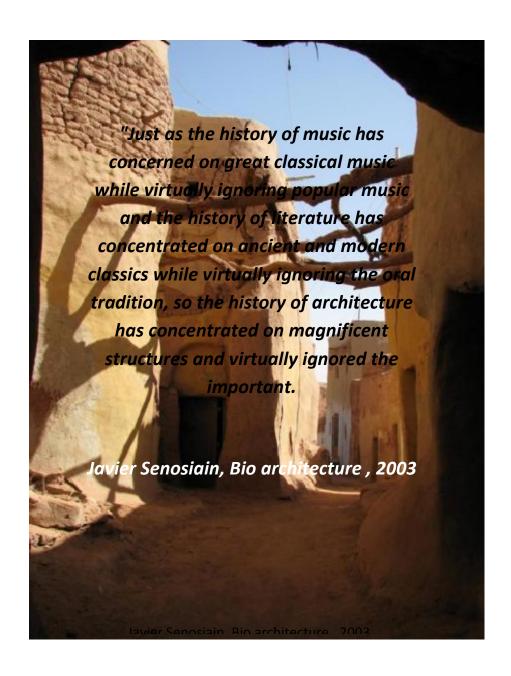
Back to the future of dying vernacular past.

Conservation of Desert Vernacular in Egypt,

Practical Study of Balat Village in Dakhla Oasis.

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Abstract:

The existing desert vernacular settlements around the world are sometimes endangered facing either a deterioration threat or risk dilemma and are in other times even vanished. The problem primarily happens in the urban areas surrounding old vernacular settlements that are growing and developing based on nothing but economics paradigm. As a matter of fact, the deportation phenomenon of desert vernacular communities -specifically in the western desert in Egypt- are due to development of activities and other motives, such as city revitalization, is dramatically harming the traditional vernacular cores of such cities, towns and old dwellings. Another big problem is that, due to its geographical as well as quantitative vastness, desert vernacular heritage is rarely recorded or listed, and important parts have already been lost.



Fig. (1) A panoramic view for desert vernacular mud brick architecture in Dakhla oasis, Egypt.

Desert vernacular architecture was always a product of a natural cycle of sustainable building tradition. People inherit the traditional way of building from their ancestors and the oral undocumented knowledge was transferred and developed from generation to generation along the years. Inhabitants respond to their surrounding environment and climate through trial and error in a way satisfying their needs and aspirations. This natural cycle is about to vanish due to the fact that inhabitants are leaving their houses to deteriorate or they demolish them to build modern concrete houses instead. People are seeking for modern life facilities that their old houses don't satisfy any more. This paper is based on a PhD research that will reveal the know-how of desert vernacular architecture in Egypt taking Balat village in the western desert as a case study. It is mainly focusing on how to adjust traditional techniques to new life demands in a way that keep and preserve these beneficial traditional techniques. The research outcome is a manual and a checklist for a contemporary vernacular building model based on the argument mentioned above. The manual will be designed based on intensive questionnaires and interviews to come up with wish-list for inhabitants need. That will be

tested by a virtual and physical model built in site. By this way we are preserving the sustainable desert vernacular architecture as it used to be for centuries and helping to keep the old beneficial values naturally developing. It is a new vision for the future of old and contemporary vernacular desert communities through conservation by modeling. This research is still in progress, a preliminary studies and investigations were done to support the research hypothesis. This research targets planners, architects, conservation architects, anthropologists, theorists and inhabitants in desert communities.

Key words:

Desert vernacular at risk, Desert mud brick architecture, Desert Vernacular know-how.

1-Buildings know how:

The know- how of building phases in Balat village as a case study resembles desert vernacular in Egypt can't be seen only as being born out of local materials and technology. It is accumulation of knowledge, awareness, understanding and their pure instinct, tight relation to the environment and sometimes even intuition. It is the awareness of being responsive to climate mixed with reflections of customs and the community life style. The search for compromised solution or transform for the avail liable resources. More over we can't deny the collective wisdom given by seniors, their own experience to their own society, their own norms that is appropriate to the built environment in the village. The knowhow also includes the knowledge of the natural environment, harsh weather conditions, topography, the surrounding natural hazards and more about sustainability of their village site location. Mete Turan mentioned in the preface of his book- vernacular alarchitecture- "Since it is not a single phenomenon, vernacular know-how requires study within the specific nature of cultures which employ its numerous forms. It also needs to be studied beyond its merits without overlooking the limitation, defects, and failures" (Turan, 1990).

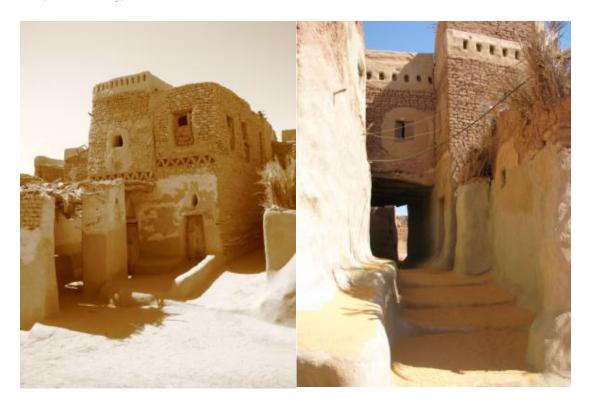




Fig. (2) Shots from Balat villages showing the beauty of mud-brick composition.

The structure is sun dried mud brick casted manually in site. This traditional building material fits the inhabitants' needs well. It is available where ever a house is to be built, so it is almost for free. As for labor it requires only one builder and the rest are the houses owner and their neighbors or relatives. Normally from 5 to 15 persons helps in the building phases plus the builder.



Fig:(3) Part of Building process : mud brick casting and plastering..

2-Problems and risks in Balat (within the old village):

The rate of economic growth in Balat is still moving very slowly, that what makes it still preserving some of the old values in the urban fabric formulation. While on the other hand when life demands are changing due to this economic growth new needs evoke to cope with life changes. Unfortunately all the old ways of thinking is vanishing day after day. This traditional thinking is not documented. The old techniques that was highly adequate to the local environment of the place and that were highly satisfying the social and cultural needs are disappearing gradually. Sasidharan gave an overlook on this problem generally in vernacular settlements by arguing that "The cause and course of the changes, the gradual transformation leading to a catastrophic metamorphosis needs to be understood and documented to take charge of the current situation and delve into measures of effective conservation and initiative to the treasuring of vernacular identity." (Sasidharan, 2008, page 1). Based on the interviews some of the inhabitants perceive the old village as an old fashioned way of living. That is they tend to leave the old village and build new modern concrete houses.



Fig(4): Sample of the new concrete houses, that to grow on the periphery of the old village

That is one of the major problems. Although as a matter of fact, old techniques in their houses were more adaptive to the harsh desert climate. Adding that living in a house with natural building materials is good for health than that with concrete. 70 % of the inhabitants moved out of the old village declared in the questionnaire that they started to feel sick after moving into the concrete houses. The old compact urban fabric with shaded narrow streets, cool courtyard, inner patios for social interaction and children gathering are more adaptive to the desert climate and social cultural habits than the new planning with wide streets.

The risk of losing the traditional knowledge is really high. That is not only because it is not documented, but the evidences is deteriorating and will be vanishing slowly due to abscond and abandonment. People are seeking for more modern life facilities that their old houses don't satisfy any more and that is a natural and fair demand. Balat as an example of special typology of a vernacular desert villages is losing the unique sense of place. Inhabitants' attachment to their traditional dwellings is deteriorating with the deterioration of their buildings and the urban patterns. Moreover the sever threat that can't be denied now is that the

government policy represented in the municipal act. They encouraged inhabitants to move out whenever possible. The government claims are that it is safer as the village is deteriorating.



Fig(5): Traditional crafts in Balat village that is vanishing

Inhabitants act positively to move in concrete houses when they have the economy to do that because that enables them to embed some new facilities that their traditional houses don't provide. So those who still live in the old village are those who either don't have the money to move out or seniors who are still attached to the old village. Another risk is frizzing the old villages as a listed village for tourist, Balat in no time will be transformed into ghost city. Balat will not be stagnate; the issue is the how far it will change and what are the fears from theses changes. Lewis Mumford wrote in his book "The city in History" about the need for cities to be more than 'containers' guaranteeing the coherence and community of urban culture over time. He warned of the danger of a too-stabilized community, arguing that urban experience is also about mobility and mixture, encounters and challenges. (Mumford, 1961).

3- Participatory approaches:

Carsjens argued that community participation in any conservation project is necessary for obtaining appropriate solutions. The harmony between project outcome and user's requirements may avoid wastes in resources with non asked performances or neglect to inhabitants presence. Planning for the people is obviously no longer acceptable and planning with the people proved to be too complex, so planning by the people has become the rallying cry of many 'new' planners. (Carsjens ,2009)

So applying this concept on Balat, community participation is considered a process based on creating a channel of communication with inhabitants through dialogues, and "empowerment"

of the community perception to identify their problems or needs and decide how to work that out. This community based approach should be based on the existing local capabilities - paying special attention to strategies that engage families, communities and local authorities in problem analysis and search for solutions. The community knows the area and their problems better than practitioners as outsiders will ever know. Getting their input and having them help decide the nature of a conservation proposal for Balat will develop a sense of 'ownership' and increase the proposal chances for success. Literature that supports the idea of community participation makes four major claims. First, community participation leads to better results in project delivery because of a better chance of knowing inhabitants preference. Second, it leads to easier acceptance of results by inhabitants. Third, it leads to better economy because of participation directly reducing costs and enhanced willingness to help. Finally, community participation is a worthwhile end in itself. In conclusion the action planning with the community is one of the most important assets that encourage identifying problems and enables future expectations and suggestions for vernacular heritage protection and conservation.

4- Conclusion:

Desert vernacular is basically based on adaptation of users' needs, traditions, social habits and climate change. The research took Balat village as a role model for analyzing desert vernacular and for expressing a new vision for desert vernacular conservation. This research tried to highlight the fracture that occurs between traditional desert vernacular architecture that proved to be more efficient with inhabitants' aspiration for modern life facilities.

Moreover it was an attempt to lay hand on the major problem which primarily happens in similar urban cultural areas that are growing and developing based on nothing but economics paradigm. The completion of this research-which still in progress- will lead to the manual for contemporary desert vernacular, which is expected to help in conserving the undocumented desert vernacular heritage

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