Living and Sustainability: An Environmental Critique of Design and Building Practices, Locally and Globally

Abstract / Initial Proposal Form:

1. Paper / Proposal Title:

Vernacular architecture as an approach to low energy design: learning from ancient and local knowledge

2. Format:

Written paper + presentation and poster(if acceptable)

3. Author(s) Name:

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5. Abstract (300 words):

Vernacular architectural design is the rational outcome of local climate, available materials, building design techniques, a manifestation of cultural traditions and beliefs and lessons of sustainability learned over many generations. Much of contemporary architecture depends on

vernacular architecture design in its development and vernacular architecture exemplifies historical vision for the sustainable design of this architecture to the local environment which incorporates the essence of environment architecture. This paper will discuss a number of examples where vernacular design has been considered, including Masdar City in Abu Dhabi, Qatar University in Qatar, and Residence complex in Oman. The paper will focus on the impact of the conventional and traditional vernacular buildings considering planning and building design (form and fabric), environment and technological techniques, which are functional and can be rediscovered to fit with contemporary sustainable forms and types of architecture design. Contemporary vernacular architecture which includes low carbon technologies, whilst enhancing local identity, provide opportunities to guide professional architects and architectural students to develop an in-depth understanding of the influence of vernacular architecture design precedents and implement it properly in the architectural design to achieve high level of sustainable architecture appropriate to the context.

6. Author(s) Biography (200 words each):

Noor Aalhashem:

Noor Aalhashem is a PhD Research at the Welsh School of Architecture and with over 8 years of experience in academic development and the delivery of fundamental and applied research projects in the area of sustainability in the built environment. Many of these projects have involved the assembly and management of multidisciplinary groups from Iraq including both academic and government partners with many continuous training certificates to enrich my knowledge and experience.

Dr Jo Patterson:

Dr Jo Patterson is a Research Fellow at the Welsh School of Architecture with over 19 years of experience in the development and delivery of fundamental and applied research projects in the area of sustainability in the built environment with a particular focus on energy. Many of these projects have involved the assembly and management of multidisciplinary groups from Wales, the UK and Europe including both academic industrial and government partners, with project funded by the Welsh Government and WEFO, TSB, EU COST, EU 5th Framework, EPSRC and industrial funding.