

INFORMED DESIGN OF FISHING CULTURE CENTRE IN MUMBAI

Agne Zenkeviciute

Extreme weather conditions, energy prices and power outages has changed the way we think about building comfort. The alternative for excessive power usage is to turn to sustainable solutions and passive strategies to create climate resilient buildings that do not depend entirely on energy. The challenge is to adapt these passive strategies in a way that benefits the architectural expression as well as human comfort.

In this thesis project I am exploring the architectural form finding based on the site specific climate data and the results gathered from CFD analysis. The project is being developed in a non-linear fashion: feedback from wind simulations guides the design, as it is being continually advanced to achieve the desired goals. To create diverse and favourable microclimate conditions in the different areas of the site with the means of landscape, vegetation and architectural solutions.

Furthermore, external forces such as sun and rainfall have an equally important impact on the site. The project aims to incorporate all conditions as a driver for design that leads to a truly sustainable setting, entwining nature and architecture in a way that benefits them both.