

## P27. The Visualization of Uncertainty as an Essential Bridge Between the Past and the Future

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Cultural heritage is typically tangible or intangible. But this is not the end of the story. For even in the field of material heritage such as architecture, there is something immaterial, namely the architectural thought, the design, the original intention, of which the building bears witness as a relic, but which represents an independent value, not only as cultural heritage but also as a living element in the inventory of the creative discipline of architecture today. Of course, we are dependent on the surviving testimonies, but nevertheless, sciences such as that of archaeology provide us with precisely this architectural intention, admittedly only as a hypothesis, but all the more universal in its validity. If only there were not this uncertainty, as it is always inherent in every hypothesis, but also in every science.

Nevertheless, there are often clear indications of plausible hypotheses. Examples are ancient foundation walls, whose buildings can certainly be deduced from the theory of proportions of antiquity. Even with this, however, nothing more than the structure is recorded. Completely unknown are the individual building elements. It will never be possible to recover the surface texture of a lost stone. We refer to this ambivalence, the certainty of form versus the unknowability of surface, as an aspect of uncertainty in knowledge. Uncertainty can also affect the form itself. Foundation walls of a building which by its typology must necessarily have possessed openings, often do not reveal their position. Here, then, the uncertainty consists of the fact that the windows' position is unclear. All such uncertainties are common for verbal communication, but not at all for its visual translation.

There are precedents for many of these uncertainties, which have been developed in cooperative projects with research institutions, cultural institutions, and museums. The great challenge is to generate, instead of pure information, such representations that, despite the uncertainty, make a genuine architectural statement, i.e., that can be grasped as architectural design models' cultural heritage. Within this debate, the aim of this session is to bridge the gap between tangible and intangible architectural heritage by means of historical uncertainty. We particularly welcome topics based on work that has used visualization to explain this dichotomy.

**Keywords**: Knowledge; Uncertainty; Visualization; Virtual photography; Abstraction.

Thematic lines: Heritage Communication; Interdisciplinarities.













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