

**Zero Waste Church
Education for Circular Reuse of Religious Buildings**

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Publication date

2023

Document Version

Final published version

Published in

As Found International Colloquium on Adaptive Reuse

Citation (APA)

dos Santos Gonçalves, J. M., Quist, W. J., & Ioannou, O. (2023). Zero Waste Church: Education for Circular Reuse of Religious Buildings. In N. Augustiniok (Ed.), *As Found International Colloquium on Adaptive Reuse: Book of Abstracts* (pp. 88-89). Hasselt University.

Important note

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As Found

International colloquium on adaptive reuse

5-7 September 2023

📍 Hasselt & Antwerp, Belgium

Hasselt University &
Flanders Architecture Institute

BOOK OF ABSTRACTS



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IMAGE: Castelvecchio Museum Verona by architect Carlo Scarpa (cc) presso Archivio Paolo Monti

AS FOUND INTERNATIONAL COLLOQUIUM ON ADAPTIVE REUSE
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BOOK OF ABSTRACTS

Organized by the Faculty of Architecture and Arts of Hasselt University and
Flanders Architecture Institute

5-7 September 2023 in Antwerp & Hasselt

Conference Chairs and editors: Bie Plevoets, Hülya Ertas, Sofie De Caigny

Joana dos Santos Gonçalves is a researcher on circularity in the built environment at VITO (Belgium). She graduated as an architect from the School of Architecture of University of Minho (Portugal) in 2014, with a master thesis on the contributions of vernacular architecture for sustainability. In 2022 she concluded her PhD on “Beyond good intentions: building passport for sustainable conservation”, funded by FCT. Between 2019 and 2021 Joana was a guest PhD in the UNESCO chair on Heritage and the Reshaping of Urban Conservation for Sustainability, and between 2020 and 2022, she was a lecturer on Heritage and Sustainability in the Faculty of Architecture and the Built Environment, at TU Delft.

Wido Quist is Associate Professor in Heritage & Technology and leading the section Heritage & Architecture at TU Delft (The Netherlands). He is Secretary General of Docomomo International, Chair of Docomomo Netherlands. Since 2022 he is – together with Uta Pottgiesser - editor in chief of the Docomomo Journal. His research and teaching centers around the preservation and adaptive re-use of the built legacy of the 20th century, connecting the specialist disciplines. Intertwining Values, Design and Technology, he is an expert on the crossing between historical knowledge of modern building materials and strategies for conservation and re-use.

Olga Ioannou is Assistant Professor at the Department of Architectural Engineering and Technology of TU Delft. She works for the chair of Building Product Innovation. She is in the steering committee of the Circular Built Environment Hub at TU Delft and a member of the Architectural Facades & Products (AF+P) group. Her expertise lies in architectural education, network learning and knowledge creation within the extended communities of knowledge; this is why she is now actively involved in integrating circularity in BK curricula. Olga is particularly interested in the systemic character of circularity and how it challenges the established processes for the production of the built environment, stakeholder relations and societal values.

ZERO WASTE CHURCH: EDUCATION FOR CIRCULAR REUSE OF RELIGIOUS BUILDINGS

Joana dos Santos Gonçalves, Wido Quist, Olga Ioannou
TU Delft, The Netherlands

While heritage conservation is usually associated with the action of “keeping”, circular approaches are often seen as focusing on flexibility, and disassembly. Both share the common goal of using existing resources efficiently and avoiding waste. The conservation of cultural heritage is a complex issue that requires a cautious balance between maintaining heritage values associated with tangible and intangible attributes and managing change to answer the challenges of future use. On the one hand, mining the urban environment for material resources, risks irreparable damage to the historic urban fabric. On the other hand, salvaging components from heritage buildings and re-purposing them can be a sustainable strategy to extend a buildings’ lifetime and minimize construction waste. In the case of buildings threatened by demolition, as several churches in the Netherlands, salvaging components might even be the only way to keep (some) of this heritage alive. In these cases, circular design approaches need to go beyond inventorying materials and components: the traceability of values and meanings to the involved communities become key factors driving reuse strategies. The Zero Waste Church graduation studio at TU Delft provides architecture students with the opportunity to discuss how heritage values might shift to integrate sustainability as a value to preserve. The students selected cases based on three key circularity principles: refuse, reduce, and value retention. By choosing vacant buildings, the students were prompted to refuse the notion of building new and to value space as a limited resource. Some of the selected buildings faced demolition, resulting in projects that have the potential to reduce material waste. Through a heritage value assessment, the students demonstrated that despite being under threat, these heritage buildings still add value to local communities. Students explored creative approaches to redesign from values related to tangible and intangible attributes. This approach aims at instigating awareness and transformative attitudes towards the built environment. Individual students approach the challenge from different perspectives, contributing to a multitude of readings and strategies to deal with the complexity of bridging heritage and circularity. The implementation of the first edition of the Zero Waste studio faced challenges when conflicts arose in determining what to keep, add or transform. A key learning from this experience is that circularity needs to be an integrated part of a design project from the earliest stages. While a fully zero waste heritage may be an unachievable ambition, the aim is to trigger reflection and adopt an explorative approach towards a project.

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ISBN: 9789089130839

Depot number: D/2023/2451/ 70

Acknowledgement

The organization of this international colloquium was made possible through the generous financial support of the DIOS Incentive Fund (UHasselt), the Doctoral School of Behavioral Sciences and Humanities (UHasselt), and the Research Foundation Flanders (FWO), as well as the invaluable practical assistance provided by the Faculty of Architecture and Arts of UHasselt and the Flanders Architecture Institute. Our heartfelt appreciation goes out to all our esteemed colleagues whose dedicated efforts contributed to the seamless execution of this event.

This colloquium is organized as an extension of the exhibition *As Found: Experiments in Preservation* by the Flanders Architecture Institute. Curated by Sofie De Caigny, Hülya Ertas and Bie Plevoets, the exhibition is on show at De Singel, Antwerp, from 6 September 2023 to 17 March 2024. The exhibition is accompanied by a catalogue, available in English (ISBN: 9789492567321) and Dutch (ISBN: 9789492567338).

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