Birch + paint = bamboo

Lois Warnow

Between 1763 and 1767, two young noblemen set off on several journeys to see antique buildings in Italy, and to see France, the Netherlands, southern Germany, and especially England, the most modern and economically developed country of Europe at that time. It was Leopold III Friedrich Franz, known as ‘Prince Franz’, from Anhalt-Dessau, one of the German eighteenth-century principalities, and his architect and friend Wilhelm von Erdmannsdorf. Shortly after their return to Anhalt-Dessau these two chairs (figures 1-3) were built for a room in the Prince’s palace Oranienbaum. They are a pair of bamboo imitation (so-called faux bamboo) armchairs dating from 1767, which are part of a group of twelve chairs from the South-Chinese Room in the palace of Oranienbaum. Six examples of the group are lost and the remaining four are deposited. From 2014 to 2016 the two chairs have been at the University for Applied Science in Potsdam for conservation and restoration because they had considerable losses and were nearly falling apart.

Prince Leopold III Friedrich Franz and Friedrich Wilhelm von Erdmannsdorf

To put bamboo imitation and these chairs into context we have to step back and take a closer look into the history of Anhalt-Dessau.
Prince Franz of Anhalt-Dessau (1740-1817) succeeded to the throne in 1758 at the age of 18. He lost both parents in 1751 and was raised by his uncle Prince Dietrich, a representative of the Enlightenment. He supported the young man’s interest in science, nature, arts as well as the development of his social-political consciousness. During his reign Prince Franz undertook numerous reforms in the areas of education, health care, social services, roads, agriculture, forestry, and industry in his principality. He made Anhalt-Dessau one of the most modern and most prosperous of the small German states. Shortly after his nomination as the new prince he befriended Friedrich Wilhelm von Erdmannsdorf (1736-1800), a student and later architect. The Prince and von Erdmannsdorf were young and curious. They felt the urge to explore foreign countries and they were immensely impressed by what they saw. In England it was the ‘Chinese’ style in particular that made an impact on them. It is not proven - but very likely - that the two young men met the architect Robert Adam, the already famous cabinetmaker Thomas Chippendale as well as William Chambers. Chambers had travelled through China, and in 1757 he had published a book with drafts and patterns of Chinese architecture and interior designs (figures 4, 5). They definitely visited Chambers’ Kew Gardens and saw the already famous pagoda built in 1762.

Indeed, as soon as Prince Franz and Von Erdmannsdorf returned to Anhalt-Dessau, they immediately started to form their newly acquired impressions into building and design projects. They created a very distinctive Chinese style while re-decorating several rooms in Oranienbaum Palace. They gradually transformed the former Baroque park into an Anglo-Chinese garden. By 1769, they started to build Wörlitz Palace (1769-1773), the very first neoclassical building in today’s Germany which initiated a wave of neoclassical taste in the German realms.

**Description, construction and coating system**

The faux-bamboo chairs had been part of the first wave of the re-decoration of Oranienbaum palace. Ordered by the Prince himself they were made for the so-called South-Chinese Room (R. 216). Indeed, they are regarded as one of the first examples of bamboo imitation in Europe. Although several other pieces of furniture and interior decorations had been made exactly after the drawings in William Chambers’ book Designs, the faux-
bamboo chairs do not appear in the book but they obviously follow an English design. These ‘bamboo’ armchairs with latticework sides and backs are not made of real bamboo wood but of turned birch elements that form a frame construction. The extended rear legs are joined with two rails and form the back frame which is filled with latticework - turned sticks form upright and horizontal rectangular fields. The same latticework fills the frames of the armrests. The seat has a trapezoidal shape and is also constructed as a frame connecting the legs with rails. The inner rebate of the seat rails housed a drop-in seat, which is now lost. The brackets between legs and seat rails are in the shape of an arch segment jointed with small elements to the legs and seat frame. They do not add to the stabilisation of the construction but only have an aesthetic function.

How is it that even today we clearly recognise the intention of the designer and maker to imitate an exotic material? Two main features suffice to make the imitation believable: firstly, there are regular notches in the turned birch lattice segments, which imitate the characteristic bamboo nodes. Secondly, the chairs were painted all over to match the visual properties of bamboo, although, of course, the original appearance was different to what we see now due to over-painting and ageing.
In the course of the conservation we detected three coatings (figure 6). The first and probably original one consists of a yellow-brown undercoat (lead white, chalk, iron oxide red, ochre and some black pigments in an oil binder), a yellowish white base coat (like the undercoat, but less pigmented) and a resin top coat made from sandarac, mastic and colophony or turpentine. The second layer was done in the same manner as the first, but without the undercoat. It was added in only a few areas where there were missing parts in the coating.

What you can see today is the layer of the third treatment, presumably dating from the early twentieth century. It was of a lighter brown but has darkened and attracted a lot of dirt.

So how did the chairs look like in the beginning? There is one area where you can still see the first coating because it has never been painted over, presumably because it is located at the bottom of a rail and they forgot to paint it. It appears like an ochre brown tone, similar to what we think bamboo should look like. However, considering the ageing of a resin-based coating (especially sandarac) and looking at the parts of the chairs where the present coating is lost so that the first one is visible, one has to admit that the colour was most likely more of a yellowish white than a yellowish brown (figures 7, 8).

The chairs’ conservation concept included the complete reconstruction of the lost elements and an attempt to remove the present coating, revealing the original. But due to the deep cracks in the surface it was impossible to remove the present coating without damaging the layers underneath. After having reconstructed the lost parts, we then tried to work out a sample for a new coating system based on the findings (figure 9).

Now we have an idea of what the chairs probably looked like in their original state. But what about the construction? While a coating of three layers indicates some effort in the surface finishing, a close look at the construction tells a different story. When we take a closer look at the construction and the material of choice it becomes clear that the local cabinetmakers who built the chairs did not focus on the importance of a stable construction, as they put every effort into the aspect of representation. They used birch, a wood species that moves considerably in fluctuating climate conditions. The legs had twisted a lot and the former parallel elements do not line up any more. Also, the main joint areas of the seat frame are far too small, there is almost no material that takes the tenons.

Therefore, without stretchers between the legs the joints cannot take force and consequently must break. Of course, there are chairs without stretchers but usually they have wider rails and therefore more space for mortise-and-tenon joints that resist force. When dismantling the chairs it was revealed that there were joints with no glue at all and also dowel joints where the length of the dowel filled only one third of the dowel hole. Also, there are elements that differ in their length so that some of the joints were never formfitting and never could have been. Some of the gaps were filled with remains of all coating layers – showing that there was a gap from the beginning (figures 10, 11).

One can conclude that their ostensibly Chinese design and appearance complement the architectural setting they were intended for, but that the execution falls short when it comes to bamboo imitation. The attempt to combine traditional cabinet-making techniques and bamboo resembling rounded chair parts shaped from local material and a English-Chinese design did not prove to be a successful marriage in this case.

In 2014 we had to deal with the conservation and restoration of dirty looking repainted fragments of chairs that were falling apart due to a choice of material and craftsmanship that does not match the high-end luxurious appearance of the furniture.
(figure 12). So, how come the chairs, which represent one of the first of their kind, are built in such a poor way? What about other bamboo imitation chairs of this time?

**Faux-bamboo chairs of the eighteenth century**

The chairs for Oranienbaum Palace were by no means the only bamboo imitations during the late eighteenth century. The desire and fascination for Chinese furniture and accessories spread from England, initiated by Chippendale and Chambers. But bamboo imitation in Europe did not appear before Chambers published his book on Chinese architecture and interior design in 1757.⁴ There are examples of bamboo imitation chairs mostly from England but also from Denmark and France. They are all made of painted hardwood. Some of them even have painted nodes instead of having them turned. Others show painted dots, even if you cannot find those when you look at real bamboo. The imitation of bamboo is done in many different ways but there are several chairs that also

![Figure 13](image13.jpg) Chair by Georges Jacob, France, 1780, Musée des Arts Décoratifs, Paris.

![Figure 14](image14.jpg) England, 1786-1794, David Garrick Chair, Victoria and Albert Museum, London.

![Figure 15](image15.jpg) Denmark, f1810, Brede, Dr. Henriette Graf.

![Figure 16](image16.jpg) England, f1815, corridor Royal Pavillon Brighton, Royal Collection Trust, Her Majesty Queen Elizabeth II 2016.
follow the same design idea with lattice work backs and framed lattice work arm rails. A lot of them are based on the designs of Chippendale or Chambers (figures 13-16).

The most similar ones to the chairs in Oranienbaum are five chairs in the storage of Sanssouci Palace in Potsdam (figure 17). They are side chairs without arm rests and with a concave seat frame. But apart from that they are a good match. Again they are made from turned bars with incised nodes. As with the Oranienbaum chairs the top rail is doweled into the back upright; the design as well as the construction of the corner brackets are the same. But the ones from Potsdam are built in a slightly more accurate and thoughtful way, and the construction is improved in a few aspects. The latticed back, for example, consists of more rods/pieces, which add to its stability. Also, H-shaped stretchers are adjoined between the legs. In the main joints also there are improvements. The seat rails of the Potsdam chairs have a wider diameter in order to increase the stability of the mortise-and-tenon joints.

The improved construction goes for all of the other bamboo imitation chairs. None of them are built in exactly the same manner as the Oranienbaum ones. They have either stretchers that support the construction, or wider rails with more space for the joints. But as all the other chairs have been produced up to fifty years later, one could easily say that there must have been an improvement. It is also known that there was not a lot of nobility residing in the area, so even if there was a lot of work to do, not many highly qualified cabinetmakers existed in Dessau-Wörlitz.\(^5\) It is very likely that after the first big redecorating and building process the most decent cabinetmakers stayed (e.g. cabinetmaker Irmer, who should be responsible for most of the furniture at Wörlitz Palace).

Maybe the construction is poor because there were no models and the makers had never seen real bamboo or other bamboo imitation chairs, and therefore they did not know how to do it. But the main reason for the poor construction and material of

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Figure 17  England, 1786-1794, David Garrick Chair, Victoria and Albert Museum, London.

Figure 18  William Hogarth, Marriage à-la-Mode 2, The Tête à Tête, 1743, oil on canvas.
The seventeenth century loved the Chinese style because China represented a ‘great, unified, centrally governed state, considerably larger than any kingdom in Europe, provided with an unbroken cultural tradition for millennia, a kingdom without aristocracy and without a church comparable to the Curia, with a comprehensive philosophy and morality and such a variety of teachings that almost every impulse could find its model.’

The eighteenth century - and Prince Franz in particular - loved the Chinese style because of its intriguing ideas very different from the absolutistic monarchic system of the western Baroque period. Prince Franz belonged to those within the upper class that were bored by all the glamour, excess and abundance. They were craving something new (figure 18).

Prince Franz was the friend and student of Rousseau, Winkelmann, Sterne, Chambers and Goethe. So he, and also Von Erdmannsdorf, formed part of the Enlightenment - willing to change society in a way that included more social justice and a closer relationship to nature. As Rousseau said: ‘Back to nature!', or: ‘No man has any natural authority over his fellow men.' and ‘Force does not constitute right... obedience is due only to legitimate powers.’ These views had a deep impact on the style of art, architecture and furniture making. Von Erdmannsdorf and the Prince were convinced that ‘the noble simple shapes and decorations of antiquity, the plain, simple furnishings with its expressive outlines educate the mind to simplicity, clarity and morality.’

What was important was simplicity and naturalness. And here we go: bamboo is a perfect symbol for simplicity and naturalness! The upper class in China at the time, which was firmly rooted in buddhism and taoism, liked bamboo as a symbol for humility and nature. It was said that the upright growing of bamboo stands for a strong character and that bamboo is strong to resist attacks but is still flexible. The empty inside stands for modesty but also means space for more knowledge.

One could ask: why not use proper bamboo then? According to Chambers, chairs made from bamboo belonged to the interior of a Chinese palace: ‘The movables of the saloon consist of
chairs, stools, and tables; made sometimes of rose-wood, ebony, or lacquered work, and sometimes of bamboo only, which is cheap, and, nevertheless very neat. But as a matter of fact, bamboo was a material that was mostly used by the poor in China. It was not as long-lasting as hardwood. People threw bamboo furniture away as soon as it was damaged, as they rather built new ones. (That is why almost none of the bamboo furniture of the late Ming and early Qing dynasty has survived.) Using hardwood and not bamboo makes you a part of the educated upper class but at the same time shows that you have a wise mind and appreciate the simplicity of the poor. There are some examples of bamboo imitation in China dating circa 1780 (figures 19-20a).

Conclusion
The bamboo imitation chairs from Oranienbaum Palace can be interpreted as examples for a ‘modern’ way of thinking. They are one of the first attempts to come clean with the highly religious and long-established structures and therefore they start something new and different. The idea of these chairs is not Baroque but being modern and simple. Therefore, it is not important to show the knowledge of high-end furniture construction. But still, they are Baroque in their function as a ‘safe haven’. Like in the Baroque period the enlightened upper class created themselves ‘safe havens’, which means places to escape from reality. It was a time when their reign and power given to them by ‘god’s will’ was not regarded as natural and self-evident any more. The ‘Chinese’, the ‘exotic’, was a way to escape their sometimes frightening reality. It stands for ‘wanderlust’, the urge to explore, the wish for foreign, exciting things – what one can find already in renaissance with the upcoming Kunstkabinette, filled with curiosities from all over the world.

Furthermore, the chairs’ function of representation is the very same as during the Baroque era. They were not made for comfortable sitting or for endurance. Fully in tradition with high-end Baroque and Rococo, their most important function is pure representation and decoration. The failing construction was obviously of no importance. These chairs clearly show that in this case form was more important than function. They were props, representing the Prince’s knowledge of and for all things foreign and modern – suitable ornaments in his garden-kingdom with pagodas, tea houses and even a volcano (figures 21-22).

Figure 21 Pagode Gartenreich Dessau Wörlitz, Kulturstiftung Dessau Wörlitz.

Figure 22 Volcano Gartenreich Dessau Wörlitz, Kulturstiftung Dessau Wörlitz.
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Lois Warnow, conservation student
University of Applied Sciences Potsdam, Germany
l.warnow@yahoo.de

Notes
2 Compare figure 5, drawings number 2 and 6, with wallpaper on figure 3.
3 Identified using GC-MS (A. Fuhrmann, Hochschule für Bildende Künste, Dresden), FT-IR (C. Fuchs, Fachhochschule Potsdam) and RFA (J. Bartoll, Stiftung Preußische Schlösser und Gärten).
5 Büttner 2007, 34.

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• Figure 3: Messbild der Staatlichen Bildstelle Berlin 1926/27, Süd-Chinesischer Raum: Brandenburgisches Landesamt für Denkmalpflege und Archäologisches Landesmuseum; Negativnummer 30 c 24 / C 37 63, 25.
• Figures 4-5: Chambers, 1757, plates XIII and XX.
• Figure 7: Daniel Obenaus,
• Figure 14: Victoria and Albert Museum, London.
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• Figure 19-20a: Shixiang, 1990, pp. 53, 139.
• Figure 21-22: Kulturstiftung Dessau Wörlitz (KsDW), Heinz Fraßdorf.