



*I wish you a  
fascinating visit  
to the Margravian  
Opera House!*

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*Bayerischer Staatsminister der  
Finanzen, für Landesentwicklung  
und Heimat*



*Wilhelmine of Bayreuth in pilgrim costume,  
Antoine Pesne, c. 1750*



*The façade of the Margravian Opera House was designed  
by court architect Joseph Saint-Pierre*



*Illusionistic painting in the north-east corner of the ceiling  
of the loge hall*

## The Margravian Opera House – UNESCO World Heritage site since 2012

The UNESCO World Heritage Committee included the Margravian Opera House in Bayreuth in the UNESCO World Heritage List at its 36th meeting, held in St Petersburg on 30 June 2012. It is a well-deserved honour: built between 1746 and 1750, the Opera House, with its wooden loge hall almost completely intact in the original state, is regarded as the world's most important and best-preserved example of baroque theatre architecture. The Opera House and its decoration represent an incomparable testimony to the courtly ceremonial and musical culture of the eighteenth century. The building was the joint achievement of two outstanding personalities: Giuseppe Galli Bibiena, the leading European theatre architect of his day, and the project's patron, Margravine Wilhelmine, sister of Frederick the Great. She was not only the artistic and business director of the court opera, but was herself also active as a playwright, composer and actress. As a 'masterpiece of

*Allegory of Fame on the baldachin of the court loge*

human creative genius' and an 'outstanding example of a type of building ... which illustrates a significant stage in human history', the Opera House meets two of the ten criteria (I and IV) set by the World Heritage Committee for inclusion in the World Heritage List. Its patron Wilhelmine, a music-lover, bequeathed to posterity an opera house that was able to rival the most important court theatres in Europe in the period when it was built. More than 250 years later, the Margravian Opera House in Bayreuth is the last building of its type that has survived in its original state – an exemplary model of the baroque court opera house as a genre. Nowhere else can the character of baroque opera be experienced so authentically as a total work of art encompassing all of the senses. The ceremonial architecture of the historic loge hall, constructed from wood and canvas, provides an impression of the original acoustics and an incomparable glimpse onto the stage of courtly prestige that decisively shaped the era of absolutism – a milieu that can otherwise only be reconstructed from written and pictorial sources. The inclu-

*Loge hall, with the court loge at the centre*

sion of the Opera House in the World Heritage List places this monument among the masterly cultural achievements of human history. At the same time, however, it also represents an obligation for later generations to ensure the best possible preservation of this legacy. The Bavarian Palace Administration, in close coordination with the Bavarian State Ministry of Finance, the Bavarian State Office for the Preservation of Monuments and Historic Buildings and the International Council on Monuments and Sites (ICOMOS), have decided on a comprehensive package of measures designed to guarantee the continuing existence and safety of the building for long-term usage appropriate to its protected status.

### Repair and restoration measures

As a unique monument of baroque theatre culture, the Opera House is intended to be more than just a museum; it is also to be used in the future in accordance with its original purpose as

*Dedication above the court loge*

a performance space for operas, concerts and guest performances. The repair and restoration measures thus have two objectives: substantial improvement of the conservation conditions, which is essential for long-term preservation of all the original components of the building, and adaptation of the building to meet the requirements of modern theatre and museum operations without endangering the original substance. In addition to restoration of the historic auditorium, extensive architectural repairs and complete renovation of the technical infrastructure are planned. Work started in October 2012 under the direction of the State Department of Planning and Building Control and with specialist supervision by the Bavarian Palace Administration's building department. The fully restored Opera House is planned to reopen in 2017 after a four-year construction period, costing an estimated € 18.88 million. In addition to opening of the building for sightseeing visits all year round as part of museum operations, performances consistent with the protection of historic buildings will again be possible in the summer months, from May to October.

*Loge gallery, with view towards the court loge*



## PROJECT PARTICIPANTS

Building contractor: Free State of Bavaria – Bavarian State Ministry of Finance  
 Conservation supervision: Bavarian Palace Department  
 Property administrative office: Bayreuth-Eremitage Palace and Garden Administration  
 Project management: Department of Planning and Building Control, Bayreuth  
 Architectural planning and construction supervision: P+ Architects, Bayreuth  
 Project coordination: DU Diederichs Project Management Ltd., Puchheim  
 Structural planning: Dr. Schroeter & Dr. Kneidl Ltd. Consulting Engineers, Weiden  
 Building research: Kohnert – Büro für Bauforschung, Bamberg and Dipl.-Ing. (FH) Peter Dresen, Bamberg  
 Building physics: BASIC Gesellschaft für Bauphysik Akustik Sonderingenieurwesen Consultance Ltd., Bayreuth  
 Fire prevention planning: hhpberlin Ingenieure für Brandschutz Ltd., Munich  
 Health and safety coordinator: HIG Hersbrucker Ingenieurgesellschaft für Baumanagement, Hersbruck  
 Director of restoration work: Martin Hess, Qualified Conservator, Munich  
 Electrical design: Burghart Engineers Ltd., Nuremberg  
 Heating, ventilation and sanitary planning: Rabenstein Supply Technology Consulting Engineers, Bischofsgrün  
 Stage equipment: Walter Kottke Stage Planning Engineers Ltd., Bayreuth  
 Surveying: Linsinger ZT Ltd., St. Johann im Pongau, Austria  
 Pollutant analysis: BEN Umwelt Ltd., Bayreuth

## ADMINISTRATIVE BODY RESPONSIBLE

Schloss- und Gartenverwaltung Bayreuth-Eremitage  
 Ludwigstraße 21 · 95444 Bayreuth  
 Tel. +49 (0) 9 21 7 59 69-0 · www.bayreuth-wilhelmine.de

The Opera House has been closed for restoration **since 2012** and will **remain closed until further notice**. An **information centre** has been set up in the Opera House to provide visitors with details about the building during the renovation work. Visitors are also able to see a high-resolution 360° simulation of the theatre, film reports about the renovation project and the Opera House, and an exhibition on the architect Giuseppe Galli Bibiena.

## INFORMATION CENTRE OPENING TIMES AND ADMISSION FEES

April – September: 9am – 6pm  
 October – March: 10am – 4pm  
 Admission: € 2.50/2.00 (adult/concessions)

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View from the stage before the narrowing of the proscenium, gouache by Gustav Bauernfeind, 1879



Photomontage showing restoration of the enlarged proscenium that was substantially narrowed in 1935–36



Findings showing the original colouring of the painting under the balcony of the northern trumpeters' loge



Balustrade of a loge, showing the original colouring following removal of the overpainting

### Restoration of the historical auditorium

The heart of the Margravian Opera House is its baroque auditorium. Its three semicircular tiers of loges represent a building within a building, and their wooden structure has been preserved entirely in its original state. The impression originally made by the interior was created by the colourful painting of the wooden architecture, and the restoration measures in the auditorium are focused on conserving this structure. A detailed preliminary examination showed that the original painted surface dating from when the Opera House was built has remained largely intact underneath extensive overpainting carried out in 1935–36. Considerable damage caused by poor air conditions, inappropriate conservation measures, overcoating and the use of wood preservative agents are now endangering the original substance. Following positive results from tests on sample areas for removal of the overpainting, which is in the meantime not only damaged itself but is also causing further damage, it was decided to carry out extensive removal of the overcoating. Following cleaning and stabilization of the original painting layers that will be exposed in this process, as well as judicious retouching, the interior will once again sparkle in its original colours as a brightly painted and splendid ceremonial hall. All of the new materials and design elements used, such as the floor surfaces, seating and lighting, will take the historical colour scheme into account while at the same time meeting the requirements of a modern theatre. Greater comfort and better sight-lines were borne in mind when planning the new seating, for example.

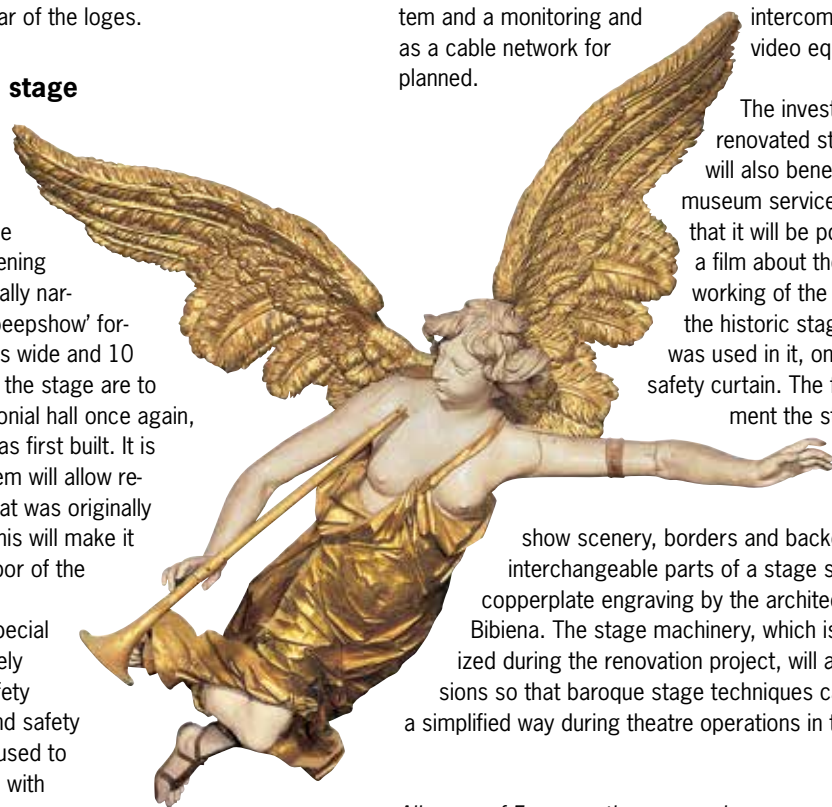
Additional seats will be provided in the stalls, and the seating in the loges will be reduced to the single row at the front. Standing frames will be installed behind this row and will also serve to protect the original painting at the rear of the loges.

### Structural renovation of the stage

Structural renovation of the stage and loge hall is also being carried out alongside the restoration of the original painting in the auditorium. The central aspect of this will involve widening the proscenium, which was substantially narrowed in 1935–36, from its current 'peepshow' format to its original size of 13.5 metres wide and 10 metres in height. The auditorium and the stage are to be combined to form a single ceremonial hall once again, as they did when the Opera House was first built. It is intended that a mobile platform system will allow reconstruction of the platform stage that was originally present over today's orchestra pit. This will make it possible to temporarily extend the floor of the stage into the auditorium. The stage equipment represents a special challenge, as it needs to be completely replaced in order to meet today's safety standards and occupational health and safety directives. Half of the manual hoists used to move the scenery are to be replaced with machine hoists.

The existing stage lighting will be extended and partly renovated. The old halogen spotlights in the hall will mainly be replaced with LED spotlights, which emit less heat. A sound system and a monitoring and video equipment, as well as a cable network for intercom system, are also planned.

The investment required for renovated stage equipment will also benefit the building's museum services. It is envisaged that it will be possible to project a film about the history and working of the Opera House, and the historic stage equipment that was used in it, onto the new iron safety curtain. The film will supplement the static stage set, which during normal museum operations will show scenery, borders and backdrops (the various interchangeable parts of a stage set) based on a copperplate engraving by the architect Carlo Galli Bibiena. The stage machinery, which is to be modernized during the renovation project, will also allow extensions so that baroque stage techniques can be simulated in a simplified way during theatre operations in the future.



Allegory of Fame on the proscenium

### Preventive conservation using modern building services

Long-term preservation of the wooden architecture of the loge hall and stage and their original painted surfaces will only be possible if there are stable air conditions. To ensure that this is possible even during events with audiences of more than 500 people, a sophisticated approach to air conditioning has been developed on the basis of a three-dimensional simulation of the air conditions in the hall, with 16 million virtual detection points. The very latest technology is being used during renovation of the heating, ventilation and sanitary facilities in order to implement this approach. In the stalls, a new type of ventilation flooring will be used, allowing conditioned air (with controlled humidity, etc.) to flow into the auditorium evenly and slowly through 1.5 million perforations without creating any draughts or disturbing noises – based on the principle of displacement ventilation. To prevent dehumidification of the indoor air due to condensation on the external walls, the temperature in the corridors around the loge hall will be controlled using heating pipes laid under the plaster at the base of the exterior walls and window embrasures. One of the major reasons why the Opera House has survived is that it was spared from the theatre fires that often irreparably destroyed similar buildings in the baroque period. Detailed fire prevention planning is intended to ensure that this continues to be the case. Emergency stairways, fire exits and fire walls will be modernized to meet today's safety standards in accordance with conservation requirements. In addition, extensive rapid fire detection and extinguishing systems are to be installed. In the roof space, for example, a modern high-pressure mist firefighting system will allow any fires to be extinguished quickly with minimal amounts of water, to prevent any further damage.

# Margravian Opera House Bayreuth

## Repair and restoration

