

# Heritage for a Sustainable Future



Pushing sustainability in architecture forward



## Enhance Connections for Sustainable Futures

EuroTeQ Collider 2024 – [ja.tum.de/ja/euroteq](https://ja.tum.de/ja/euroteq)



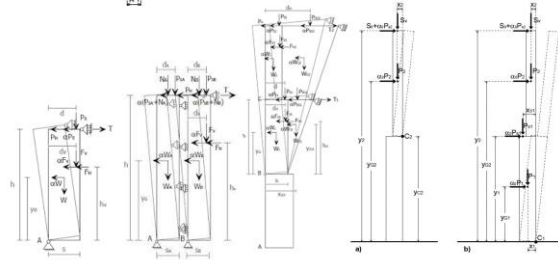
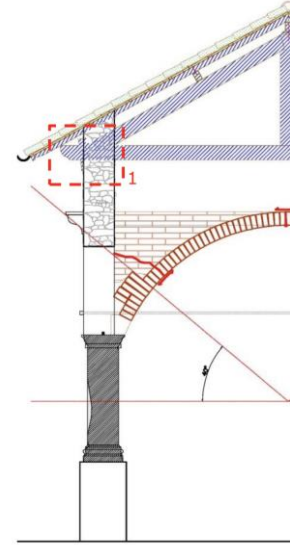
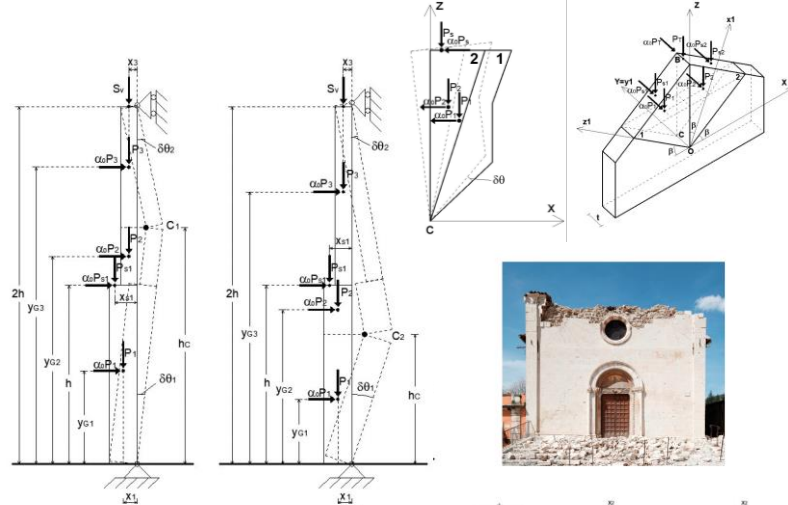
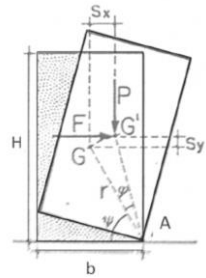
Co-funded by the Erasmus+ Programme of the European Union



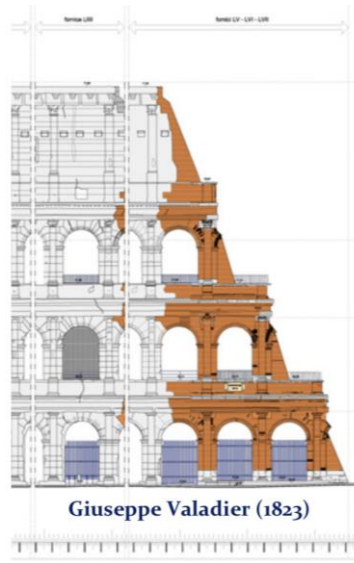
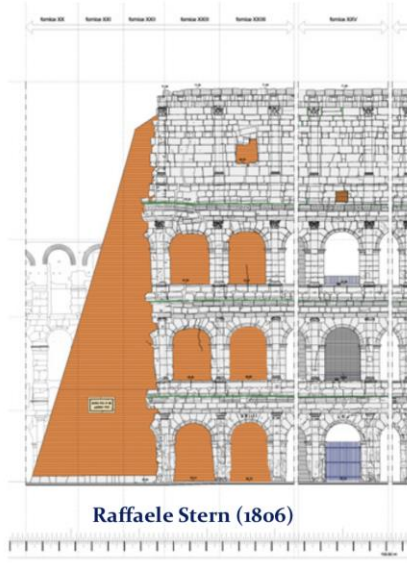
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Category	Material	Description
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06	Dipinto murale	...
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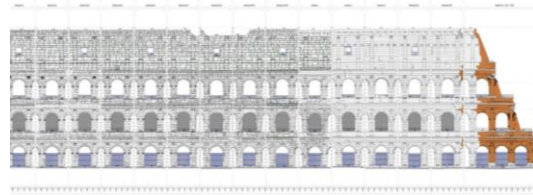
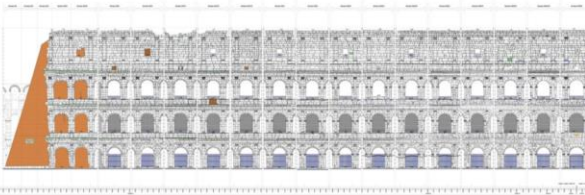
# Chair of Restoration, Art technology and Conservation science



Text written by Valadier

(1821)

Narrazione artistica dell'operato finora nel restauro dell'Arco di Tito : letta nell'Acad. Romana di Archeologia li 20. Dec. 1821 by Valadier



# Heritage for a Sustainable Future

## Pushing sustainability in architecture forward

### Problem definition:

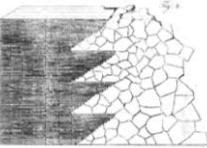
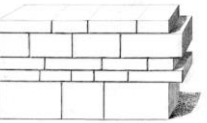
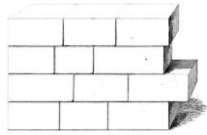
How can we push sustainability in architecture forward so to provide **a sustainable future to our existing heritage**, all the while **learning from our existing heritage for progressing in the future** so to conceive more resilient built environments able to resist **unexpected catastrophic events**?

### Challenge:

**Conceiving increasingly and more sustainable construction systems**, which are able to adapt to our environment.

This is so to meet the needs of our planet in **CO2 reduction** by the help of **natural materials** able to build solid constructions in a great variety of forms.

This knowledge is intended to be spent both in the **reactivation of existing architectural heritage** that is lacking integrity and/or seeking for a new purpose as well as into the **strengthening of buildings so to withstand earthquakes**. Further, this is also intended push sustainability forward in the design of **new architecture** by exploring new horizons in the design of **masonry constructions** and city landscapes.



© Valadier, 1831-1832. Eteuferio Catesi, Giacomo Rocchi, e Accademia di San Luca. L'architettura Pratica Detata Nella Scuola E Cattedra Dell'ingegnere Accademia Di S. Luca. Roma: Società Tipografica, Tom. III



# Heritage for a Sustainable Future



## Pushing sustainability in architecture forward

### Desired Impact:

To reactivate existing architectural heritage by adapting this to modern uses of spaces as well as favouring processes of **critical re-appropriation of tangible and intangible heritage** so to reinsert existing building that is also lacking integrity – due to **man made or natural catastrophic events** - into the daily life of people.

This will help to built up more resilient societies able to progress in the future by further satisfying the ever-increasing need for housing of our modern societies, all the while respecting our planet.

### Relevant considerations for the challenge/theme:

This educational format **will not deal with** the design of new buildings and their safety assessment from their foundation system to the roof top. **Rather, this will focus on the design of works of addition to existing buildings and the assessment of their stability to seismic actions.** A particular deal of attention will be paid to the **design of masonry patterns** and how these are influencing the resistance of wall to actions.

