

PROJECT 1 THIRTEA FOR ONE

“THE
HIDDEN
WATER WE
ACTUALLY
CONSUME”

Since 2015, the city of Cape Town in South Africa experienced its driest period in over a century. Being a South African born designer, whose family and friends are directly affected by an on-going water crisis, I began a discourse on the precious element of water. Water is contained in almost everything around us, but sadly, at the same moment it is a dwindling resource that we tend to ‘spill’ carelessly.

I created a ceramic installation to show the amount of virtual water a simple cup of tea contains. For every 150ml of tea, 30l of water is required in the entire production chain process. My installation functions as a large tea maker, where one has to pour water into the tallest cup continuously until the very last cup at the bottom is filled. As it stands today, it makes up for just one third of the 30l of water used in the production chain of a cup of tea.

I dedicated this work to my father who passed away in November 2017, and it was his passing that brought me to the cold realization of the finite nature of life in general. “We take a lot for granted, that is, until it is gone forever. in the same way, we somehow all tend to take for granted that our natural resources will be here to serve us forever.”



Featured at Design Indaba Conference Cape Town 2018



PROJECT 2 TEA DROP

A TEA MACHINE WHICH WORKS ON ITS OWN TIME FRAME, INDEPENDENT FROM THE HOUSEHOLD TAP.

As the threat to earth's natural resources rises exponentially, our 'available-on-demand' mentality seeks to be refreshed. Can this initiate an alternative for the way we consume daily resources?

Tea Drop is a tea machine, which condenses water vapour from the surrounding humid atmosphere. It functions on its own timeframe, so one has to wait for the tea vessel to be filled up with water, before it can be boiled and ready for making tea.

Learning that it takes 30 liters of virtual water to produce one single cup of tea, led Shaakira to do field research on tea farms in Asia. While there, she discovered that water is a by-product of processing tea and harvested tea leaves are dependent on the weather and subject to time. On a symbolic level, Tea Drop aims to recapture this precious resource, whilst giving power back to the environment.

Featured in a year long traveling exhibition by Dutch Institute of Food and Design and Kingdom of the Netherlands (Canada).

Exhibited at Food Art Week Berlin August 2019



AQUATECTURE
SHAAKIRA JASSAT

PROJECT3 AQUATECTURE

A PANEL DESIGNED TO HARVEST WATER.

I have been fascinated by water as a material in my projects. Since the recent drought in my native country South Africa, I have shifted focus towards using my design work as a response to what I observed in Cape Town last year. During that time, people's behavior towards water changed very quickly.

Day Zero, the day the city's taps would be shut off was anticipated. The drought in Cape Town has eased up due to some rains last year, however other parts of the country have experienced bouts of drought and on the other extreme, subsequent flash floods. These unexpected changes in our climate have all inspired me to create something that would alter the way we experience water in the urban environment.

Exhibited at Campina DDW and Bio Art Labs DDW 2019.

Aquatecture is a panel designed to harvest rain water and when integrated with technology, it can harvest moisture from the atmosphere. Aquatecture can be installed as a façade panel on buildings making water harvesting an integrated building feature. It can also be used to create free standing elements in landscapes, creating water harvesting stations at various nodes throughout cities. Traditional architecture requires water to be kept out and away from a building, often flowing into stormwater drainage systems and picking up dirt along the route. Given the dry situation in Cape Town, I envisioned buildings that could harvest and sustain their own water needs.

Aquatecture is designed to collect falling rainwater as it trickles over the open punctures of the panel. The water that is collected is transported down to a collection tank and pumped back into the building's grey water system, or stored for later use. I reimagined a traditional practice like water harvesting, which usually requires space and doesn't easily fit into the urban aesthetic, into something that is compact and easier for people to engage with. The main goal was to create a water harvester that would fit in dense urban spheres through its compactness, visual identity and ability to integrate into architecture.

Photography by: Ronal Smits and Angeline Swinkels.

PROJECT 4 EMBRACING WATER

LIVING IN HARMONY WITH OUR ENVIRONMENT.

Embracing Water explores the idea of the symbiocene and how humans could live more in harmony with water in the urban environment. For this research I used Aquatecture as the starting point and began delving further into the research surrounding the initial inspirations I was drawn to.

I was selected as a talent for the Bio Art Laboratories in Eindhoven and studied 'Air Plants' under the microscope at their lab. Air Plants (Tillandsia and Bromeliad species) have the ability to harvest their own water needs from the air. During Dutch Design Week this past October, I exhibited research models showing the way these plants have inspired how architecture can evolve to embrace water entering the Symbiocene era.

Trichomic Wall, inspired by Tillandsia Genus, is one example of the ideas that emerged from this research. In Trichomic Wall, I suggest using hydrophilic material to create a hair-like facade in order to mimic Tillandsia trichomes. This will help cool the surface and help to trap enough moist air around the facade to facilitate condensation.

Researched and exhibited at Bio Art Labs for DDW.

