Lunar habitat module, architecture application within engineering solution

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The future lunar missions will become greatly extended as much as six month, because the Moon is an ideal "Staging Post"[1]. In fact, most of the lunar explorations are primarily concerned with the function of the critical systems and safety with disregard to the human interfaces. Everything at NASA is built to performance specifications, which require, basically, that everything is Function. It has been shown in the previous studies that involvement of architects in the early design phase has great benefits for development human habitats in space. Architects can define habitat problems and reach the points of success. Collaboration between Architect, Engineer, and scientist will have the best result in lunar dwelling, especially once consideration of human factor is the key of success in the long term missions. This paper focuses on lunar habitat problems from the architecture perspective. These problems have strong connections with architectural issues for long term stay. This study will offer combined architectural and engineering solution to advance lunar long duration habitat.

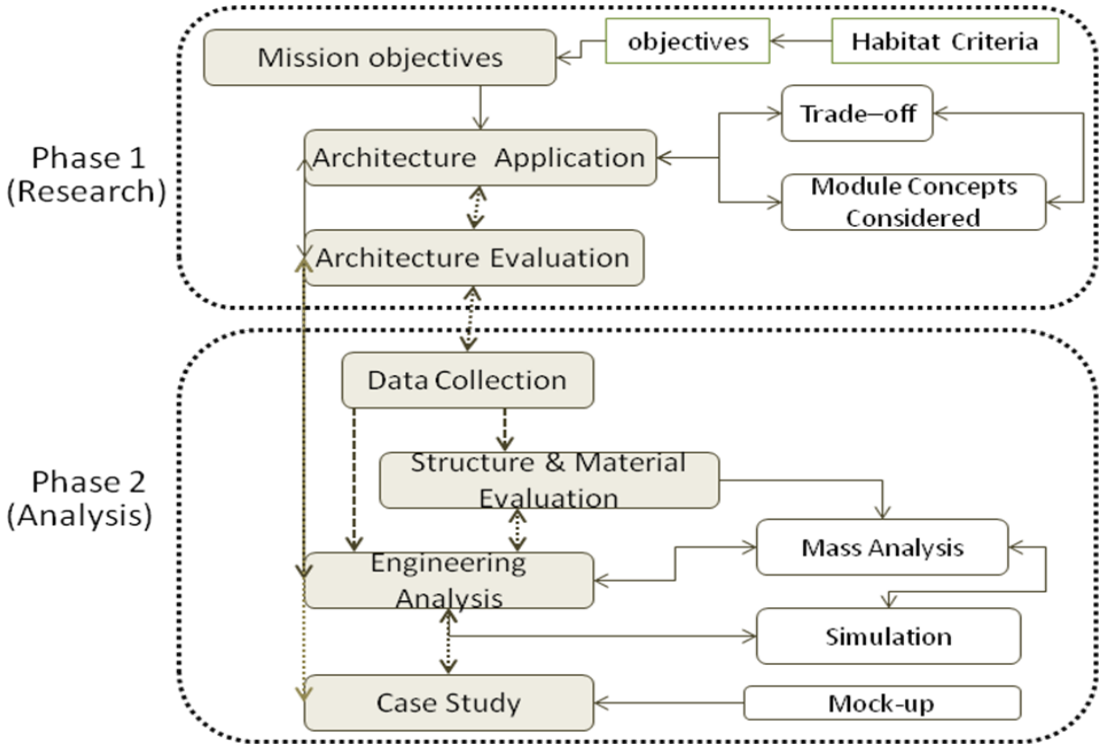

Figure 1: Methodology Diagram

[1] Ian O'Neill, Building a moon base, Feb 2008.