



7ICCH

Seventh International Congress on Construction History

12 - 16 JULY, 2021

LISBON, PORTUGAL

Thematic Session

TS9. Can Engineering culture be improved by construction history?

Chaired by: *Annette Bögle* (HafenCity Universität, Hamburg, Germany); *Ignacio Payá-Zaforteza*, (Universitat Politècnica de València, Spain) and *Nicolas Janberg* (Structurae, Berlin, Germany)

Contemporary engineering education rarely includes construction history in its curriculum, and if so it is either as an elective or a side note, while architectural history is considered a necessity in the education of architects. This can result in a lack of awareness of engineers about their own profession's history, an entirely uncultured approach towards existing and historical structures, as well as the inability to draw inspiration from or critically interpret the work of past or even contemporary builders.

Within this context, this session will include papers and presentations to show:

- (1) how construction history is a key tool to promote a more passionate, conscious and cultivated engineering profession;
- (2) case studies where the contribution of engineering to preserve the historical heritage was highly relevant;
- (3) case studies where the knowledge of history was important because it provided significant information or inspiration for a modern construction.

Climate change is forcing humanity to build in more sustainable ways. Maintaining and adapting existing structures (buildings, bridges, etc.) for a different use or stronger loads is an inherently sustainable goal which, unfortunately, is often discarded as a concept by engineers and owners as a replacement structure seems more economic. Educating engineering students and practitioners in construction history and sensitizing the engineering community for the cultural value of historical structures could help alleviate this by improving awareness and respect for what has been designed and built by preceding generations of engineers, on one hand. On the other hand it could improve the understanding of the materials and processes that were used to create these structures and thus making it easier to maintain and adapt them economically.

