ARCHITEKTURA WIELORAZOWA

Dekonstrukcja, ponowne użycie i recykling materiałów jako ekologiczna alternatywa dla tradycyjnego budownictwa

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Streszczenie w języku angielskim/English summary

A dissertation titled "Reusable architecture: deconstruction, reuse, and material recycling as an ecological alternative to traditional construction" addresses the implementation of the Circular Economy (CE) concept into architectural practice. Despite declarations made by cities, regions, and countries and the incorporation of CE principles into European Union and national documents, the actual transformation from a linear to a circular model is progressing slowly and encountering numerous barriers, particularly in the fields of architecture, urban planning, and the construction industry.

Observing the processes of CE implementation in architecture at various stages of advancement and participating in the design and construction process as a co-author allows for the identification of grassroots and top-down initiatives, activators, and barriers. The aim of this work is to investigate the implementation of CE in architecture, delineate the processes that lead to it, and attempt to outline possibilities for its improvement.

In the initial stage, comprehensive analyses of source texts were conducted, starting from theoretical foundations, through international and national documents, to sources related to practical applications. Subsequently, concepts, phenomena, actions, and strategies relevant to the implementation of CE in architecture were explained. Cases of implementation at macro, meso, and micro scales were analyzed, including projects in which the dissertation author participated. The knowledge and experiences gathered provided a solid foundation for the development of guidelines for designers and models for effective implementation in the design and construction process. The work also highlights promising pilot, conceptual, and research projects within the chosen research area.

The conducted study and analyses confirm the thesis that the Circular Economy concept constitutes a significant determinant of the development of contemporary architecture and urban planning in the face of the challenges of sustainable development. Unfortunately, the idea is currently not adequately supported by top-down initiatives, making its practical, technical, and financial aspects complex when applied.