

IC - (21356) - PREFAB A MORE SUSTAINABLE SOCIETY—PREFABRICATED ARCHITECTURE PRACTICE IN CHINA IN GLOBAL CHALLENGES

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Background and objectives

A new round of scientific and technological revolution and industrial transformation is gaining momentum around the world, while extreme events represented by the Covid-19 outbreak force us to rethink issues like people-environmental relation and development-sustainability balance. This is such a global challenge every country and every field could not escape.

Process and methods (for empirical research)

This paper selects projects of several Chinese architects such as Jingxiang Zhu and Philip Yuan to expound "why we prefab", "how to prefabricate" and "what prefabrication achieves" through comprehensive analysis of project background, design concept, construction method and completion effect.

Main results (or main arguments in the case of critical reviews)

These representative cases illustrate the application of prefabricated architecture in four scenario of rural vitalization, urban regeneration, emergency recovery and temporary construction in China, showcasing its four characteristics of lightness, precision, swiftness and flexibility to prove its contribution and potential in building a more sustainable society.

Implications for research and practice/policy | Importance and originality of the contribution

Starting from "prefabrication", which is still in its infancy in China, the research describes the new development of Chinese architecture in the face of global challenges to reflect the efforts made by the whole society in addressing sustainability. In addition, hot topics such as discipline boundary extension of "Architecture" and role transformation of "architects" are probed through the discussion of prefabricated "architecture".

Palavras-chave : prefabricated architecture, sustainability, application scenarios, main characteristics