

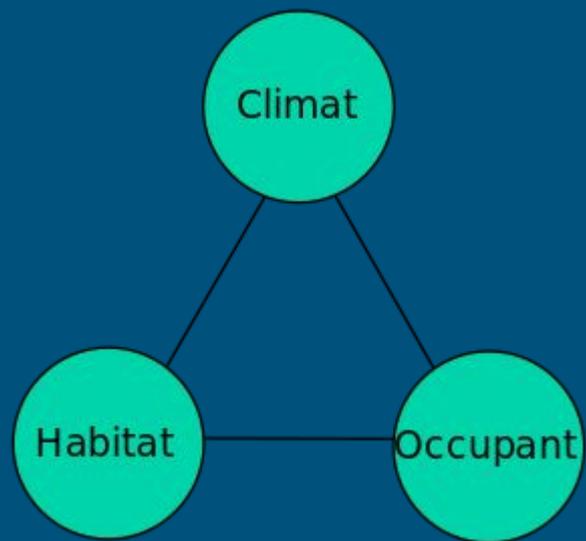


BIO SMART CITY STREET



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Our design reacts to the body heat and movements of each passengers. This living system integrates artificial and natural elements into an organic system. Human presence around the the design triggers the opening of 'cabinet de curiosités' filled with biological materials which are expected to have a significant impact on architectural design and construction.

The structures allude to the built and unbuilt urban fabric, the shade of the fluid is the identification and treatment of diseased areas due to unattended changes in population density to demonstrate the flows of energy (light radiation), matter (biomass, carbon dioxide) and information (images, tweets, stats) will be triggered to induce multiple mechanisms of self-regulation and evolve novel forms of self-organisation.

Global trends of migration towards urban centers are increasing exponentially, overtaxing urban infrastructure to the point where it risks collapsing beyond repair. In order to assess the moment – where overcrowding in a city has reached ‘the point of no return’, This project examines if tackling urban sickness could be pioneered according to biological principles and methodologies which govern cancer research.

URBAN ISSUE

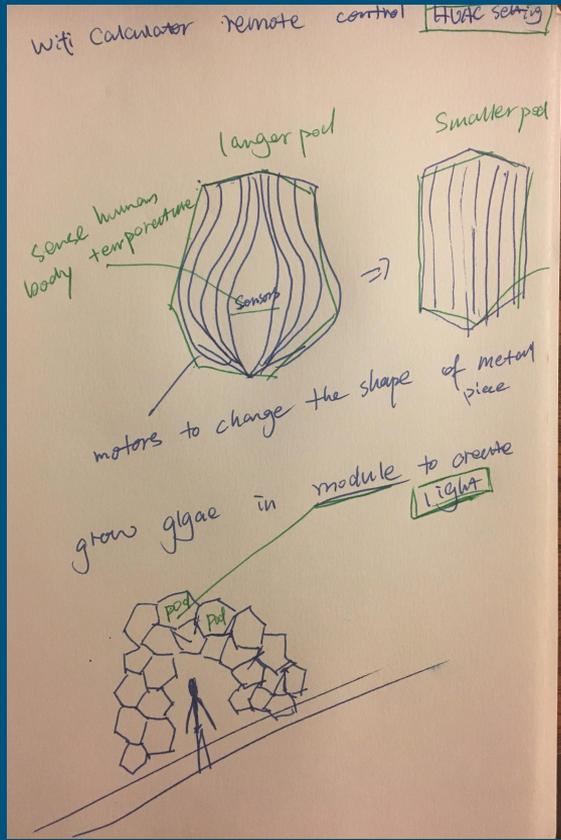
The design proposes a bio-inspired building ventilation and air conditioning system that mimics the breathing process, where the nasal passage naturally conditions the inhaled environmental air. The proposed project presents a dynamic structure which is the outcome of a joint collaboration between architects and bioengineers. Anchored in the mediterranean sea off the coast of Ashdod, the structure is designed to fulfill the challenging function of creating an optimal HVAC (Heat, Ventilation, Air-Conditioning) system by using renewable energy in order to insure more sustainable and ecological manner to create ventilation systems that preserve environmental balance and reduce the building's carbon imprint. Many of these new ideas are based on treating the architectural structure as a living body that synergizes with the surrounding ecosystem through mechanisms that mediate the movement of air.

<https://www.architecture.yale.edu/calendar/42-material-light-light-material>

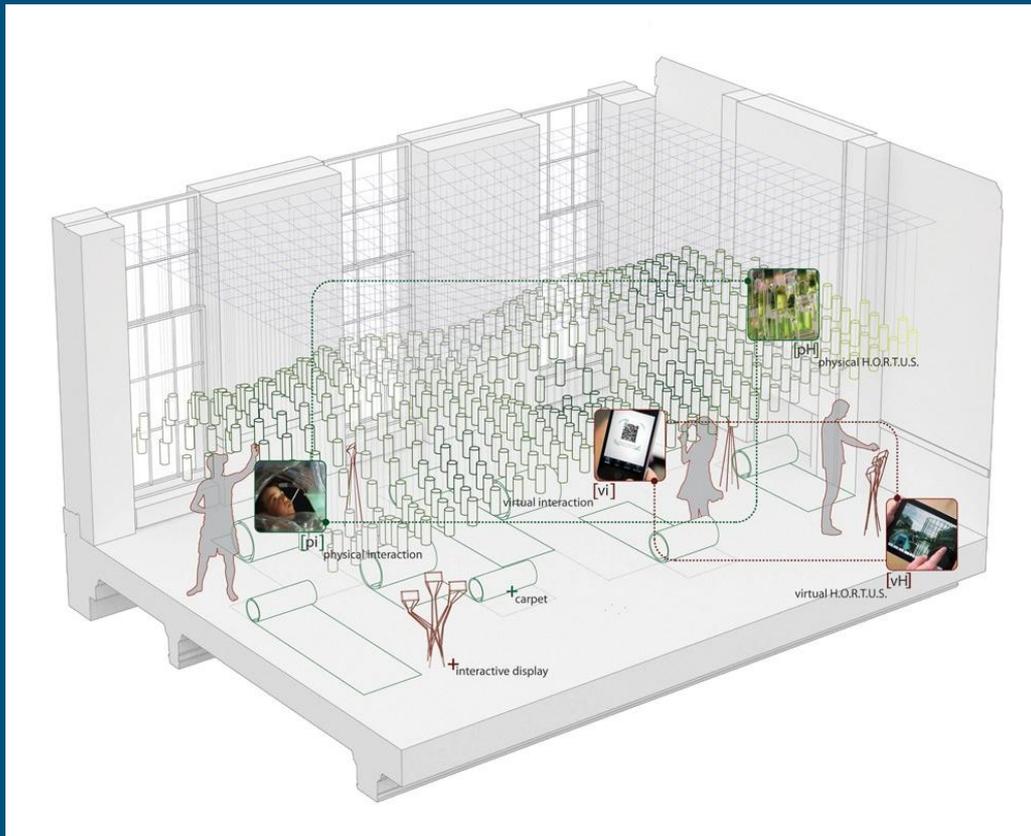
BREATHING

An interactive lighting component is rigged to the canopies, incorporating some tubular structures that emit an ethereal glow when daylight fades with alge growth. A misting system is also set up to create a “micro-climate” to refresh visitors underscoring the natural tendencies of materials to respond to physical forces, and to those in close proximity.

LIGHTING



SKETCH



FURTHER APPLICATION