



<https://publications.dainst.org>

iDAI.publications

DIGITALE PUBLIKATIONEN DES  
DEUTSCHEN ARCHÄOLOGISCHEN INSTITUTS

Das ist eine digitale Ausgabe von / This is a digital edition of

Mania, Ulrich – Tezer-Altay, Seçil

## **Pergamon, Turkey. Monument Conservation and Capacity Building. The work of 2020 and 2021**

aus / from

**e-Forschungsberichte des Deutschen Archäologischen Instituts, 2022-2, § 1–18**

DOI: <https://doi.org/10.34780/d33p-m3c6>

**Herausgebende Institution / Publisher:**  
Deutsches Archäologisches Institut

**Copyright (Digital Edition) © 2022 Deutsches Archäologisches Institut**  
Deutsches Archäologisches Institut, Zentrale, Podbielskiallee 69–71, 14195 Berlin, Tel: +49 30 187711-0  
Email: [info@dainst.de](mailto:info@dainst.de) | Web: <https://www.dainst.org>

**Nutzungsbedingungen:** Mit dem Herunterladen erkennen Sie die Nutzungsbedingungen (<https://publications.dainst.org/terms-of-use>) von iDAI.publications an. Sofern in dem Dokument nichts anderes ausdrücklich vermerkt ist, gelten folgende Nutzungsbedingungen: Die Nutzung der Inhalte ist ausschließlich privaten Nutzerinnen / Nutzern für den eigenen wissenschaftlichen und sonstigen privaten Gebrauch gestattet. Sämtliche Texte, Bilder und sonstige Inhalte in diesem Dokument unterliegen dem Schutz des Urheberrechts gemäß dem Urheberrechtsgesetz der Bundesrepublik Deutschland. Die Inhalte können von Ihnen nur dann genutzt und vervielfältigt werden, wenn Ihnen dies im Einzelfall durch den Rechteinhaber oder die Schrankenregelungen des Urheberrechts gestattet ist. Jede Art der Nutzung zu gewerblichen Zwecken ist untersagt. Zu den Möglichkeiten einer Lizenzierung von Nutzungsrechten wenden Sie sich bitte direkt an die verantwortlichen Herausgeberinnen/Herausgeber der entsprechenden Publikationsorgane oder an die Online-Redaktion des Deutschen Archäologischen Instituts ([info@dainst.de](mailto:info@dainst.de)). Etwaige davon abweichende Lizenzbedingungen sind im Abbildungsnachweis vermerkt.

**Terms of use:** By downloading you accept the terms of use (<https://publications.dainst.org/terms-of-use>) of iDAI.publications. Unless otherwise stated in the document, the following terms of use are applicable: All materials including texts, articles, images and other content contained in this document are subject to the German copyright. The contents are for personal use only and may only be reproduced or made accessible to third parties if you have gained permission from the copyright owner. Any form of commercial use is expressly prohibited. When seeking the granting of licenses of use or permission to reproduce any kind of material please contact the responsible editors of the publications or contact the Deutsches Archäologisches Institut ([info@dainst.de](mailto:info@dainst.de)). Any deviating terms of use are indicated in the credits.



## PERGAMON, TURKEY Monument Conservation and Capacity Building



The work of 2020 and 2021

**Istanbul Department of the German Archaeological Institute**

by Ulrich Mania and Seçil Tezer-Altay



e-FORSCHUNGSBERICHTE DES DAI 2022 · Faszikel 2

**Cooperation partner:** Bergama Chamber of Commerce (capacity building); Bergama Municipality (capacity building); Bergama Museum; General Directorate for Cultural Monuments and Museums of the Ministry of Culture and Tourism of the Republic of Turkey.

**Financial Support (capacity building):** Culture Office of the German Ministry of Foreign Affairs; Gerda Henkel Foundation, private funding.

**Head of project:** U. Mania, F. Pirson, S. Tezer-Altay.

**Team:** H. F. Çamlı, D. Erdem, E. İrgin, H. C. Kahya, I. Kemaller, J. Steiner, D. Suvacı, E. Yanık.

*Höhepunkt des Jahres 2020 war der Abschluss der Restaurierungsarbeiten in der Roten Halle, wo seit 2006 mehrere Projekte durchgeführt wurden. Außerdem wurden 2021 die Erhaltungsarbeiten an der östlichen Stützmauer des Gymnasiums abgeschlossen. Im selben Jahr wurde ein neues Projekt begonnen, das sich auf die einsturzgefährdeten Stützmauern auf der Theaterterrasse konzentriert. Außerdem wurden dringende Erhaltungsarbeiten im Asklepieion und an der Gotenmauer durchgeführt, da der Grad ihres Verfalls eine unmittelbare Gefahr darstellte. All diese Arbeiten wurden von Aktivitäten des Capacity Building begleitet, die seit 2019 mit großzügiger Unterstützung der Gerda Henkel Stiftung und des Kulturbüros des deutschen Außenministeriums zusammen mit verschiedenen lokalen Akteuren durchgeführt werden konnten.*

*Highlight of 2020 was the finalisation of the conservation activities in the Red Hall, where several projects have been conducted since 2006. Furthermore in 2021 we finalized, the conservational efforts on the east retaining wall of the Gymnasium. In the same year, a new project has started focusing on retaining*



1 Pergamon, Turkey. Red Hall. Southern temenos wall and two supportive buttresses after consolidation. (Photo: Ulrich Mania)

walls in danger of collapse at the theatre terrace. Besides this, urgent conservational works have been carried out in the Asklepieion, and at the Goths' Wall since the grade of deterioration created imminent danger. All these works were accompanied by a capacity building project that has been running since 2019 with generous supports of the Gerda Henkel Foundation and the Culture Office of the German Ministry of Foreign Affairs, together with various local stakeholders.

### Sanctuary of the Red Hall

- 1 The completion of work on the southeastern temenos wall of the [Red Hall](#) <sup>↗</sup> deserves a brief flashback after 14 years of reconstructional and consolidating measures in the sanctuary: A research program of the Red Hall, that was initiated between 2002 and 2006, created the conditions for multiple projects focused on the preservation and presentation of the extraordinary building complex of the Roman imperial era. The first step was the construction of a depot for the storage of finds and the restoration of the southern rotunda of the sanctuary as a museum space in which sculptural and architectural fragments are presented to visitors (2006–2009). This was followed by the reconstruction of one of the figures supporting the porticoes of the southern side courtyard. Here, in addition to the spectacular Egyptianized figure with a height of about eight meters. A section of the marble pavement of the courtyard floor was reconstructed (2010–2014). From 2013 to 2018, conservational work was also carried out by Turkish authorities and their subordinate agencies on the main structure of the sanctuary and its northern rotunda. The Pergamon Excavation was involved in these construction measures as an advisory institution.
- 2 During the period of the above-mentioned works, the south-eastern retaining wall of the ancient building complex was consolidated in several steps (Fig. 1). The stones that form the outer shell of the wall were mostly looted and had to be reassembled in order to ensure the stability of the wall. After this work was almost completed in 2019, the upper wall zones and the two buttresses leaning against the retaining wall were restored in 2020. Here, a total of 40 arch stones that were missing on the outer shell of the buttresses



2 Pergamon, Turkey. Red Hall. Addition missing archstones on the western buttress of the southern temenos wall. (Photo: Seçil Tezer-Altay)

had to be replaced, due to static concerns (Fig. 2). All new arch stones were manufactured as part of the stonemasonry training programme (see Capacity Building).

- 3 Thus, in 2020, a whole series of projects were completed, which were carried out in accordance with the aspects of didactic mediation and preservation of the structure. The Ministry of Tourism and Culture of the Republic of Turkey is currently planning the construction of an archaeological museum and visitor centre, east of the Red Hall. At the same area, the restoration work on the buildings of a 19<sup>th</sup> century tannery included in this concept has already been completed. The Red Hall is thus gaining importance for visitors coming to Pergamon, so that the architectural conservation measures of recent years can also be appreciated by a large public.

#### *The ›Goths' Walk*

- 4 Two areas at acute risk of collapse on the ›Goths' Walk had to be included in the work programme of 2020 on an unscheduled basis in order to end a hazardous situation. The endangered area was located on the west-southwest slope of the ancient city hill. From a historical perspective, the wall is of great importance for the understanding of the development of Pergamon, since it is the first military fortification after a phase lasting for centuries, during which such defensive structures were not necessary.
- 5 During a scheduled site visit in the winter of 2019/2020, it was noticed that a section of the wall posed an acute danger to the road that leads to the Acropolis and to the adjacent living quarters in the historical town of Bergama at the skirts of the hill. The loss of the outer wall shell here was not due to stone robbery, but to the fact that the wall had probably been built in great haste due to a dangerous situation. However, as a result the outer wall shell had been placed on the sloping rock, instead of being placed on a foundation, which later led to the slipping of the lower stone courses of the wall.
- 6 A major challenge here was setting up the construction site, which was far from the common paths of the city hill. Therefore, some of the building materials were transported by chutes to the places where they





3



4

3 Pergamon, Turkey. So-called Goths' Wall. Southwest section of the fortification after conservation measures are applied. (Photo: Seçil Tezer-Altay)

4 Pergamon, Turkey. Southern Rotunda, Asklepieion. Close look on the edge of the vault. The inner vault shell in particular has suffered a high degree of material loss. (Photo: Seçil Tezer-Altay)

were to be used. The defects in the wall, which was built of spolia and rubble, were closed carefully with a rough masonry of mortar and rubble (Fig. 3).

#### *Southern Rotunda, Asklepieion*

7 The decaying vaults of the structure have been taken into the conservation program in 2020. The Southern Rotunda is one of the imperial-period buildings in the sanctuary of the 2<sup>nd</sup> century A.D., which presumably served therapeutic purposes as part of the medical treatments performed in the [Asklepieion](#) <sup>7</sup>.

8 The basement floor of the Rotunda is covered by a vault system, that is formed by two concentric barrel vaults. This covering of the basement has already largely collapsed. Recently the preserved parts of the vault have become looser, especially at the edges by erosion (Fig. 4). In order to preserve the structure from further deterioration and to secure the visitors, the weakened edges of the vault had to be stabilized. For this purpose, in 2020, loose parts were carefully removed and then a wooden formwork was placed under the vault. On this formwork, the inner vault shell was subsequently reconstructed (Fig. 5). This work continued in 2021, focusing on remains of the vault, with a huge loss of the cohesive mortar. Here, over a length of approximately 20 m, the vault has been consolidated by filling the joints with lime mortar.

#### *Gymnasion*

9 Since a number of projects in the Gymnasion have started almost a decade ago, numerous spots in statically problematic condition have been consolidated. All these reinforcing measures have increased the resistance of the 2500-years-old building complex against conditions caused by the sloping terrain and weathering.

10 As a response to the unbalanced circulation of tourists at the ancient city of Pergamon, a visitor concept was developed in 2012 [1]. This concept offers a route, where visitors can experience the entire city hill along the ancient main street and finally reach the recent historical quarter of Bergama. Therefore, we also consider this concept as a contribution to the participation



5



6

5 Pergamon, Turkey. Southern Rotunda, Asklepion. Consolidated edges of the vaults and upper parts of the walls in the eastern part of the building. (Photo: Seçil Tezer-Altay)

6 Pergamon, Turkey. Gymnasion. Southeast retaining wall, which is restored as part of the stonemason training programme. (Photo: Seçil Tezer-Altay)

of the local population in tourism in [Pergamon](#)<sup>7</sup>. In the visitor concept the Gymnasion is one of the main attraction points. Therefore, and because of its cultural value as one of the main monuments of Hellenistic-Roman Pergamon, it received special consideration.

- 11 The focus of the works in the Gymnasion in 2021 was to finalize the ongoing conservational interventions on the southeastern retaining wall of the large building complex. Part of the works have been completed in the framework of the stonemason training program, in which trainees have prepared large-size andesite blocks to replace missing steps in the eastern entrance gate, and also for the retaining wall of the Gymnasion terrace (see Capacity Building). This wall was partly under threat of collapse, since a number of stones of the outer shell were missing, whereas remaining ones were partly loosened from the core of the wall. Along the restoration of this wall, a part of the ancient road has been uncovered from the former excavations' debris in order to be presented along the visitor route. The finalization of these works not only protects the remains of the Gymnasion, but also provides a more secure access and increases the attraction of the site (Fig. 6).

#### *Theatre Terrace*

- 12 The Hellenistic Theatre is located on the western edge of the highest plateau of the ancient city hill. Owing its reputation to sitting on a steep slope, the theatre itself covers a height of approximately 40 m, whereas the rest of the slope is terraced by walls built in different levels and stages. In 2020, the terrace walls were documented, after the damaged areas had gotten particular attention and it was called for action since the visitor route was directly threatened (Fig. 7).
- 13 On the retaining walls of the theatre terrace, three spots were identified to be restored. In 2021, a first collapsed wall section which is supporting the level of a visitor path was rebuilt. A great effort was necessary in order to set up the construction site, by building a road for a huge crane and collecting ashlar from a steep slope, which had fallen down from the retaining wall. All these actions took place in the middle of a touristic spot with respective cautions. After the wall was freed from the loose parts around the damaged area, the collected ashlar could be replaced on the wall (Fig. 8).





7



8

7 Pergamon, Turkey. Theatre Terrace. Collapsed part of the terrace wall, threatening the visitor path on top. (Photo: Ulrich Mania)

8 Pergamon, Turkey. Theatre Terrace. The terrace wall after restoration. (Photo: Seçil Tezer-Altay)

### Capacity Building

- 14 The monument conservation work at Pergamon was flanked by capacity building activities in a social context, between 2019 and 2021 (supporting institutions are acknowledged among the cooperation partners). The main objective of the project is to involve inhabitants of Bergama in the preservation of the common cultural heritage. As part of the program, stonemasonry training was carried out throughout each year [2]. Also, with a group of young, unskilled workers under the guidance of an experienced master builder, roofs of historic residential houses in Bergama's old town were repaired. The third project assisted the re-erection of a nearly collapsed historic building in the old town that formerly housed a small bakery and will be available for the beneficial use of the local community.
- 15 Within the stonemasonry training program, ten young, unskilled craftsmen from Bergama have been trained. As part of the program, they learned to work rough andesite or marble stones into dimensionally accurate ashlar, arch stones, or profiled blocks (Fig. 9). These worked stones were eventually used in various restoration projects in the ancient city. As a journeyman's piece, each graduate made a profiled building block from marble.
- 16 The aim of the roof repairs is to preserve 19<sup>th</sup> century dwellings in the neighborhood (Kale Mahallesi) below the city hill of Pergamon, and to involve the residents in the entire process of cultural preservation – starting from bureaucratic procedures of applying for a permit, to the execution and the completion of repairs. During the three years of the project, ten roofs have been repaired. The repairs encouraged the inhabitants of one of the saved houses to do further maintenance and consolidation work which resulted in receiving a local prize for protecting their historic living environment [3].
- 17 The establishment of a community centre (*Mahalle Evi*) for the residents of the neighbourhood in the historic quarter was another focus of the capacity building project. Starting point was the offer of the municipality of Bergama to assign an abandoned historical building to public benefit, in return for its comprehensive restoration. After the agreement between



9



10

9 Pergamon, Turkey. Capacity Building. Stonemason trainees cutting and dressing ashlar blocks for the consolidation of the buttresses of the Red Hall. (Photo: Ulrich Mania)

10 Pergamon, Turkey. Capacity Building. The old house was restored in order to function as a community house. (Photo: Ilgin Kemaller)

Pergamon Excavation and Bergama Municipality had been signed, the restoration could begin (Fig. 10). While the work was still in progress, an open forum was to be organized for the residents, to give them the opportunity to discuss possible functions of Mahalle Evi. However, due to the ongoing COVID-19 pandemic, meetings had to be avoided. Instead, a neighborhood survey was conducted. The result clearly showed a desire to use the house for various purposes, with a focus on artistic education for children. The result and the conditions of use were discussed with the responsible *Muhtars* (the elected head of a neighborhood), who will possibly be responsible for the house. The long-term goal is that the local community takes lasting responsibility for the house, for the benefit of the common good. The Pergamon Excavation keeps supporting this process with consultancy and public relations activities.

- 18 For the capacity building project, the Pergamon Excavation and Gerda Henkel Foundation have been awarded a prize by the Bergama Kültür ve Sanat Vakfı ([Foundation of Culture and Arts Bergama](#)<sup>↗</sup>). This prize has reflected the recognition and the appreciation of the project in the local society.

## References

[Bachmann 2014](#)<sup>↗</sup>

M. Bachmann, Excavation and Conservation. 130 Years of Restoration History at Pergamon, in: F. Pirson – A. Scholl (eds.), *A Hellenistic Capital in Anatolia*, Yapı Kredi (Istanbul 2014) 80–101

[Mania – Tezer-Altay 2020](#)<sup>↗</sup>

U. Mania – S. Tezer-Altay, Community Archaeology in Pergamon. A Short Report on Activities of the Pergamon Excavation of the German Archaeological Institute, in: A. Riedel – S. Winghart (eds.), *Archaeological World Heritage Sites. Transnational Conservation, Communication, Cooperation*, ICOMOS Hefte des Deutschen Nationalkomitees, 47–50



---

### *Endnotes*

[1] The visitor concept was created by Martin Bachmann (Bachmann 2014, 82, Fig. 2). About the capacity building project basing on the concept, see also Mania – Tezer-Altay 2020.

[2] The stonemason training is given by the local stonemason Selim Baskın, who has been working for the Pergamon Excavation for over 40 years.

[3] [House of A. Şaşmazer](#) <sup>↗</sup>.

## Authors

Ulrich Mania

German Archaeological Institute, Istanbul Department

İnönü Cad. 10

34437 Gümüşsuyu – Istanbul

Turkey

ulrich.mania@dainst.de

ORCID-ID: <https://orcid.org/0000-0001-9044-0146> ↗

ROR-ID: <https://ror.org/041qv0h25> ↗

Seçil Tezer-Altay

German Archaeological Institute, Istanbul Department

İnönü Cad. 10

34437 Gümüşsuyu – Istanbul

Turkey

secil.tezer@dainst.de

ORCID-ID: <https://orcid.org/0000-0002-1109-1476> ↗

ROR-ID: <https://ror.org/041qv0h25> ↗

## Metadata

Title/*title*: Pergamon, Turkey. Monument Conservation and Capacity Building.  
The work of 2020 and 2021

Band/*issue*: e-Forschungsberichte 2022-2

Bitte zitieren Sie diesen Beitrag folgenderweise/*Please cite the article as follows*: U. Mania – S. Tezer-Altay, Pergamon, Turkey. Monument Conservation and Capacity Building. The work of 2020 and 2021, eDAI-F 2022-2, § 1–18, <https://doi.org/10.34780/d33p-m3c6>

Copyright: CC-BY-NC-ND 4.0

Online veröffentlicht am/*Online published on*: 04.11.2022

DOI: <https://doi.org/10.34780/d33p-m3c6>

Schlagworte/*keywords*: Monitoring

Bibliographischer Datensatz/*Bibliographic reference*: <https://zenon.dainst.org/Record/003022244>