

Crisis In/Out, Emergent, and Adaptive Urban Organisms

Authors : Alessandra Swiny, Michalis Georgiou, Yiorgos Hadjichristou

Abstract : This paper focuses on the questions raised through the work of Unit 5: 'In/Out of crisis, emergent and adaptive'; an architectural research-based studio at the University of Nicosia. It focusses on sustainable architectural and urban explorations tackling with the ever growing crises in its various types, phases and locations. 'Great crisis situations' are seen as 'great chances' that trigger investigations for further development and evolution of the built environment in an ultimate sustainable approach. The crisis is taken as an opportunity to rethink the urban and architectural directions as new forces for inventions leading to emergent and adaptive built environments. The Unit 5's identity and environment facilitates the students to respond optimistically, alternatively and creatively towards the global current crisis. Mark Wigley's notion that "crises are ultimately productive" and "They force invention" intrigued and defined the premises of the Unit. 'Weather and nature are coauthors of the built environment' Jonathan Hill states in his 'weather architecture' discourse. The weather is constantly changing and new environments, the subnatures are created which derived from the human activities David Gissen explains. The above set of premises triggered innovative responses by the Unit's students. They thoroughly investigated the various kinds of crisis and their causes in relation to their various types of Terrains. The tools used for the research and investigation were chosen in contradictory pairs to generate further crisis situations: The re-used/salvaged competed with the new, the handmade rivalling with the fabrication, the analogue juxtaposed with digital. Students were asked to delve into state of art technologies in order to propose sustainable emergent and adaptive architectures and Urbanities, having though always in mind that the human and the social aspects of the community should be the core of the investigation. The resulting unprecedented spatial conditions and atmospheres of the emergent new ways of living are deemed to be the ultimate aim of the investigation. Students explored a variety of sites and crisis conditions such as: The vague terrain of the Green Line in Nicosia, the lost footprints of the sinking Venice, the endangered Australian coral reefs, the earthquake torn town of Crevalcore, and the decaying concrete urbanscape of Athens. Among other projects, 'the plume project' proposes a cloud-like, floating and almost dream-like living environment with unprecedented spatial conditions to the inhabitants of the coal mine of Centralia, USA, not just to enable them to survive but even to prosper in this unbearable environment due to the process of the captured plumes of smoke and heat. Existing water wells inspire inversed vertical structures creating a new living underground network, protecting the nomads from catastrophic sand storms in the Araoune of Mali. "Inverted utopia: Lost things in the sand", weaves a series of tea-houses and a library holding lost artifacts and transcripts into a complex underground labyrinth by the utilization of the sand solidification technology. Within this methodology, crisis is seen as a mechanism for allowing an emergence of new and fascinating ultimate sustainable future cultures and cities.

Keywords : adaptive built environments, crisis as opportunity, emergent urbanities, forces for inventions

Conference Title : ICSAUD 2015 : International Conference on Sustainable Architecture and Urban Design

Conference Location : Kyoto, Japan

Conference Dates : November 12-13, 2015