

# *Unit 1: theCity&TheCity - The Tech-Xapiripë*

by Xuejiao Ma, Yue Qi, Xinyi Ding, Jinglei Xu, Jiayu Sun

Instructor: Hadin Charbel & Joris Putteneers

Co-tutor: Qianxin Deng

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LATEST  
SPECIAL

# DAILY NEWS

DAILY  
REPORT

TODAT,  
AUG 20,  
YYYY

## YANOMAMI UNDER ATTACK



## ILLEGAL MINING



## Brazil-Venezuela border

## HUMANITARIAN CRISIS

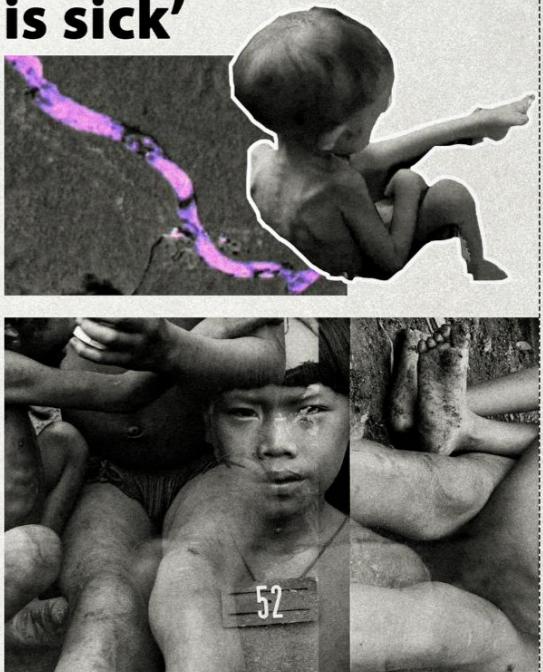
1,000 km  
500 miles

## FACING PROBLEMS

Today, the Yanomami – who number about 29,000 – say they are at serious risk of losing their lands, culture and traditional way of life. The lust for gold and other valuable minerals that lay beneath their ancestral territory has in recent years attracted a wave of illegal prospectors who have cut down forests, poisoned rivers and brought deadly diseases to the tribe.

## ECOLOGICAL DAMAGE

'The water  
is sick'



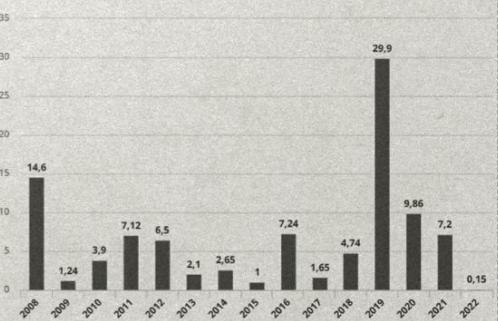
Diseases and  
malnutrition

Deforestation  
in Yanomami

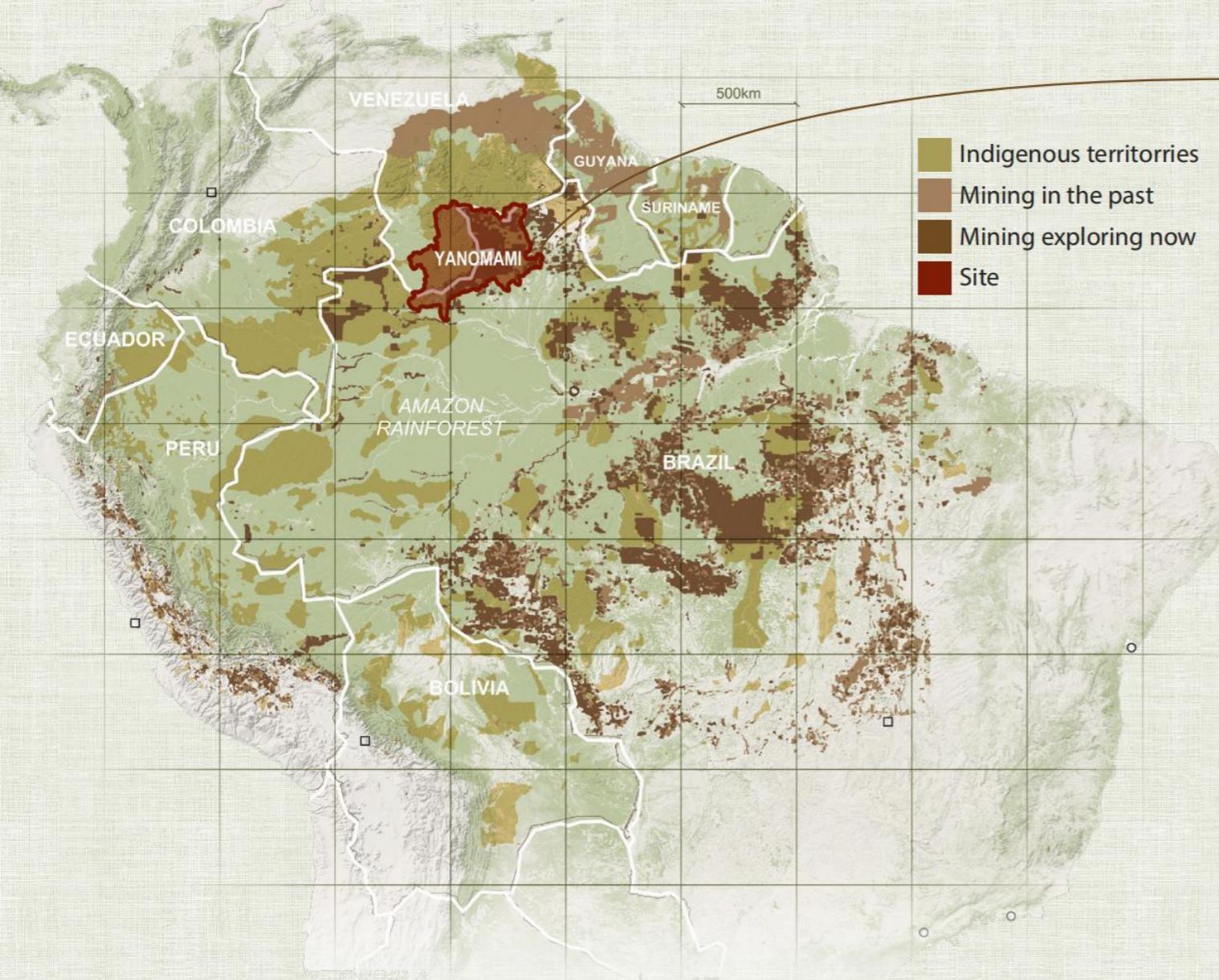
## CULTURE DISAPPEARING

### The last of the Yanomami

This northern Amazonian tribe still live much as they have for thousands of years, but since they came into contact with outsiders, their numbers have been dwindling and their traditions are under threat.



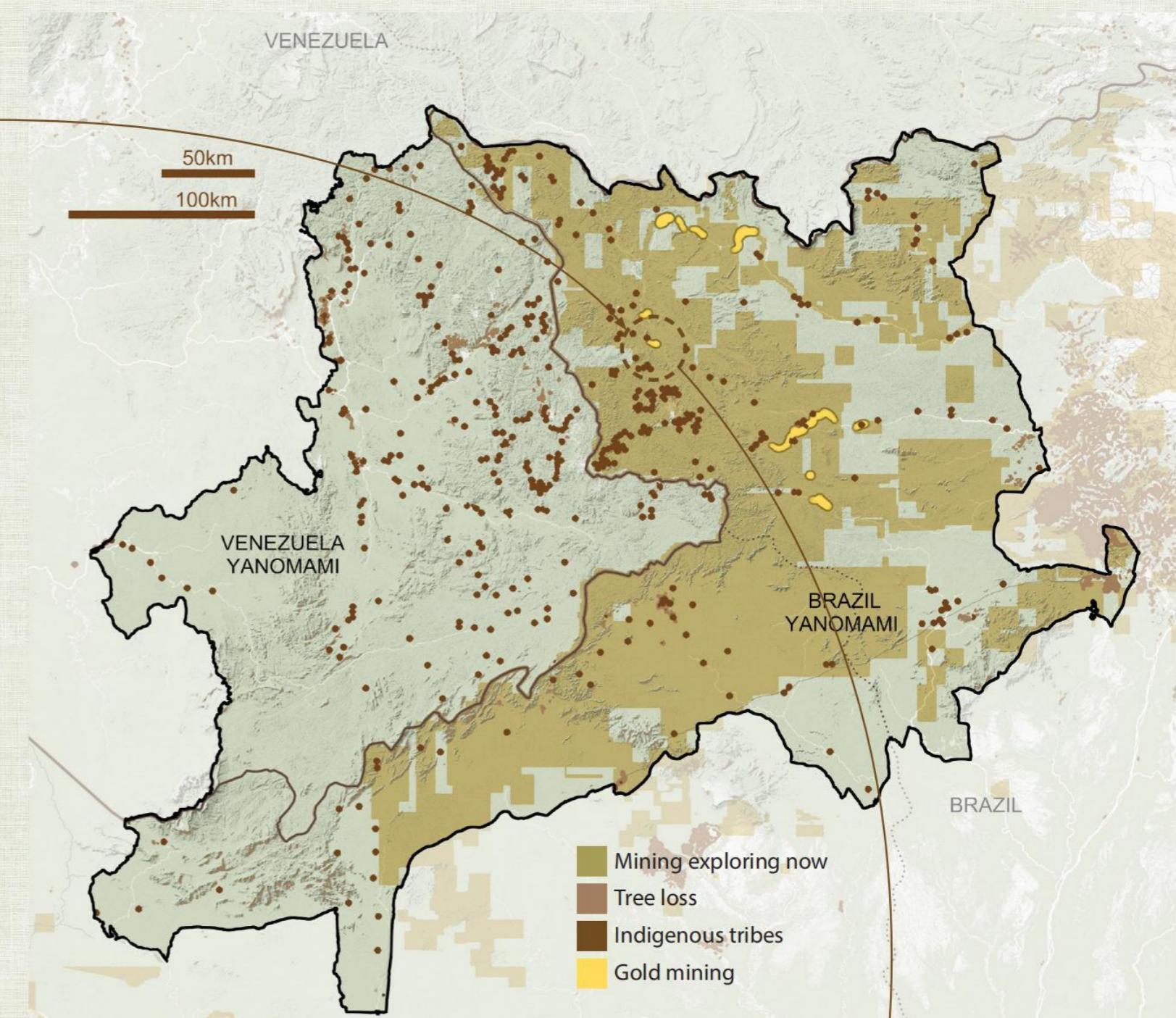
# THE YANOMAMI TRIBES IN THE RAINFOREST



The Amazon forest



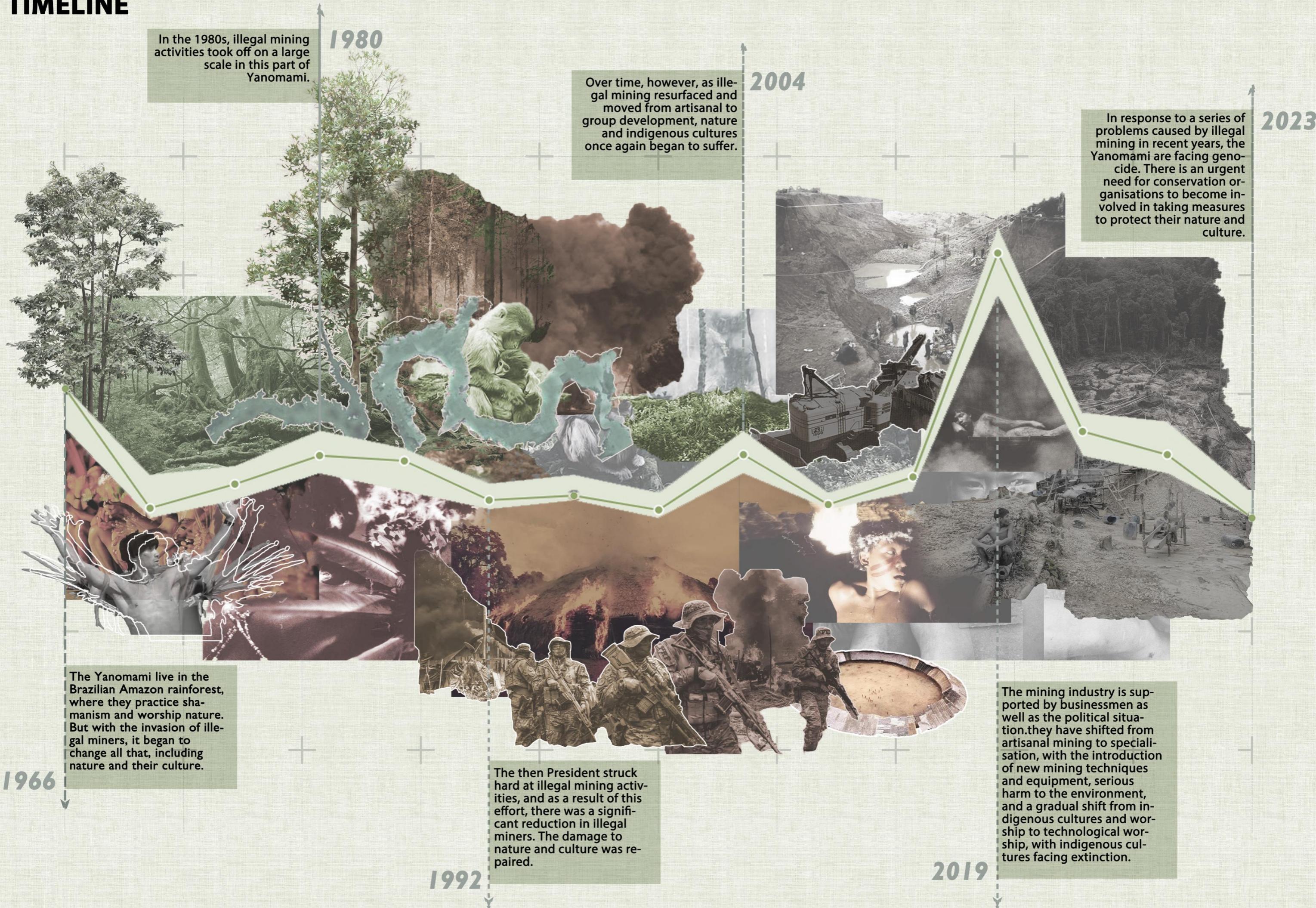
The habitat after mine exploring



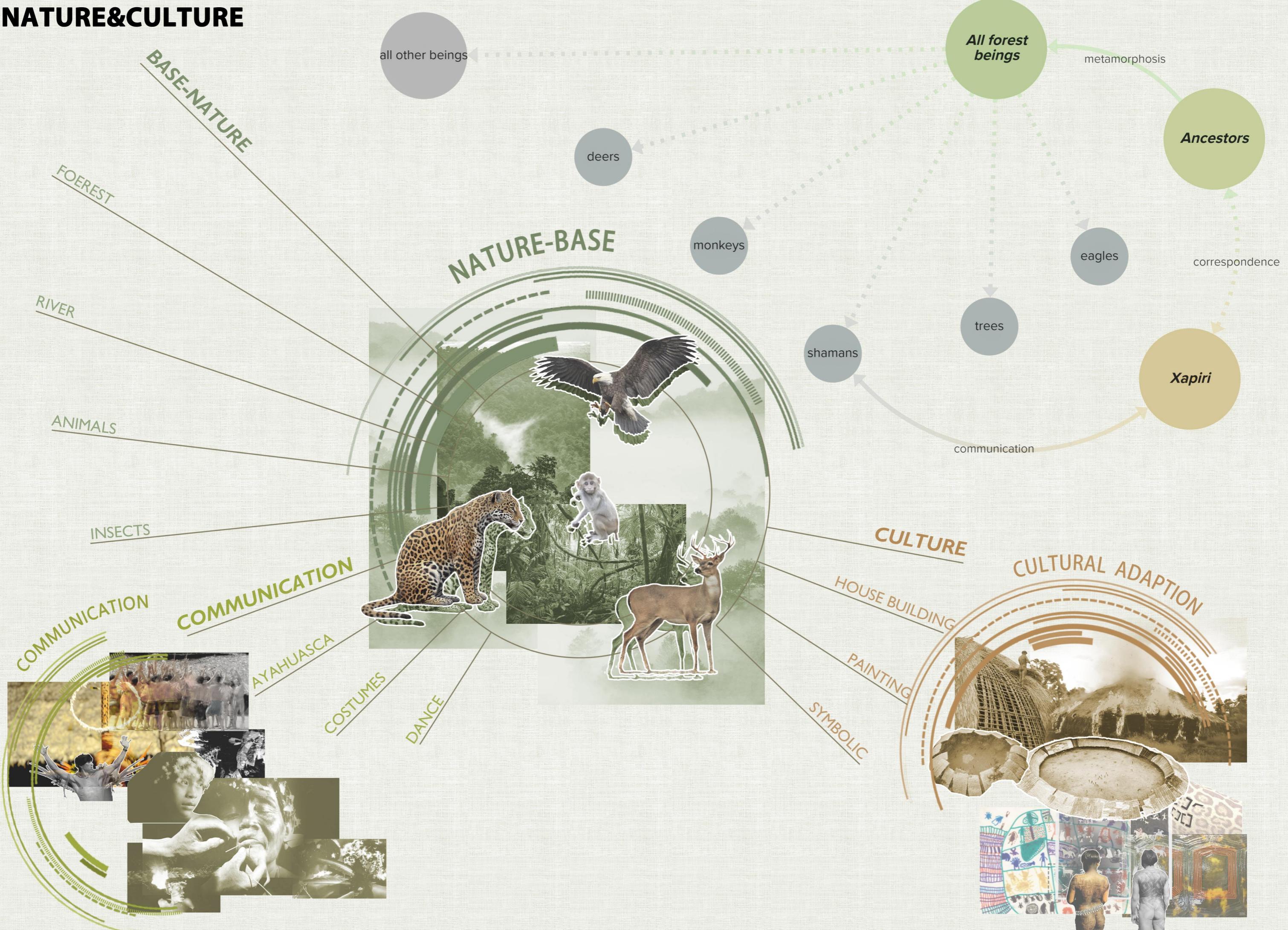
The tribe house



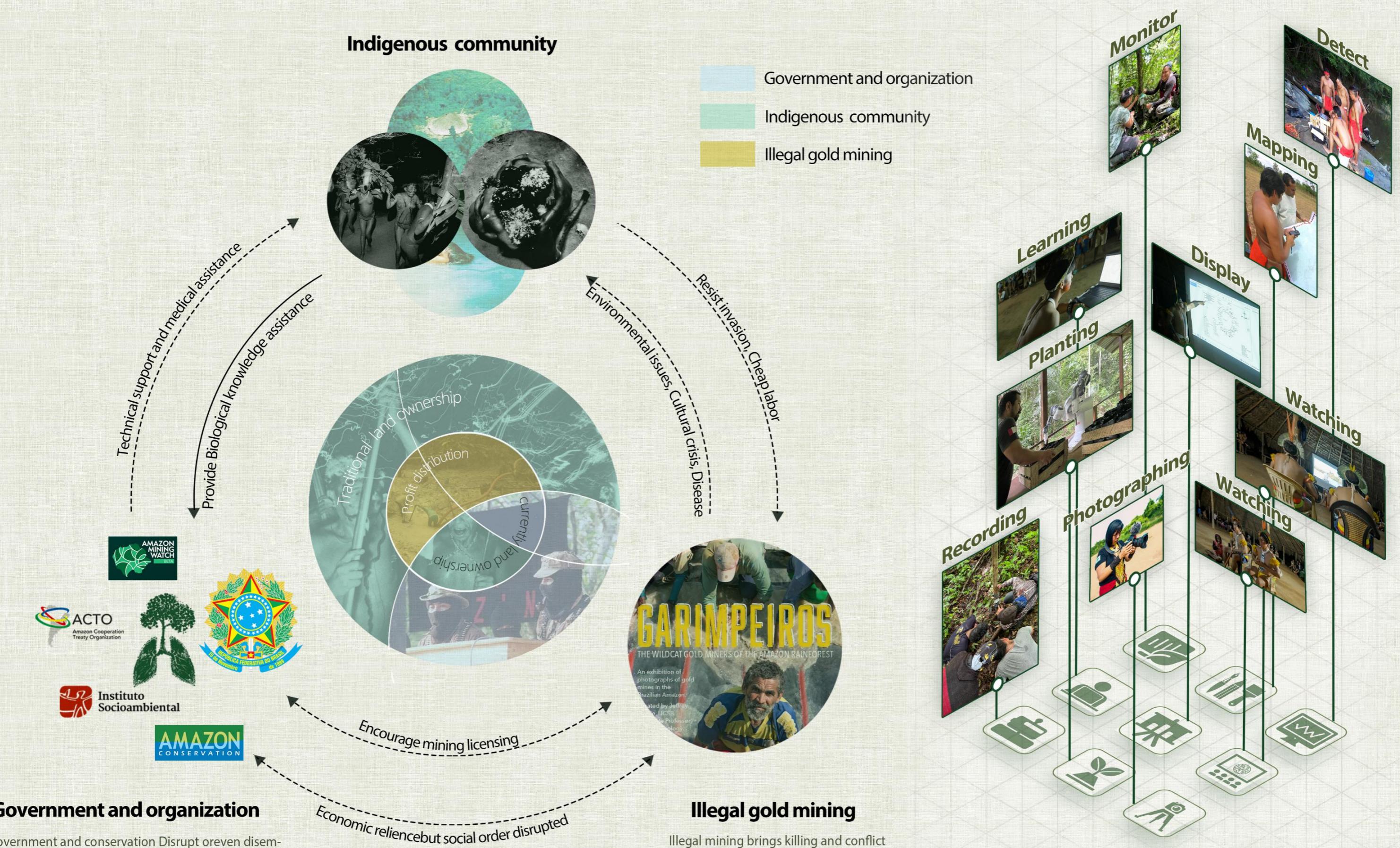
# TIMELINE



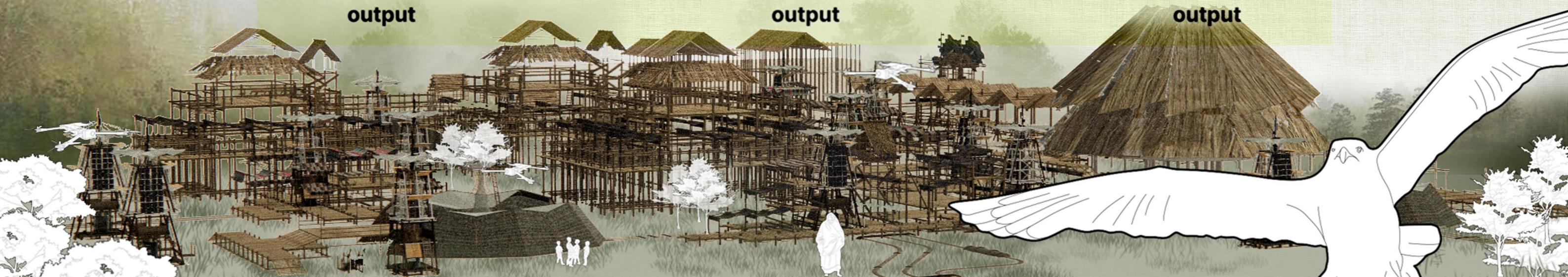
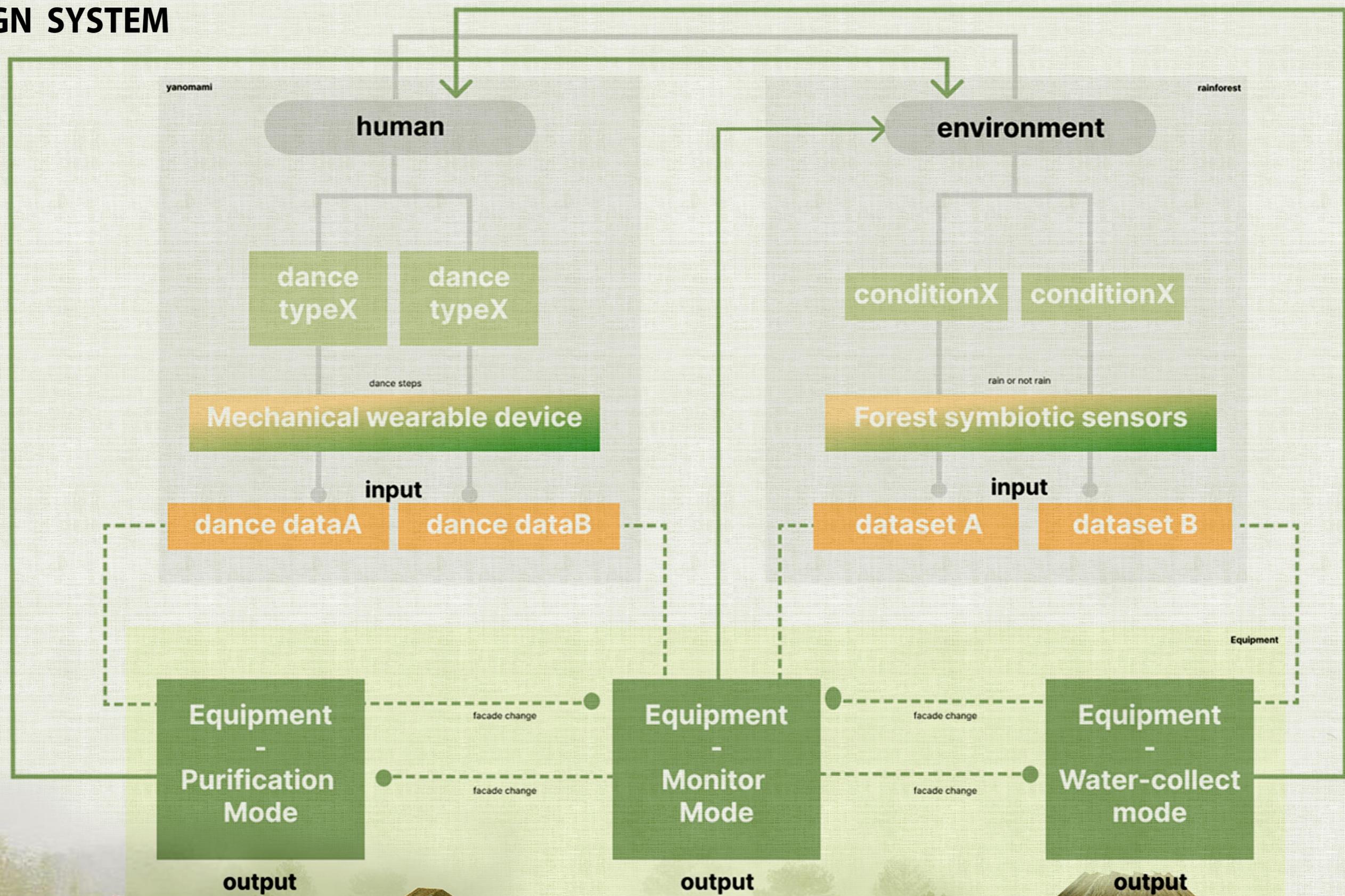
# NATURE&CULTURE



# IMPORTANCE OF INDIGENOUS LAND AUTONOMY

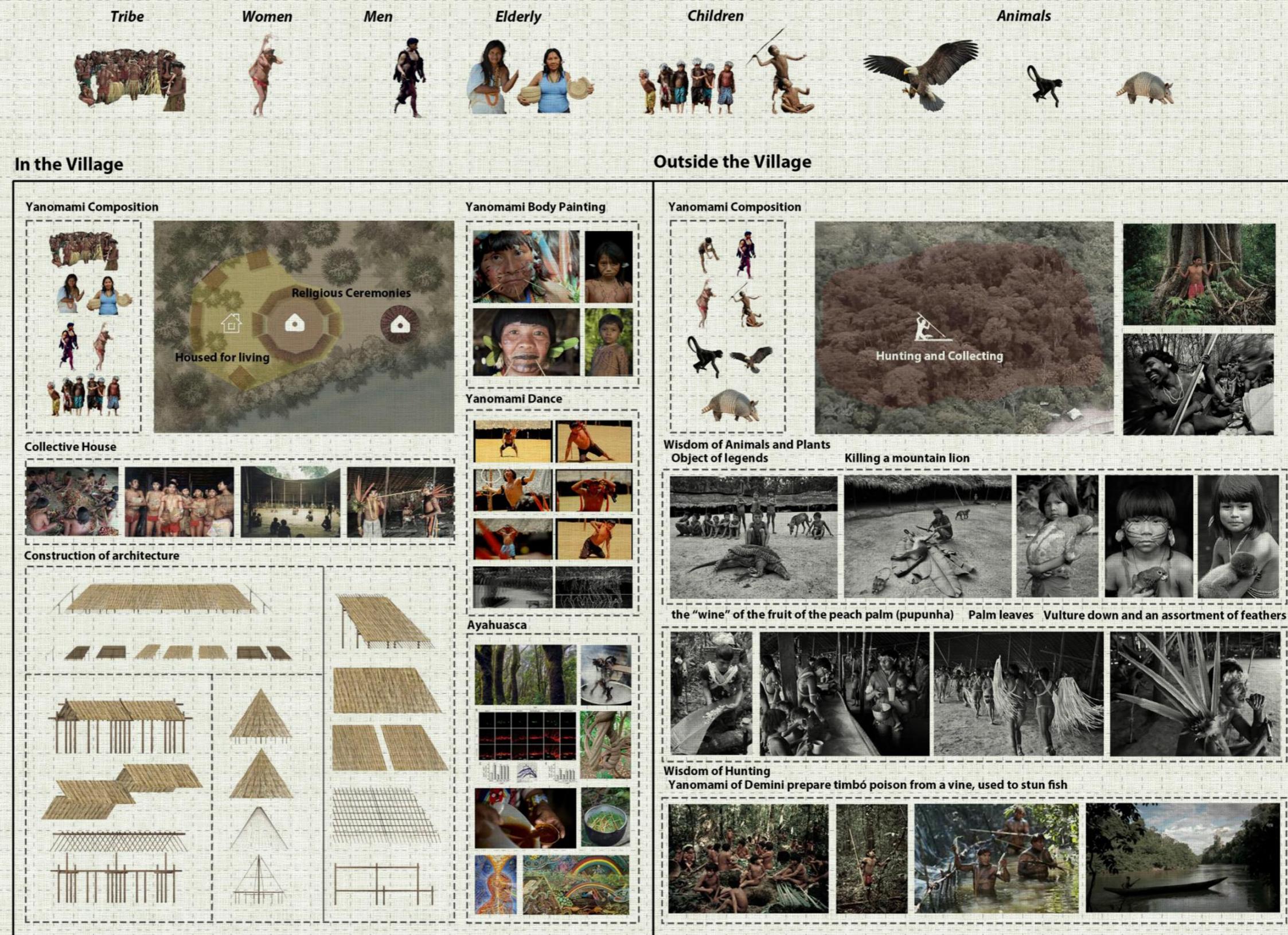
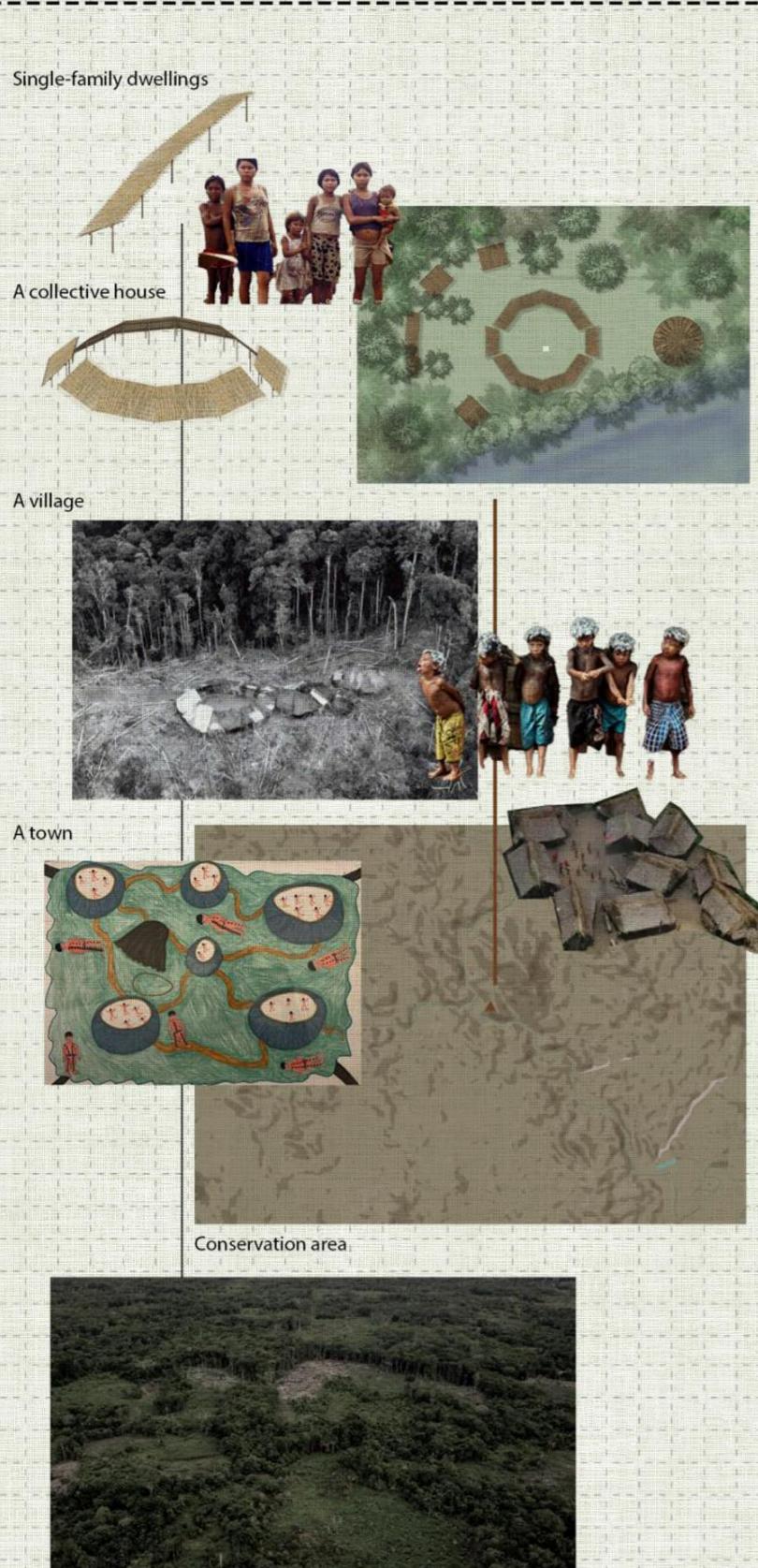


# DESIGN SYSTEM



# SITE ANALYSIS

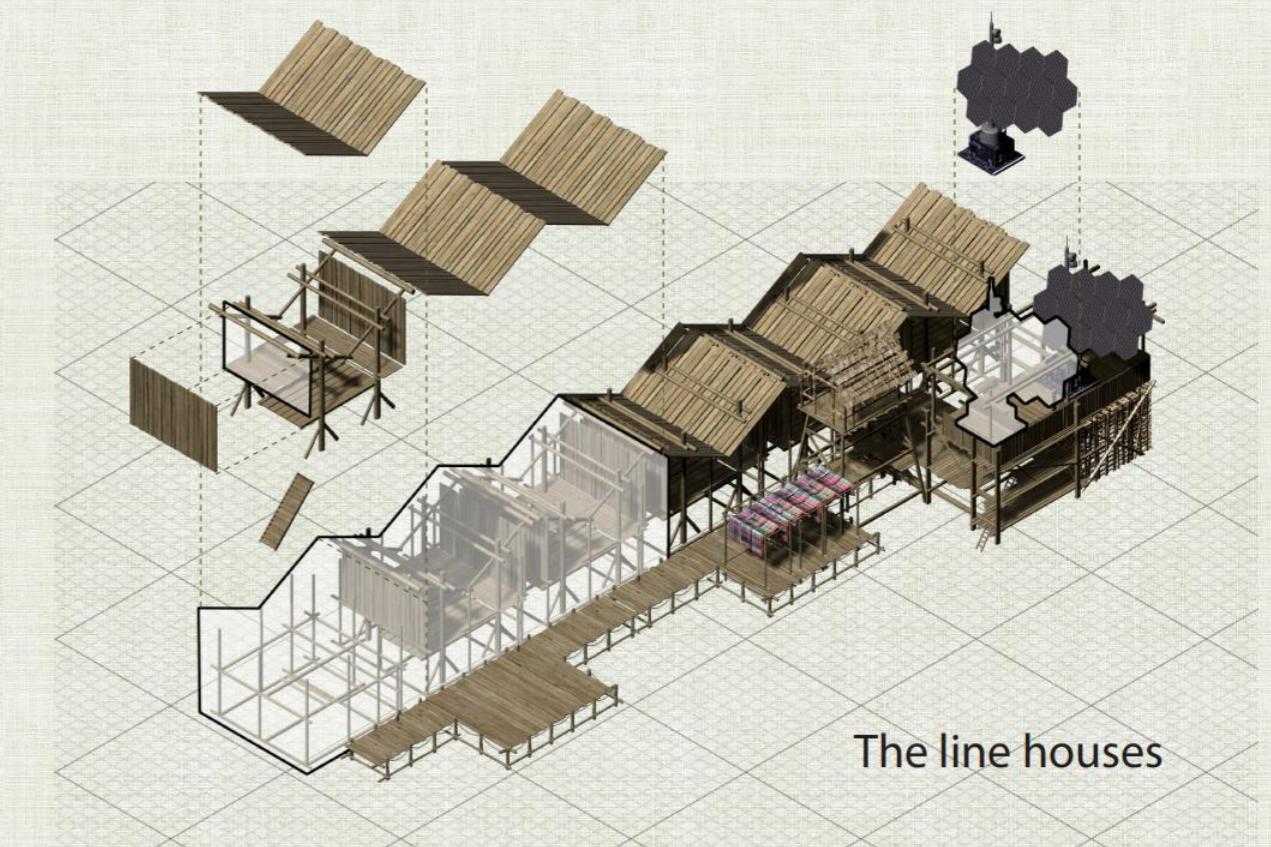
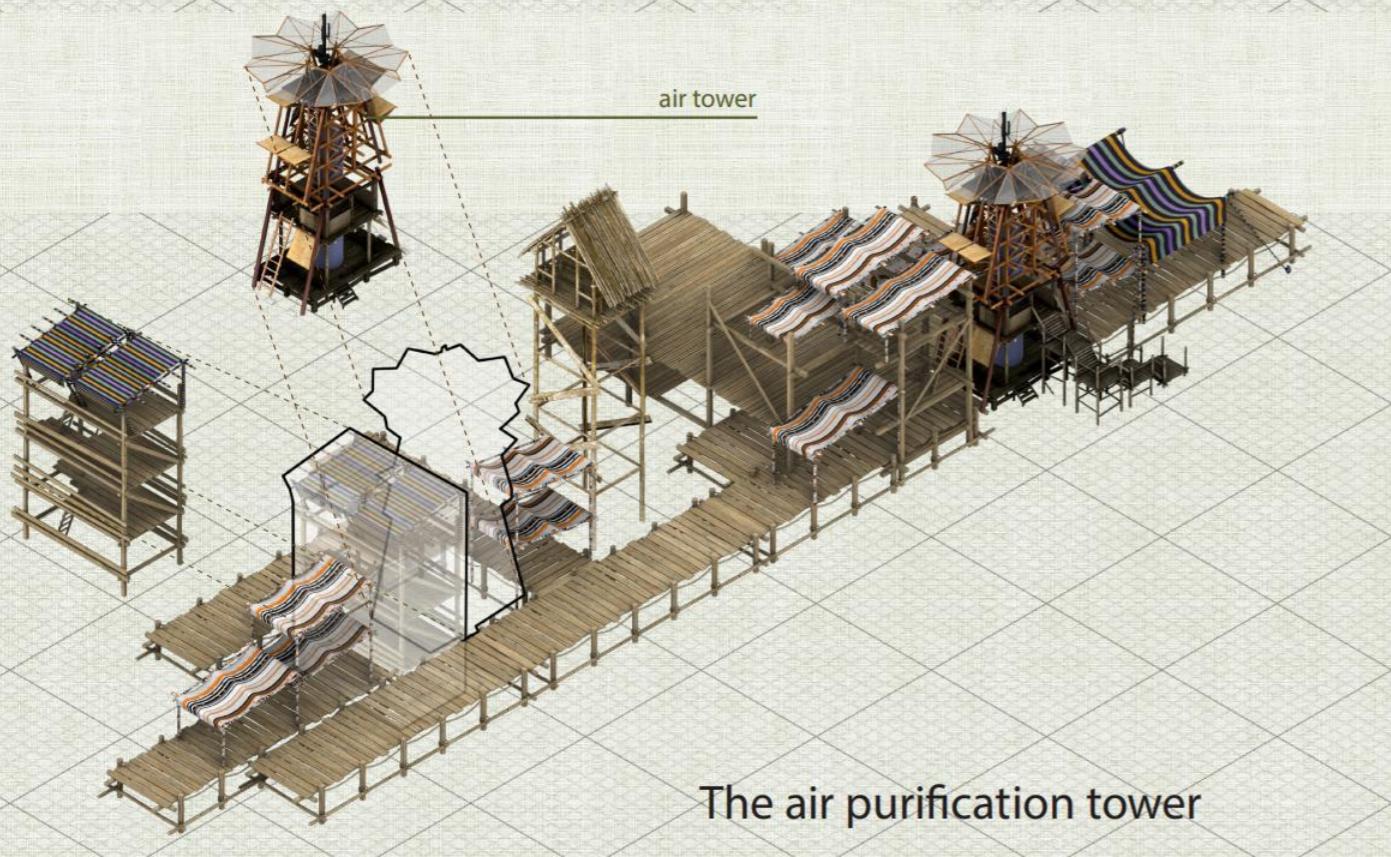
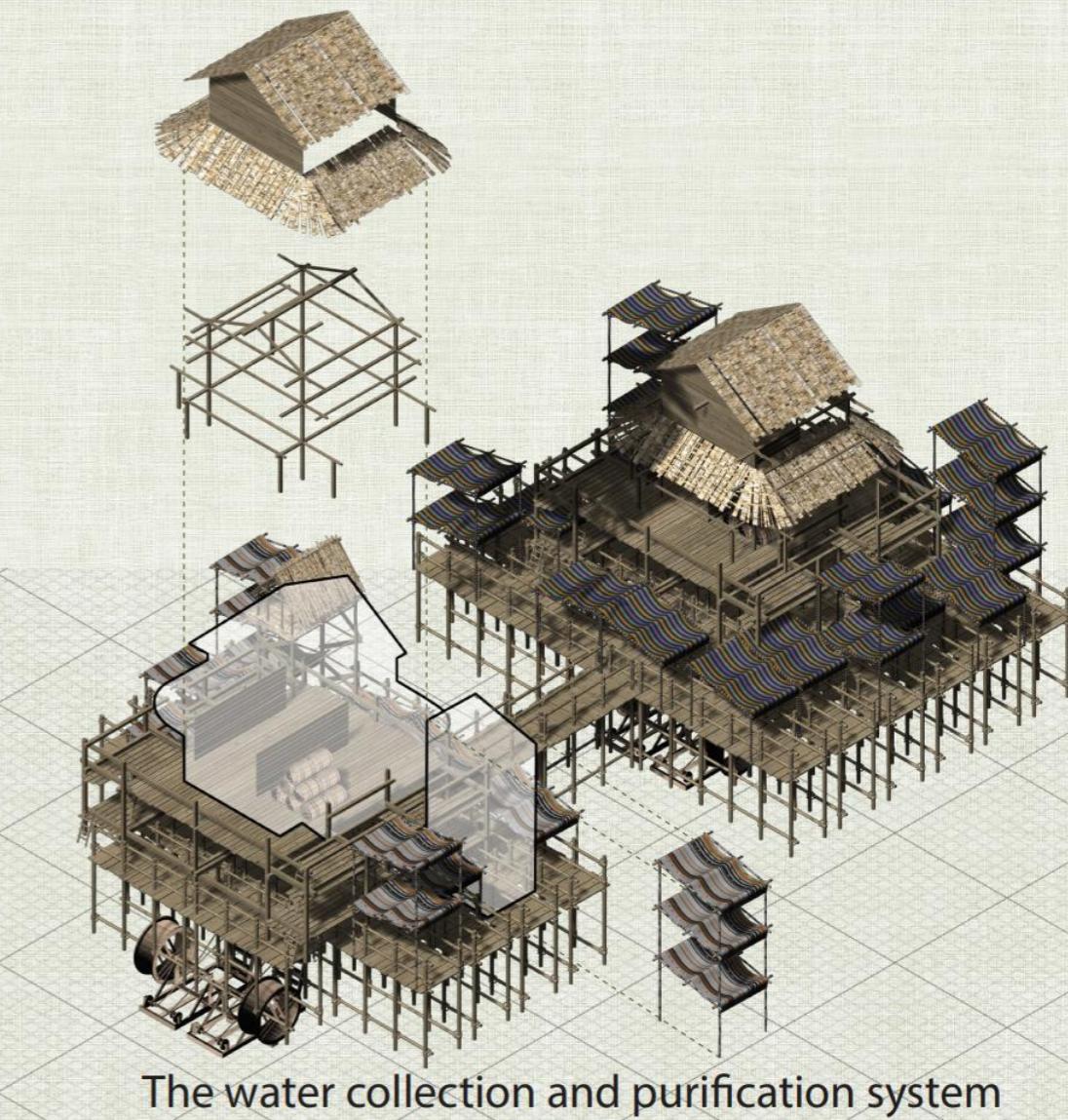
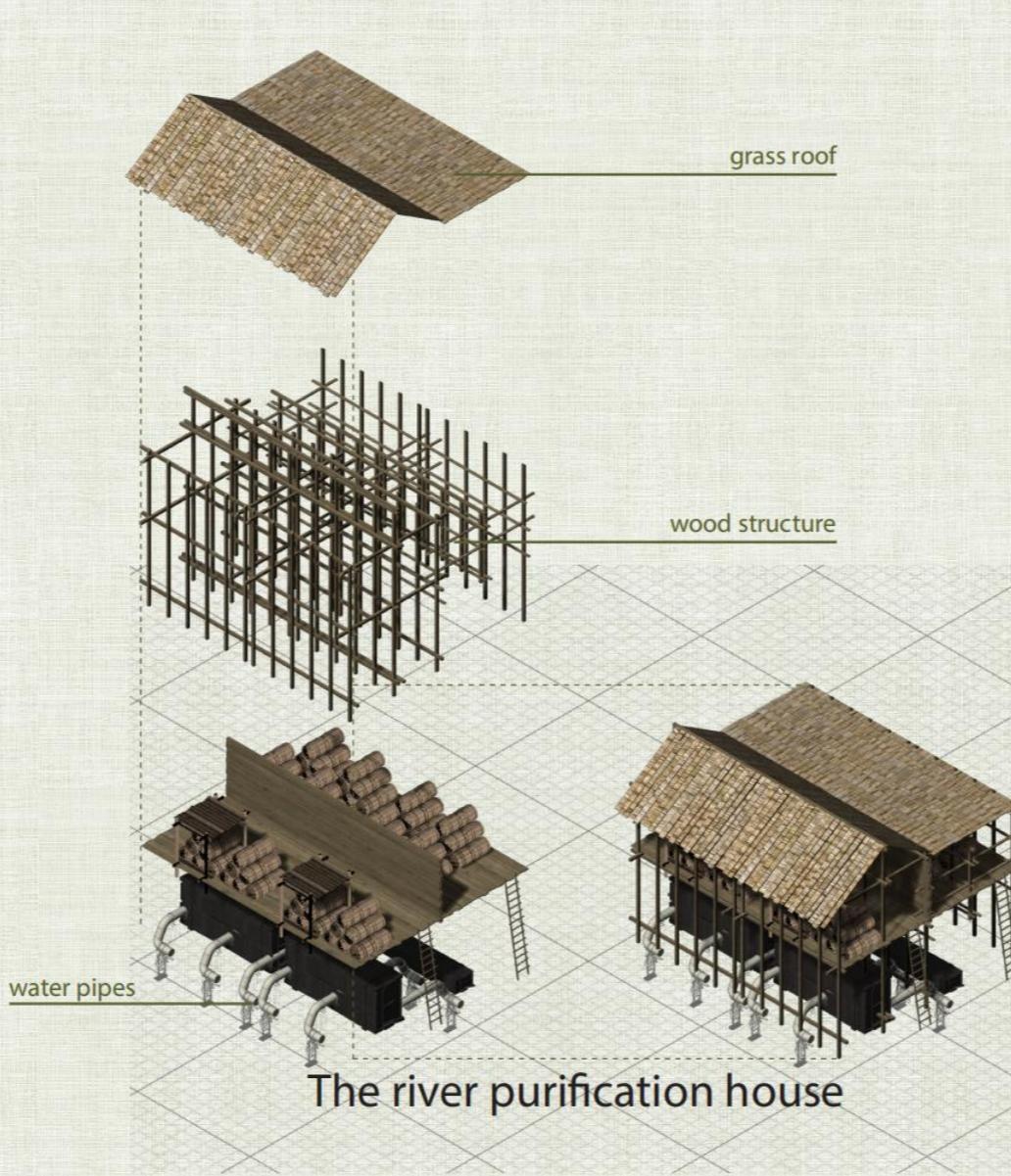
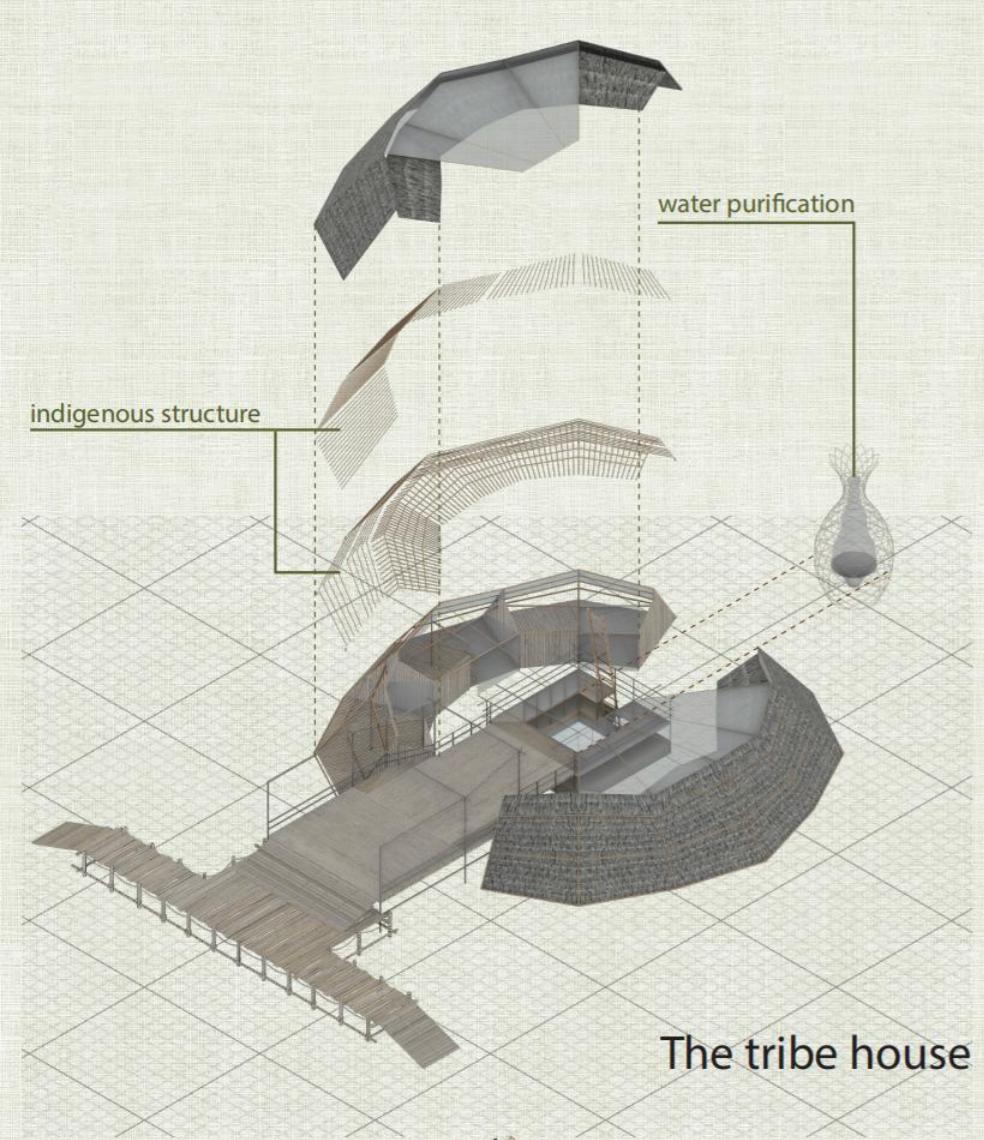
Yanomami Life and Environment



# THE PROTOTYPE ANALYSIS



# THE DESIGN SYSTEM MODULES



# Architecture Module Analysis Diagram

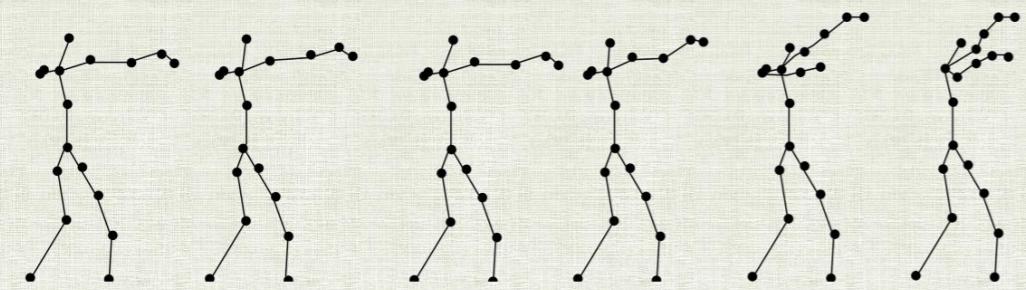


# GENERAL PLAN

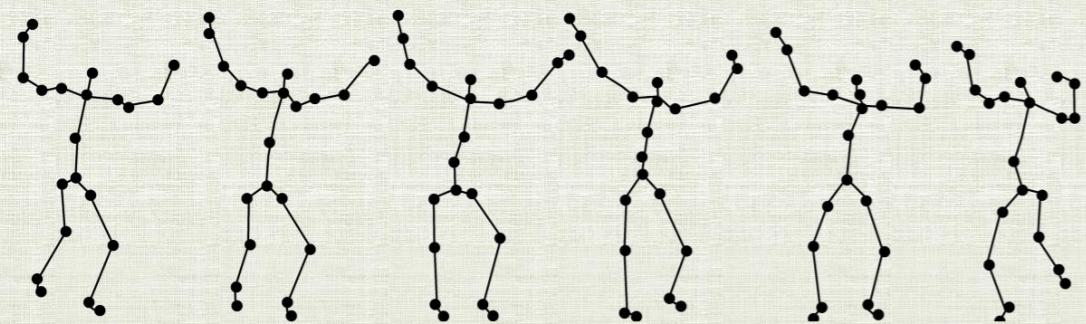


# DANCING MOVEMENT

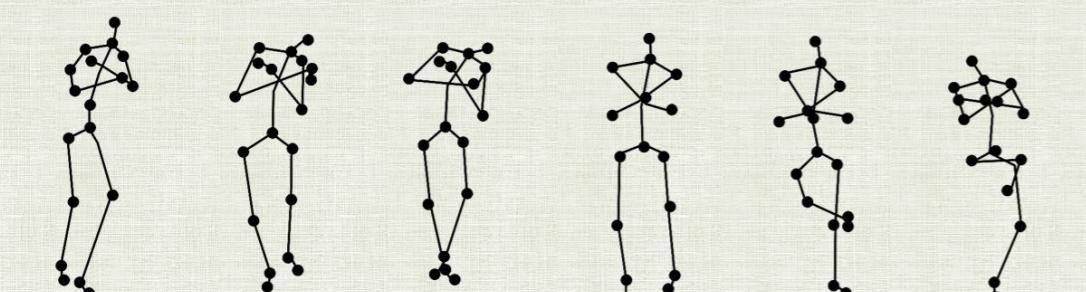
## MOVEMENT 1



## MOVEMENT 2



## MOVEMENT 3



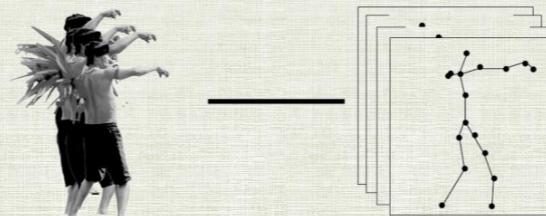
# THE WERAER MACHINE



## Motivation

Goal: To recognize and analyze  
Idea: Use Yanomami dance movements for machine running and adjusting

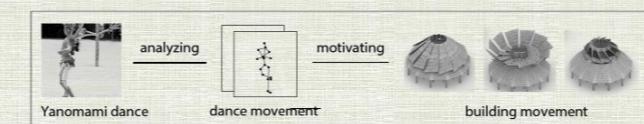
- Generate dance movement from wearable machine
- Train movement to person image translation
- Apply to machine starten



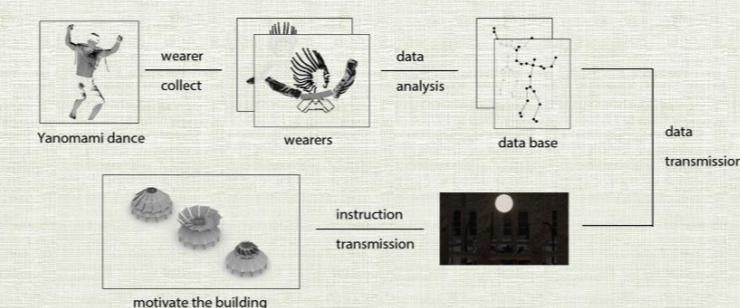
## Contributions

- 1) Simple method for Yanomami to learn machine using
- 2) Preserve the Yanomami dance culture
- 3) Combining dance and machines

## Training



## Transfer



## Dancing Dataset



# THE TEMPLE

## Raining

**Action**  
When it's raining, the roof inclines down to protect the solar panels from rain water. It also reduces rain contact with the machine.

**Panels**  
The solar panels under the roof provide energy to the sensor and all the machines on the second floor.

weather sensor



## Opening

**Action**  
When the rain stops, the sensor under the center hole finds the weather change, then the movable roof opens and goes up.

**Sensor**  
People can touch the sensor directly on the stage, and the sensor is at the same level as people's sight when they are using the machine.



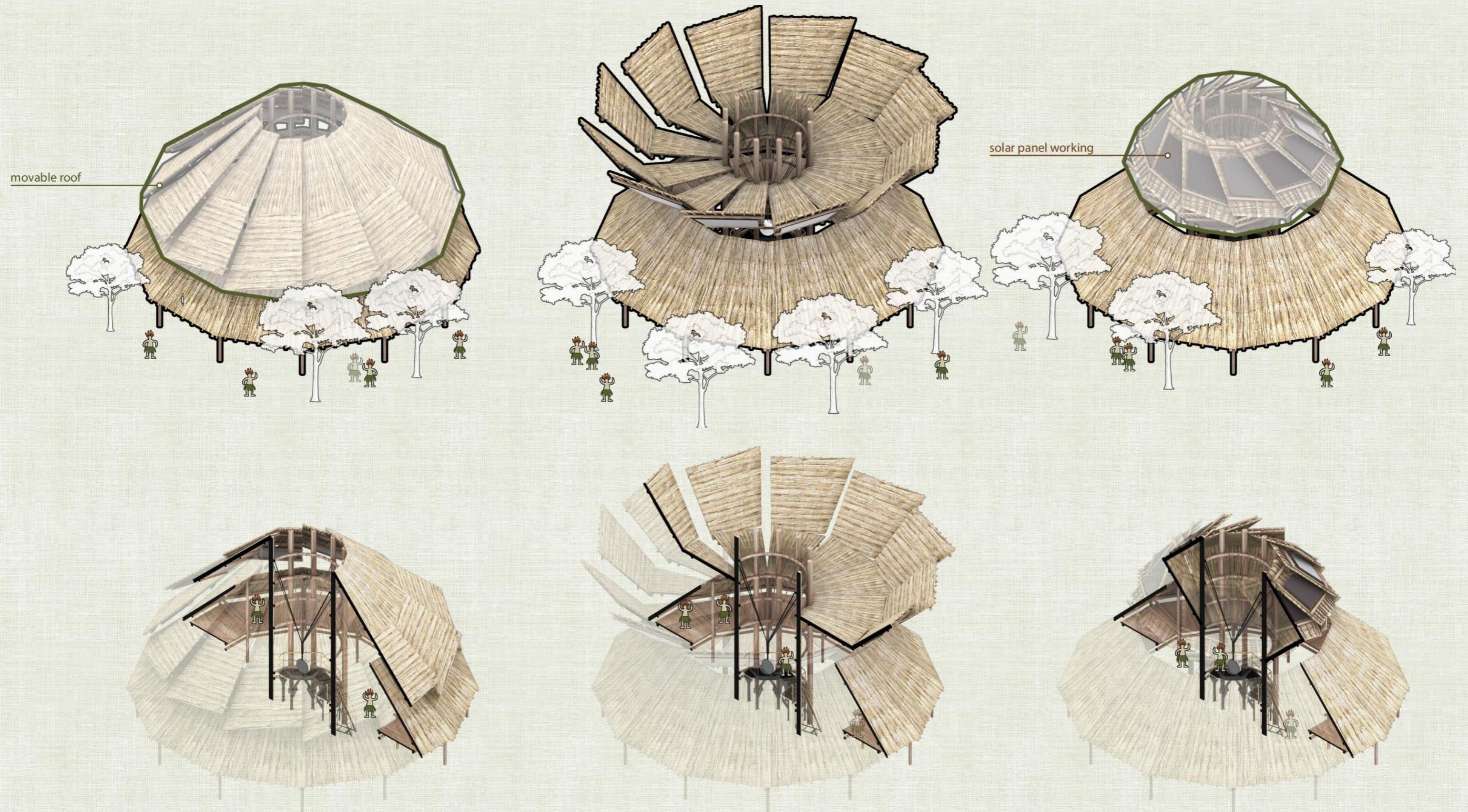
## Solar Energy Accumulation

The roof totally opens. The solar panels turn to the upside of the roof, absorbing the solar energy to accumulate electricity.

**Light**  
The weather should be sunny, and more light and wind go into the space, while the center hole still gives a toplight.



# THE TEMPLE



# RITUALS IN TEMPLE

## Wearable devices

Indigenous people perform rituals (dancing) on the temple stage by wearing a device to switch on the machine and send out signals.



## Data crate

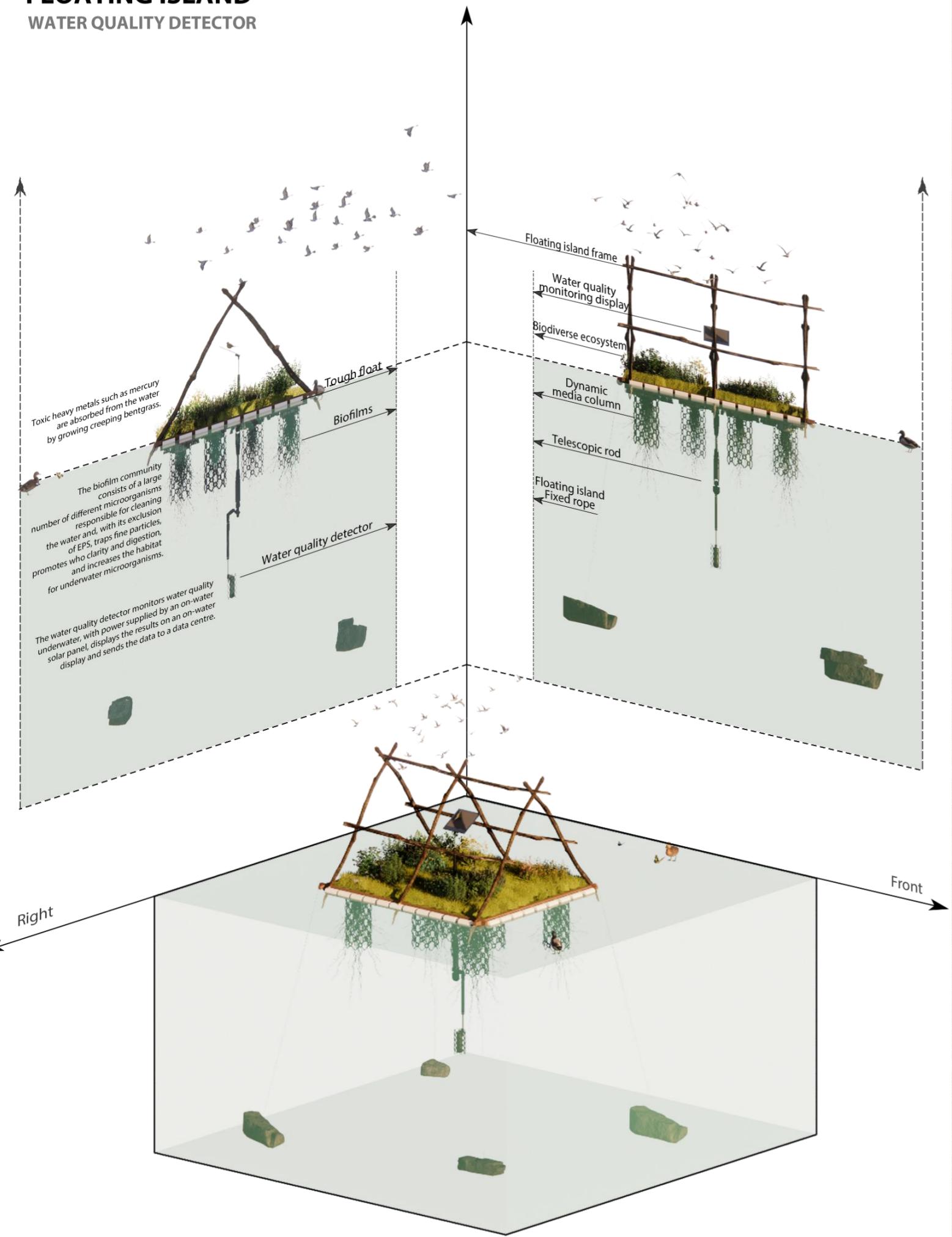
The data box on the first floor, which collects data via data lines and signals to generate a database.

## Data station

The data equipment in the centre, which carries out data collection and signal transmission and collection, transmits signals to the robots and construction machines when it receives dance commands, and can display the information monitored by the monitoring equipment.

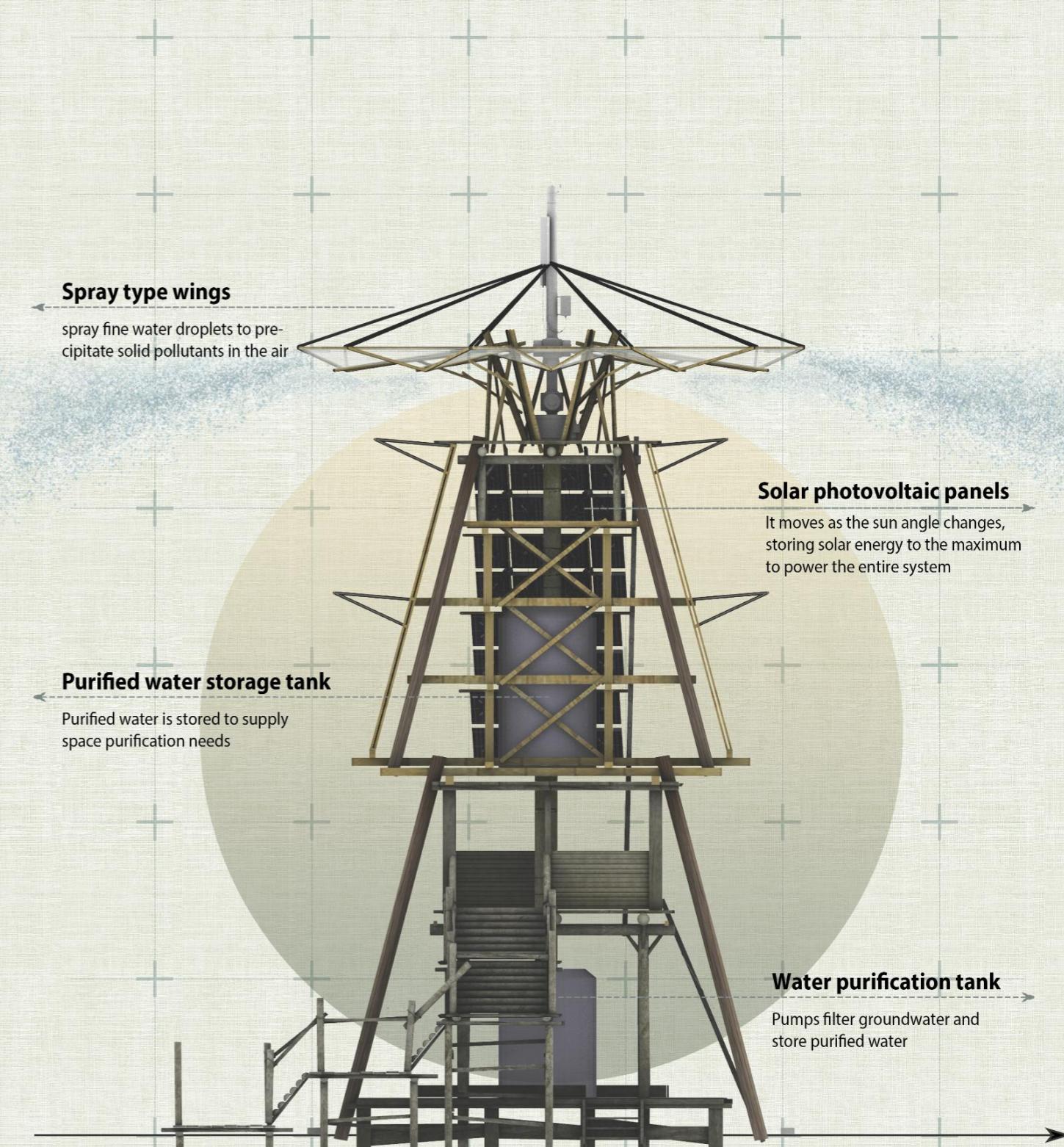
## FLOATING ISLAND

### WATER QUALITY DETECTOR



## TOWER

### WATER & AIR PURIFICATION TOWER

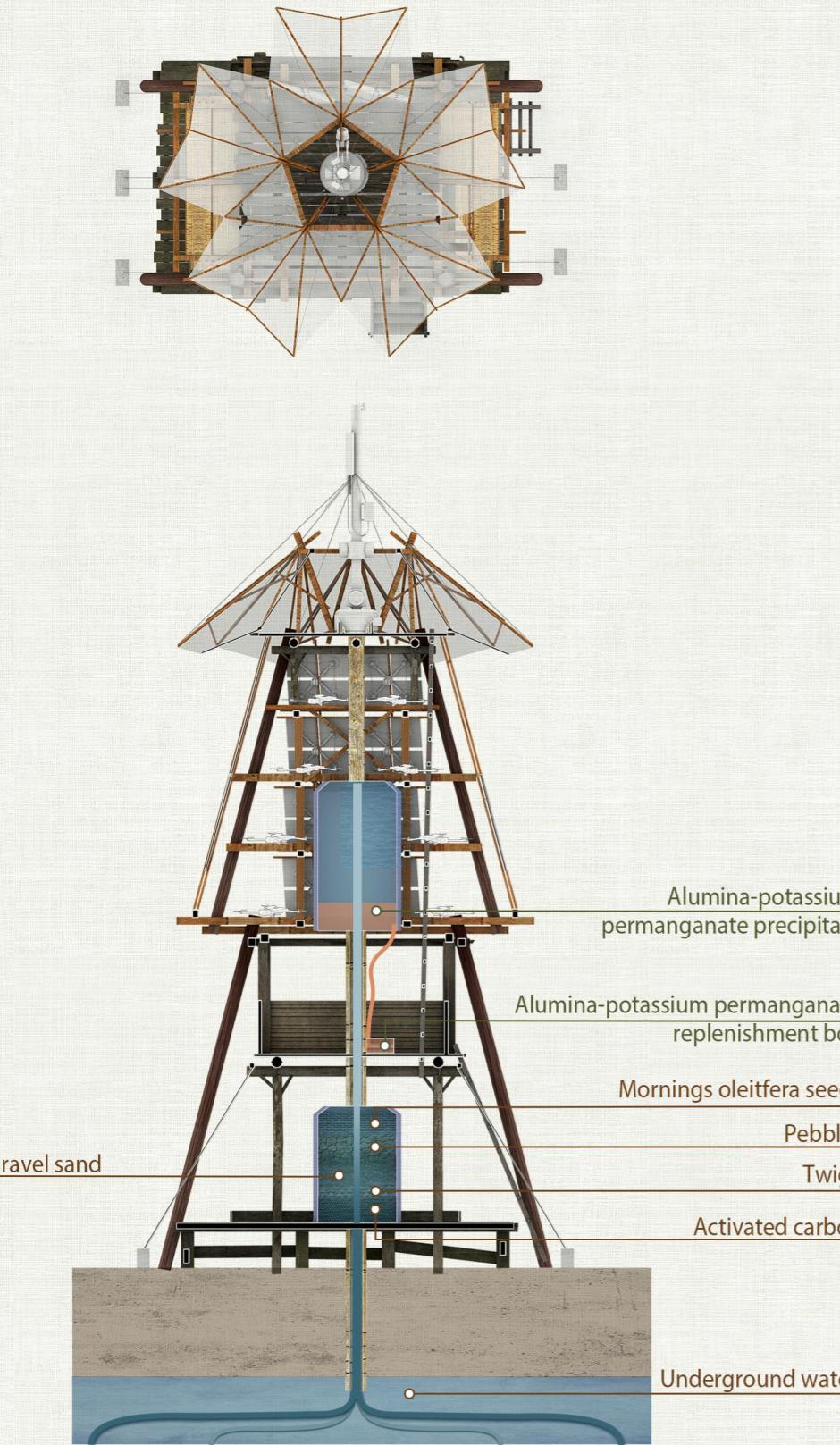


# PURIFICATION TOWER

## High Air Quality

The air purification system is in sleep mode. The drone is charged and dormant inside the tower.

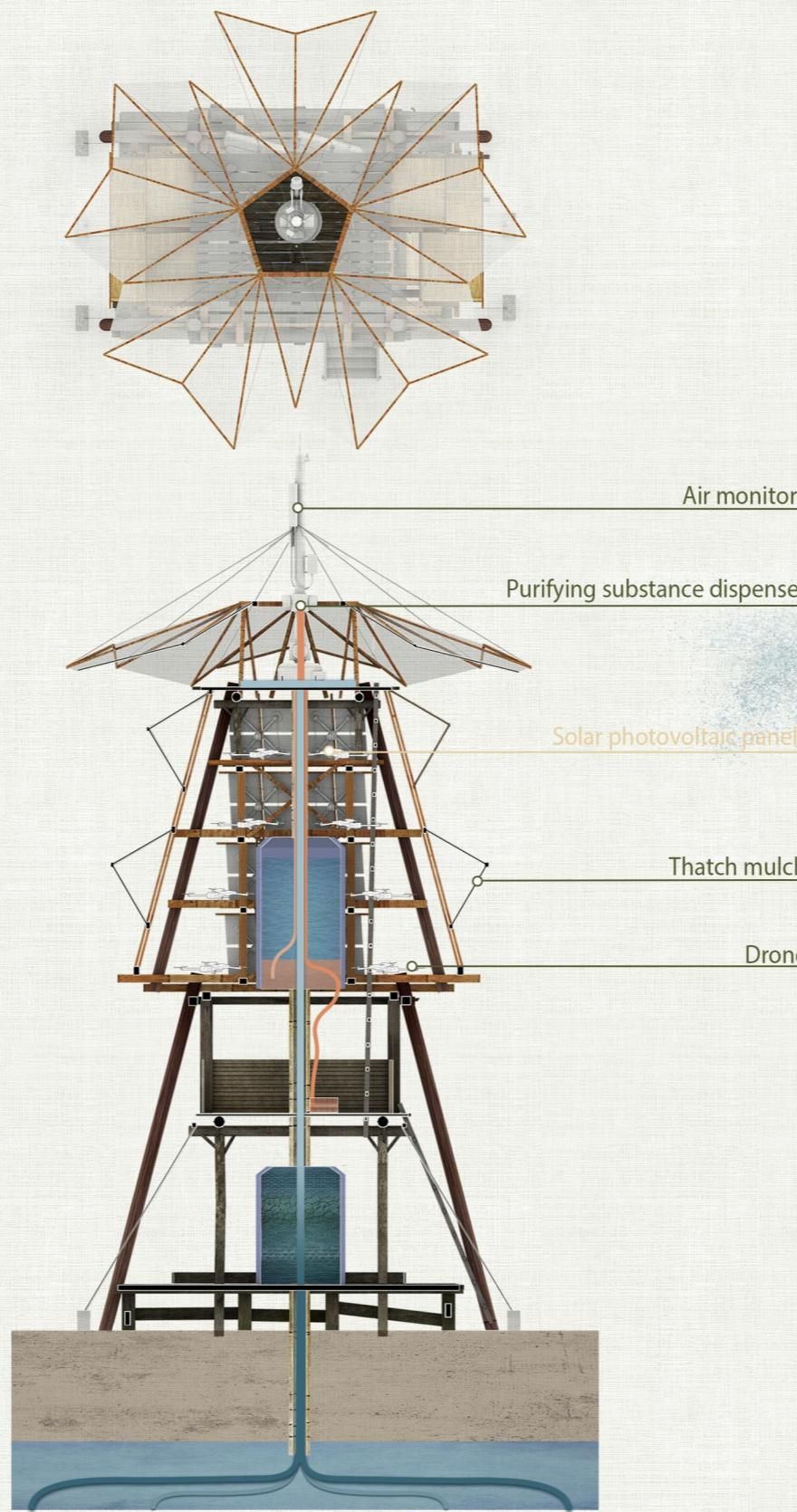
The purification tower automatically pumps groundwater for purification and stores it in the water tank on the second floor.



## Air Quality Changing

The spray type wings automatically opens and blooms, the purified water and purified substances in the tank enter the spraying system, and the thatch mulch goes into folding mode.

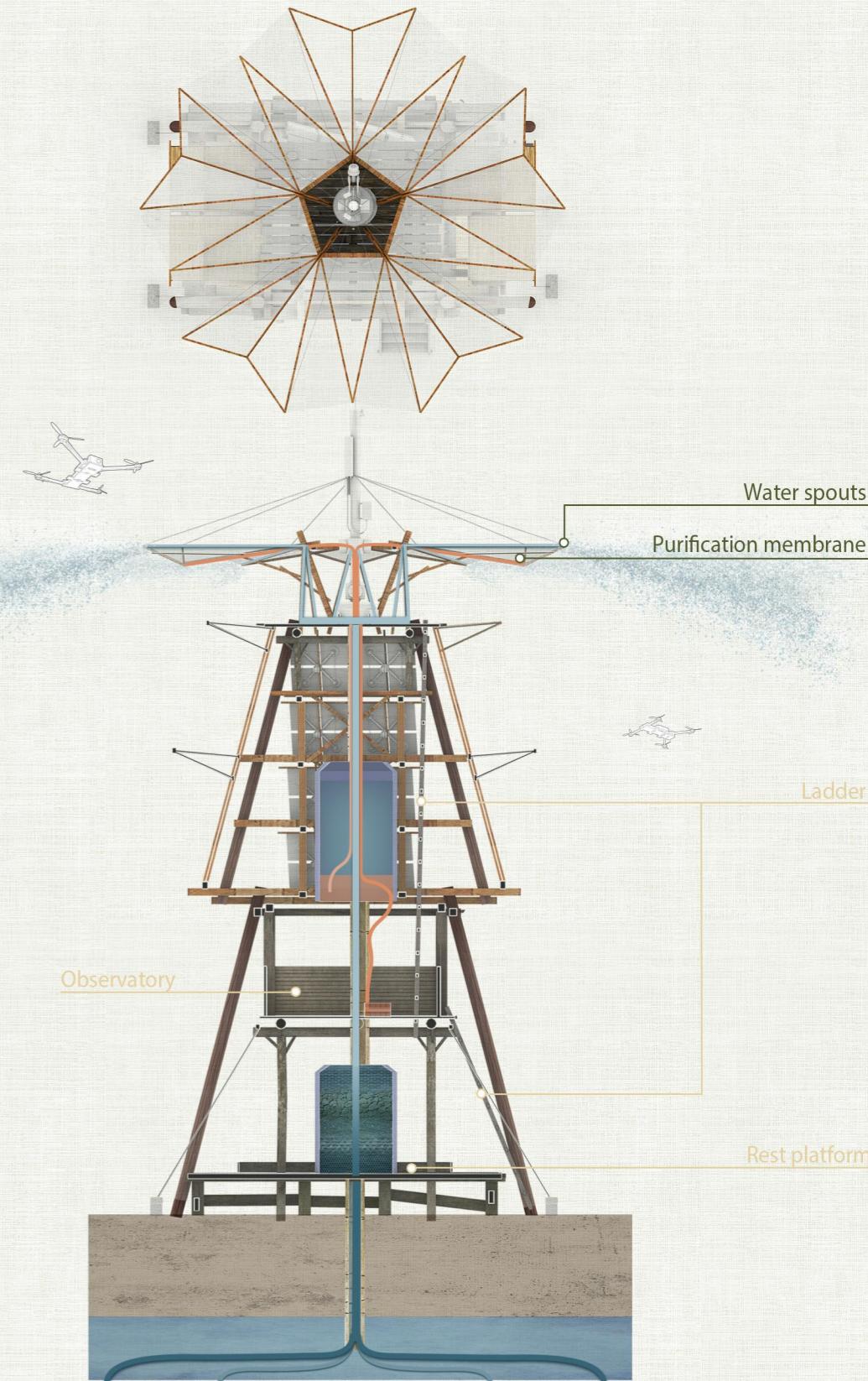
The water purification unit is still operating



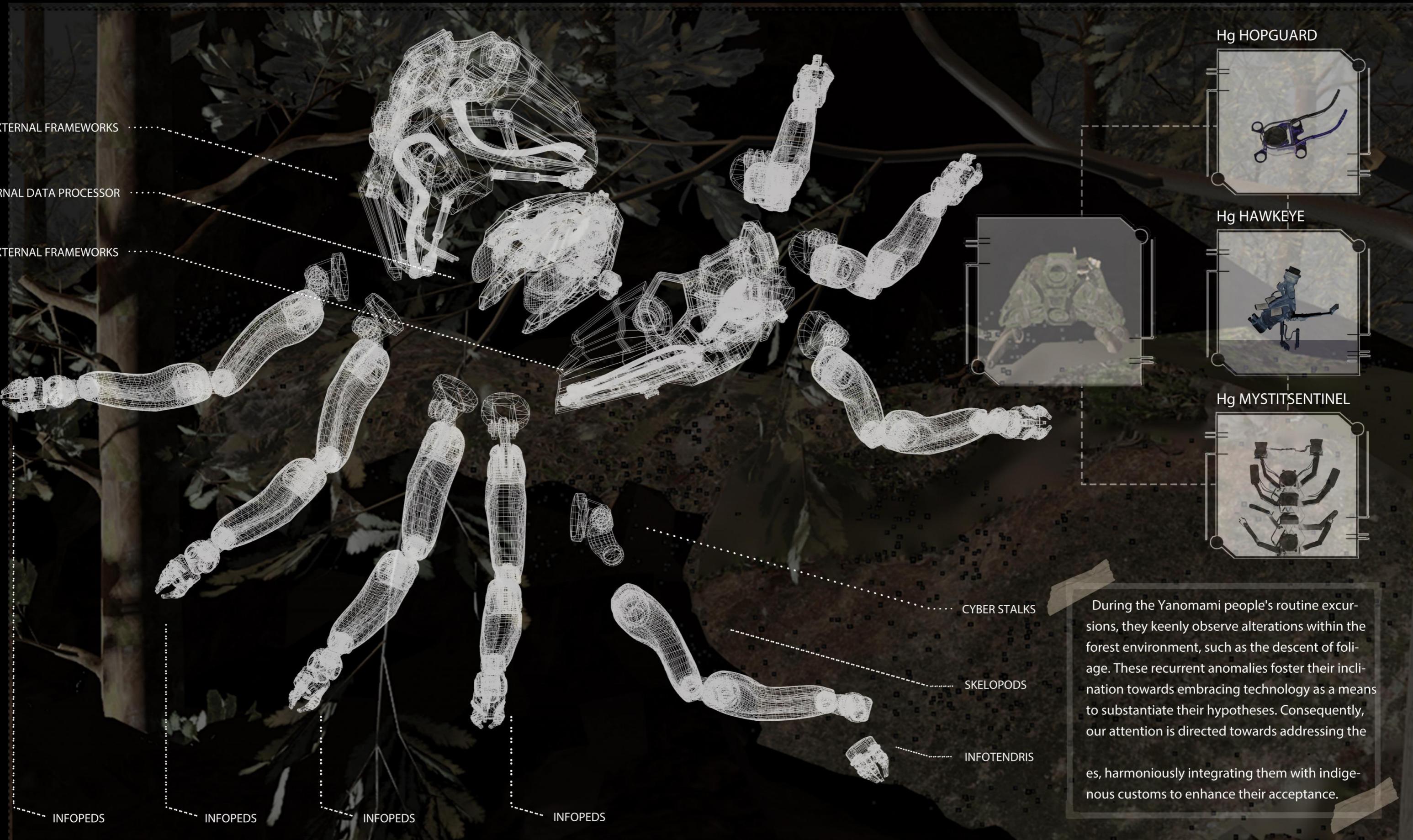
## Low Air Quality

The device sprays purified water into the air to precipitate solid pollutants, the purification membrane captures mercury in the air for precipitation and absorption, and the drone is turned on and flew to distant forests for mercury monitoring and absorption.

Water purification systems are kept operational to sustain the need for air purification



# ARBOREAL MERCURY BOT



# DWELLING

