

Courtyard Evolution in Contemporary Sustainable Living

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Abstract : The paper will focus on the strategic development deriving from the evolution of the traditional courtyard spatial organization towards a new, contemporary sustainable way of living. New sustainable approaches that engulf the social issues, the notion of place, the understanding of weather architecture blended together with the bioclimatic behaviour will be seen through a series of experimental case studies in the island of Cyprus, inspired and originated from its traditional wisdom, ranging from small scale of living to urban interventions. Weather and nature will be seen as co-architectural authors with architects as intelligently claimed by Jonathan Hill in his Weather Architecture discourse. Furthermore, following Pallasmaa's understanding, the building will be seen not as an end itself and the elements of an architectural experience as having a verb form rather than being nouns. This will further enhance the notion of merging the subject-human and the object-building as discussed by Julio Bermudez. This eventually will enable to generate the discussion of the understanding of the building constructed according to the specifics of place and inhabitants, shaped by its physical and human topography as referred by Adam Sharr in relation to Heidegger's thinking. The specificities of the divided island and the dealing with sites that are in vicinity with the diving Green Line will further trigger explorations dealing with the regeneration issues and the social sustainability offering unprecedented opportunities for innovative sustainable ways of living. The above premises will lead us to develop innovative strategies for a profound, both technical and social sustainability, which fruitfully yields to innovative living built environments, responding to the ever changing environmental and social needs. As a starting point, a case study in Kaimakli in Nicosia a refurbishment with an extension of a traditional house, already engulfs all the traditional/ vernacular wisdom of the bioclimatic architecture. It aims at capturing not only its direct and quite obvious bioclimatic features, but rather to evolve them by adjusting the whole house in a contemporary living environment. In order to succeed this, evolutions of traditional architectural elements and spatial conditions are integrated in a way that does not only respond to some certain weather conditions, but they integrate and blend the weather within the built environment. A series of innovations aiming at maximum flexibility is proposed. The house can finally be transformed into a winter enclosure, while for the most part of the year it turns into a 'camping' living environment. Parallel to experimental interventions in existing traditional units, we will proceed examining the implementation of the same developed methodology in designing living units and complexes. Malleable courtyard organizations that attempt to blend the traditional wisdom with the contemporary needs for living, the weather and nature with the built environment will be seen tested in both horizontal and vertical developments. A new social identity of people, directly involved and interacting with the weather and climatic conditions will be seen as the result of balancing the social with the technological sustainability, the immaterial and the material aspects of the built environment.

Keywords : building as a verb, contemporary living, traditional bioclimatic wisdom, weather architecture

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