at the Institute of Art Conservation Science at the Nicolaus Copernicus University in Toruń, where the object was reconstructed. The fragments were glued onto an artificial egg model and returned to Kozłówka. The provenance of the object is unknown, as are the circumstances surrounding its addition to the Kozłówka museum. The object is most probably an exhibit from the former Central Museum Repository which operated in Kozłówka from

¹ KORNACKI, Krzysztof (ed.). *Muzea rezydencje w Polsce: materiały sesji naukowej zorganizowanej w Muzeum Zamoyskich w Kozłowie 14-16 października 2004 r.* Kozłówka 2004.

² For interpretation and explanation of the term *curiosité* (sing.), *curiosités* (pl.) in the culture of the seventeenth century, based on contemporary dictionary entries, see POMIAN, Krzysztof. *Zbieracze i osobliwości: Paryż-Wenecja XVI-XVIII wiek*; translated by Andrzej PIENKOS. Lublin 2001, pp. 77–82.

1954 to 1977. Cultural assets were transferred to Kozłówka from Żelazno in Silesia.³



Fig. 1: Ostrich egg from the collection of the Zamoyski Museum in Kozłówka (photo by author).

Fig. 2: Ostrich egg from the collection of the Zamoyski Museum in Kozłówka (detail) (photo by author).

The goal of this article is to attempt to interpret the decorations of the egg, as well as to present the sociocultural meaning of this artefact in the context of customs and social reception in seventeenth-century Holland. In what context did it function? Was it supposed to instil curiosity, to amaze, or perhaps – due to its decoration and inscriptions – act as a type of morality play or satirical commentary about the contemporary socio-cultural situation? Does it hide other content pertaining to medical procedures and their allegorical perception in the context of life and health? It is also vital to ask why an ostrich egg was chosen as a medium for such depictions. Does this exotic object correlate with the content of the displayed motifs? Are they mutually dependent and influencing each other?

When deciphering, analysing and interpreting artefacts from past epochs, one should set them in the iconological context of influences and dependencies shaped by the artistic and economical situation of those times, connecting them with contemporaneous customs, conventions, social rules and moral categories propagated in the repertoire of secular and religious values. Among the enlightened Dutch elites of the seventeenth century, a vital role may have been played by the literary tradition of allegorical, moralistical or humorous works which provided commentaries about the world and human behaviours in contemporary reality. All such displays of ideological content found their reflection in art, especially in Dutch genre painting, where everyday motifs rose to the rank of allegorical treaties – in disguised symbolism⁴

³ The object probably came from the museal collection of a private Polish or German estate owner. KAMIŃSKA, Lidia M. Powojenne Składnice Przemieszczanych Dóbr Kultury w Polsce. Przyczynek do Szerszego Opracowania. In: *Muzealnictwo*, 57, 2016, pp. 74–80, esp. 77.

⁴ PANOFSKY, Erwin. *Early Netherlandish Painting, its Origin and Character*. Vol. I. Cambridge Mass.: Harvard University Press. 1966, pp. 131-148.

about culture, ethics and social roles of their characters.⁵ What is more, the meaning of naturalia – including ostrich eggs, their artistic quality and their contemporaneous quantifiable (i.e. financial) value – speaks volumes about the rank of their creator, as well as the aspirations of their recipients. All of these dependencies, particular reactions and social attitudes, were preserved in literary works and transferred into paintings. Thus, the analysed natural object—that is, the egg from Kozłówka, its form, decorations and inscriptions—contribute to inquiries into the series of dependencies and motifs which combine in this object, like in a lens. In what historical, artistic and social context did such objects function? How strongly do they designate their epoch – the epoch of Wunderkammern filled with rare, exotic and artistic objects?⁶

Presentation of the object and engraved decoration

The remaining fragments consist of the shell of an ostrich egg covered with shallow, linear engraved decoration, with grooves filled with dark paste or ink.⁷ The presented scenes were composed in the form of oval areas, initially three, separated by wide floral bordures with a motif of leafy volutes. Each scene is rimmed with a narrow strip of engraved inscriptions in Old Dutch. Only one depiction area is legible – the scene set in a domestic interior, presenting



Fig. 3: *Enema scene* (photo by author).

Fig. 4: *Enema scene* (detail) (photo by author).

⁵ It is impossible to reference all of the abundant literature dedicated to symbolism and ideological content in Dutch genre painting of the seventeenth century. Among Polish scholars this subject is also of great interest; see OCZKO, Piotr, *Bezem en kruis. De Hollandse schoonmaakcultuur of de geschiedenis van een obsessie*. Leiden 2020; FRANTIS, Wayne E. *Paragons of Virtue: Women and Domesticity in Seventeenth-Century Dutch Art*. Cambridge: Cambridge University Press. 1993, pp. 1–17.

⁶ POMIAN, *Zbieracze i ...*, pp. 67–108; 138–147; STRUŻYŃSKA, Katarzyna. *Curiositas jako kategoria kultury barokowej (XVI–XVII wieku)*. In: *Meluzyna*, 1(4), 2016, pp. 35–51, esp. 43–44.

⁷ KOYAMA, Tomiyasu, TENNYSON, Alan J. D., *Respiratory Pores on Ostrich Struthio camelus (Aves: Struthionidae) Eggshells*. In: *Advances in Experimental Medicine and Biology*, 923, 2016, pp. 51–55.

an enema being administered (Fig. 3 and Fig. 4). This fragment is legible enough to distinguish the participants of the scene, a woman and two men. The woman, reclining, is holding her thigh up with her hand, while a considerable portion of her dress is cast aside, exhibiting her naked buttocks. The first man – wearing glasses and a hat, possibly a doctor overseeing the act – is holding a candle near the patient. The second man, probably an apothecary or an unprofessional barber, can be seen performing an enema using an unspecified, elongated fusiform tool (Fig. 4). The female figure clearly dominates the scene; her scale visibly surpasses the size of male figures who seem unnaturally small, almost purposely miniaturised.



Fig. 5: *Legs, (detail)* (photo by author).

Only one fragment remains of the second scene, bearing the motif of a raised tree crown. In the third area, in the bottom section of the fragment one can discern naked legs of an unknown figure, probably sitting. Under the feet lies a pitcher or unspecified oval dish, with water flowing out of it (Fig. 5). The scenes are separated by a decoration of tendrils and leaves, as well as floral volutes, painstakingly precise, with clearly visible regularity and symmetry of weave layout. The plants are unidentifiable, as they are merely highly stylised floral decorations.

In the upper section of the egg are three separate depictions, each assigned to the scenes below them. Above the shell fragment depicting a section of a leafy tree crown is a figure of an angel with wings spread wide, wearing a long-sleeved robe fastened at the waist (Fig. 6). The angel, smiling slightly, is spreading their arms, which can be interpreted as a gesture of benevolence or a presentation of the image below. Above the image with the procedure is a man holding a long spear, blade pointed upwards.



Fig. 6: *Angel (detail)* (photo by author).

Fig. 7: *Man holding a spear (detail)* (photo by author).

His clothing and attributes suggest he might be a guard or a nobleman (Fig. 7).⁸ Does this figure symbolically signify a “Guardian of the Anus”, as doctors overseeing enemas were called by Egyptians? What is his connection with the enema scene?

Above the third area, of which only a fragment depicting legs remains, there is a vessel stylised as a Greek krater (Fig. 8). Separating these three motives are ornamental volutes. The manner of engraving of figural depictions is simplified, with heavy burin operations and numerous parallel lines, whereas the motif of tendrils, leaves and volutes was created using significantly less force, more finesse and softness of seamlessly performed engraving. There is a round opening in the top section of the egg, which might have held an ornamental finial or an element used to hang the egg.



Fig. 8: *Greek krater (detail)* (photo by author).

Inscriptions

The narrow strips surrounding the depictions are covered with inscriptions. Unfortunately, due to the loss of parts of the eggshell, they are only partially legible (Fig. 9):

Surrounding the enema scene is:

(...)PYN * HET IS VERKEERT SOO GEKLISTEREERT * HET KLISTEREN

Below the angel:

(...) KE V SOET GE(...) (...TA)AL DOEN MY MYN (I...) (...)KE

⁸ ZIMMERMAN, Michael R. Practicing Medicine in Ancient Egypt. In: *Juniata Voices* 17, 2017, pp. 144–152, esp. 145.

According to Marcin Polkowski,⁹ the adverb *verkeerd* (*verkeert* in seventeenth- and eighteenth-century orthography) translates as “incorrectly, improperly, backwards”. One can thus attempt to translate the text as: “[This] enema is incorrect” or “backwards” (?). Polkowski highlights that this translation is just a hypothesis since the rest of the text is unknown, making it difficult to precisely determine the sense of this inscription, or explain why performing this enema was deemed erroneous.

The remaining phrases are single words. The verb *klisteeren* meant to perform an enema (Woordenboek der Nederlandsche Taal dictionary), and this form is considered an archaism. The word comes from the Greek κλυστήρ, or Latin *chyster*. Without a longer section of text it is difficult to translate the last fragment, presumably transliterated as: “...[?]*aal doen my myn*”. Grammatically, *doen* could be a conjunction (=> *toen*) or an auxiliary verb, *my*, *myn* – eg. “when I am (...) by my”. However, this version is highly questionable.¹⁰

Kamila Tomaka¹¹ suggests that PYN might be read as *pijn* [pain]. However, there is no certainty whether this word can be linked to the DOEN inscription on the banderole (a strip with inscriptions). Assuming that it can, it would result in *pijn doen* [to cause pain].¹² With the transcription of SOET as *zoet* [sweet], the line below the angel would read: *sweet... (...) when I am (...) by my ... (?)*



Fig. 9: *Inscriptions and ornamentation* (photo by author).

⁹ Personal comment, 8 September 2021.

¹⁰ Linguistic consultation with Professor Marcin Polkowski from The Department of Dutch Literature of the Catholic University of Lublin, <https://gtb.ivdnt.org/iWDB/search?actie=article&wdb=WNT&id=M033877.re.1&lemma=klisteeren&doemc=0&conc=true>

¹¹ Personal comment, 8 September 2021.

¹² Linguistic consultation with Kamila Tomaka from The Department of Dutch Language of the Catholic University Of Lublin

The meaning and function of ostrich eggs in tradition

For millennia ostrich eggs were highly desirable and valued objects in many cultures of the world. They possessed a unique cultural and ritual meaning; ostrich eggshells have been found in prehistoric burials, some dating back to Bronze and Iron Ages. They served as bowls, beakers, containers for cosmetic and medicinal substances, and bottles for carrying wine and other liquids.¹³ One such example of a decorated ostrich-shell vessel is a Phoenician vessel dating from the seventh century BCE and housed at The British Museum, London.¹⁴ Beads, pendants and bracelets were also made from ostrich eggshells. We also find examples of ancient vessels made from stone that imitate ostrich eggs, used for storing perfume, fragrances and balms (such as the vessel made from travertine, Egypt, circa 1540–1296 BCE, Cleveland Museum of Art, US¹⁵).

Live birds and their eggs were traded and shipped to South Europe from Egypt and countries of the Levant in the seventh and sixth centuries BCE. They yielded eggs, feathers, skins and fat used for medicinal purposes.¹⁶ Ostrich eggs were often decorated, engraved or carved, bringing out a low relief from the shell surface, and subsequently polychromed, polished and smoothed out. Many were set in metal rings or leather strips, while some received additional applications, gilded bases and spouts, thus transforming them into valuable vessels, cups and pitchers.¹⁷ In Greek and Roman Antiquity, as well as the first centuries of Christianity, ostrich eggs were hung in temples as lamps or as decorative symbolic objects dedicated to the gods. This sacral and symbolic meaning of ostrich eggs was adopted by both Muslim and Christian cultures. Eggs were used to decorate mosques, Coptic churches and Jewish synagogues; such decorations hang in churches and monasteries to this day.¹⁸ Their symbolic role in prayers in the temple is also discussed in written works. Among others, Guilemus Durantis (d. 1296), in his *Rationale Divinorum Officiorum*, connected the description from ancient *Physiologus* regarding

¹³ TEXIER, Pierre-Jean et al. A Howiesons Poort Tradition of Engraving Ostrich Eggshell Containers Dated to 60,000 Years Ago at Diepkloof Rockshelter, South Africa. In: *Proceedings of the National Academy of Sciences of the USA*, 107(14), 2010, pp. 6180–6185.

¹⁴ https://www.britishmuseum.org/collection/object/G_1850-0227-9

¹⁵ <https://www.clevelandart.org/art/1914.620>

¹⁶ HERLES, Michael, Der Vogel Strauß in den Kulturen Altvorderasiens. In: *Mitteilungen der Deutschen Orient-Gesellschaft zu Berlin*, no. 139, 2007, pp. 173–212, esp. 203–204.

¹⁷ LAUFER, Berthold, Ostrich Egg-Shell Cups of Mesopotamia and the Ostrich in Ancient and Modern Times. In: *Anthropology leaflet*, 23. Chicago: Field Museum of Natural History. Laufer, 1926; RATHJE, Anette, Five Ostrich Eggs from Vulci. In: SWADDLING Judith (ed). *Italian Iron Age Artefacts in the British Museum. Papers of the Sixth British Museum Classical Colloquium 1982*. London 1986, pp. 397–404; POTTS, Daniel T., Ostrich Distribution and Exploitation in the Arabian Peninsula. In: *Antiquity*, 75(287), 2001, pp. 182–190; EZZ EL-DIN, Dina M. (2020). Ostrich Eggs of Predynastic Egypt. In: *Journal of the General Association of the Arab Archeologists*, 11(11), pp. 40–56; HERLES, Der Vogel Strauß..., pp. 173–212; HODOS, Tamar et al., The Origins of Decorated Ostrich Eggs in the Ancient Mediterranean and Middle East. In: *Antiquity*, 94(374), 2020, pp. 381–400. Photograph of the rhyton: <https://www.worldhistory.org/image/12783/ostrich-egg-rhyton/>

¹⁸ GREEN, Nile, Ostrich Eggs and Peacock Feathers: Sacred Objects as Cultural Exchange between Christianity and Islam. In: *Al-Masāq*, 18(1), 2006, pp. 27–78. cf. SAYED, Kitat S.E., Ostrich Egg and Its Symbolic Meaning in the Ancient Egyptian Monastery Churches. In: *Journal of the General Union of Arab Archaeologists*, 15(1), 2014, pp. 23–41; JURKOWLANIEC, Tadeusz, Strusie jaja w Prusach. Z badań nad średniowieczną ikonografią maryjną. In: *Biuletyn Historii Sztuki*, 71(1–2), 2009, pp. 5–33; GOŁGOWSKI, Tadeusz, De lucernis et de ovis struthiocamelinis – symbolika jaj strusich w kościołach wschodniochrześcijańskich. In: Zbigniew KOBYLŃSKI Zbigniew and Wojciech BRZEZIŃSKI (eds). *Hereditatem cognoscere. Studia i szkice dedykowane Profesor Marii Miśkiewicz*. Warszawa: Letter Quality, 2004, pp. 21–26.

the strength of ostrich eyesight with the strength of Christian prayer.¹⁹ The ostrich does not incubate its eggs, but it was thought that its gaze, along with sunrays, helped the young chicks to hatch. This description was allegorically compared to the power of prayer and the engrossment of the faithful, especially those who turned their back on God and looked upon Him again. In this context, the egg is a symbol of new life, resurrection, determination and faith. In temples, ostrich egg artefacts were also used to ignite curiosity and draw attention to God with strength analogical to that of the gaze of an ostrich. In Medieval symbolism, ostrich eggs were interpreted as a symbol of the Immaculate Conception; for this reason, artistic images of the Madonna are often accompanied by the motif of an egg. Bernard of Clairvaux, as well as Konrad von Würzburg, in *Goldene Schmiede* (after 1277), compare the gaze of an ostrich to the benevolent gaze of Mary and her protection of people.²⁰ Ostrich eggs also abound in paintings of saints.²¹

In the Middle Ages and the Early Modern era, ostrich eggs were hung in the interiors of private castles and estates belonging to the nobility as lamps and exotic decorations. Especially valuable specimens were those encased by jewellers in metal baskets and set on intricate bases, fastened by rings and straps. In this way, eggs were transformed into cups, pitchers and ornamental table decorations as well as reliquaries (vessels for sacral purposes; see, for example, the egg from the Schatzkammer of the Munich Residenz, thought to have originated in a workshop from France or Southern Germany, circa 1400).²² Exceptionally decorated specimens could be found from cathedral vaults to cabinets of curiosities.²³ Depending on the object, the fittings might depict sacral motifs (biblical figures, symbolic animals, sentences) or secular ones (coats of arms, medallions). Sometimes, ostrich eggs were used to form part of a larger ensemble, incorporating miniature figurines such as ostriches, pelicans, crest holders or crosses, with the eggs themselves framed in gold, silver and other precious substances such as coral, with finishing elements in the form of a Gothic pinnacle or a crown. Often, they were set on huge bases and bodies.²⁴ Ostrich eggs were also incorporated into naturalistic sculptures,

¹⁹ KOBIELUS, Stanisław, *Fizjologi i Aviarium: Średnioniewieczne traktaty o symbolice zwierząt*. Kraków 2005, pp. 67–68.

²⁰ BERNARD OF CLAIRVAUX. *Kazania o Najświętszej Maryi Pannie*, translated by Ildefons Bobicz. Warszawa 2000, pp. 44-45, 48-49.

²¹ See, for example, the scene of the Circumcision of Baby Jesus, one of the oldest depictions of an ostrich egg motif in a sacral scene: BNF Latin 757 Missale et horae ad usum Fratrum Minorum, 1385–1390, Milan, Italy, f.291v, Vittore Carpaccio, Appearance of the crucifixes of Mount Arrarat in the church Saint Antonio di Castello, 1512–1513, Galleria dell'Accademia, Venice. Regarding the complex meaning of the egg in the Montefeltro altar, see: BOCK, S., *The 'Egg' of the Pala Montefeltro by Piero della Francesca and Its Symbolic Meaning*, Freiburg am Br.-Heidelberg 2002, pp. 1–20. MEISS, Millard, Addendum Ovologicum. In: *The Art Bulletin*, 36(3), 1954, pp. 221–222; RAGUSA, Isa, The Egg Reopened. In: *The Art Bulletin*, 53(4), 1971, pp. 435–443; GILBERT, Creighton E., The Egg Reopened Again. In: *The Art Bulletin*, 56(2), 1974, pp. 252–258; MEISS, Millard, Not an Ostrich Egg? In: *The Art Bulletin*, 57(1), 1975, p. 116; BRISSON, Dawid W., Piero della Francesca's Egg Again. In: *The Art Bulletin*, 62(2), 1980, pp. 284–286.

²² <https://www.residenz-muenchen.de/englisch/treasury/pic15.htm> THOMA, Hans, Schatzkammer der Residenz München: Katalog. München 1958, pp. 25, 59.

²³ See, for example, the reliquary made from an ostrich egg from a workshop in Tournai, fifteenth century, held at the Musees royaux d'Art et d'Histoire, Brussels; an object from the vault of the Basilica of St Servatius in Maastricht; and a fifteenth-century reliquary of the Duchess Elisabeth Matsch from the vault of the city church in Rapperswil, held by the Stadtmuseum in Rapperswil.

²⁴ See, for example, the ostrich egg framed in gilded silver with elements made from natural precious coral, created by Clement Klicklinger, 1570–75, Augsburg workshop, held by the Kunsthistorisches Museum, Kunstkammer, inv. no 897, Vienna. <http://www.alaintruong.com/2024/06/lidded-cup-with-ostrich-egg-augsburg-ca.1570/75-clement-klicklinger-meister-1561-1617-augsburg.html>; a silver, standing cup, The British Museum, no. AF.3050 https://www.britishmuseum.org/collection/object/H_AF-3050

for example, as the torso of an ostrich figurine.²⁵ These vessels were examples of exquisite jewellery craftsmanship and a sign of an unfaltering interest in exoticism. It is known that from the sixteenth century in London and many European cities there were merchants specialising in trade in exotic materials and naturalia; such objects were bought by jewellers and goldsmiths as well as collectors for their Wunderkammern.²⁶

Decorating ostrich eggshells

In numerous ancient products the eggshell remains unprocessed; other eggs, however, present various types of decoration, such as polychrome or simple engraving. Engraving was carried out with a sharp tool known as a burin, and could take a range of forms, from stripes and simplified forms to more elaborate depictions of gods, animals and scenes, for example hunting. Reliefs were also carved into eggshells and external elements (both ornamental and functional, such as handles) added separately. Engraved decorations or shallow relief on eggshells, created by scraping the background layer, is known from as early as 3000 BCE, with works from Assyrian and Phoenician workshops. Numerous engraved and polychromed ostrich eggs found in different parts of the world offer evidence of the transportation of these objects along trade routes leading west to various Mediterranean regions, as well as east to Asia Minor and China. To this day scientists strive to discover and understand the origins of these objects and their decorations.²⁷

An egg selected to be sculpted and/or engraved required extensive preparation involving emptying and drying the egg in order to harden the shell. Obtaining ostrich eggs was a challenge, due to the ostriches themselves. In ancient sources and iconography ostriches are characterised as dangerous birds, able to kill their opponent with one kick, hence hunting ostriches demanded courage and a proper technique. Shipping to Europe presumably involved only eggs or pre-prepared empty shells which were then given a decorative jewellery setting.²⁸

The Kozłówka egg presents decorations made by engraving with a sharp tool, with the resulting cuts filled with a paste or dark ink. There is a degree of finesse in both the

²⁵ See, for example, the cup dating from 1576 made for Christopher Bathory, Voivode of Transylvania, held at the Ashmolean Museum, Oxford, inv. no WA2013.1.128. WINTERBOTTOM, Matthew, *Treasures of the Goldsmith's Art: The Michael Wellby Bequest to the Ashmolean Museum*, Oxford 2015. <https://jekely.blogspot.com/2015/10/ostrich-egg-cup-of-christopher-bathory.html>

Elias Geyer, a goldsmith from Leipzig, made a few vessels from ostrich eggs, including one in the form of a bird which served as a cup; see Grüne Gewölbe, inv. no III 115, Dresden, 1589–1595. <https://skd-online-collection.skd.museum/Details/Index/117217> MENZHAUSEN, Joachim, Das Grüne Gewölbe. In: Erich STEINGRÄBER (ed), *Schatzkammern Europas. Weltliche Schatzkammern*. München 1968, pp. 59–66, il. 81–96.

²⁶ WOŹNIAK, Michał, O naturaliach w sztuce złotniczej. In: CHOJECKA, Ewa (ed). *Sztuka a natura. Materiały XXXVIII Sesji Naukowej Stowarzyszenia Historyków Sztuki, Katowice 23–25 listopada 1989*, Katowice 1991, pp.191–206, esp. 192.

²⁷ Researchers have examined whether decorated ostrich eggs found in Europe were brought there as finished products, decorated by Assyrian or Egyptian artists, or whether only smooth, natural shells (or eggs instead of empty shells) were traded, then engraved at their destination copying the style of artists from the Levant or North Africa. It is possible that the artists skilled in decorating these eggs moved to European lands from the Levant or from Africa and decorated the eggs there. HODOS, The Origins of ..., pp. 392–393.

²⁸ In princes' gardens in Pavia and Milan (Italy), as early as the fourteenth century, as well as in Florence in the sixteenth century, there were places called Struzzeria where ostriches were kept and bred. MISSINNE, Stefaan, *The Da Vinci Globe*. Cambridge 2020, pp. 4–6.

ornamentation and depictions.²⁹ The following analysis aims to answer the questions: 1) to what extent do the inscriptions correspond with the depictions; and 2) how are they connected with the context of secular customs of the period?

Ostrich eggs in museums and private collections are predominantly natural specimens in jewellery settings, while only a small number resemble the egg from Kozłówka – engraved empty egg shells with decorations that constitute a deliberate, coherent program. One great example is a specimen from the Dresden Grünes Gewölbe. The surface of the egg is taken up with images of two men hunting an animal resembling a reptile, a lion under a palm tree, and modest floral motifs (seventeenth century, inv. no III 213³⁰). Another specimen depicts a hunter and exotic animals such as a lion, an ostrich and a panther. The third example, also dating back to the seventeenth century, was acquired in 2024 by the German Historical Museum in Berlin (Deutsches Historisches Museum). This ostrich egg is covered with intricate depictions of colonial bounties and crops, including a coconut-picker and a worker planting tobacco.³¹ The pictorial archetypes used by the engraver come from the travel journal of Dutch explorer Jan Huygen van Linschoten, from his 1596 expedition to India. These two objects from German collections display a fascination with the discovery and colonisation of new lands, as well as exotic plants and animals, and the character of the depictions are highly consistent with the contemporaneous subject of colonial conquests. Such objects often became part of Wunderkammern as curiosités: unique, rare and luxurious objects of artificialia.³² This type of artefact – naturalia transformed by goldsmithing – were not only objects of awe but also media for conveying metaphorical meanings, with short stories woven into their decorations.³³

Ostrich eggs – or vessels imitating their shape – can often be seen in paintings of the interiors of doctors' surgeries or apothecary shops, where vessels resembling ostrich eggs can be identified on the shelves (see, for example, Isaak Koedijck's painting, *The Barber-Surgeon*, 1649–50, Museum of Fine Arts, Boston).³⁴ In the collections of apothecary museums one can find large collections of this type of vessel – which are in fact not eggshells but albarello pottery from Spain. There are also Mauritian–Italian examples (such as an albarello showing an the enema scene from Deruta, Umbria, eighteenth century) and French products. A Spanish apothecary pitcher presents a scene of administering an enema, with an inscription bearing the words of the owner of the pitcher instructing his servant to perform the procedure on him (circa 1600, The British Museum, Sir Henry Wellcome's Museum Collection, London).

²⁹ Engraved decorations highlighted with dark pigment observed on a phoenician egg depicting hoplites, seventh century BCE, British Museum 1850, 0227.9. https://www.britishmuseum.org/collection/object/G_1850-0227-9

³⁰ <https://skd-online-collection.skd.museum/Details/Index/219349>

³¹ <https://www.museumsfernsehen.de/neuerwerbung-ein-graviertes-straussenei-aus-dem-fruehen-17-jahrhundert-deutsches-historisches-museum/>

Primarily, the egg belonged to the collection of Oettinger princes. The ostrich egg and the travelling book were presented at the *Was ist Aufklärung? Fragen an das 18. Jahrhundert* exhibition (opened 18 October 2024 in Pei-Bau Deutsches Historisches Museum, Berlin)

³² PHILIPPOVICH, Eugen von. *Kuriositäten, Antiquitäten. Ein Handbuch für Sammler und Liebhaber*. Braunschweig, 1966.

³³ See, for example, the early eighteenth-century nautilus from the Museum Boijmans Van Beuningen in Rotterdam, which is covered in inscriptions and scenes of an erotic nature; E. Zuroski, Nautilus Cups and Unstill Life, *Journal 18*, 3 (2017) DOI: 10.30610/3.2017.3 https://www.journal18.org/issue3/nautilus-cups-and-unstill-life/#_cdn38

³⁴ <https://collections.mfa.org/objects/333601/the-barbersurgeon?ctx=a3815175-91fa-4931-a96d-31099bd72c3d&idx=0>

Enema as not only a medical procedure

An enema is a form of treatment described in medical sources, but has also been present in art and literature since Antiquity, presented not only as a medical treatment but from a satirical point of view. The scene from Kozłówka can be interpreted in the context of the customs and morals of its era. This procedure – known and used for millennia in various civilisations – earned the rank of a vital, not only medical, but also ritual ceremony, bringing health both physically and spiritually.³⁵ Enemas are listed in historical medical documents such as the Papyrus of Edwin Smith and the Papyrus of Ebers (sixteenth century BCE), as well as in the works of Galen, Hippocrates, Herodotus and Celsus. It was believed that cleansing facilitated the emptying of the bowels, thereby evacuating toxic accretions which caused illnesses. Beliefs assuming a connection between the presence of stool in the organism and illness lingered for centuries. In the second century CE, Galen wrote that humours of the organism turn into human faeces which require regular defecation in order to dispose of illnesses. Enemas were used to ease headaches, colds, suppuration, kidney inflammation and stones, gout, hepatitis and even help with sexual dysfunctions and in maintaining or regaining clarity of mind. They were also used as a method of administering medications (Egypt, Greece) and nutrients. In antiquity it was advised to use enemas quite often. In Mesopotamia there was a special type of doctor called the “Guardian of the Royal Anus”. In Egypt, the ibis-headed god Thot was said by Pilny the Elder to have discovered the enema.³⁶ The act of cleansing had an almost religious meaning, hence its importance in the cultures of Egypt, Mesopotamia, China and Mayan civilisation.³⁷ In Greek–Roman culture enemas were used to cleanse and to administer astringent agents, relaxants, softening agents and nutrients, as well as dewormers. Enemas were also used to introduce cleansing and medicinal substances into the vagina and the bladder. In his *De medicina*, Aulus Cornelius Celsus (first century CE), who discovered the nourishing function of enemas, warned against overusing these procedures, especially by women who used them as beauty treatments for a better complexion and weight loss.³⁸ In the fourteenth century, Master Henri de Mondeville (d. 1316), surgeon of Philip IV of France, as well as Guy de Chauliac practiced such treatments among their patients.³⁹

At the end of the sixteenth century, the surgeon Ambroise Paré (1510–1590) stated that only barbers and apothecaries should administer enemas, since the procedure was too unclean and undignified to be performed by a doctor. Quite the opposite rule was implemented in France in 1774 and soon after in Holland, allowing only doctors to administer enemas.⁴⁰

In the Early Modern period, in European medical universities including Leiden, scientific works were written regarding the manner of performing enemas and their medical importance, especially in the cases of “uterine hysteria”. One such author was Regnier de Graaf (dec. 1673), a Dutch doctor, author of *De virorum organis generationi inservientibus, de clijsteribus et de usu*

³⁵ FRIEDENWALD, Julius and MORRISON, Samuel, The History of the Enema with Some Notes on Related Procedures. Part I. In: *Bulletin of the History of Medicine*, 8(1), 1940, pp. 68–114.

³⁶ FRIEDENWALD and MORRISON, The History of ..., pp. 69–71. DOYLE, Derek, Per Rectum: A History of Enemata. *Journal of the Royal College of Physicians of Edinburgh*, 35(4), 2005, pp. 367–370.

³⁷ DE SMET, Peter A.G.M., HELLMUTH, Nicholas M., A multidisciplinary approach to ritual enema scenes on ancient Maya pottery, *Journal of Ethnopharmacology*, 16, 1986, pp. 213–262. DOYLE, Per Rectum..., pp. 367–370.

³⁸ SPIVACK, Barney S., A. C. Celsus: Roman Medicus. In: *Journal of the History of Medicine and Allied Sciences*, 46, 1991, pp. 144.

³⁹ FRIEDENWALD and MORRISON, The History of ..., p. 79.

⁴⁰ DOYLE, Per Rectum..., p. 368.

siphonis in anatomia (1668).⁴¹ He invented a simplified syringe to make the procedure safer and possible for individuals to perform on their own.⁴² The position of the body the patient was to adopt was also considered important. Some doctors advised lying flat on one's back, some lying on the left side, while others – on the right. As to who administered the infusions, it was predominantly the task of apothecaries or barbers, under the strict supervision of medics. Before the invention of the syringe, enemas were applied using a tool made from leather or a pig bladder with a tube made from a reed or a hollowed-out plant stem. However, this brought discomfort to the patients and required two people to administer. De Graaf's invention of a syringe with a soft, flexible tube in the late seventeenth century brought an effective solution. One of the risks involved in the procedure involved patient moving, causing the tube to fall out or be improperly introduced, which could lead to laceration or even perforation of the anus. Thanks to the syringe, patients could now introduce the tube by themselves, entailing less pain and risk and removing the need to expose oneself to others. De Graaf decided that apothecaries' duty was now only to provide the equipment and substances for the decoctions and infusions, not to assist with or indeed administer enemas. He also prepared a classification of enemas: softening, purgative, relaxant, astringent, nourishing.⁴³

The seventeenth century – the probable period of origin of the Kozłówka egg – was called the century of the enema.⁴⁴ Irrigations of the vagina, the uterus and the bladder were also popular. Enemas were used to treat uterine hysteria, an affliction assumed to be associated with so-called lovesickness (love melancholy).⁴⁵ It was the beginning of a trend for enemas, especially among the aristocracy. They were used by women as beauty treatments, and numerous French monarchs tried to improve their health in this manner, including Louis XIII and Louis XIV. In France enemas were used to improve one's beauty using infusions with aromatic decoctions, and even smoke. The same was practiced by medics such as John Gerard, who mentions the favourable effects of enemas in his work *Herball* (1633).⁴⁶

The procedure is also mentioned in Renaissance and Baroque literature (e.g., in Dutch stories concerning social relations among families, married couples and young women). An anonymous Dutch story characterised by humour and irony tells of two sisters, Neeltje and Tryntje, who claimed to have a stomach ache joyfully accepted enemas conducted by their neighbour Knelis.⁴⁷ Lovesickness and its remedies – in this case, an enema – are discussed in one of Thomas Asselyn's plays, *Jan Klaasz of gewaande dienstmaagt* (1682).

Lovesickness and enema as a countermeasure

Decorating such a bizarre, unique object as an ostrich egg with a scene of an enema suggests that the importance of this subject went beyond the presentation of a mere treatment. The

⁴¹ De GRAAF, Regnerus; *De virorum organis generationi inservientibus, de clijsteribus et de usu siphonis in anatomia*, Lugd. Batav. et Roterod. Leiden and Rotterdam: Officina Hackiana, 1668.

⁴² LORIAUX, Regnier de Graaf..., pp. 61–68.

⁴³ FRIEDENWALD and MORRISON, *The History of ...*, pp. 84–95.

⁴⁴ DIXON, *Some Penetrating ...*, p. 28; LIEBERMAN, William, *The Enema*. In: *The Revue of Gastroenterology*, 13, 1946, pp. 215–229.

⁴⁵ MARCZUK-SZWED, Barbara, *Miłość i medycyna we francuskiej literaturze renesansowej*. In: ŚNIEŻYŃSKA-STOLOT Ewa (ed), *Spotkania Klubu Historii Idei 2004–2007*. T. 2, Kraków 2009, pp. 97–98.

⁴⁶ LIEBERMAN, *The Enema...*

⁴⁷ *Het Vermakelyk Bagyn-Hof*, Amsterdam 1739, pp. 90–91 Available at: https://www.dbnl.org/tekst/_ver046verm02_01/_ver046verm02_01_0051.php?q=GEKLISTEERT%20%20%20HET%20KLISTEREN#hl1 (accessed: 8 May 2025).

Kozłówka artefact corresponds with an array of works of art in which enemas are a recurring motif.⁴⁸ Many offered a metaphorical depiction of a sexual intercourse of an illegal, socially and morally improper nature, usually with a young woman at its centre.

In painting, the lovesick individual is typically a young woman brought by her guardians or parents, attended by a medic or apothecary bearing a uroscopy flask and an enema syringe.⁴⁹ Lovesickness manifested in sadness, paleness and apathy was thought to be caused by excess “black bile” which gathers and affects the lower organs of the abdominal cavity. Female maladies were labelled “hysteria”, blaming the uterus not the other organs of the abdominal cavity. The Greek word *ustera* (uterus) was used to call the affliction *uterine hysteria*. This condition was believed to take place if the uterus was separated or inflamed due to movement inside the organism,⁵⁰ causing discomfort by warming and suddenly squeezing other internal organs, interpreted as an “attack” or a “paroxysm”. The symptoms were treated using vaginal irrigations, which were also performed to prevent unplanned pregnancy. Ancient Egyptians attributed numerous symptoms suffered by women to the “hunger” of the uterus. Similarly, in the Early Modern era, the affliction was present most often in widows, lonely young women and nuns – those without means to fulfil their feelings, also in a strictly physical, sexual manner. Remedies included enemas and also marriage (advised to young women). Avoiding marriage also led to imbalances in the body’s humours. The sensations experienced during these procedures, as well as the decoctions (usually herbal), were to have a healing effect. Fumigations were used to regulate the balance of fluids in the organism by treating the lower part of the body with sweet-scented fumes. There are even records of attempts to fumigate a prolapsed uterus in order to return it to its place. From the times of Trota of Salerno (eleventh century CE) it was believed that vaginal infusions cooled down and hydrated a hot uterus.

Enemas thus became a metaphor for the sexual desires of young women, growing to the rank of a remedy that helped improve the condition of their bodies and minds. This motif is abundantly present in paintings from the seventeenth and eighteenth centuries presenting alcoves and bedrooms where young ladies recline, taking pleasure in receiving an enema.⁵¹ In the context of the period, the Kozłówka egg decoration can thus be perceived as a social commentary, full of irony, humour and a critical way of looking at social behaviours. Doctors warned against unjustified use of enemas, understanding the danger to patients’ health. What is more, in the social sense enemas were also considered to cause abortions, or to serve as a metaphor for the sexual act – both raising objections in Dutch society. In multiple paintings, a sneer on the face of the doctor or of a background figure pointing to the syringe suggests that the young lady is not suffering from any serious illness and the enema is likely (a) a countermeasure against an unwanted pregnancy (Godefridus Schalcken, *The Doctor’s Examination*, 1680–85, Hague, Mauritshuis⁵²); (b) a remedy apparently much desired by patients (Abraham Bosse, *Woman About to Receive a Clyster*, ca. 1632–34, etching, The British Museum,

⁴⁸ DIXON, Laurinda S., Some Penetrating Insights: The Imagery of Enemas in Art. In: *Art Journal*, 52(3), 1993, pp. 28–35

⁴⁹ PETERSON, Einar, Amans Amanti Medicus: Das Genremotiv “Der ärztliche Besuch” in seinem kulturhistorischen Kontext. Berlin 2001, pp. 390–403.

⁵⁰ DIXON, Some Penetrating..., p. 29. TOOHEY, Peter, Love, Lovesickness, and Melancholia. In: *Illinois Classical Studies*, 17(2), 1992, pp. 265–286, esp. 265–275.

⁵¹ Aliamet, François-Germain (1734–1790) according to the drawing by Jeaurat, Etienne (1699–1789), La Remede, copperplate, Herzog Anton Ulrich-Museum, Braunschweig. <http://www.virtuelles-kupferstichkabinett.de/de/detail-view>

⁵² SEVCIK, Die ärztliche Konsultation..., pp. 128–131.

London;⁵³ Jan Steen, *Doctor's Visit*, 1665; Jan Steen, *The Sick Woman*, 1660, Rotterdam, Boijmans van Beuningen); or (c) a medium for sexual inuendo, as in the work by Abraham Bosse, with the erotic undertone of the words spoken by the young man holding the syringe, who reassures the patient that she will be “lively” as a result of his medical treatment, since she is “in heat” and his tool is designed to enter her delicately.⁵⁴ The estimated time of origin of the Kozłówka artefact overlaps with the period when using enemas for pleasure, as well as plain hygiene, was popular, confirming that this scene fits the recurring painting topos in the European graphic arts of the seventeenth and eighteenth centuries.⁵⁵

The meaning of the candle held by one of the figures assisting in the enema procedure casts an interesting light upon the way this scene can be interpreted. Is it only typical assistance, or could it be an allusion to the contemporaneous saying, “Gone is the flame, gone is the shame”, which means that if there are no witnesses, it is easier for the woman to act inappropriately (*Sentit adagium mulieres plerasque esse impudicas si detur facultas sine teste peccandis*).⁵⁶ In a scene involving the administration of an enema, a candle held too close to the body could reveal too much, illuminating what should remain hidden, unseen, modestly covered. A contrary report can be found in the medical treaty by doctor Ambrose Pare (1634): “there are many who shall not be persuaded to show their buttocks to the person that should administer the enema, and stupid bashfulness is to their inconvenience.”⁵⁷

The legible fragments on the Kozłówka egg suggest that the inscriptions concern the enema procedure and the pain it may cause when administered incorrectly. The text could be interpreted more metaphorically, meaning that administering the enema is erroneous and unnecessary, since the real cure is love, fulfilled both emotionally and physically. Maybe its goal lies not in improving the patient’s health but in highlighting very personal reasons unrelated to any somatic discomfort? This would have been especially likely in the eighteenth century, when enemas were officially criticised due to their excessive use for reasons resembling entertainment, due to the health risks involved, and because they challenged social norms.⁵⁸ Marriage, on the other hand, was determined to be the best cure for uteral hysteria.

A bold way to interpret the object would be to juxtapose the egg as a symbol of life, with the abortive character of the enema, since the inscription around the scene clearly states that the enema is “erroneous”. Perhaps the two missing scenes represented a quite contrary meaning? The lack of analogous examples of artefacts presenting similar scenes, the fragmented condition of the Kozłówka egg, and the incomplete remnants of the inscriptions do not allow an unequivocal assessment of such interpretations.

It is important to consider the cultural background of this artefact, the context in which it was created, its origin and the meaning of the inscriptions. These lines of study map out the directions of research to find connections between images, texts and the psychological and social trends of the epoch. It is also vital to inquire about the goal behind the creation of such

⁵³ https://www.britishmuseum.org/collection/object/P_1866-0407-805

⁵⁴ DIXON, *Some Penetrating...*, p. 32

⁵⁵ Frivolous Rococco engravings Pierre Maleuvre after Pierre-Antoine Baudouin (1740–1803), *Le curieux* and Niclas Lafrensen.

⁵⁶ DE JONGH, Eddy, *Erotica in vogelperspectief. De dubbelzinnigheid van een reeks 17de eeuwse genrevoorstellingen [Double Entendre in some Seventeenth-Century Genre Subjects]*. In: *Simiolus: Netherlands Quarterly for the History of Art*, 3(1), 1968/1969, pp. 22–74, esp. 47.

⁵⁷ DIXON, *Some Penetrating...*, p. 29.

⁵⁸ A French engraving by Dicuel, presenting a man holding an enema syringe, intending to apply it to an elegant woman, refers to the enema in its inscription as *L'Agrdement aux dames* [the ladies' amusement].

an object and its function from the viewpoint of the contemporaneous recipient, the customer. Was it supposed to be a humorous trinket with social commentary on the times? Or was it intended to amaze, intrigue or even embarrass?

The Early Modern period was filled with popular emblems presenting universal truths and cautionary tales, often shown in a social context through realistic scenes, depictions and attributes with relevant text.⁵⁹ The message provided a lesson, sometimes in the form of a humorous maxim, other times in a serious and universal way. In this regard, the Kozłówka egg can be considered a medium for the educational art of emblems. This suggestion can be supported by the three depictions set in the upper section of the egg: the angel, the guardian and the vessel.⁶⁰

Conclusions: Decorated ostrich eggs in modern Europe, as *objets croisés* and “*cultural migrators*”

The unique character of the Kozłówka artefact is highlighted by its extraordinary, exotic medium as ostrich eggs were difficult to obtain and there was a limited supply in Europe. The egg is an example of artificialia, objects valued for their quality and for the craftsmanship needed to create such decorations.

It is important to take into account the combination of its extravagance, unique form, and the character and subject matter of the decorations, as well as the content of the inscription. Only then one can attempt to understand the function and sense of this object to a contemporary recipient. Its luxurious character should also be contemplated in relation to the people for whom it was created. The egg from Kozłówka represents not only a type of *curiosité*, it can also be described as an *objet croisés*⁶¹ or, as proposed by Martin Kemp, a *cultural migrator*.⁶² These terms indicate objects which travelled through and into new cultural areas, relocating their primary meaning and gaining more intertwined meanings in new contexts. This was certainly true of the egg from Kozłówka, which was not a mere trinket but, from the moment of its creation in the European cultural sphere, acted as a medium for contemporary social content. It represents an entanglement of different and distant cultural traditions, expressing fascination regarding anything Far Eastern; it belongs to the ancient tradition of decorating ostrich eggs and expresses the transference of these objects into the cultural context of European cabinets of naturalia, or Wunderkammern. Such objects were admired, since they represented an intertwining of the marvellous variety of cabinets of curiosities – of all that is beautiful, artistically intricate and surprising – with what is natural, real, rare, distant and exotic. Moreover, the social context of the enema motif adds a new level of interpretation, encouraging the researcher to search for

⁵⁹ One of the most popular works regarding marriage, full of maxims, love codes and moral symbols regarding the culture and society of the Netherlands of the beginning of the seventeenth century, is by Jacob Cats, Houwelyck, Middelburg 1625. Another example is the genre iconography in De BRUNES, J., *Emblemata, of Zinne-werck: vorghestelt, in beelden, ghedichten, en breeder uijt-legginghen, tot uijt-druckinghe, en verbeteringhe van verscheijden feijlen onser eeuwe*, Amsterdam 1661: Bij Abraham Latham boeckverkoper op't Rockin, op't hoeckje van de Lange brug steegh. <https://archive.org/details/iohannisdebrunes00brune/page/n10/mode/1up>

⁶⁰ The meaning of vessels, pots in the context of female corporeality and morality. DE JONGH, Eddy, *Erotica in...*, p. 47.

⁶¹ CLARK, Leah R., *Objets croisés: Albarelli as Vessels of Mediation Within and Beyond the Spezieria*. In: *Études Épistémè Revue de littérature et de civilisation (XVIe–XVIIIe siècles)*, 36, 2019, pp. 1–4.

⁶² KEMP, Martin, *Wrought by No Artist's Hand?: The Natural, the Artificial, the Exotic, and the Scientific in Some Artifacts from the Renaissance*. In: FARAGO, Claire (ed). *Reframing the Renaissance Visual Culture in Europe and Latin America, 1450–1650*. New Haven and London 1995, pp. 177–196.

analogies in works of art in which this motif was present. The transcultural flux of meanings in this type of artefact shows how an ostrich egg can become a “cultural migrator”, a *croisés* object, combining multi-layered analyses and interpretations from the histories of medicine, art, emblems, literature, social culture and customs.

In the case of the Kozłówka egg, its decorations represent an intriguing exhibit typical of the culture of the seventeenth century. It should be kept in mind that underlying the origin of such unique objects, as well as the creation of cabinets of curiosities, is an ideal–intellectual concept that unites elements belonging to different scientific fields and spheres of interest, and analyses them in the context of a network of various, sometimes distant, sciences and disciplines. It is not possible to decide whether the Kozłówka egg was an object of humour, a toy or a curiosity in a medical–social context – or even a moralistic lecture in a unique form. Certainly, decorated ostrich eggs expressed Baroque culture and educated those who saw them, inculcating a sense of curiosity towards the world, combined with a sense of play, imagination and open-mindedness regarding such artefacts.

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References

- BERNARD OF CLAIRVAUX (2000). *Kazania o Najświętszej Maryi Pannie*, translated by Ildefons Bobicz. Warszawa: Wydawnictwo AA. ISBN 978-83-7864-002-8
- BOCK, Sebastian (2002). *The ‘Egg’ of the Pala Montefeltro by Piero della Francesca and Its Symbolic Meaning*. Freiburg am Br.-Heidelberg: Universitätsbibliothek Heidelberg, pp. 1–20. <http://archiv.ub.uni-heidelberg.de/volltextserver/3123/1/PieroEgg.pdf>
- BRISSON, Dawid W. (1980). Piero della Francesca’s Egg Again. In: *The Art Bulletin*, 62(2), pp. 284–286. ISSN 00043079
- BRUNES DE, JOHANNIS (1661). *Emblemata, of Zinne-werck: vorgbestelt, in beelden, gbedichten, en breeder uijt-legginghen, tot uijt-druckinghe, en verbeteringhe van verscheijden feijlen onser eeuwne*, Amsterdam: Bij Abraham Latham boeckverkoper op’t Rockin, op’t hoeckje van de Lange brug steegh.
- CATS, Jacob (1625). *Houweyck*, Middelburg: Jan Pietersz. vande Venne.
- CLARK, Leah R. (2019). Objets croisés: Albarelli as Vessels of Mediation Within and Beyond the Spezieria. In: *Études Épistémè Revue de littérature et de civilisation (XVIe – XVIIIe siècles)*, 36: 1-25. <https://doi.org/10.4000/episteme.6292>
- De JONGH, Eddy. *Erotica in vogelperspectief. De dubbelzinnigheid van een reeks 17de eeuwse genrevoorstellingen* [Erotica from a bird’s-eye view: Double Entendre in Some seventeenth-Century Genre Subjects]. In: *Simiolus: Netherlands Quarterly for the History of Art*, 3(1), pp. 22–74. <https://doi.org/10.2307/3780472>

- De SMET, Peter A.G.M., HELLMUTH Nicholas M. (1986). A multidisciplinary approach to ritual enema scenes on ancient maya pottery). In: *Journal of Ethnopharmacology*, 16, pp. 213–262. <https://flaar-mesoamerica.org/wp-content/uploads/2022/10/enema-ritual-enema-scenes-on-ancient-Maya-vases-ceramics-De-Smet-and-Hellmuth-1986.pdf>
- DIXON, Laurinda S. (1993). Some Penetrating Insights: The Imagery of Enemas in Art. In: *Art Journal* 52(3), pp. 28–35. <https://doi.org/10.1080/00043249.1993.10791520>
- DOYLE, Derek (2005). Per Rectum: A History of Enemata. *Journal of the Royal College of Physicians of Edinburgh*, 35(4), pp. 367–370. <https://doi.org/10.1177/147827152005350408>.
- EZZ EL-DIN, Dina M. (2020). Ostrich Eggs of Predynastic Egypt. In: *Journal of the General Association of the Arab Archeologists*, 11(11), pp. 40–56. <https://doi.org/10.21608/JGUA.2010.2754>. Accessed 8 May 2025 at: https://jguaa.journals.ekb.eg/article_2754_9a36080136c91901261c665144ee1d0d.pdf
- FRANTIS, Wayne E. (1993). *Paragons of Virtue: Women and Domesticity in Seventeenth-Century Dutch Art*. Cambridge: Cambridge University Press. ISBN 0-521-43129-8.
- FRIEDENWALD, Julius and Morrison Samuel (1940). The History of the Enema with Some Notes on Related Procedures. Part I. In: *Bulletin of the History of Medicine*, 8(1), pp. 68–114. ISSN: 1086-3176.
- GILBERT, Creighton E. (1974). The Egg Reopened Again. In: *The Art Bulletin*, 56(2), pp. 252–258. ISSN. 0004-3079.
- GOŁGOWSKI, Tadeusz (2004). De lucernis et de ovis struthiocamelinis – symbolika jaj strusich w kościołach wschodniochrześcijańskich. In: Zbigniew KOBYLŃSKI Zbigniew and Wojciech BRZEZIŃSKI (eds). *Hereditatem cognoscere. Studia i szkice dedykowane Profesor Marii Miśkiewicz*. Warszawa: Letter Quality, pp. 21–26. ISBN: 83-917894-5-4
- GRAAF de, Regnerus (1668). *De virorum organis generationi inservientibus, de clijsteribus et de usu siphonis in anatomia*, Lugd. Batav. et Roterod. [Leiden and Rotterdam]: Officina Hackiana 1668.
- GREEN, Nile (2006) Ostrich Eggs and Peacock Feathers: Sacred Objects as Cultural Exchange between Christianity and Islam. In: *Al-Masāq* 18(1), pp. 27–78. e-ISSN 1473-348X.
- HERLES, Michael (2007). Der Vogel Strauß in den Kulturen Altvorderasiens. In: *Mitteilungen der Deutschen Orient-Gesellschaft zu Berlin*, no 139, pp. 173–212. https://www.orient-gesellschaft.de/repositorium/MDOG/MDOG_139.pdf
- Het Vermakelyk Bagyn-Hof* (1739). Amsterdam: Weduwe Jacobus van Egmont, pp. 90–91. Available at: https://www.dbnl.org/tekst/_ver046verm02_01/_ver046verm02_01_0051.php (accessed: 8 May 2025).
- HODOS, Tamar et al. (2020). The Origins of Decorated Ostrich Eggs in the Ancient Mediterranean and Middle East. In: *Antiquity*, 94(374), pp. 381–400. <https://doi.org/10.15184/aqy.2020.14>
- HOFER, Ricarda (2019). Sie Sammeln und Sie Tauschen: Schloss Ambras als Knotenpunkt eines Europäischen Netzwerks Kunstaffiner Fürstenhöfe der Spätrenaissance. In: *Historia Scribere* 11: 301–321.
- JÉKELY, Zsombor (2015). Ostrich Egg Cup of Christopher Bathory. *Jekely.blogspot.com*, October. Accessed 8 May 2025 at: <https://jekely.blogspot.com/2015/10/ostrich-egg-cup-of-christopher-bathory.html>

- JURKOWLANIEC, Tadeusz (2009). Strusie jaja w Prusach. Z badań nad średniowieczną ikonografią maryjną. In: *Biuletyn Historii Sztuki*, 71(1–2), pp. 5–33. ISSN 0006-3967
- KAMIŃSKA, Lidia M. (2016). Powojenne Składnice Przemieszczanych Dóbr Kultury w Polsce. Przyczynek do Szerszego Opracowania. In: *Muzealnictwo*, 57, pp. 74–80. ISSN 0464-1086
- KEMP, Martin (1995). Wrought by No Artist's Hand?: The Natural, the Artificial, the Exotic, and the Scientific in Some Artifacts from the Renaissance. In: Farago Claire (ed). *Reframing the Renaissance Visual Culture in Europe and Latin America, 1450-1650*. New Haven and London: Yale University Press, pp. 177–196. ISBN: 0300062958
- KOBIELUS, Stanisław (2005). *Fizjologi i Aviarium: Średniowieczne traktaty o symbolice zwierząt*. Kraków: Tyniec Wydawnictwo Benedyktynów. ISBN 83-7354-107-1
- KORNACKI, Krzysztof (ed.) (2004). *Muzea rezydencje w Polsce: materiały sesji naukowej zorganizowanej w Muzeum Zamoykich w Kozłowie 14-16 października 2004 r.* Kozłówka: Muzeum Zamoykich w Kozłowie. ISBN 83-919292-2-1.
- KOYAMA, Tomiyasu and TENNYSON, Alan J.D. (2016). Respiratory Pores on Ostrich *Struthio camelus* (Aves: Struthionidae) Eggshells. In: *Advances in Experimental Medicine and Biology*, 923, pp. 51–55. E-ISSN 2214-8019.
- LAUFER, Berthold (1926). *Ostrich Egg-Shell Cups of Mesopotamia and the Ostrich in Ancient and Modern Times*. In: Anthropology leaflet, 23. Chicago: Field Museum of Natural History. <https://dn790009.ca.archive.org/0/items/ostricheggshellc24lauf/ostricheggshellc24lauf.pdf>
- LIEBERMAN, William (1946). The Enema. In: *The Revue of Gastroenterology*, 13, pp. 215–29. ISSN 0096-2929
- LORIAUX, Lynn (2016). Regnier de Graaf 1641–1673. In: LORIAUX Lynn (ed). *A Biographical History of Endocrinology*. Washington: Endocrine Society and John Wiley & Sons, Ltd. pp 61–68. Online ISBN: 9781119205791 |DOI:10.1002/9781119205791
- MARCZUK-SZWED, Barbara (2009). Miłość i medycyna we francuskiej literaturze renesansowej. In: ŚNIEŻYŃSKA-STOLOT Ewa (ed). *Spotkania Klubu Historii Idei 2004-2007 T. 2*. Kraków: Wydawnictwo Uniwersytetu Jagiellońskiego, pp. 97–102. ISBN 978-83-233-2641-0
- MEISS, Millard (1954). Addendum Ovologicum. In: *The Art Bulletin*, 36(3), pp. 221–222. ISSN 0004-3079 E-ISSN 1559-6478
- MEISS, Millard (1975). Not an Ostrich Egg? In: *The Art Bulletin*, 57(1), p. 116. ISSN 0004-3079 E-ISSN 1559-6478
- MENZHAUSEN, Joachim (1968). Das Grüne Gewölbe. In: Erich Steingräber (ed), *Schatzkammern Europas. Weltliche Schatzkammern*. München: Hirmer, pp. 59–66, Figs 81–96.
- MISSINNE, Stefaan (2020). *The Da Vinci Globe*. Cambridge: Cambridge Scholars Publishing. ISBN 1-5275-1134-0.
- OCZKO, Piotr (2020). *Bezem en kruis. De Hollandse schoonmaakcultuur of de geschiedenis van een obsessive*. Leiden: Primavera Pers. ISBN 978-90-5997-326-8.
- PANOFSKY, Erwin (1966). *Early Netherlandish Painting, its Origin and Character*. Vol. I. Cambridge Mass.: Harvard University Press. ISBN 0802016308
- PETTERSON, Einar (2001). *Amans Amanti Medicus: Das Genremotiv „Der ärztliche Besuch” in seinem kulturhistorischen Kontext*. Berlin: Gebr. Mann. ISBN 3786118086.

- PHILIPPOVICH, Eugen von (1966). *Kuriositäten, Antiquitäten. Ein Handbuch für Sammler und Liebhaber*. Braunschweig: Klinkhardt and Biermann. ISBN 10: 3781400336 / ISBN 13: 9783781400337.
- POMIAN, Krzysztof (2001). *Zbieracze i osobliwości: Paryż-Wenecja XVI-XVIII wiek*; translated by Andrzej PIENKOS. Lublin: Wyd. Uniwersytetu Marii Curie-Skłodowskiej. ISBN 83-227-1764-4.
- POTTS, Daniel T. (2001). Ostrich Distribution and Exploitation in the Arabian Peninsula. In: *Antiquity*, 75(287), pp. 182–190. <https://doi.org/10.1017/S0003598X00052881>.
- RAGUSA, Isa (1971). The Egg Reopened. In: *The Art Bulletin*, 53(4), pp. 435–443. <https://doi.org/10.2307/3048899>.
- RATHJE, Anette (1986). Five Ostrich Eggs from Vulci. In: SWADDLING Judith (ed). *Italian Iron Age Artefacts in the British Museum*. Papers of the Sixth British Museum Classical Colloquium 1982. London: British Museum Press, pp. 397–404. ISBN 0714112747, 9780714112749.
- SAYED, Kitat S.E. (2014). Ostrich Egg and Its Symbolic Meaning in the Ancient Egyptian Monastery Churches. In: *Journal of the General Union of Arab Archaeologists*, 15(1), pp. 23–41. Available at: https://journals.ekb.eg/article_3088_2896b3b73097d1bd92a006489b7f4da6.pdf (accessed: 8 May 2025).
- SCHEICHER, Elisabeth (1995). Zur Ikonologie von Naturalien im Zusammenhang der Enzyklopädischen Kunstkammer. In: *Anzeiger des Germanischen Nationalmuseums und Berichte aus dem Forschungsinstitut für Realienkunde*, pp. 115–124. http://www.rhinoresourcecenter.com/pdf_files/127/1278631105.pdf ISSN: 0934-519
- SEVCIK Anja K. (ed). (2015). *Schalcken - Gemalte Verführung*. Stuttgart: Belser Verlag. ISBN 3763027211
- SPIVACK, Barney S. (1991). A. C. Celsus: Roman Medicus. In: *Journal of the History of Medicine and Allied Sciences*, 46, pp. 143–157. DOI: 10.1093/jhmas/46.2.143.
- STRUŻYŃSKA, Katarzyna (2016). *Curiositas* jako kategoria kultury barokowej (XVI-XVII wieku). In: *Meluzyna*, 1(4), pp. 35–51. ISSN 2449-7339.
- TEXIER, Pierre-Jean et al. (2010). A Howiesons Poort Tradition of Engraving Ostrich Eggshell Containers Dated to 60,000 Years Ago at Diepkloof Rockshelter, South Africa. In: *Proceedings of the National Academy of Sciences of the USA*, 107(14), pp. 6180–6185. <https://doi.org/10.1073/pnas.0913047107>.
- THOMA, Hans (1958). *Schatzkammer der Residenz München: Katalog*. München: Bayerische Verwaltung der Staatlichen Schlösser, Gärten und Seen.
- TOOHEY, Peter (1992). Love, Lovesickness, and Melancholia. In: *Illinois Classical Studies*, 17(2), pp. 265–286. ISSN: 0363-1923 <https://www.jstor.org/stable/23064324?seq=1>.
- WINTERBOTTOM, Matthew (2015). *Treasures of the Goldsmith's Art: The Michael Wellby Bequest to the Ashmolean Museum*. Oxford: Ashmolean Museum Publications. ISBN 9781910807019.
- WOŹNIAK, Michał (1991). O naturaliach w sztuce złotniczej. In: CHOJECKA, Ewa (ed). In: *Sztuka a natura. Materiały XXXVIII Sesji Naukowej Stowarzyszenia Historyków Sztuki*, Katowice 23–25 listopada 1989, Katowice, pp.191–206. ISBN 83-85039-89-9.
- ZIMMERMAN, Michael R. (2017). Practicing Medicine in Ancient Egypt. In: *Juniata Voices* 17, pp. 144–152. ISSN. 1068-8498. <https://www.juniata.edu/offices/juniata-voices/media/volume-17/vol17-Zimmerman.pdf>
- ZUROSKI, Eugenia (2017). Nautilus Cups and Unstill Life. In: *Journal* 18, issue 3. (online) DOI: 10.30610/3.2017.