Structural reinforcement of archaeological remains. Studies and design interpretations

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The special conservative care required by archaeological remains often conflicts with the peculiar structural needs of mutilated buildings; this usually leads to compromises that in the face of slightly less safety allow the composition and texture of the structure to remain unaltered or minimally altered.

Some design examples describe how projects can take the form of reinforcement or structural caution while safeguarding the value of the archaeological image.

One example refers to a proposal currently in progress for the site of Pompeii, specifically a portion of the defensive walls where the goal was to minimise project highlighting while maximising the reversibility of metal additions.

A second theme concerns four buildings in the Roman Forum, where seismic reinforcement precautions have been prepared, showing different outcomes, i.e. the Palace of Domitian, the Temple of Vesta, the "Museeto" and the Temple of Antoninus and Faustina.

Surrounded by remains of classical antiquity, the project for the Vulci Bridge, repaired after the devastating results of a river flood, shows aspects that creep into landscape design.

A further area concerns a series of preventive works in the ancient, abandoned city of Monterano, near Rome. Here, the works have taken differential modalities, from mimetic consolidation to partial reintegration.

Finally, a few references are made to the Claudian aqueduct, as the works are still in progress. Here, despite the repetitiveness of the construction, the distinct identity of each of the sections studied, showing various structural criticalities, require ad hoc responses and interpretations which have been outlined.