Design Principles in Late-Gothic Vault Construction - A New Approach Based on Surveys, Reverse Geometric Engineering and a Reinterpretation of the Sources

From 2012-02-01 to 2017-07-31, closed project

Project details

<table>
<thead>
<tr>
<th>Total cost:</th>
<th>Topic(s):</th>
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<tbody>
<tr>
<td>EUR 1 091 160</td>
<td>ERC-SG-SH5 - ERC Starting Grant - Cultures and cultural production</td>
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<td>EU contribution:</td>
<td>Call for proposal:</td>
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<td>Coordinated in:</td>
<td>Funding scheme:</td>
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<td>Germany</td>
<td>ERC-SG - ERC Starting Grant</td>
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Objective

The project is dealing with the study of the design of Late Gothic vaults by correlating the existing knowledge with surveys performed on existing structures. The aim is to gain a better understanding of how the design of these highly complex structures was performed, searching in particular for a possible connection between geometric design of the vaults, structural design and architectural proportion systems.

While until now the knowledge is mainly based on sources and in some aspects appears inconsistent, the innovative approach of the project consists in formulating hypotheses on the design directly from the built artefact, with a working method not common in surveying until now.

On this background, the current interpretation of the sources will be revised. Moreover, a relevant but still underestimated source will be edited and studied. The methodological problems regarding the interpretation of the geometric features of surveyed buildings and the interpretation of design processes in architecture will be discussed.

Related information

- **Results Packs**: Heritage at Risk: EU research and innovation for a more resilient cultural heritage
- **Result In Brief**: New insights into how the great Gothic vaults were constructed helps restorers of the future
- **Report Summaries**: Final Report Summary - REGOTHICVAULTDESIGN (Design Principles in Late-Gothic Vault Construction - A New Approach Based on Surveys, Reverse Geometric Engineering and a Reinterpretation of the Sources)
- **Top Stories**: ERC Stories - Reverse engineering in late Gothic vaulted ceilings
**Principal Investigator**

David Fritz Eryk Wendland  
Tel.: +49 351 3139855  
Fax: +49 351 46335850  
E-mail

**Host Institution**

TECHNISCHE UNIVERSITAET DRESDEN  
HELMHOLTZSTRASSE 10  
01069 DRESDEN  
Germany  
EU contribution: EUR 1 091 160

**Activity type:** Higher or Secondary Education Establishments  
**Administrative contact:** Friederieke Noack  
Tel.: +49 351 463 42191  
Fax: +49 351 463 39742  
Contact the organisation

**Beneficiaries**

TECHNISCHE UNIVERSITAET DRESDEN  
HELMHOLTZSTRASSE 10  
01069 DRESDEN  
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**To know more**

http://erc.europa.eu/

**Subjects**

Social sciences and humanities

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