

WHAT IS ARCHITECTURE TO ME?

Architecture is more than just putting a roof over someone's head, Architecture should be cheap, easily constructible, that allows for running water, which in turn increases standard of living. As the world around us constantly matures, design needs to grow and adapt to the change. The most common product of an architect is referred to as a building, but not every building is architecture.

Sustainability is a big part of our society in the 21st century. We often talk about the immediate impact of technology, but rarely acknowledge its indirect side effects and consequences on our planet. These effects play out across all dimensions of sustainability over the short, medium and long term.

I have lived in Kenya for most of my life, growing up in a country where you are constantly surrounded by poverty; it becomes a very normal thing to see. It becomes normal because the middle and upper class of the country start to forget that it's an issue that needs to be solved. Many of the poorer residents of Nairobi live in low hygiene, unsafe environments because they can't afford anything else.

After reading articles on the internet, I found a company called Eco Tec that builds affordable housing in India, Nigeria & Colombia using recycled and found materials such as PET bottles. These re-cycled materials are used in a way that challenges our perception of building materials that wouldn't usually and how we can manipulate them to create something new that is affordable and can be constructed with ease.

I started doing more research and decided to design a multi-family housing unit that houses 12 families and enables them to share communal spaces which in turn increases the standard of living by allowing for basic amenities such as; toilets, kitchens, bedrooms,

living spaces and running water. The site I chose for my project is the biggest slum in Africa called Kibera. With the ratios of most amenities in the slum being unfavorable, I wanted to create a way of living that allows for sharing between 10-20 people versus 40-100 for one toilet or a water tap. Working on this project allowed me to gain insight on some of the difficult parts of what it means to be an Architect.

More than 2 million people became homeless when civil war broke out in Rwanda in 1994. The office of the United Nations High Commissioner for Refugees (UNHCR) normally supplied plastic sheets and aluminum poles to be rigged as temporary shelters. Rwandan refugees would sell the aluminum poles and then proceed to cut down trees to use branches for structural support. Contributing to already critical deforestation, it was obvious that alternative materials had to be found. Shigeru Ban introduced a low-cost alternative, paper tubes. The proposal was adopted and development of prototype shelters began.

Shigeru Ban used a basic cheap material as a building component to create floors, walls and ceilings for these shelters. By manipulating an unusual material, and using it in a modular fashion, he was able to create shelters that were easily constructible and cost effective. In the same way, my design for the bottle house was inspired by his work.