

International Conference on

## NATURAL HAZARDS AND DISASTER MANAGEMENT

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**Doomsday rehearsal: Architecture for pre-disaster learning and 2020 Tokyo Olympics the year of disaster prevention global classroom****Choon Yong Heng**

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**Statement of the Problem:** Natural disaster raises awareness in contemporary capability of reacting contingencies. Japan is one most hazardous place due to its geological context. Research looked into Japanese disaster prevention culture, risk management experience and the integrity of disaster prevention facilities. Research found that Japan is successful in managing risk because of their pre-delivery of the BOUSAI disaster safety code; knowledge that reaching public consensus so that their citizens have less contradictory decisions when dealing contingencies. However, disaster prevention architecture still performs in a conventional approach. Research has aligned two strategies, BOUSAI Disaster Prevention and Tokyo Olympic Urban Development & Planning Guide. The purpose of this is to examine the feasibility of adopting education and experiential architecture in disaster prevention use.

**Methodology & Theoretical Orientation:** Research mapping, visual diagrams, and architectural composite drawings are utilized to conduct the design ideas. Researcher has foreseen the architectural capability to deliver great user experience in DRR strategy and utilized 2020 Olympic year as the opportunity to disseminate the BOUSAI disaster prevention ideology. Architecture is the medium to translate this prestige knowledge and introduce to the international audiences.

**Outcome:** The visual package has led the conversation of aligning Tokyo Olympic with BOUSAI to discuss over five key aspects of this alignment. It is BOUSAI re-introduction, DRR research core, immersive simulations, post-disaster living scheme, and future method of natural preservation. Researcher demonstrates BOUSAI in the transformation from written intellectual to spatial experiences. Comparative images and diagram will also be provided to show the degree of architecture contribution.

**Conclusion & Significance:** Disaster simulations and pre-disaster rehearse could strategically succeed in reducing disaster risk. Research expect that Tokyo Olympic is in another way to take disaster prevention education into a deeper level and globalize disaster prevention research collaboration. It also fulfills the scheme of a sustainable Post-Olympics strategy.

**Biography**

Choon Yong Heng is an Architecture Enthusiast and young Architecture Graduate from the Curtin University (2017) and currently practicing at Hassell Studio, Perth. He believes that great architecture makes impactful experiences, even shapes user's behavior on and off from the daily context. He always looks to participate in conversations on community and environmental series. His Master's thesis expressed his concern about catastrophic contingencies reaction in the crowd. He is looking forward in more extensive research and have the intention to deliver a communication package before the year of 2020 for the Japan Department of Risk Management and Tokyo Olympics Organization Committee.

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