

Verzeichniß der Mineralien

Goldstutz.

1. Für die gewöhnliche Gold in weißen Quarz. Ist
aus Indien von der Insel Sumatra kommen.
wägt 5 M^p. 7 Lotz $\frac{1}{2}$ quint.
2. Chinesische Goldarbeit und Goldkörner wegen
Zuführung 6. Lotz. Die Körner liegen
in einem kleinen bairischen pfälzlichen
N. 24. gezeigelt und sind sehr raritet.
3. O. Gold Stutzen.

The naturalia from the Berlin Kunstkammer whose whereabouts are unknown today include many valuable objects. The mineral collection, in particular, contained several specimens of great value. Probably none was more prized than the piece of white quartz encrusted with crystalline gold from Sumatra. Expressed in modern units, it weighed 1.273 kilogrammes (fig. 1).¹ Today, a gold specimen of this weight would be the showpiece of any mineralogical collection, presented in exhibition rooms in a secure display case (fig. 2). Indeed, from the late seventeenth century on, the crystalline gold from Sumatra was one of the highlights of the Kunstkammer in the Berlin Palace [◆ Changing Focuses].² However, the object does more than just illustrate the fascination with all that was perceived as exotic and valuable in early modern Europe – a fascination typical of collecting practices in the curiosity cabinets of the period. It testifies to the colonial activities of European trading companies and the consequences of armed conflict in the nineteenth and twentieth centuries.

The gold specimen thus reflects the ambivalence that has informed perceptions of mining and its sociocultural effects for centuries. As early as the fifteenth and sixteenth centuries, scholars, merchants, and government officials debated the benefits and drawbacks of mining, which was considered dirty, risky, and dangerous. Proponents argued that the positive effects of the trade in extracted metals and the development of previously unused territories outweighed the negatives. They concluded that these effects legitimized the activities of European princes and trading companies and even benefited humanity.³ Valuable minerals such as the gold-impregnated quartz in the Berlin Kunstkammer provided evidence of rich deposits awaiting extraction.

A Valuable Exhibition Piece

The great value of the object was always clear to the Kunstkammer's administrators and visitors. Early records of the museum's holdings emphasize its significance. In the inventory of 1694, for example, the "List of Minerals" classifies ores according to their value, a common practice at the time. Gold is the first category, with the specimen from Sumatra at the top of the list. Next come silver, iron, and copper; tin, lead, and various rock and metal compounds; and finally numerous precious stones. Some of these were set, while others were in their natural state.⁴ The specimen from Sumatra is followed by two additional entries for gold objects. The first pertains to "Chinese goldwork and gold nuggets", which were kept in an ivory box among the rare objects [● 1685/1688]. The second consists of six pieces of crystalline gold that the elector acquired for the Kunstkammer in the late 1680s. These are not described in further detail.⁵ Thus the piece of gold from Sumatra is not only assigned its own number and listed separately from the other gold specimens in the Kunstkammer, but also appears at the top of the mineral list because of its great value.

◀ 1 | On the first page of the "List of Minerals" in the Kunstkammer inventory of 1694, the crystalline gold from Sumatra is entered separately from the other gold specimens.

- 1 Inventar 1694, p. 25: "5 M[ark] 7 Loth ½ Quint". I wish to thank Ferdinand Damaschun (Museum für Naturkunde Berlin) for helping me to convert the old units and Ralf-Thomas Schmitt (Museum für Naturkunde Berlin) for valuable insights into the collection.
- 2 Anonymus B, fol. 8v.
- 3 See Asmussen/Long 2019, pp. 8–10; Bentancor 2017.
- 4 On the crafting of the emerald cluster in the Dresden Kunstkammer, see Dresdner Hofjuwelier 2019, p. 35.
- 5 Inventar 1694, pp. 25–44.

Specimens of gold from Sumatra, an island in the western part of the Malay Archipelago, were highly treasured by Europeans. The early modern travel reports that introduced collections to a wider audience explicitly emphasized the value of the objects for their owners.⁶ In Berlin, the piece of gold-encrusted quartz from Sumatra quickly became a much-admired and well-known object. Visitors to the collection were impressed by the piece, which stood out even more due to its presentation: whereas the other minerals were kept in cabinets, the crystalline gold was exhibited in a prominent location. Together with a gold-bearing “cobble” (a stone rounded by flowing water), it was openly displayed on a table, where it drew the visitors’ attention (fig. 3–4).⁷ As a result, it is mentioned in nearly all of the surviving descriptions of the *Kunstkammer*. Reflecting the content of the tours they took, the writers address the nature and origin of the specimen [● Around 1740]. The Saxon miner Elias Hesse, for example, who had previously travelled to Sumatra, was familiar with the object in Berlin and was able to give its exact weight: the piece of “solid gold” on white quartz, which was displayed at the “Berlin Chamber of Art and Rarities” of “His Serene Highness of Brandenburg”, weighed “5 marks, 7 loths, and half a quint”. According to Hesse, this was an indication of the “richness” of the gold mines in Sumatra.⁸ Other *Kunstkammer* visitors describe the object more generally as “very big . . . and substantial” and write that it was found in the “rich mines” of Sumatra.⁹

In this context, Sumatra seems to have been of interest less as the source of objects for modern scientific investigation than as the backdrop for narratives of distant lands and their treasures. Curiosity about the origin of the crystalline gold was further boosted by the growing number of travel reports that reached the Berlin public at that time. For in the second half of the seventeenth century, German-speaking mercenaries, merchants, doctors, and miners increasingly travelled to the islands of the Malay Archipelago in the service of the *Vereenigde Oostindische Compagnie* (VOC, or Dutch East India Company). In their accounts, they describe not only



2 | A gold specimen from California weighing 473.5 grammes in the exhibition of the *Museum für Naturkunde Berlin* (MfN Min 1992/0817).



the animal and plant life there, but also the people and the powerful kingdoms.¹⁰ They thus confirmed the centuries-old reputation of the Kingdom of Aceh in Sumatra, which was home to the “richest treasure ... of gold and jewels”. Additionally, they offered background information on the gold specimen brought to Berlin.¹¹ Elias Hesse wrote a detailed account of the VOC’s activities on the island, describing the Dutch-operated mine tunnel by tunnel and appending a site sketch to his report (fig. 5).¹² In the late 1680s, when Hesse returned from Sumatra to Europe to settle in Berlin, the piece of crystalline gold passed into the possession of Elector Friedrich III of Brandenburg. During the first years of his reign, Friedrich III, who had ascended the throne after his father’s death, acquired numerous objects for the *Kunstammer*. He focused particularly on rocks and minerals, purchasing six pieces of crystalline gold in addition to the specimen from Sumatra.¹³ To expand his collection in the Berlin Palace, the Brandenburg regent paid Elias Hesse thirty reichstalers for several objects the miner had brought back with him from the East Indies. They included weapons and a “booklet containing drawings of various Indian nations”.¹⁴ However, these objects, which entered the collection between 1688 and 1692 and were recorded in the *Kunstammer*’s register of new items, did not include the piece of crystalline gold. It was first documented in the inventory of 1694 and was recorded on the same page as the six other pieces of crystalline gold acquired at the same time; unlike them, though, it had its own entry.¹⁵

The Temptations and Realities of the Gold Island

As evidence of rich deposits, mineral specimens like the piece of crystalline gold from Sumatra had a significance that went beyond collections such as the Berlin *Kunstammer*. Because gold was the most important means of payment for Indian textiles and other wares, European merchants took a keen interest in Sumatra’s deposits. The VOC, for example, required large amounts of gold to purchase cotton fabrics from the Coromandel Coast along the south-eastern edge of the Indian subcontinent. For centuries, Sumatra was known as a “gold island” far beyond the Malay Archipelago, but Europeans had no access to the high-yielding mines in its interior.¹⁶ Not mining for gold itself, the VOC was long forced to acquire the coveted metal in the Sultanate of Aceh in northern Sumatra and the Sultanate of Banten on the neighbouring island of Java to the south. Although it established a trading post in the city of Padang on Sumatra’s western coast,

3–4 | A 96.2-gramme gold specimen from Australia (MfN Min 2000/7978) and an 80.6-gramme gold-encrusted rock from California (MfN Min 2000/7986) in the mineralogical collection of the Museum für Naturkunde Berlin.

6 See Lombard 1967, pp. 64–5.
 7 Anonymus A, fol. 39v.
 8 Hesse 1690, p. 180.
 9 Nicolai 1769, p. 339; Anonymus B, fol. 8v.
 10 For a discussion of the travel reports by Caspar Schmalkalden and Caspar Schamberger, see Joost 1983; Michel 2010.
 11 Hesse 1690, p. 181.
 12 *Ibid.*, 171–3.
 13 *Eingangsbuch 1688/1692b*, fols. 16v–17r.
 14 *Ibid.*, fol. 25r.
 15 *Inventar 1694*, p. 25.
 16 Hesse 1690, p. 180. For gold mining on Sumatra, see Rueb 1991.



5 | Sketch of the mine from Elias Hesse's travel report from the East Indies.

a Dutch mining expert who had worked for the duke of Braunschweig in the Harz Mountains, but had never seen the mines in Sumatra.¹⁸

As a result of the report, which suggested that operations could be profitable with a sufficiently large workforce and skilled miners from Europe, the VOC began transporting slaves to Sumatra. Initially, it attempted to subjugate people on other Indonesian islands, including Nias, and later purchased indigenous people in Madagascar who had been captured by local groups in armed conflicts.¹⁹ The VOC also recruited experienced miners from Saxony. Due to its recruitment campaigns, Elias Hesse, who came from a poor background, travelled to Sumatra in the trading company's service together with twenty other miners from the region, some of whom took their families along with them. At the time, more than 300 male and female slaves were taken to the island from Madagascar in order to work the mine and ensure the operation of the settlement.²⁰ Despite the VOC's efforts, however, the Salida mining project proved a futile economic undertaking, as Elias Hesse – who worked as a mining clerk – wrote in a report published after his return to Europe. The mine itself was in poor condition, and although “a large quantity of ore” was extracted during the roughly six months he spent there, “in this whole period, the salaries of the many expensive servants, the maintenance of numerous slaves, as well as other related expenses” exceeded its output by far. Given the “loss of many miners”, who perished before arriving, and the “unhealthy conditions at this place”, it was clear that the venture could not pay off for the trading company.²¹ Under the geological and climatic conditions on the island, the European personnel at the VOC's mine were unable to extract gold or other ores profitably.²² Against this backdrop, Hesse questioned whether the gold specimen in Berlin was really from the mine. As he explained in his report, such a “massive piece of crystalline gold” probably came from one of the productive sites in the country's interior and had been acquired by local traders.²³ Disillusioned by his experiences in the East Indies, he critically assessed the VOC's actions in Sumatra. He reported on violent confrontations with the local population and the constant use of force against the workers to keep the mine in operation.²⁴ If captured, runaway slaves were subjected to even more brutal treatment than he had witnessed in similar situations elsewhere.²⁵ His descriptions contrast sharply with the glittering, priceless pieces of gold like the specimen in the Berlin *Kunstammer* and point to a certain ambivalence in the perception of mining. The crystalline gold reflects the lustre of the luxury goods that could be bought with the precious metals, while embodying the hopes linked to the exploitation of natural resources. However, it also reveals the consequences of the VOC's

this was not enough to secure the lucrative pepper and gold trade (fig. 6). For this reason, beginning in the 1660s, the VOC finally moved into gold mining by taking possession of mines previously abandoned by locals due to their low yield or by entering into agreements with local rulers, who competed with the leading gold-trading empires.¹⁷ When the VOC's local employees expressed fears that the mine in the hinterland of the western coast could not be operated profitably, the company responded by commissioning a report from

17 See Somers Heidhues 2006, pp. 221–2.

18 See *ibid.*, p. 223.

19 See Lombard 1971, pp. 232–4; Bialuschewski 2005, pp. 403–5.

20 Hesse 1690, p. 169.

21 *Ibid.*, pp. 175–6.

22 Hesse 1690, pp. 171–2. See

Lombard 1971, p. 231; Rueb 1991, pp. 24–6.

23 Hesse 1690, p. 180.

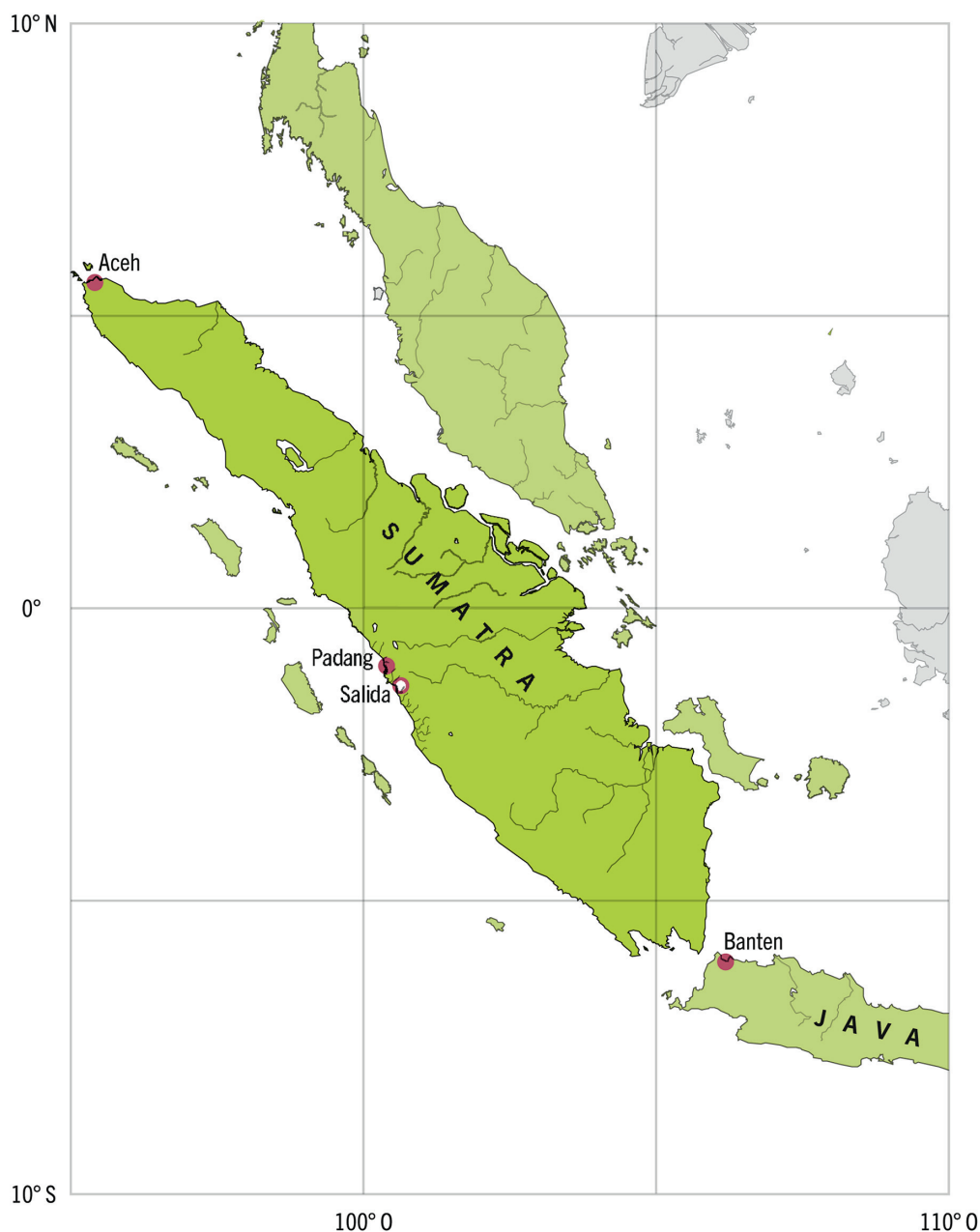
24 See *ibid.*, pp. 169, 215.

mining operations on Sumatra: the deaths of countless individuals who had journeyed to the island in the hope of prosperity or who had been taken there against their will by the trading company.

A Contested Treasure

Like the extraction of gold in Sumatra, the path of the piece of crystalline gold from the *Kunstammer* in the Berlin Palace to the Mineralogical Museum at Berlin University, founded in 1810, was also marked by conflict.²⁶ In 1805, King Friedrich Wilhelm III ordered all minerals in his possession to be united in a single collection. Only pieces of “special artistic value” were to remain in the *Kunstammer*.²⁷ However, the joint presentation of the Royal Mineral Collection was delayed for several years due to quarrels among the responsible parties and evacuations during the Napoleonic Wars. Jean Henry, the long-time director of the *Kunstammer*, long resisted handing over the minerals exhibited in the palace. Among other things, he argued that the cutting, polishing, and crafting of the minerals would change their character and that different mineral collections had their own kinds of audiences. It was entirely possible, he believed, for a collection intended “for the instruction of mineralogists” to exist alongside a collection meant for “the pleasure of dilettantes and the broader public”. In the end, Henry prevailed with the argument that the Mineral Cabinet of the Department of Mines and Metallurgy, which was the chosen site for the combined collection, did not yet offer sufficient space.²⁸

In the following years, in conjunction with the reform of the Academy of Sciences, debate continued over a suitable location for mineralogical treasures such as the piece of crystalline gold from Sumatra.²⁹ Finally, in 1809, against the backdrop of the founding of Berlin University, Wilhelm von Humboldt as director of the Culture and Education Section of the Interior Ministry pressed



6 | Location of trading posts and mines in western Sumatra.

25 See *ibid.*, p. 215.
26 On the conflicts over where the *Kunstammer*'s naturalia belonged, see Dolezel 2019, pp. 203–38.
27 ABBAW, PAW (1700–1811), I–XV–32, fol. 13. See Dolezel 2019, p. 205.
28 ABBAW, PAW (1700–1811), I–XV–32, fols. 14–18, esp. fol. 14v.

287.

288.

V. Gediegenes Gold.

36.2. Gel. Gold von Sukirih an der Mündung
zwischen Trubach und Jeth. 3 Loth 3 Pfund
schwer.

- 26. Gold aus Brasilien
- 27. Gold von Tejuco (Centrally) in Brasilien.
- 28. Gold auf Talkschiefer von Tejuco in Brasilien.
- 29. G. aus Brasilien. Ein Stück 3 1/2 Pf schwer.
- 30. G. in Quarz von den Quellen des T. Sepel in Brasilien.
- 31-32. Gold auf Quarz von Tejuco in Brasilien.
- 33. Gold in Quarz von Sumatra.
- 34. Gold mit Graphit in Quarz.
- 35. Gold von Kimarjambat in Ungarn.
- 36. Gold von Blagodatka in Kurfürstentum an der Ural.
- 37. Gold von den alten Goldgruben bei Katharinenburg.
- 38-41. Gold zum Theil erzigt. in Quarz von Benefowskay Ländchen in Brasilien.
- 42. G. auf erzigt. Quarz.
- 43. G. in einzelnen Körnern aus der Bucharey.
- 44-48. G. mit Bleiglanz auf Porphyrt von Veröppatak in Siebenbürgen.
- 49. G. mit Bleiglanz von Boicze in Siebenbürgen.
- 50-51. G. auf Porphyrt von Veröppatak in Siebenbürgen.
- 52. G. auf Quarz von Fures.
- 53. G. auf Thonschiefer von Facebay in Siebenbürgen.
- 54-56. G. auf Porphyrt von Veröppatak in Siebenbürgen.
- 57. G. auf Hornstein von Facebay.

for the royal order to be carried out. However, when the mineralogist Dietrich Ludwig Gustav Karsten took possession of the objects for the Mineral Cabinet in accord with the royal order, the “famous, rich specimen of crystalline gold” was missing, along with “a few smaller pieces”.³⁰ Unlike the two “beautiful onyx specimens” – precious stones that, according to Henry, had been transported to Paris – the gold specimen had been taken to a safe place “together with other precious objects” and thus saved from Napoleon’s troops. After the objects were brought back from their evacuation site in Königsberg, they were kept in a sealed box in the queen’s chamber.³¹ The parties responsible for the collection did their utmost to make the treasures accessible again, and ultimately succeeded.

A few years later, a specimen worthy of closer attention appeared in the catalogue of the university’s mineral collection. According to this source, in the mid-1820s a piece of “gold in quartz from Sumatra”, whose size and weight are not indicated, was among the holdings of the university’s recently founded museum (fig. 7).³² However, it is impossible to reconstruct the object’s subsequent fate. Even if the crystalline gold from the *Kunstammer* remained part of the mineralogical collection of the *Museum für Naturkunde* until the Second World War, it was not returned there after the armistice. As in the Napoleonic Wars, valuable objects were removed from the museum during the Second World War to prevent them from being seized as war booty. No information has survived as to which objects were contained in the evacuated crates. However, what the evacuations make clear – much like the debates on a suitable exhibition site for the piece of crystalline gold – is that this object was considered extremely valuable throughout the centuries.

Although it has not survived, the gold specimen from Sumatra, which passed into the possession of Friedrich III in the late 1680s, has lost none of its allure. The gold-encrusted quartz – a dazzling exhibit at the *Kunstammer* in the early modern period – continues to reflect the manifold economic and political entanglements of mineral collecting.

Translated by Adam Blauhut

◀ 7 | A gold specimen from Sumatra in the mineral collection catalogue compiled by Gustav Rose in 1826.

29 See Hoppe 1987, pp. 303–4. On the plans for the *Kunstammer* objects as part of the reform of the Academy of Sciences, see Dolezel 2019, pp. 30–4.

30 ABBAW, PAW (1700–1811), I–X–10, fol. 3r; fol. 31.

31 *Ibid.*, fol. 31.

32 Rose 1825, p. 288.