

As built survey and research of historical buildings with MonuMap and PhoToPlan

The digital glass hall

Shedding light on the history of glass hall

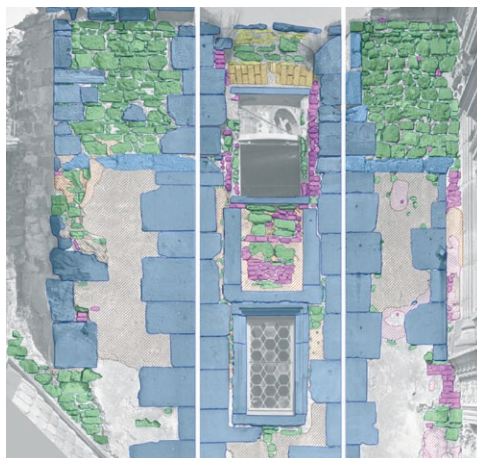
The Heidelberg Castle is one of the most popular cultural monuments in Germany. Tourists from around the world flock to the castle for its enchanting renaissance style structure. Today, it remains one of Germany's most beautiful ruins. The complex dates from the 13th century. Most of the visible parts originate mainly from the 15th to the beginning of the 17th century. Throughout the castle's history, a phase of multiple destructions occurred which can be traced back to the late 18th century.

The castle was rediscovered years later in ruin and eventually a reconstruction initiative ignited between preservationists. During this time of discussion a "castle construction office" was established under the direction of Julius Koch and Fritz Seitz. It was Koch and Seitz that were responsible for drawing up a very detailed building survey of the complete castle complex.

One reason for the survey was the static-constructive damages, which strongly necessitated building measures. The ultimate goal though, to once again preserve the glass hall into full working condition.

Due to their extraordinary quality of work, the historic plans of Koch and Seitz built the basis for the planning. The scanned floor plan which had been rectified, was digitized inside CAD and updated according to the current on-site as-built. Connected photo plans were generated of all walls of the glass hall. They served as a mapping base for the building's historic restoration analysis. The on-site mapping will be done conventionally on a scaffold with colored crayon on paper.

The mappings were digitally processed and organized with MonuMap in the CAD system. With the push of a button, all collected information is linked into a single project and a variety of thematic plans can be generated. The mass data of all mapped objects will be available for further analysis. As a result, all plans and maps will be available in AutoCAD and therefore may be used by all parties in an organized fashion.



The concept of MonuMap to be able to draw, rectify and map in a consistent system has convinced us. The next step will be, to digitally map with MonuMap on laptops on site, in order to skip the intermediate step of changing the conventional plans into digital plans.

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Task

Survey and feature documentation for planned restoration

Customer

*Regional board Stuttgart,
State office of preservation
of historic monuments
Berliner Straße 12
73728 Esslingen
Germany*

Period

Since 2005

Results

*Digital
as-built documentation*

Advantages

*Efficient transfer of clear
CAD plans and mappings
to planning and research
partners*

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