

**Rewriting our values as makers of the future. Projecting 200 years ahead. *What if buildings could grow?***

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2021 was the crossover year.

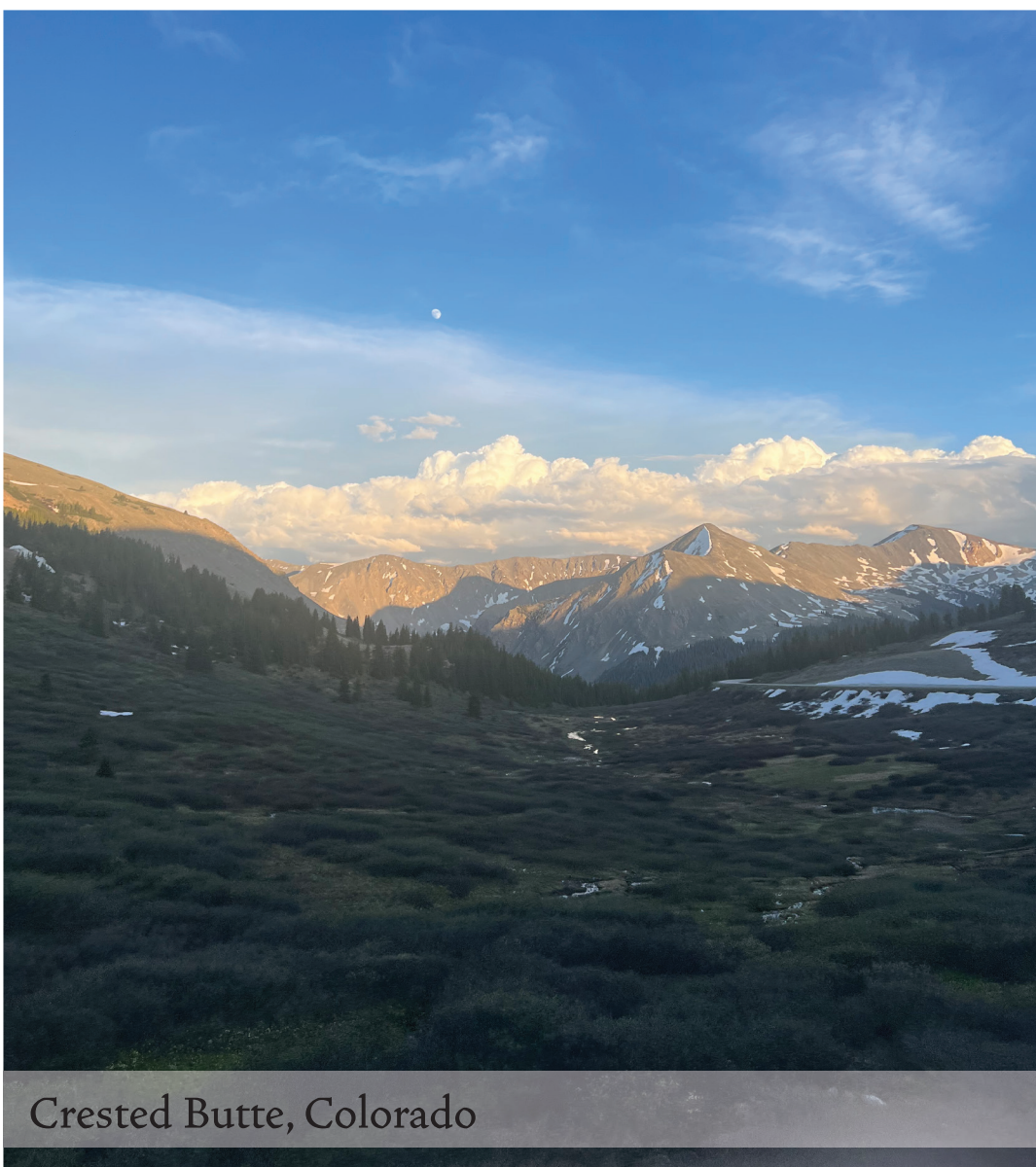
This was the year when the mass embodied in the built environment, including glass, metal, concrete and brick, exceeded the biomass on our planet, including trees, plants, animals, bacteria, fungi.

Good designers must become alchemists. If humanity is to survive and thrive we must rethink our relationship with nature.

Humanism has confused bigness with greatness. However, as humans we have the ability to use foresight to look ahead and hindsight to learn from our past. We also have the ability to reverse what we have imposed.

We have to begin now.

*What if an existing concrete building could be infused with a substance that gradually transforms it into a resilient, soil-like material rich in nutrients, similar to a tree and capable of providing habitat for plants, animals, and humans?*

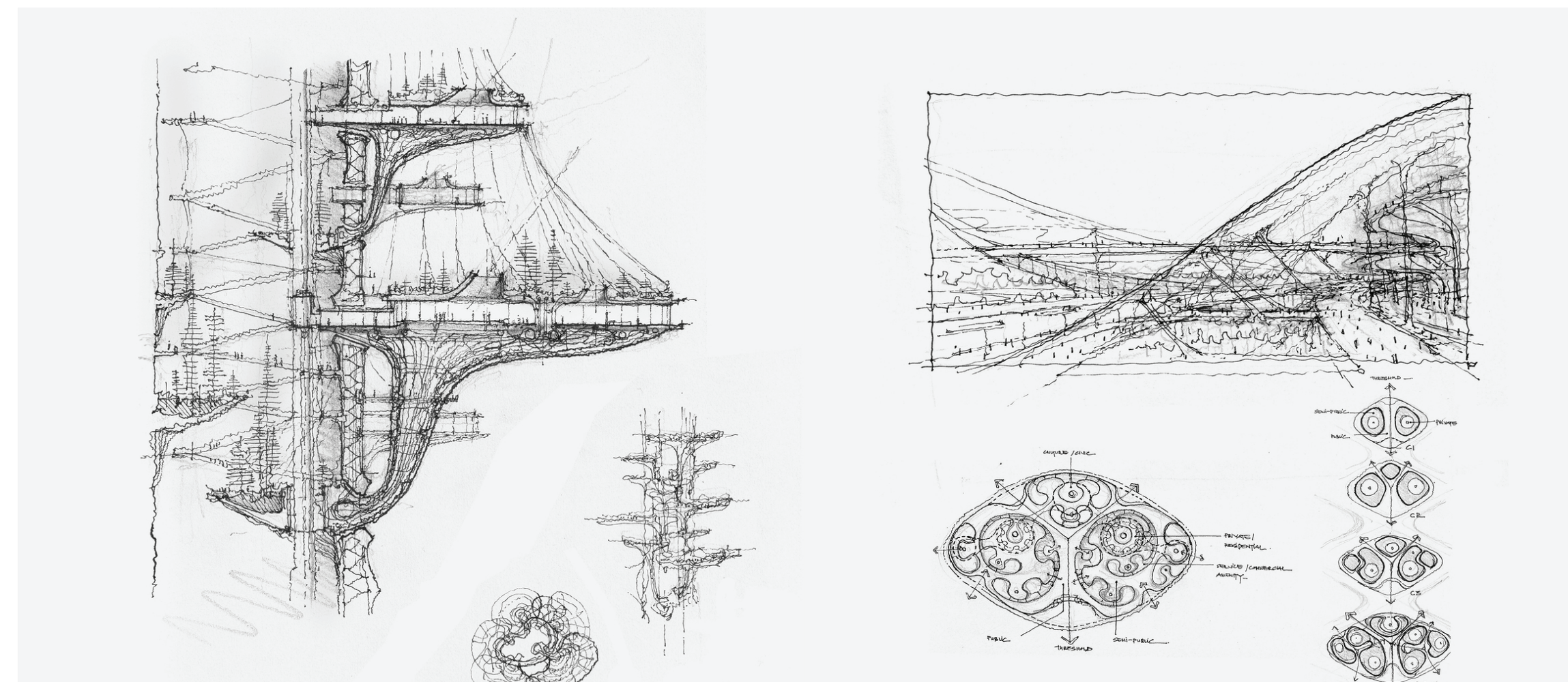


This project envisions a future of New York where computational design revitalizes the city with biodiversity, harmonizing cultural diversity and nature's vitality.

By 2100, climate-driven changes reshape the city's essence, and a circular system emerges, shaped by sunlight, airflow, and topography.

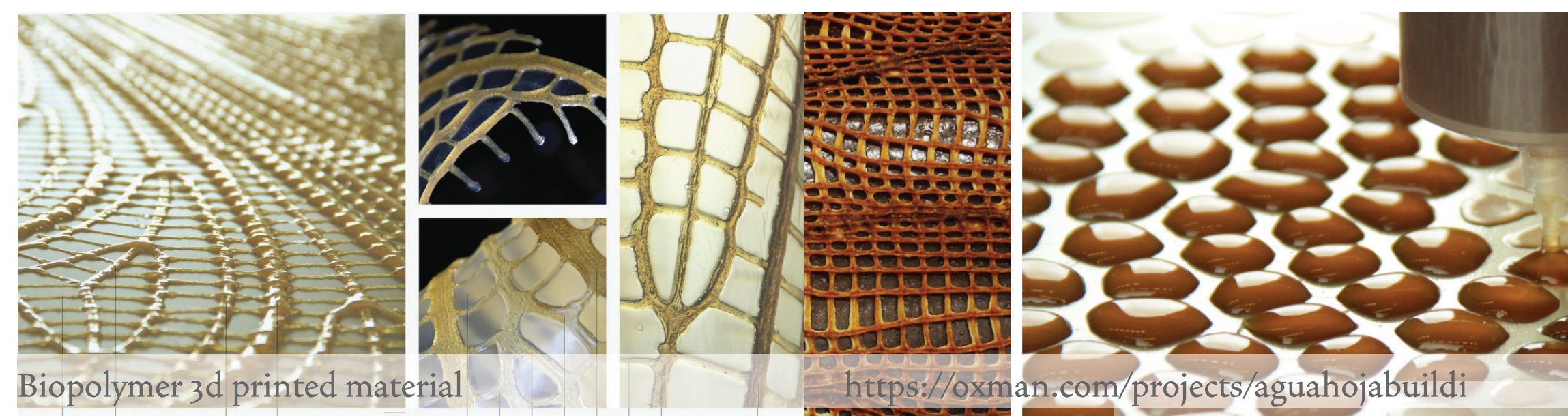
In 2200, the city adapts infinitely, fostering kinship among life forms and relying on plants for environmental balance.

By 2300, it decomposes into megalithic elements, held together by mycorrhizal networks. In 2400, Manhattan's urban memory blends with native history, creating a new cycle of humanity.



Sketches of Man-Nahata

<https://oxman.com/>



Biopolymer 3d printed material

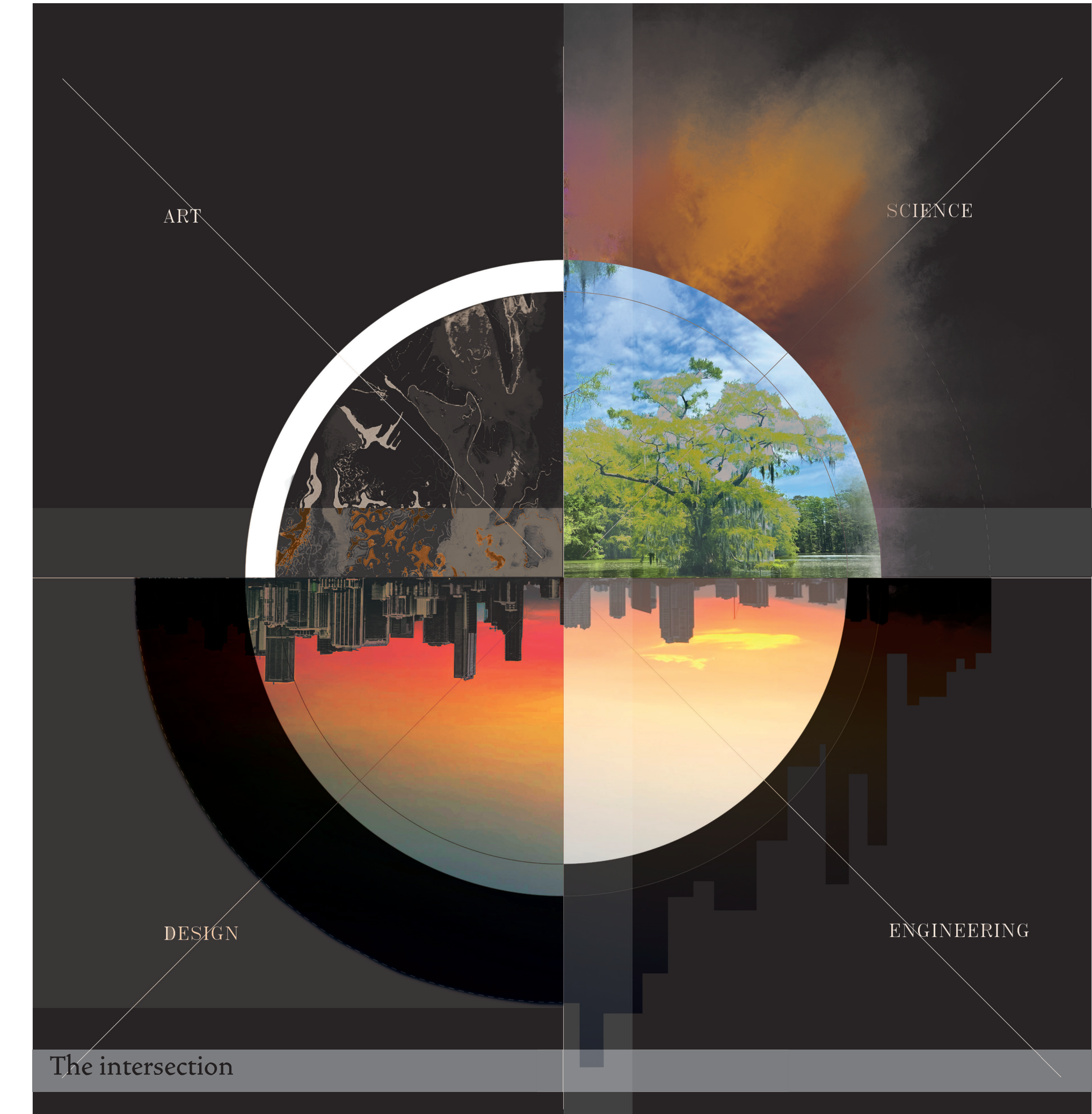
<https://oxman.com/projects/aguahojabuildi>

**Rethinking our materials.**

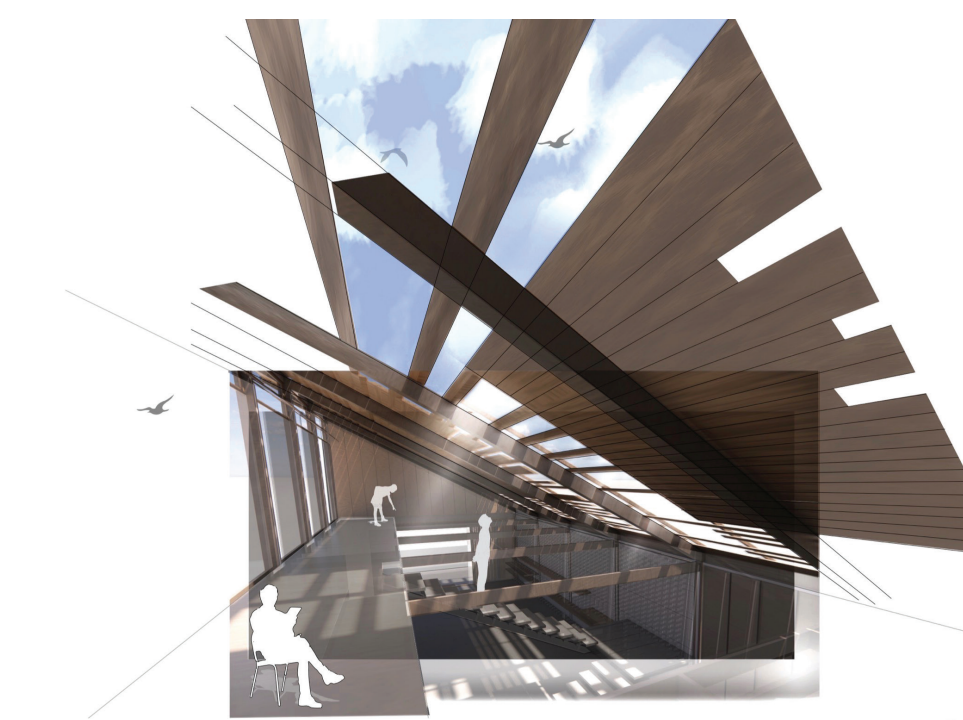
The United Nations Environmental Program (UNEP) reports that global plastic production exceeds 300 million tons annually, less than 10% of plastic is recycled, and the rest ends up as waste in landfills and oceans.

The OXMAN group has defined a better way. Natural structures, using components like cellulose, chitin, and pectin found in trees and animals, create diverse functional materials without synthetic counterparts. These materials are resilient, sustainable, and adaptable, outperforming human-made materials.

The Aguahoja collection provides an alternative to plastic by creating biopolymer composites with adjustable properties, including mechanical, optical, and sensory qualities. These biocompatible polymers harness natural resource cycles and can be designed to biodegrade, promoting new growth.



The intersection



Interior view of Studio Sun



North Facing view of Studio Sun

**A vision for the future.**

My project, Studio Sun, which I designed last semester was selected for construction. With my new understanding of architecture I look forward to reinvigorating my first built project with these values. Overseeing the procuring of materials, assembly coordination, and client communication will further open my eyes to the multifaceted knowledge architects require.

I envision becoming a catalyst for global change by immersing myself within a community of biomimetic designers. Learning from nature's processes, I aspire to revitalize existing structures, including health clinics, rehabilitation centers, educational buildings, parks, work spaces, and more, infusing them with renewed vitality.

