

The night clock by Johann Michael Dobler, crafted around 1700, is one of the many objects from the Berlin Kunstkammer that were lost in the course of the Second World War (fig. 1). Luckily, however, it left informative traces in the sources. These sources attest to an object whose function is not immediately apparent. Because of the inherent ambiguity of the night clock, and especially due to the work done on it in the early eighteenth century, its history has been marked by a number of reinterpretations that repeatedly lead to new assessments and classifications.

√ 1 | Night clock by Johann Michael Dobler, ca. 1700, Staatliche Museen zu Berlin, Museum of Decorative Arts (not extant, photograph before 1945).

The decisive source for Dobler's night clock is an entry in the so-called K-number inventory, which documents the objects transferred from the Kunstkammer to the Museum of Decorative Arts (Kunstgewerbemuseum) in the 1870s [ Around 1855]. In addition, a typescript inserted into this inventory includes a comprehensive description of the object from the period prior to 1945 (fig. 2). The photograph file of the Museum of Decorative Arts in Berlin also contains two black-and-white photographs presumably taken in the first few decades of the twentieth century (figs. 1 and 3). As is often the case within the context of object biographies, these documents and photographs are both a source of information and evidence of how the objects were received in a specific period. They make up the point of departure as well as the end point in addressing the object.

# Clock and Magic Lantern

The extant photographs in the Museum of Decorative Arts show a clock cabinet with a projection lens on a tall, wooden stand. On it are the symbols of kingship which Friedrich I achieved in 1701: the Prussian eagle with crown and sceptre on the front and the monogram FR (Fridericus Rex) framed by war trophies on the sides, as well as depictions of Swiss palace guards, who were present at the coronation. The cabinet, supported by four crystal balls, stood on a surface held by the raised wings and partially open beak of a wooden Prussian eagle. The top was decorated with a crown lying on a pillow. Including the stand, the object was approximately two meters high.<sup>2</sup>

This type of night clock was developed in the 1660s by the Italian astronomer and optician Giuseppe Campani and his brothers Matteo and Pier Tommaso. Clocks of this type were either furnished with a face lit from behind or, as was the case with the Berlin night clock, could project the time on the wall as a hybrid of clock and magic lantern. Very few night clocks are extant today and often come from early modern collections such as those in Kassel (fig. 4), Dresden, the Esterházy treasure chamber at Forchtenstein Castle, and several private Italian collections.<sup>3</sup> One of the early projecting night clocks was owned by Louis XIV (fig. 5).<sup>4</sup>

Kunstkammerinventar 1875, vol. 7, fols. 707v-708r (K 4710). On this object, see Kiesant 2013, pp. 55-8. I would like to thank Michael Korey and Peter Plaßmeyer (Mathematisch-Physikalischer Salon, Staatliche Kunstsammlungen Dresden) for helpful information.

<sup>2</sup> Kunstkammerinventar 1875, vol. 7, fols. 707v-708r.

<sup>3</sup> On the night clock genre, see La Forma del Tempo 2020; on Kassel, see Groß gedacht 2018, pp. 360–3; Schirmeier 2011, pp. 110–13; on Dresden, see the SKD Online Collection at https://skd-online-collection.skd.museum/Details/In dex/116721 (accessed 25 January 2022); on Forchtenstein, see Koeppe 2019, p. 221, cat. no. 118; on the clocks in Italian collections, see La Forma del Tempo 2020, pp. 150–97.

<sup>4</sup> See Zanetti 2020, p. 62.

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2 | K-number inventory, entry for night clock by Johann Michael Dobler, Staatliche Museen zu Berlin, Museum of Decorative Arts. Johann Michael Dobler, who constructed the Berlin night clock, was, like Campani, an instrument builder with a specialization in optics. In 1723 he became the court optician at the Berlin Academy of Sciences.<sup>5</sup> He might have already received a recommendation for this position from Gottfried Wilhelm Leibniz in 1704,<sup>6</sup> and it is possible that in this context the night clock ended up in the Berlin palace as a sort of application present for Friedrich I.

Dobler constructed a wide repertoire of physics and optical instruments, as evidenced by the circulated lists of his works that were for sale in the 1720s. A sample of the model displayed in the Kunstkammer also appeared on the list: "An optical night clock that presents a different royal prince or other person of high rank of the House of Brandenburg each hour, and one can see what time it is all night long." The common instruments of early optics and experimental physics are also mentioned, such as concave mirrors, camera obscuras, microscopes, and telescopes. In the early eighteenth century, this type of night clock was evidently still closely related to the technical achievements of the time.



3 | Night clock by Johann Michael Dobler, ca. 1700, back of clock case, Staatliche Museen zu Berlin, Museum of Decorative Arts (not extant, photograph before 1945).

- 5 See Kiesant 2013, p. 57. However, Dobler was already mentioned as the Berlin court optician in the Recueil von allerhand Collectaneis und Historien in 1721. See Specification 1721, p. 98.
- 6 See the letter from Detlev Markus Friese to Gottfried Wilhelm Leibniz, dated 22 September 1704 (Leibniz 2013, p. 756, no. 530).
- 7 See Specification 1721; Optische Maschinen 1727.
- 8 Specification 1721, p. 98.



4 | Night clock by Giuseppe Campani, before 1700, Museumslandschaft Hessen Kassel, Cabinet of Astronomy and Physics.

Some information regarding the construction of the night clock from the Berlin Kunstkammer can be gleaned from the K-number inventory. The clock cabinet had two parts: the rear part contained an oil lamp and a rotating glass face, while the front part had a system of lenses. The names of the Brandenburg rulers added to the respective hours could thus be projected onto the opposite wall. A small crown placed in the hole of the partition served as a fixed pointer.<sup>9</sup>

The K-number inventory does not mention the central concave mirror on the back wall of the case, which is key for the functioning of a magic lantern, as presented in contemporary depictions (fig. 6). It served to intensify the lamp's beam of light for the projection. This concave mirror, however, is specifically mentioned in Leopold von Ledebur's listing on the object in his Kunstkammer guidebook of 1844. It was presumably no longer extant when the night clock arrived in the Museum of

Decorative Arts three decades later. This would be extremely significant in determining how the object was viewed from the late nineteenth century on.

In a manner typical of the time, the motifs of Dobler's night clock link the genealogy of a ruling house to the metaphor of the mechanics that still functioned as a leading science in the early eighteenth century. The inscription on the front of the clock case – not visible in the photograph – also refers to this: "Not a single monarch / had ever possessed / such a clock / that presents in order / The House of Brandenburg / of which no one shall be forgotten / who already to the late fathers / has marched." First of all, the clock depicted Friedrich III/I's achievement of the royal dignity as the heroic completion of the succession of his eleven predecessors. In addition, its clockwork made it into a model of the absolutist state, which functioned mechanically, as it were. 12

The night clock was also notable for its craftsmanship. The clock case was not made of metal or wood, as were other night clocks of the time. According to the typescript, it was composed of "polished mirror plates", thus taking up a form of glasswork that could be found in the Berlin Kunstkammer in, for example, various works by the glass cutter Gottfried Spiller [ Cupid]. 13

The interplay of these various elements made it possible to describe the night clock in diverse ways, as its individual functions and features could continually be reassessed. It is therefore difficult to identify in the early descriptions of the Kunstkammer, each of which contain night clock entries. These vary so greatly that it sometimes seems questionable whether they in fact refer to Dobler's night clock.

### From Device to Showpiece

It is not clearly documented precisely when Dobler's night clock was placed in the Kunstkammer. Based on its motifs, however, there can be no doubt that it was crafted after 1701, that is, after the coronation of Friedrich I. The style of the clock in and of itself is also very heterogeneous. This is indicative of its having been refurbished at a later date, possibly on the occasion of its placement in the Kunstkammer. The clock case itself already seems quite antiquated for the pe-



5 | Johann August Corvinus, after Johann Jacob Schübler, Bedchamber of Louis XIV, illustration from Johann Jacob Schübler, Ausgabe seines vorhabenden Wercks, vol. 1, Neu inventiert sehr curieuse[n] französische[n] Betten, 1734.

See Kunstkammerinventar 1875, vol. 7, fols. 707v-708r, typescript.

<sup>10</sup> See Ledebur 1844, p. 70.

<sup>11</sup> Kunstkammerinventar 1875, vol. 7, fols. 707v–708r, typescript.

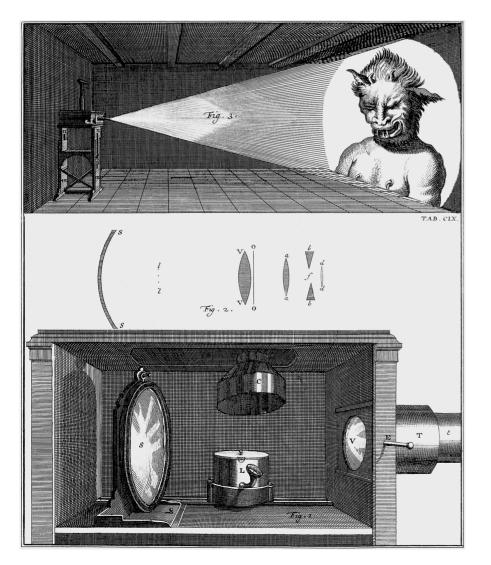
<sup>12</sup> On this aspect, see Kiesant 2013, pp. 57–8.

<sup>13</sup> See ibid., p. 56; on these objects, see Hildebrand/Theuerkauff 1981, pp. 147-8.

riod around 1700. The mounting made up of the stand, eagle, pillow and crown, on the other hand, can be placed close to the Schlüter workshop and was added to the clock case a few years later. The plaque attached to the clock stand provides its *terminus ante quem* with an inscription referring to Friedrich I. Here the passage that appears on the clock case is repeated and expanded: "Frederick the Great [i.e. Friedrich III/I] exalted above all / live ever happily / even if a storm wind blows." The mounting was therefore made during the reign of Friedrich I, that is, before 1713. The first relatively unambiguous description of the night clock as a Kunstkammer object mentioning the mirror panes of the clock case is from that same year. In Wolff Bernhard von Tschirnhaus's description of the collection it was referred to as "a very well-crafted crystal night clock". <sup>15</sup>

Dobler's night clock might therefore have been placed in the Berlin palace at the very beginning of the eighteenth century, where it initially served as part of the room furnishings in a private chamber of Friedrich I before being brought to the Kunstkammer.<sup>16</sup> It is also conceivable that it was at first displayed with other Kunstkammer objects in one of the repositories. In any case, the refurbishing turned the technological device into a large-scale showpiece. The stand raised the clock case to the viewers' eye level, giving it a massive presence. The design of the second inscrip-

6 | Laterna Magica, illustration from Willem Gravesande, Physices Elementa Mathematica, 1721.



tion, which was mounted on the plaque held by the eagle, took up this new presentation form. It repeated and supplemented the first inscription, which had been conceived for close-up viewing, in an enlarged form and, corresponding to the new presentation of the object, could therefore be read from a certain distance.

In the course of its redesign, the Prussian motifs of the device also gained significance. The eagle added to the night clock's stand turned it into a sculptural element, the size and dynamic of which competed with the clock case in terms of visual presence. This modification made it almost impossible to perceive the technical functionality of the night clock. Although the projection lens could still be seen on the front of the case next to the clock face, the flue that a magic lantern requires as a smoke vent for the oil lamp is no longer visible. It was presumably hidden by the crown and pillow, which at the time was sometimes done in a similar manner with chimneys on palace roofs.

In the subsequent decades, the night clock was redesigned a second time. Dobler's signature on the plaque held by the eagle was modified. The city "Berlin" was added, signifying the commencement of Dobler's position at the academy as court optician in the 1720s.<sup>17</sup> Above all, however, the name of Friedrich Wilhelm I was added to the glass clock face in the clock's interior, on which the names of the Brandenburg prince-electors and Prussian kings had been inserted.<sup>18</sup> Whereas the first refurbishing of the object focussed on adapting its form to the new mode of presentation, this second revamping aimed to update its iconography in view of the ruler succession.

These changes corresponded to the way of dealing with the succession of electors in eighteenth-century Prussia. In the 1690s, this motif was staged prominently in the Alabaster Hall of the Berlin palace. Here the larger-than-life statues by the Dutch sculptor Bartholomeus Eggers were displayed, presenting the twelve Hohenzollern electors and four Roman emperors. Friedrich Wilhelm I also retained this presentation form. During his reign, Eggers's sculptures were displayed in the White Hall, the new main ballroom in the palace.<sup>19</sup>

No further changes were made to the night clock under Friedrich II and his successors. This also reflected the new role of the succession of electors in Prussia, as it was replaced by a new dynastic model during the reign of Friedrich II. Elector Friedrich Wilhelm was now celebrated as the founder of the modern Prussian dynasty, while his predecessors receded into the background. This new narrative also started becoming established in the eighteenth century in the context of the Kunstkammer and, beginning with the nineteenth-century museum guides, became a dominant model of interpretation that is still popular today, well beyond the history of the Kunstkammer. In this respect, the night clock is a definitive example of a dynastic identity in Prussia that was virtually buried by later levels of reception.

In the initial decades after having arrived in the Berlin palace, the night clock, already a hybrid in its design as a technical device, became a complex structure containing various layers of time in its motifs and form. Especially the interplay of different presentation contexts that had assumed a material form in the object would greatly impact the perception of the night clock in the next two centuries.

#### Clocks and Scientific Instruments in the Berlin Kunstkammer

Because of its hybrid nature as a technical device combining magic lantern and clock, Dobler's night clock is also associated with two object groups in the Berlin Kunstkammer: clocks and scientific instruments. Since the 1670s at the latest, there was a collection of clocks connected to the Kunstkammer which, together with other clocks at the court, had a separate administration. Three inventories of this collection from around 1690 have survived, indicating the various sites of the clocks at the court and their relocations.<sup>22</sup> Of the roughly 150 objects listed, about two thirds were transferred to the Kunstkammer in 1708.<sup>23</sup> Additional clocks then made their way to the Kunstkammer under Friedrich Wilhelm I.<sup>24</sup> Most of these holdings belonged to the collection for only a relatively short time, however. Many clocks from the Kunstkammer were transferred or sold in 1752, that is, during the reign of Friedrich II.<sup>25</sup> It cannot be determined if Dobler's night clock was part of these holdings.<sup>26</sup>

- 14 In the text of the K-number inventory, it was falsely assumed that this dedication was to Friedrich II. This was corrected after the fact in pencil. See Kunst-kammerinventar 1875, vol. 7, fol.
- Tschirnhaus 1727, p. 281. This description was based on a visit to the Kunstkammer in 1713. See also the mention based on this account in Schramm 1744, col. 149. The anonymous description of the Kunstkammer written in the 1740s presumably refers to a different object: "A night clock: This clock can be used at night. You hang a white cloth opposite the lamp so you can see what the hour is" (Anonymus B, fol. 10r). See also the partly almost verbatim mention of an Augsburg night clock from the Kunstkammer in Küster 1756, p. 19: "a silver night clock, with a door with eight drawers set up so that closing the door also closes all the drawers. This clock, made in Augsburg, presents at night a large spear on the wall on a white cloth so that when you awaken, you can immediately see what the hour is." 16 According to Kiesant, the night clock was presumably first presented in the Kugelkammer, Friedrich III/I's living room and study in the Spree wing of the palace. A description of the palace written after 1713 refers to a hanging clock here, "in which twelve electors present themselves, very small, as they reigned, up to the First King of Prussia" (quoted in Kiesant 2013, p. 55). Within the context of the other sources, however, the identification of this clock as Dobler's night clock does not seem very plausible. Here the clock was not referred to as a night clock, and the face of Dobler's clock did not show figural depictions of the electors, but rather their names. Also, the Kugelkammer clock did not have a stand; the stand of Dobler's clock as described above, however, must have been made before
- In contrast to the clock case, here a "von" was added to his name, as Dobler had in the meantime been ennobled.

- 18 The typescript reads: "Above the number of each hour is the name of a Brandenburg elector or king in chronological order, up to and including Friedrich Wilhelm I" (see Kunstkammerinventar 1875, vol. 7, fols. 707v–708r, typescript). According to Kiesant this was an error and Friedrich I was meant (see Kiesant 2013, p. 56).
- 19 See Kiesant 2013, pp. 57–8; Hüneke 1988, pp. 125–6; Geyer 2010, vol. 2, pp. 28–30; see also Usenbinz 2021, pp. 285–8.
- 20 See the standard-setting conception of Friedrich II, Mémoires pour servir a l'histoire de la maison de Brandebourg of 1748 (Friedrich II of Prussia 1913).
- 21 See Nicolai 1769, p. 337; Meyen 1861, p. 1; Schasler 1861, p. 1.
- See Kiesant 2013, pp. 73, 75-6. See also the transcriptions on this in ibid., pp. 191-206.
- 23 See Inventarium Aller Churfürstl. Uhren . . . 1696, additions since 1708: ZA SMB PK, I/KKM 40, pp. 105– 6.
- 24 See the mention of the clocks in Anonymus B, fol. 8r.
- 25 See Kiesant 2013, p. 81.
- 26 One indication could be a post1793 addition to the 1688 inventory of clocks, which reads: "a
  clock that alights a lamp at night,
  which strikes and awakens for 24
  hours" (Inventarium Über alle
  S. Churfürstl. Durchl. Uhren . . .
  1688: ZA SMB PK, I/KKM 40, pp.
  27–41, here p. 39). The entry
  might also be referring to the
  night clock from Augsburg listed
  in Küster; see note 15.
- 27 Nicolai 1769, p. 347. See also the classification of the night clock in the section on "mathematical, astronomical, optical, musical and other instruments" in Ledebur 1844, pp. 68–71. The night clock is listed there as a magic lantern.
- 28 Inventar 1694, pp. 93-123.
- 29 On the respective object types, see the following entries in the index of optical instruments: microscopes: nos. 3, 7, 8, 18, 19, and 20; telescopes: nos. 4, 9, and 14–17; burning glasses and concave mirrors: nos. 2, 5, 6, and 12; optical gimmicks: nos. 1 and 13.
- 30 Entry no. 5 in the index of mathematical instruments.

In terms of its object biography, however, it seems more significant that the night clock remained in the Kunstkammer despite the transfers that took place in the 1750s. At that time it might have been perceived as an object with features crucial for a Kunstkammer piece, which distinguished it from other clocks. In addition, Dobler's night clock was classified as scientifica by the 1760s at the latest. In Friedrich Nicolai's 1769 description of the Berlin Kunstkammer, it was listed among "many optical, mechanical models and other mathematical things".<sup>27</sup>

In considering the group of scientifica objects, the 1694 inventory is the only source that documents the holdings in their entirety. The text of the listing – and the inventory as a whole – has a very brief linguistic style; the wording is sparse and not very descriptive. For this reason, the objects named there can hardly be identified individually; on top of that, presumably none of them are extant.

The scientifica entries, 138 in all, are divided into three sections. The first section, "optical instruments", presents twenty-one microscopes, thirteen telescopes, and numerous burning glasses and concave mirrors. There are also some optical gimmicks, such as a cylinder anamorphosis and a picture with hidden images.<sup>29</sup> The second section, "mathematical instruments", lists geometric and astronomical instruments, including especially compasses and instruments from a military context, such as drawing aids for constructing fortifications, projectiles, and projectile attachments. Among the entries is a gilded proportional divider from the workshop of Christoph Trechsler, an instrument maker from Dresden.<sup>30</sup> The third section, "mechanical models and instruments", includes a series of models of technological innovations of the time, such as various mills. However, an "instrument to remonstrate the vacuum" is also listed in this section. It is one of the various air pumps present in some contemporary collections, such as those developed in the mid-seventeenth century by Otto von Guericke. Also mentioned here is the "aeolipile" (or "Heron's engine"), a steam-driven, spinning sphere often used to supplement an air pump.<sup>31</sup>

Shortly before the inventory was drawn up, the scientifica department was fundamentally changed. As in other areas of the Kunstkammer, there were many new acquisitions at the time [•1685/1688].<sup>32</sup> They are evidence of the attempt to keep pace with the substantially larger and more elaborate departments of this kind, such as in the Kunstkammer in Dresden or Kassel. In Berlin, however, this department never underwent a comparable expansion.

When the scientifica were ultimately transferred to the Academy of Sciences at the turn of the nineteenth century [ Around 1800], Dobler's night clock remained in the collection rooms of the palace. This decision was presumably based largely on its visually dominant presentation, which minimized the technical aspect. Meanwhile, the status of night clocks had also changed: around 1800 they had become a fashionable object – designed for a much wider, though still elite audience. In 1803, a night clock in the form of a classicistic urn was described in the fashion magazine *Journal des Luxus und der Moden*. The Stobwasser lacquerware factory in Braunschweig offered such a model for sale (fig. 7).<sup>34</sup>

### Handicraft Object and Memorabilia

In the nineteenth century, a section with scientific instruments was again set up in the Kunstkammer, albeit with a different focus. It included the objects from the Pomeranian Art Cabinet that had been transferred to Berlin in the late seventeenth century [ Cases, Boxes] and, in particular, new acquisitions of instruments that were also already historical at the time. 35 As in other sections of the Kunstkammer, here too the new acquisitions soon eclipsed the older holdings in terms of number. The scientific instruments were also increasingly received as objects of art. This was apparent especially in Leopold von Ledebur's collection guidebook to the Kunstkammer that was published in 1844. Ledebur emphasized the aesthetic qualities of the objects in his texts and included an index of artists in his publication, which also listed Dobler's name [■Cupid, fig. 9]. 36 In Ledebur's text, the night clock appears as "a large magic lantern with the related reverbère [i.e. concave mirror]".37 The night clock's projection mechanism thus continued to be recorded, but not its functionality as a clock. Knowledge of the technical aspects of Dobler's device was then gradually lost.

In the subsequent decades, an additional nuance of interpretation became apparent. Although the night clock continued to be described as a magic lantern, the Prussian motifs gained significance in the museum guidebooks published by Philipp Löwe and Alexander Meyen

in 1861: the palace guards portrayed on the device started to be emphasized, as was the dedication to Friedrich I that had been added.<sup>38</sup> Here a conventional interpretation used for Kunstkammer objects of all kinds can be recognized, which since the early nineteenth century identified objects of the Berlin collection as memorabilia of the Prussian ruling house. It would lead to the establishment of an "alcove" reserved for this genre of object in the Kunstkammer department of the Neues Museum and ultimately in the Hohenzollern Museum opened in Monbijou Palace in 1877 [Justus Bertram / Wax/ Shattered Die / Pearls].<sup>39</sup> Both Löwe and Meyen also referred to Dobler as creator of the clock, and this association presumably played a major role in how the object was assessed. Consequently, the night clock seemed to be more handicraft than memorabilia. In any case, in contrast to most of the Prussian memorabilia, it remained in the handicrafts section of the Kunstkammer in the Neues Museum and was then transferred in the 1870s along with several thousand objects from this section to the newly founded Museum of Decorative Arts.

## "Peep-Box with Clock"

In the K-number inventory, in which the Kunstkammer objects that were transferred to the Museum of Decorative Arts are described, Dobler's night clock was again reinterpreted. A further fundamental loss of knowledge about its technical function can be observed here. The inventory entry refers to it as a "peep-box," a classification that was maintained in the aforementioned typescript that was created considerably later and inserted into this inventory. It is labelled *Guckkasten mit Uhr* (peep-box with clock). The following is noted: "The device served solely to aid in learning



7 | Night clock, Stobwasser factory, ca. 1800, Viebahn Fine Arts.

- 31 Entry nos. 29 and 41 in the index of mechanical models and instruments. Both objects were purchased for the Kunstkammer after 1689 (see Eingangsbuch 1688/1692b, fol. 16r, entry nos. 263–4). Copies of the air pump developed and constructed by Otto von Guericke were also preserved in the library of the Berlin palace, as were the "Magdeburg hemispheres". Today they are on display in the Deutsches Museum in Munich (see Winter 2018, p. 37).
- 33 See Jean Henry's letter to the directorate of the Academy of Sciences, 27 September 1798 (ABBAW, PAW [1700–1811], I-XV-27, fol. 4).

34 Vgl. Viebahn, verfügbar unter: https://www.viebahnfinearts.com /de/objekte/details?preview=true &inv=2011 (26.01.2022); Conrad/ Eckhardt 1803.

35 Ledebur 1844, S. 68.

8 | Department of Clock and Scientific Instruments in the Palace Museum, Berlin (Room 14 / Second Parade Antechamber), photograph ca. 1925. the names of the electors in the proper chronological order."<sup>40</sup> Not until later was the projection mechanism referred to when "Night Clock" was added to the entry in ink.

Contributing to this new interpretation of the night clock as a peep-box was certainly the fact that the concave mirror characteristic of the inner workings of a magic lantern, which Ledebur had mentioned, was probably no longer extant. Similarly perplexing was undoubtedly also the concealed smoke vent. This at least opened up the possibility of perceiving the projection lens as a "viewing tube", as mentioned in the typescript. <sup>41</sup> Its new classification as a peep-box might also have to do with the low financial value that the K-number inventory assigned to this object. The night clock was quoted as being worth 50 marks. This is far below the values of the other clocks listed in the inventory, in which some entries were estimated as being worth amounts in the thousands.

Other layers of time become visible in the "comments" column of the K-number inventory. Two blue stamps refer to the photographs in the museum's photo file (figs. 1 and 3). A violet stamp signifies that the object had been stored in Sophienhof Palace during the Second World War. A handwritten comment added later indicates that it had burned there.



Before being placed in storage, the night clock had been displayed in the so-called Palace Museum that was created with objects from the Museum of Decorative Arts in 1921 in seventy rooms on three floors of the Berlin palace. The night clock could be seen in Room 14, the Second Parade Antechamber, which had been designed by Schlüter. This room showed clocks and scientific instruments from the sixteenth to nineteenth centuries. The context of the Kunstkammer apparently played no major role here.

A photograph of the instrument room suggests that the night clock was the only object of its size there (fig. 8). As if to counter its visual presence, however, it was moved to the outer margin of the exhibition space, where in view of the higher lectern showcases it played a secondary role. Its orientation was virtually predetermined by the "unsuited" chinoiserie reverse side of the clock case. The clock stood with that side facing the corner of the room.

There is much to suggest that even at that time the interpretation as a peep-box, as established in the K-number inventory, continued. This reading is repeated in a photograph from the photo archive of the Scherl publishing house in Berlin which was presumably taken in the 1920s. Remarks on the back of the photo probably quote the article in the *Berliner Lokal-Anzeiger*, the newspaper that published the photograph (figs. 9 and 10):

### Historical peep-boxes.

This precious original piece from 1716 belongs to the earliest models of peep-boxes. With polished mirror plates, this work by Hans Michel DOBBELER in the Berlin Palace has a built-in clock that served as a night clock for Friedrich I.<sup>44</sup>

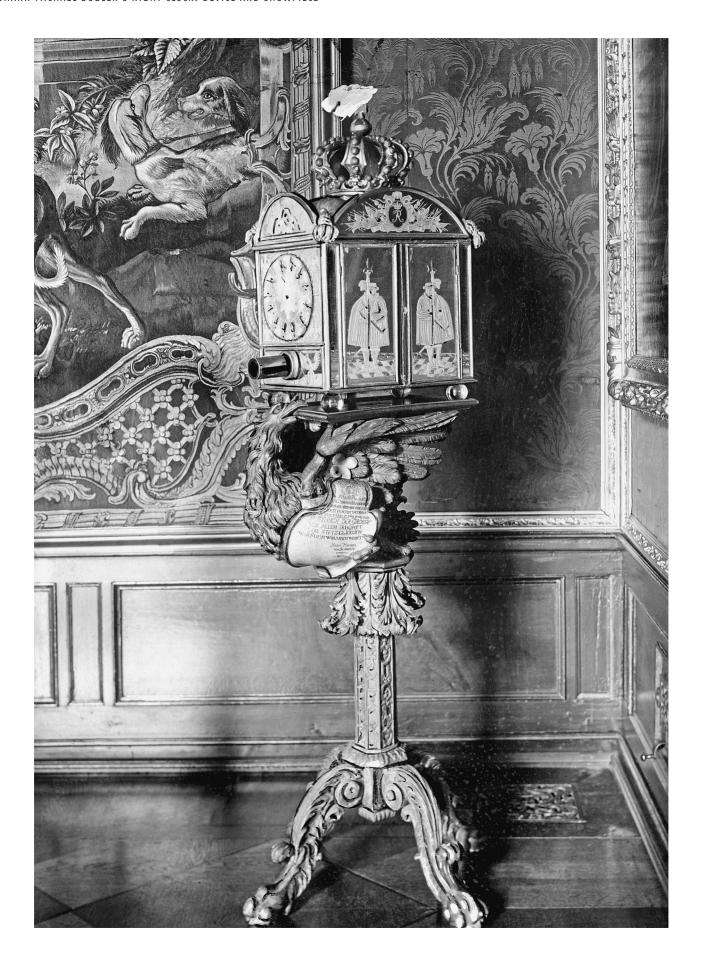
The function as a night clock is mentioned here, but as in the K-number inventory, the interpretation as a peep-box is primary. To a certain extent, this description is contrary to the low monetary valuation of this object, since here it is stylized into a "precious original" peep-box.<sup>45</sup>

Prephotographic media such as the peep-box and the magic lantern served in the late nineteenth and early twentieth centuries as educational means, entertainment, and children's toys. In this period they were features of popular culture and thus far removed from the professional attention of then curators of decorative arts museums. The explanatory text on the photograph of the night clock therefore appears to anticipate the revaluation of such phenomena that took place in the late twentieth century in connection with the collection practices of, for example, Werner Nekes, an experimental filmmaker, which caused it to become a subject of scientific discourse.<sup>46</sup>

# Hybridity and Polyvalence

The object biography of Johann Michael Dobler's night clock is closely connected with the scientifica of the Berlin Kunstkammer and the various phases of reassessment, transfer, and redevelopment that this area went through over the course of centuries. In the more than two hundred years of reception of this object, there was also a process of loss and recovery of knowledge, as can also be observed for other objects of the Berlin Kunstkammer which are not part of the areas of knowledge focussed on by the specialized museums of the nineteenth and twentieth centuries.

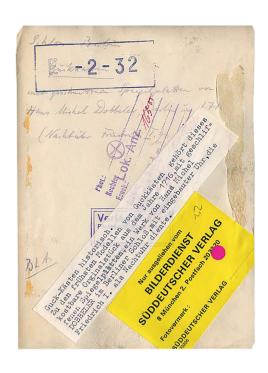
- 34 See Viebahn, available at https:// www.viebahnfinearts.com/de/obj ekte/details?preview=true&inv=2 o11 (accessed 26 January 2022); Conrad/Eckhardt 1803.
- 35 Ledebur 1844, p. 68.
- 36 See Ledebur 1844, pp. IX–XII. In Friedrich Nicolai's 1769 description of the Kunstkammer, the Opticus Johann Michael Dobler was mentioned for the first time (Nicolai 1769, p. 348).
- 37 Ledebur 1844, p. 70.
- 38 See Löwe 1861, p. 158; Meyen 1861, p. 67.
- 39 On this, based on the wax effigies of Friedrich III/I and Prince Elector Friedrich Wilhelm, see Dolezel 2019, pp. 154–8; on the presentation of the memorabilia in the Neues Museum, see Löwe 1861, pp. 140–2.
- 40 Kunstkammerinventar 1875, vol. 7, fols. 707v-708r, typescript.
- 41 Ibid
- 42 On the beginnings of the Palace Museum, see Mundt 2018, pp. 206–22.
- 43 The night clock is not mentioned among the few objects described in the museum guidebooks of the 1920s; see e.g. Schlossmuseum 1921, pp. 31–2.
- 44 SZ-Photo ID 01022162. In the course of research for this text it could not be determined which newspaper article included this photograph.
- 45 The object was also recently interpreted as a peep-box clock; see Kiesant 2013, pp. 55-8.
- 46 On the historiography of visual media, see Loiperdinger 2002.



These objects continually posed challenges for the limits of an established scientific canon and the resulting expertise [ Crab Automaton].

First and foremost, however, the Berlin history of Dobler's night clock reveals an interaction between material design and assignment of meaning, which has been decisive in dealings with this object. The reinterpretations of the night clock have been manifested, on the one hand, in the refurbishing of the object; on the other hand, precisely these material changes in turn provide the foundation for further reinterpretations. Through the changes that took place in the course of this transformation into a showpiece, Dobler's night clock assumed a form that gave the technical device a physical presence, yet at the same time furnished it with visually dominant Prussian motifs, thereby blurring its functionality. Because its technological form is itself a mixture of magic lantern and clock, the object's existing hybridity gives it a polyvalence that lets it repeatedly assume new interpretations, from a scientific instrument to an artisanal handicraft object and to memorabilia; from a night clock to a magic lantern to a peep-box and vice versa.





10 | Night clock by Johann Michael Dobler, photograph 1920s (?), reverse.