

PRESERVING ARCHITECTURAL VALUES OF KANDAVAN VILLAGE WITH NEW USES BASED ON SUSTAINABLE DEVELOPMENT PRINCIPLE OF VILLAGE

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Kandovan or in local terms kandojan, is one of the most outstanding samples of rock villages in the world, that has been located in north of the most valleys ending up to mount Sahand A, in Iran.

Stone houses of kandovan, with a history dating back to 800 years ago, has been built from the volcanic rocks that are called (Karan) which are called Qaya (meaning rock) in native language, read as a rock with a conical form and shape.

From the mouth of the volcano Sahand and other nearby volcanic mountains of Sahand, molten material is poured out during thousands of years. The lavas during the centuries and gradually accumulated on their crustal rock tuff (tuff) with different resistances established, the masses of molten volcanic and lavas has been formed by natural factors during thousands of years and has long cone-shaped form. Gradually loss parts of the cones have been fall down and hard parts of cones remain, and have been created the current situation that more resembles a natural miracle.

Spatial shapes of inside the Karan, contrast to that of humans with hard rock; to form large residential holes in the heart of stone that have been answers to human settlement and livelihoods needs over the years. These internal spaces which due to climatic factors

and the hardness of volcanic tuffs have small dimensions in human scale, and perform as multifunctional spaces and represent special applications such as mosque, school and public bath.

Having analyzed and examined the functions of dwelling spaces in Karan, based on field and library method, we are presenting approaches to establish changes in the structure of Karan in order to preserve them based on spatial qualities of sustainability and change ability which are the features of a place in changing usability. Finally, some measures have been suggested to combine old structure of Karan with new functions at the same proportion with life of village and rural sustainability principles.

Keywords:

Kandovan, Rock architecture, Spatial function, Changeability, Sustainability