

Abstract

For this research project, I investigated vernacular techniques as a form of climatic response for various locations and translated them to modern architecture. The translation was necessary because these techniques were indigenous to undeveloped areas of Asia and Africa which are not likely to be used in modern architecture, techniques like using mud or ice as a material of construction however there are many materials that possess similar characteristics of these materials and techniques that can be modernized to suit.

Introduction

As a society we have become too heavily dependent on machines, yes they make life easier but the overuse of them ultimately hurt the environment and inevitably the earth. My research was not on how to replace the use of mechanically driven items but to reduce the use of them in areas that can be helped. Vernacular techniques are techniques that are indigenous to a particular location in efforts to address the need for comfort no matter the weather. In my research I have found techniques that can be possibly applied to architecture if it were to be modernized.

Conclusion

In conclusion, I have found that many of these vernacular techniques are beneficial in ways that I had not initially discovered. Increase in natural light, decreased in utility bills, increase in comfort levels and added aesthetic appeal. My research is still a work in progress and with continuing efforts I hope to further prove its effectiveness.

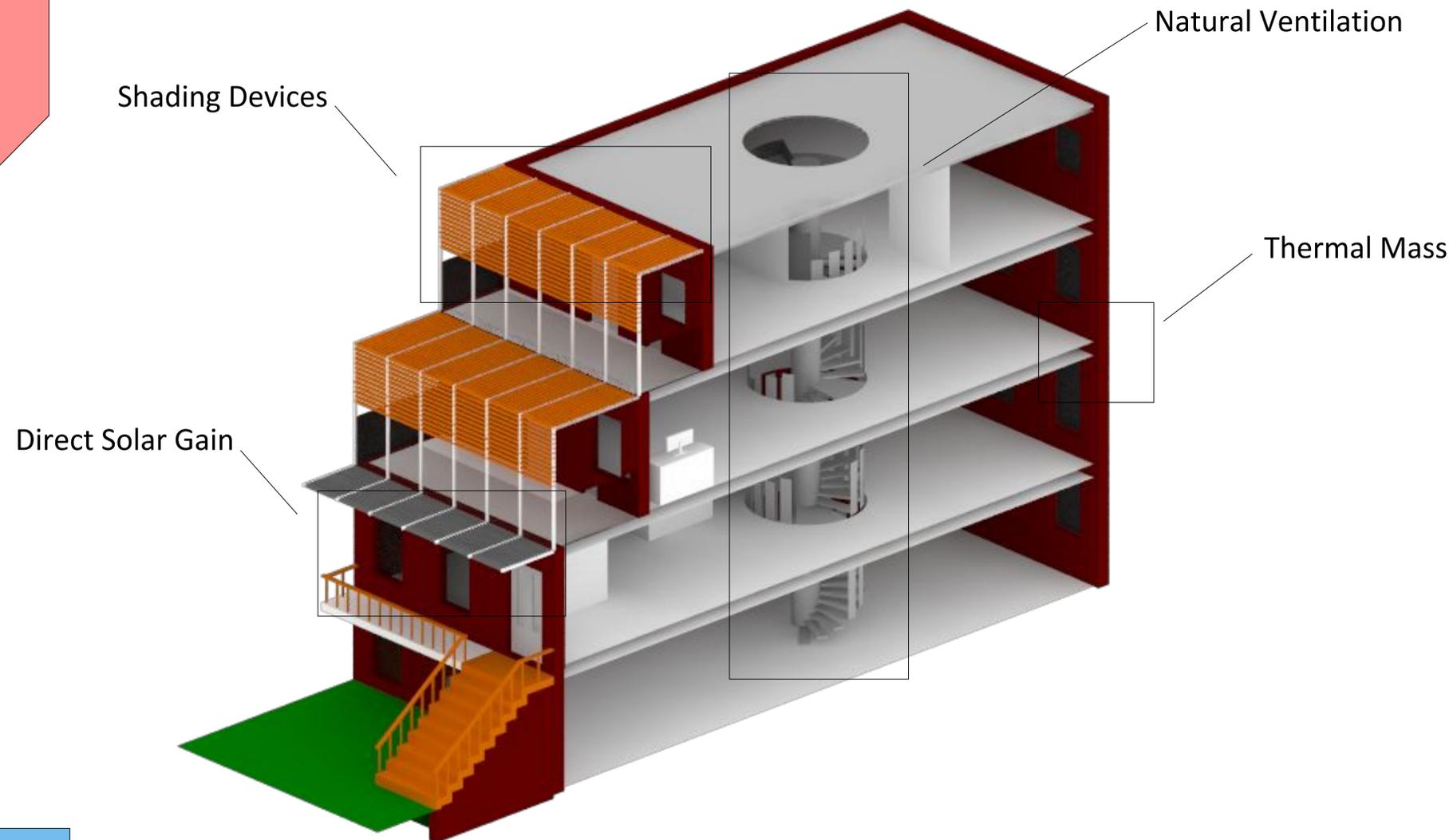
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Modern Translation of Vernacular Techniques

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Results



Translation



Thermal Mass



Shading Devices



Natural Ventilation



Direct Solar Gain

The images above are what the modern vernacular techniques that I have investigated are translated from.

