

Lenné und Hermann Sello weitestgehend folgten. Mitgeteilt und kommentiert werden auch Skizzen für die Überbauung der Akropolis von Athen als königliche Residenz, für eine ideale Residenz sowie für das Schloss Orianda auf der Krim, wofür hinsichtlich der Akropolis die dem Prinzen (und späteren König) Johann von Sachsen, mit dem Friedrich Wilhelm eng befreundet war, in Aussicht gestellte griechische Königskrone, hinsichtlich Oriandas der Wunsch seiner Schwester, der Gemahlin des späteren russischen Kaisers Nikolaus I., den Anlass gab. In Bezug auf den Schlosskomplex Charlottenhof wird auf eine angeblich *untrennbare Einheit* von „Villa“ und den sogenannten Römischen Bädern gewiesen (S. 108), was entwurfsgeschichtlich, in gewisser Weise auch funktionell zutrifft; gestalterisch aber erscheinen beide als von einander separierte Planungseinheiten. Die „Villa“ ist stilrein klassizistisch, die „Römischen Bäder“ sind es nur zum Teil. Insgesamt liegt hier ein pluraler architektonischer Historismus vor, mit dessen „Eklektizismus“ man später die Architekturgeschichte der zweiten Hälfte des 19. Jahrhunderts begrifflich generell zu verunglimpfen trachtete.

Das fünfte Kapitel beinhaltet das tatsächlich Verwirklichte der mannigfachen Architekturfantasien Friedrich Wilhelms im Schlosskomplex Charlottenhof. Die beschreibenden Darstellungen aber beschränken sich weitgehend nur auf etwas Museologisches. Es fehlen Hinweise auf das „Funktionieren“ der Anlagen, als sie noch nicht förmlich musealisiert waren, z. B. auf Küchen, Heizungen (außer der beiläufigen Nennung eines offenen Kamins in der „Villa“ und eines nie zum Einsatz gekommenen kupfernen Heizkessels in den „Römischen Bädern“) sowie auf Abtritte mit deren Entsorgung der Fäkalien. Das sechste und das siebente Kapitel („Charlottenhof in der Familienkorrespondenz“, „Zusammenfassung“ (S. 238 ff. bzw. S. 274 ff.) bringen zwar manche interessante Ergänzungen, sind jedoch für das monografisch Thematisierte weitgehend belanglos.

– Das Stibadium im Paradiesgarten von Sanssouci – ein gleichsam aus einem antiken Haus herausgerissenes Atrium (1846, Ludwig Persius) – aber hätte mehr Aufmerksamkeit verdient, als nur beiläufig erwähnt zu werden.

Belastet wird der Text durchgehend mit der, wissenschaftliche Seriösität verletzenden maskulinen Verwendung des Begriffes „Portikus“ (Portikus ist weiblich wie lat. manus = Hand), mit der Identifizierung von Beleuchtung mit Beleuchtung, mit „besitzen“ statt „haben“ (als Vollverb), mit der Unentschiedenheit bei der Pluralbildung von „Denkmal“ (Denkmäler sind Standbilder und dergleichen, Denkmale sozusagen der Rest). Insgesamt gesehen, ist das Anliegen dieser Publikation als hochlöblich einzuschätzen; das Ergebnis aber ist unbefriedigend. Es ist bedauerlich, dass ein so spannendes Thema, um es einer größeren Leserschaft zu erschließen, in so ungeschickte Hände fiel.

Hermann Wirth

English summaries

Lutz Scherff/Ines Spazier

Architectural research and archaeology at the ,Oberes Schloss in Greiz‘, Thuringia

The discovery of the late mediaeval castle site among the main buildings of Greiz's Oberes Schloss, which has a predominantly Renaissance appearance, is a significant research result. Numerous findings clearly indicate that this was a site of importance beyond its region, a sign of great political power. The Weida stewards, officials at the court of Kaiser Friedrich I since the 1180s, made their claim to power throughout their lands highly visible through the construction of the castle, particularly in the use of brick, a material until then confined to imperial buildings. Its use may have been encouraged by Friedrich I's military campaigns in Italy. The castle was built in the final decades of the 12th century, indicating that Heinrich II von Weida was the builder.

Benjamin Rudolph

The architectural history of the keep at Schloss Tonndorf, Weimarer Land, Thuringia

Burg Tonndorf, some 16 km south-east of Erfurt, was built around 1200 by the archbishopric of Mainz. The oldest part of the castle is the cylindrical keep in the north-eastern part of the inner bailey. The tower shows three main stages of construction which can clearly be distinguished by the different materials used. The Romanesque tower shaft, some 17 metres in height, is characterised by a sloping section of embossed ashlar beneath the high entrance and a band of smooth ashlar beneath the primary wall crown; the outer shell is of often highly embossed ashlar while the inner is of smooth ashlar. The entrance storey has a hearth, toilet and bed niche, indicating a high standard of living. The tower may have been intended as a temporary residence for the Archbishop of Mainz or his representative in Thuringia. In the 14th century the tower was increased in height on two further

occasions after destruction in the war of the Thuringian counts (1342–1346) and seizure by the city of Erfurt and provided with a battlemented wall-walk and an inboard roof. The first increase (around 1350) shows rubble masonry with broadly grouted joints, the second (around 1360) rough ashlar with tong-holes. By the 16th century at the latest the wall-walk had been abandoned and the battlements covered over, and a new roof in the form of a bulbous cupola had been added. The roofing was again renewed at the end of the 17th century as a conical roof with a lantern and curved dome.

Hermann Wirth

Miners as castle builders

The most obvious link between mining and castle-building lies in the digging of wells with the installation of water-raising equipment, from the often remarkable dimensions of which we are forced to conclude that special mining expertise was used, for documentary evidence of the employment of miners on this is available only from the 16th century, when castles were being transformed into fortresses. In addition, Georgius Agricola, the 16th-century mining specialist, described *arces subterraneae* (underground citadels), albeit not as mines, but as anthropological habitats of all life underground (in his document *De animantibus subterraneis*, 1549). He meant rock or cave castles, where the underground elements form only the lesser part of the whole, although there are some notable exceptions. Whether miners were involved in their construction, or only quarrymen, stonemasons, monumental masons and the like, can no longer be substantiated. Miners were also linked to fortifications in a different way; not in building them, but rather in destroying them by undermining them, by driving galleries under the defensive walls in order to breach them, after the invention of gunpowder and mines. Documents from the 15th century and later record miners being conscripted or made available for this purpose. Recruitment of that kind was later unnecessary as miners were being drilled as members of regular sapper troops from the 16th century on.

Olaf Wagener

Wooden fortifications and structural elements – parallels from the Middle Ages to the 19th century and pictorial records

This article compares selected elements of the generally wooden fortifications in North America and New Zealand with castles and early modern fortifications in central Europe in order to highlight differences but also continuity of development and similar, frequently occurring fortification elements. While the 17th-century English forts in North America harked back to the architecture of the colonists' origins, from the 18th century increasingly geometrical fortifications were being built, but often exclusively of wood. Nevertheless, stone fortifications similar to castles were also built. Wooden blockhouses, built in great numbers in North America and New Zealand in the 18th and 19th centuries, showed, with their projecting upper storeys, raised entrances, loopholes and machicolations, close similarities to the wooden towers of mediaeval motte structures. Even the mediaeval principle of the hoarding, a wooden screen projecting from the battlements themselves, is revived in 19th-century Maori fortifications. Small wooden blockhouses incorporated into the curtain walls, sharpened stakes as obstacles in ditches and earth-filled baskets as temporary defensive structures – all these elements of mediaeval and early modern fortifications return to use or are still in use in the 19th century. This article therefore deliberately compares 19th-century photographs with mediaeval depictions to obtain a better representation of such fortifications.

Thomas Steinmetz

Earthquakes – realistic causes of damage to castles between the Main and the Neckar in the 14th century

The worst-ever earthquake in central Europe occurred on 18 October 1356; it laid waste to the city of Basel and is said to have damaged or even destroyed some 60 castles in the surrounding area. Aftershocks were felt in various parts of southwest Germany

during the following twelve months. These or other earthquakes are suspected of being the cause of damage to or the destruction of several castles between the Main and Neckar rivers: an 18th-century chronicle reports that the above earthquake also damaged Wildenberg castle in the Odenwald, recording that a 'circuitus' (wall-walk) had collapsed. Despite the fact that the castle is some 300 km from Basel, findings in the courtyard wall of Wildenberg's residential building do indeed point to earthquake damage. Moreover, major cracks in the lower structure of the keep there could well be earthquake-related. In the opinion of the author the findings confirm the account, the credibility of which had been questioned. Proof is more difficult to obtain in the case of the three castles Auerberg, Hirschberg and Dagsberg on the earthquake-threatened hill road between Frankfurt am Main and Heidelberg: The castles' keeps collapsed in the 14th century, but there was no record of any local feuds. A document from 1403 explicitly records that Auerberg's tower had 'fallen down' decades before. The castle, which was extensively damaged, was subsequently rebuilt to a different design. Documents from between 1313 and 1329 record that Hirschberg became a ruin. The remains of the castle were, like the ruin of Dagsberg/Jossa near Darmstadt, dominated by the rubble from the round keep, archaeological findings from which clearly indicate that it collapsed rather than fell into disrepair and ruin. Dagsberg was a ruin by the end of 1356 at the latest. There is no explanation for why three keeps known to be particularly solidly built were destroyed within a relatively short period in the same region. Since destruction by explosives was not possible in that period and there is no record of feuds, earthquakes are a highly likely cause.

A series of tremors which hit the northern Italian region of Emilio Romagna at the end of May 2012 also damaged a number of brick-built castles there. At two of these castles the keep-like main towers collapsed as a result of the first tremor, on 20 May 2012 (maximum magnitude 5.9 on the Richter scale), thus providing evidence that even a moderate earthquake of this intensity is capable of destroying such a solid tower.