„NEW NATURE IN PARK AT THE ILM”

(DE+RE)COMPOSITION

DEFNE ISIKLI 123399
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WHAT IS NEW NATURE?

“New Nature in Park at the Ilm” is aimed at making awareness of our nature within the context of the climate change. What is actually present in contemporary nature and not as much as perceivable?

While analysing, we realized that there is a data of “garbage” which is currently not visible in nature, since the waste at the Park is regularly collected by Klassik Stiftung. Garbage is now ignored and growing as a more serious threat to world. All waste around the world are forming a large pile of trash: “7th Continent” which is threathening ecosystem and consequently accelerating climate change.

With (de+re)composition, we aimed at intensifying the multisensory perception of natural phenomena: garbage. Our “new nature” represents a future image of nature where garbage is fundamental component of Earth.

We have walked around Park Ilm, collected and analysed garbage. We have produced decomposing sound of these elements in order to create a spatial atmosphere accompanied by audio experience.

To emphasize the cruciality of the topic, we include actual garbage that will be collected from the Park. In that sense, our installation only suggests a new way of representation of future. The walls of the installation which consists of plastic bags, will be filled week by week. Visitors will experience a different situation each time they are in tunnel. In time, they will see less of the existing nature and more of the new nature.

(de+re)composition adds a new layer of auditory information in order to create an interactive communication between nature and users. While entering the garbage tunnel, visitors become more involved in the display of garbage data.

Users would be able to hear the composition of future nature; garbage sounds echoing throughout natural environment.

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EXPERIENCE

(de+re)composition offers its visitors to hear the decomposing sound of garbage categorized according to their lifespan while walking through an enclosed tunnel surrounded by waste. The installation is inspired by water sound of Ilm River and aimed at re-generating water sound as a new nature element.

Before starting their experience, visitors should read “READ ME” sign to understand how our installation functions. Users should activate the sound of each Zone while entering. Sound clips will be played automatically after visitors approach to the ultrasonic sensor. This action will turn off BLUE LED and will turn on RED LED.

Visitors will enter garbage tunnel from Zone 0, where an explanatory sound clip will be played. (WELCOME TO YOUR FUTURE HOME!)

Walking along each Zone, the sounds of different materials will be juxtaposed on top of each other and at the end, create a chaotic experience which would reflect how pure water sound of current nature will transform into garbage sound within new nature concept.

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WELCOME TO YOUR FUTURE HOME!

<Sound Starts> / =Zone 0

Here you will enter an auditory experience of a world full of waste. During this journey, you will be accompanied by the items that were collected from the park “Ilm” every day.

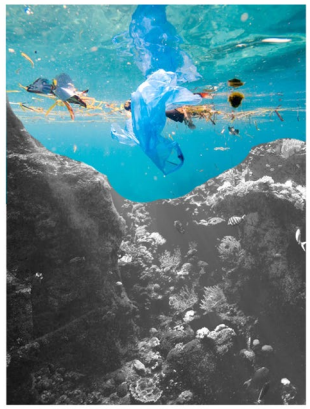
You, as humans produced more than this planet can handle and you are not doing anything to stop it. So instead, we are giving you a chance to get used to your future and look at these items which would normally end up in the ocean after Germany’s annual waste export.

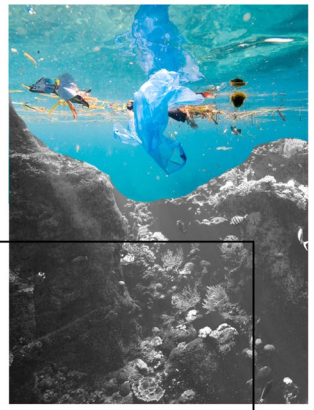
The final destination of all of the Planet’s waste is forming “The 7th Continent” in the ocean, which is also called “the great pacific garbage patch”, has now an area of 1.6 million square kilometers and continues to grow. Ultimately, It will be a brand-new habitat for humankind but no other species.

The materials on the sidewalls are placed in plastic bags to enhance a pleasant journey. You can enjoy listening to the decomposing sound of each waste-zone that is sorted according to their life-span respectively. In your future environment, you will have the opportunity to experience them on another level, by touching, smelling, walking on, and maybe swimming in it.

ENJOY YOUR STERILE EXPERIENCE WHILE YOU STILL CAN!

<Sound Ends>





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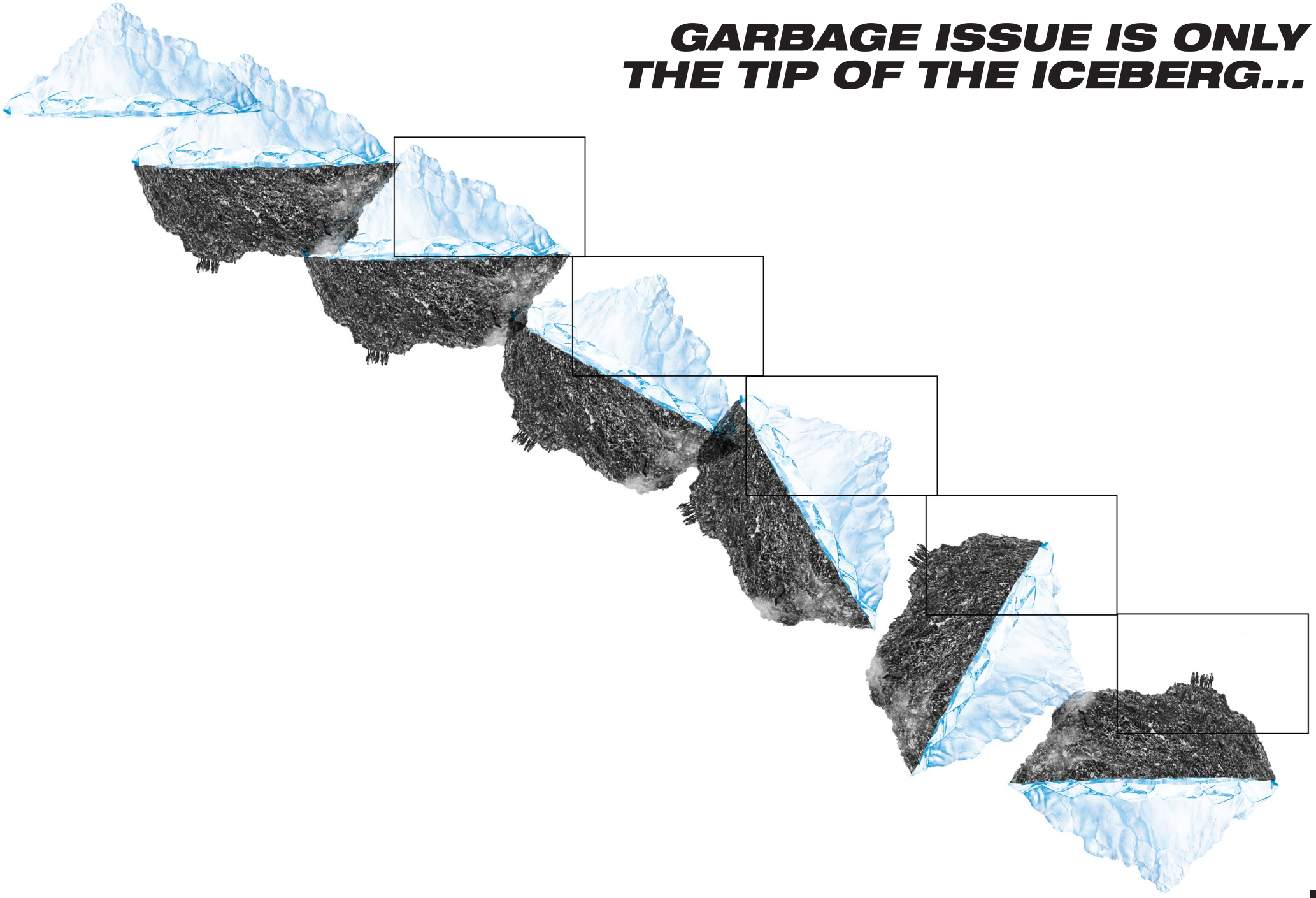
GARBAGE ISSUE IS ONLY THE TIP OF THE ICEBERG...



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INFOGRAPHIC

PLASTIC.

Plastic never fully degrades.

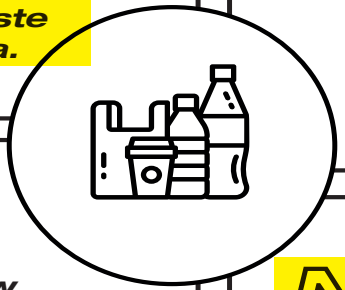
Every year, over 8 million tonnes of plastic waste flow from land to sea.

& OCEAN.

*In certain parts of the globe, **plastic represents up to 95%** of the total marine debris.*

MARINE DEBRIS

any persistent solid material that is manufactured or processed and directly or indirectly, intentionally or unintentionally, disposed of or abandoned into the marine environment

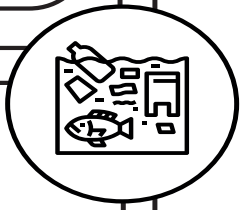


& RIVERS.

Between 1.15 and 2.41 millions of tonnes of plastic flow from rivers into the ocean every year.

WATERWAYS ARE THE MAIN CARRIERS OF WASTE FROM INLAND AREAS TO THE SEA.

NEW NATURE

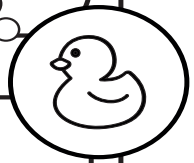


& MOVEMENT OF MARINE DEBRIS IN OCEAN

Today there are over 5000 billion plastic particles floating in our oceans even tough majority of it sinks to the bottom of the ocean.

Floating debris can be carried by ocean currents across sometimes remarkable distances.

In January 1992, an ocean liner connecting China to the US lost 12 containers off the coast of Russia in a storm. Thousands of “plastic ducks” poured into the ocean. Ten months later, numerous ducks were found on the coast of Alaska.



7th CONTINENT

*“The Seventh Continent”, also called the Great Pacific Garbage Patch, is a zone where **floating debris converges, situated in the North Pacific between California and Japan. There are 5 such meeting points or ‘gyres’ on earth.***

& GYRES.

*Taking the form of a plastic soup, these gyres are essentially made up of plastic particles smaller than 5mm. **It is estimated that the Great Pacific Garbage Patch or Seventh Continent could contain between 45 and 129 thousand tonnes of waste.***

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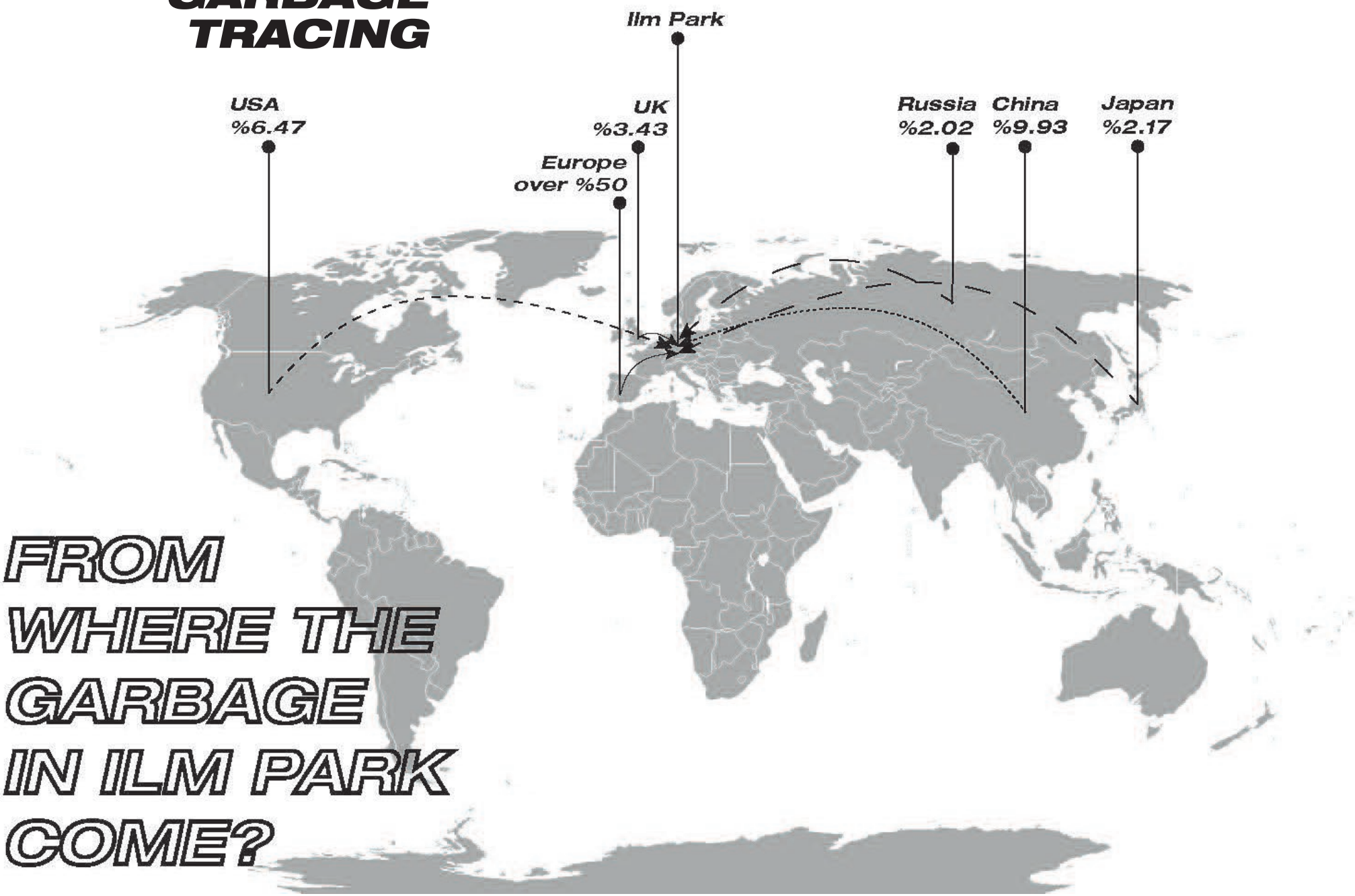
GARBAGE TRACING



FROM WHERE THE GARBAGE IN ILM PARK COME?

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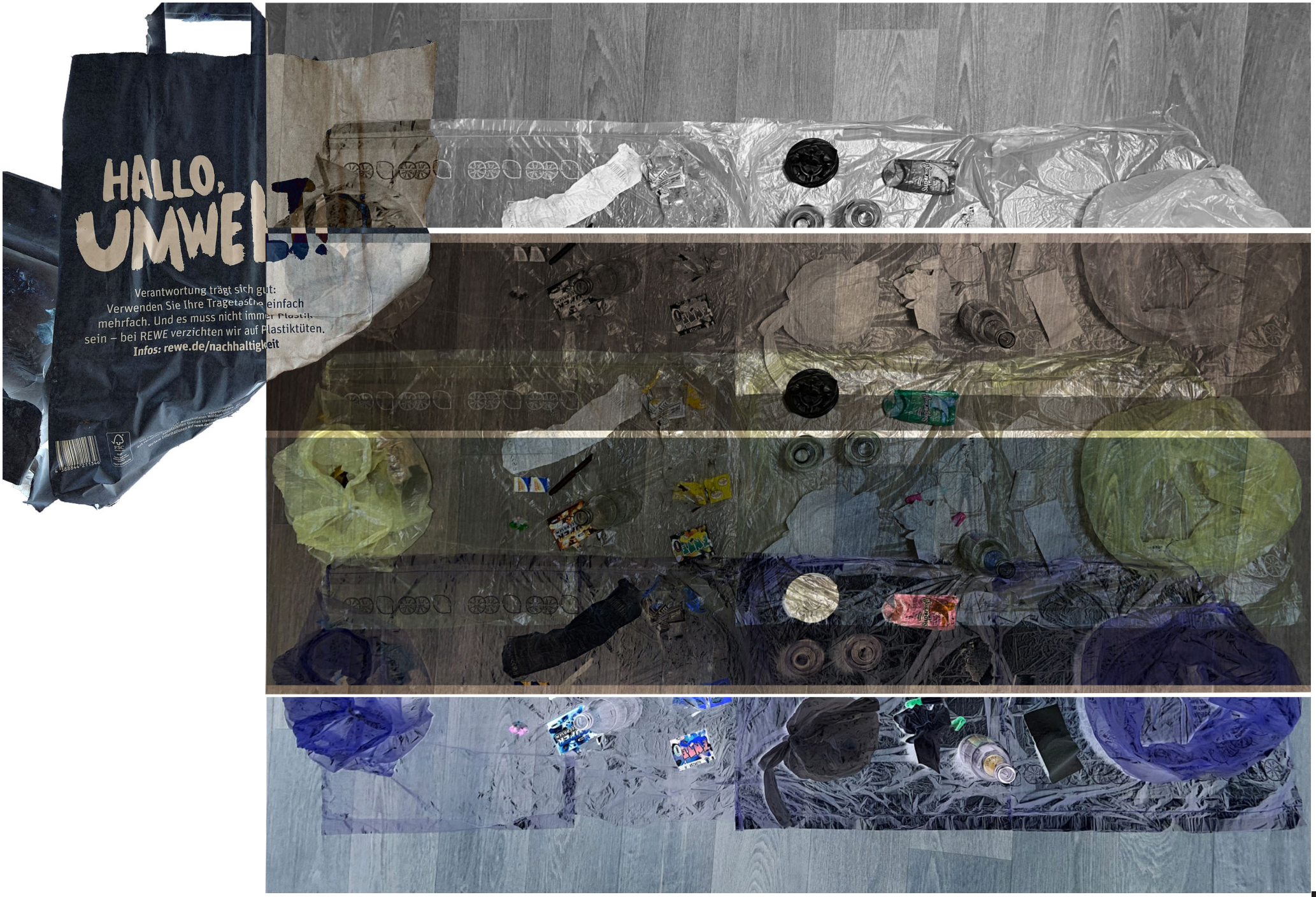

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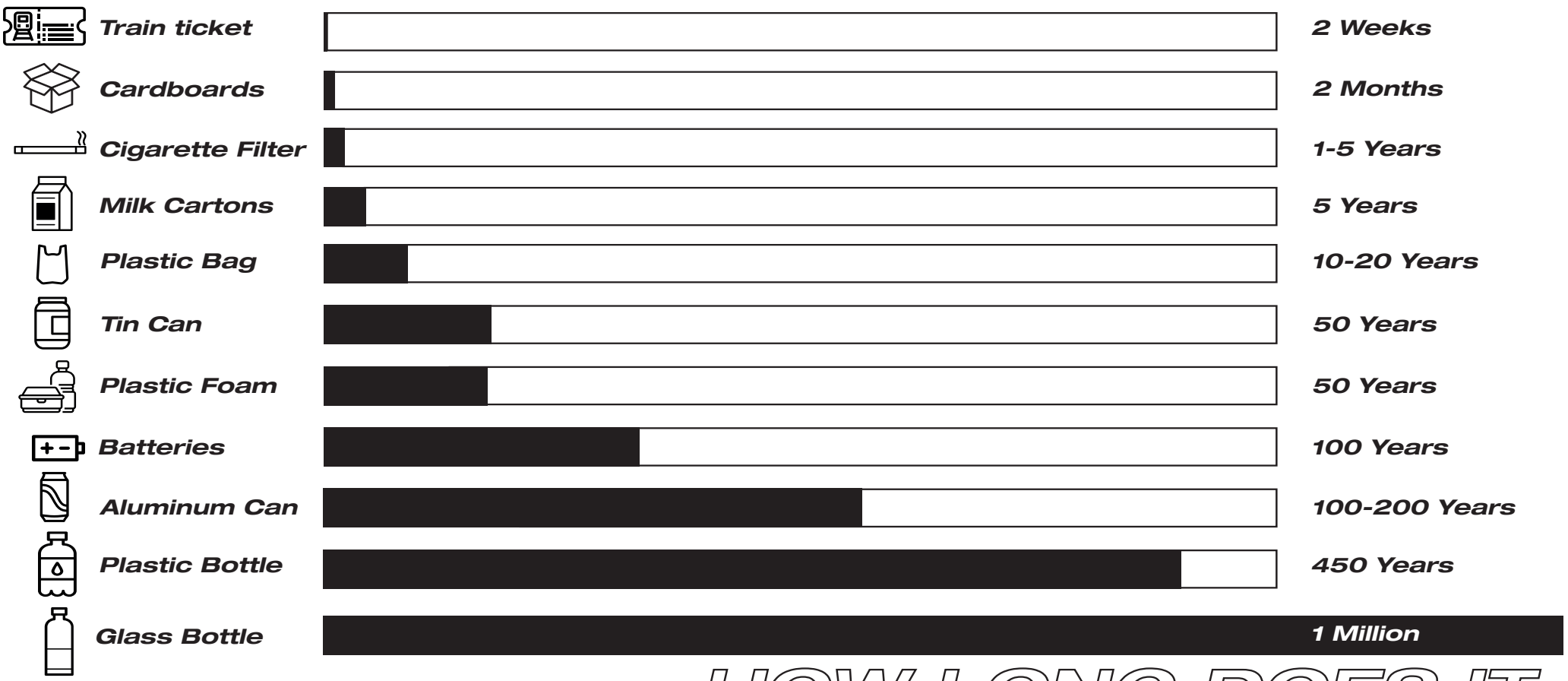
GARBAGE LIFE-SPAN



HOW LONG DOES IT TAKE FOR GARBAGE TO DECOMPOSE IN NATURE?

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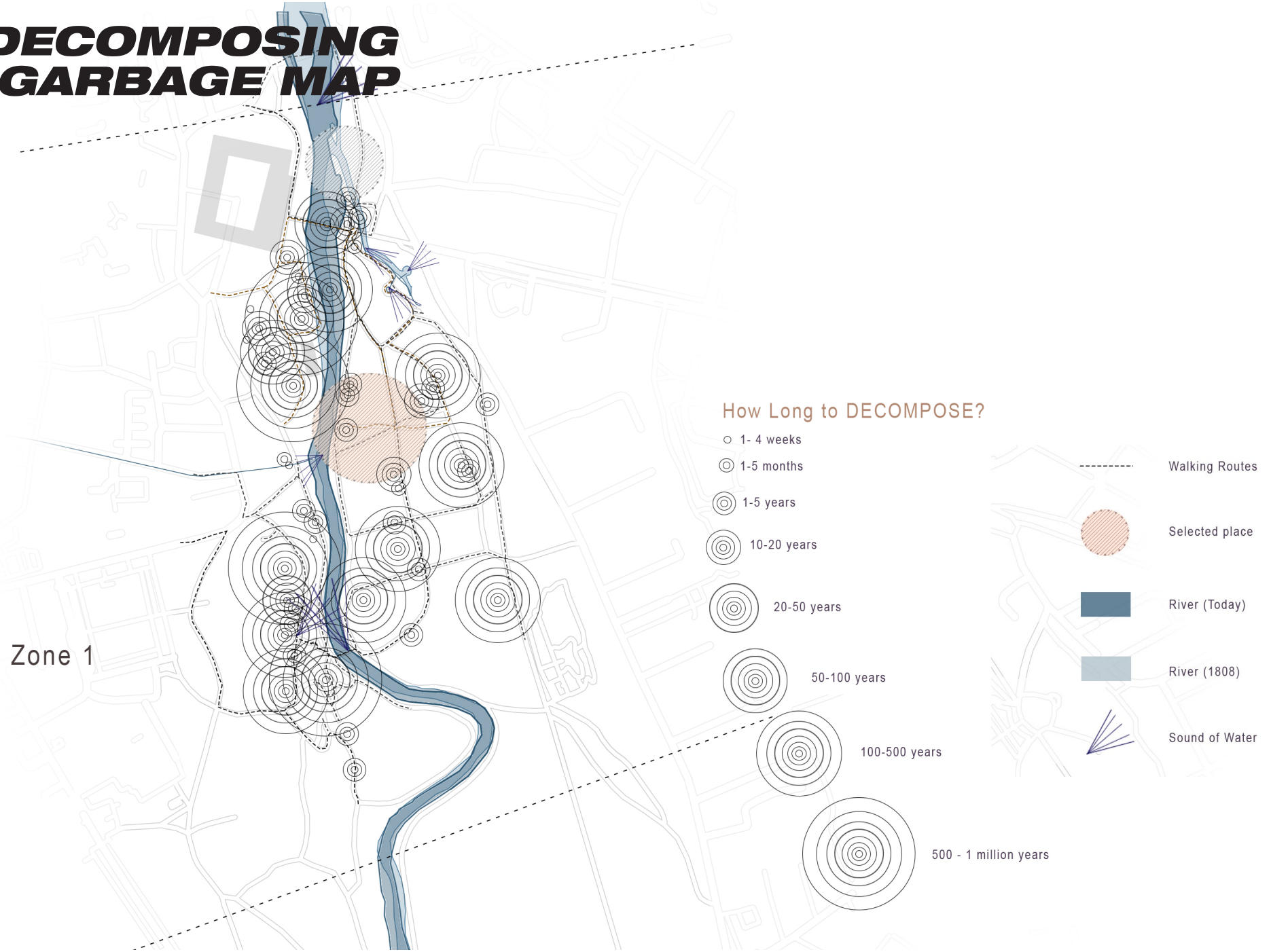
DECOMPOSING GARBAGE MAP



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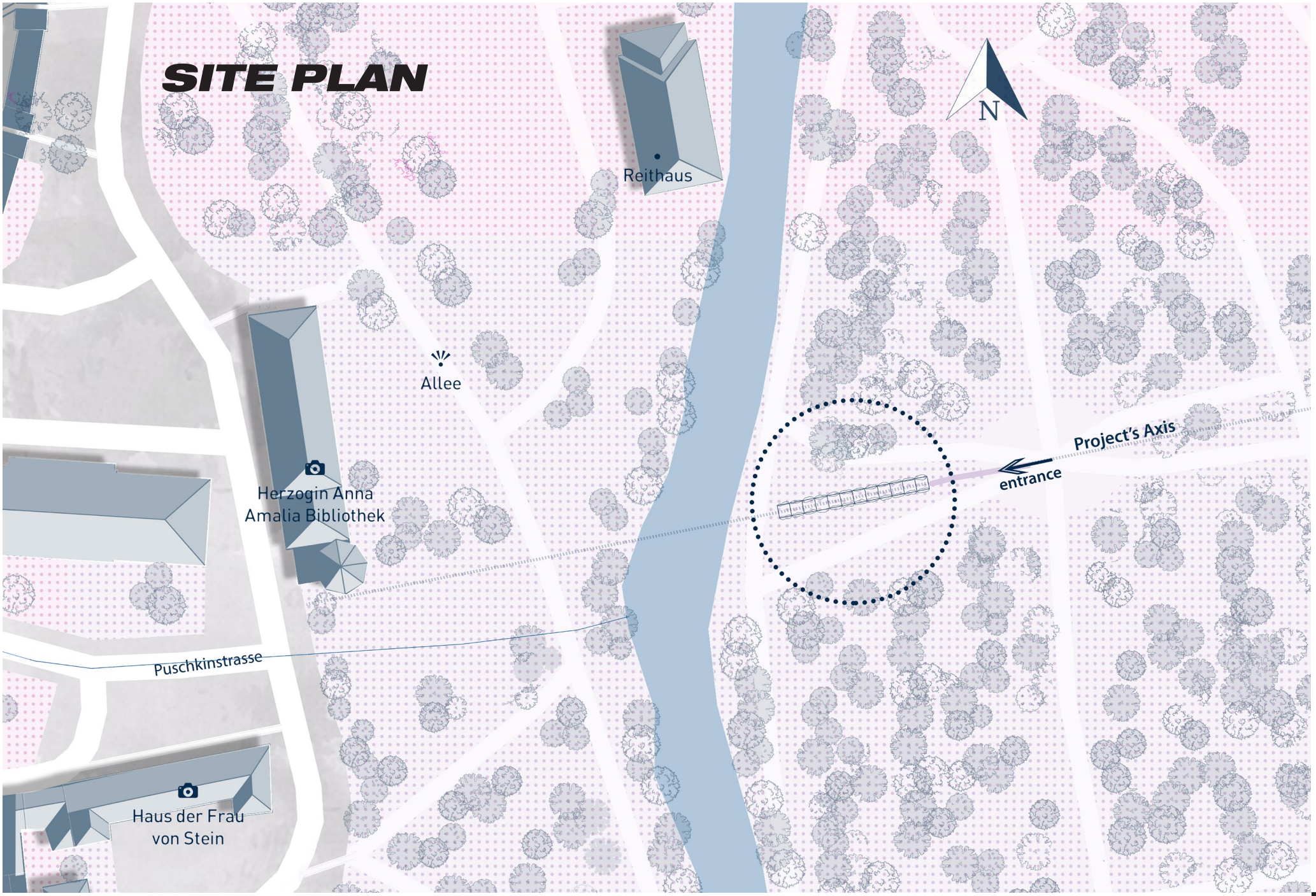

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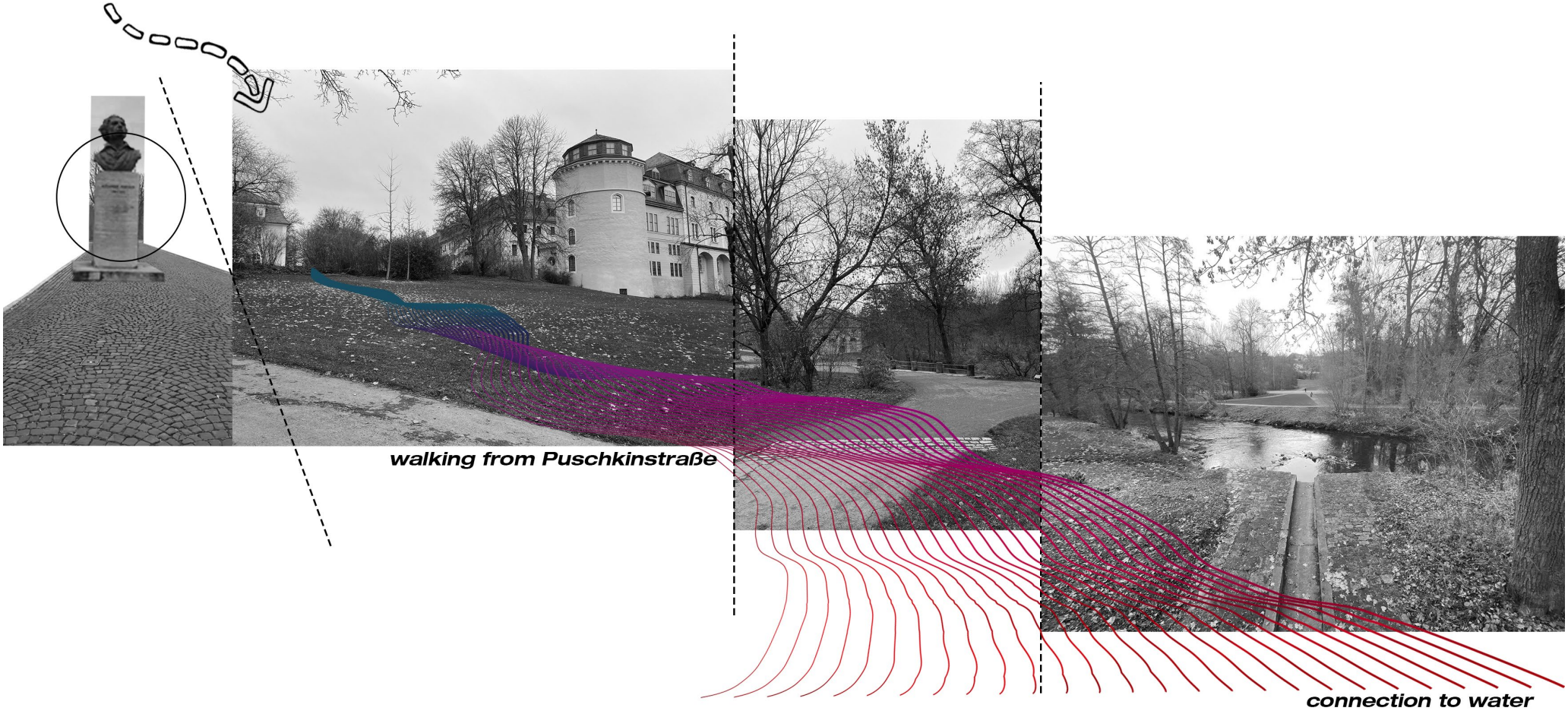
TRACE OF THE RIVER PATH



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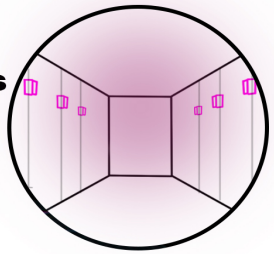
BAUHAUS-UNIVERSITAT WEIMAR | MEDIA ARCHITECTURE

AXONOMETRIC DIAGRAM

mega-zipped garbage bags
visitor's indirect contribution
// trash collection
garbage dwelivery

zone differentiation
speakers attached to frames
directionality // positioning



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ATHMOSPHERE

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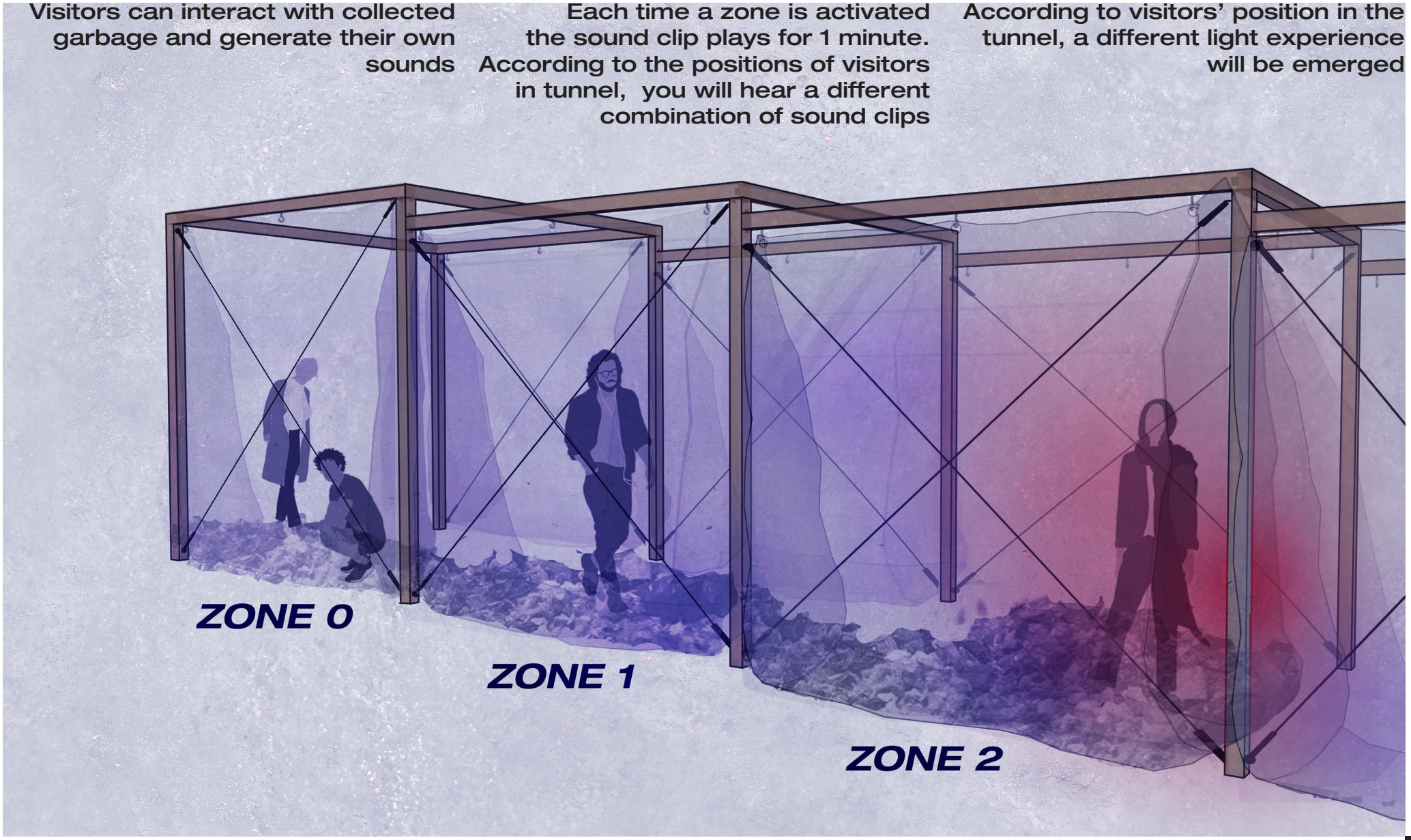
INTERACTIVITY

Visitors can interact with collected garbage and generate their own sounds

Each time a zone is activated the sound clip plays for 1 minute. According to the positions of visitors in tunnel, you will hear a different combination of sound clips

According to visitors' position in the tunnel, a different light experience will be emerged



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PERSPECTIVE COLLAGE

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INPUT& OUTPUT

INPUT
Garbage from Ilm Park
old river path of Ilm river

collecting&analyzing

SOUND DECOMPOSING
water sound imitation

editing&juxtaposing

ARDUINO

Audio-garbage tunnel

Proximity
sound trigger

GARBAGE = WATER

OUTPUT
Physical presence of ignored garbage
New nature of water

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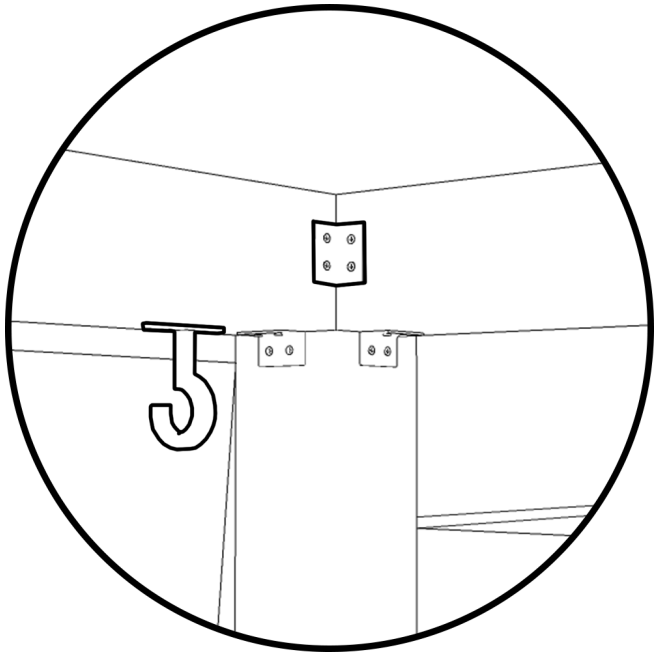
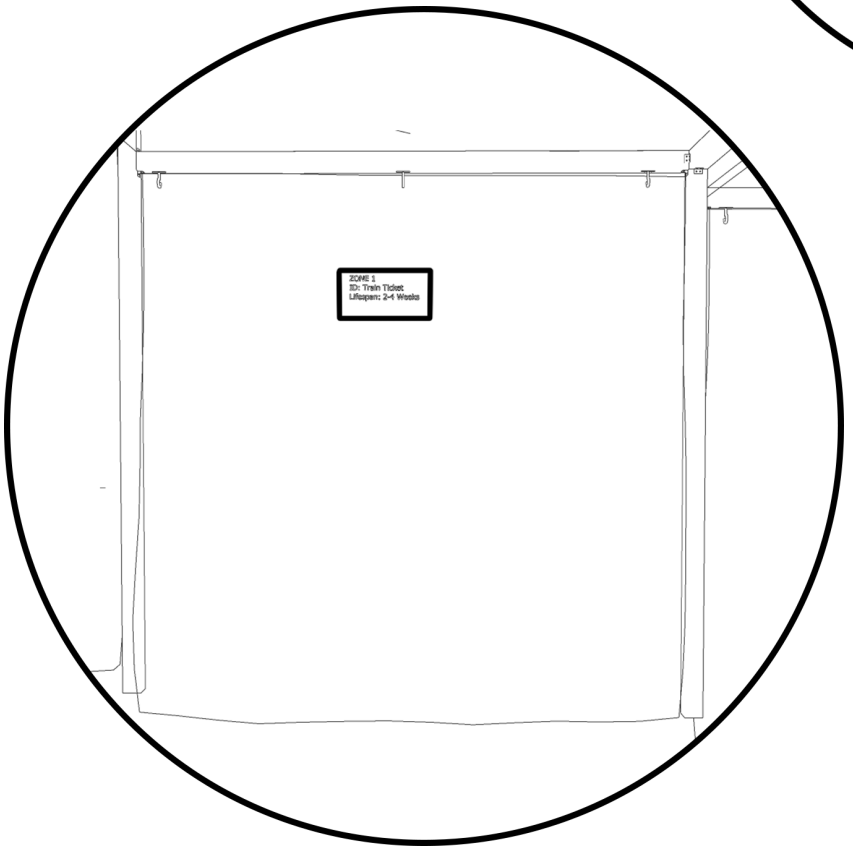
CONSTRUCTION DETAILING

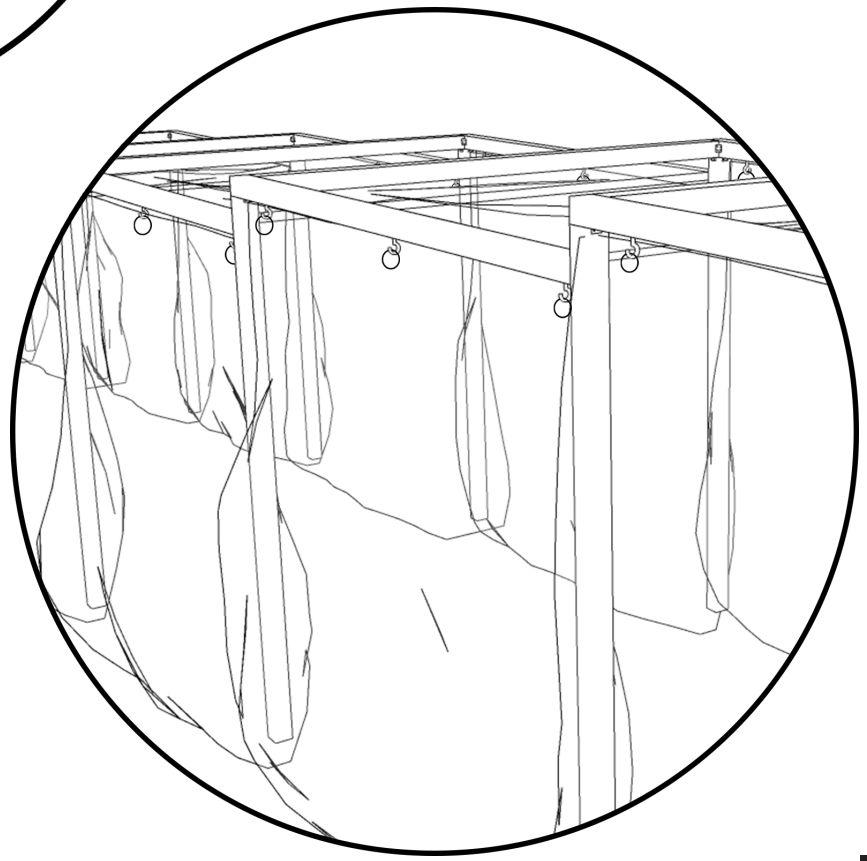
Joint details of how plastic bags will be hooked

Garbage ID Stickers

Joint details of how plastic bags will be hooked







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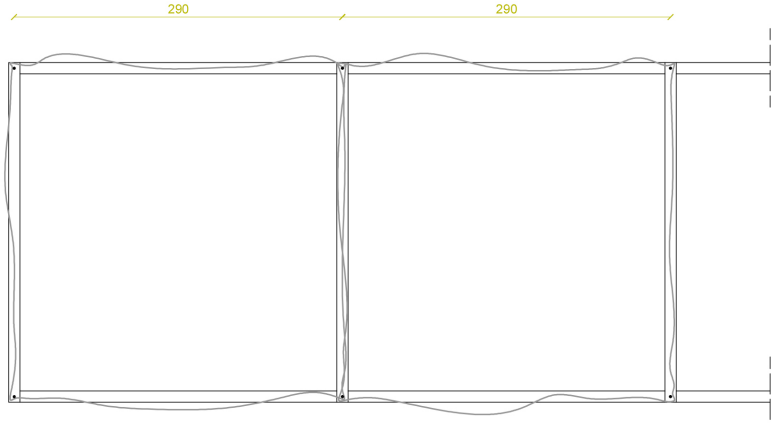
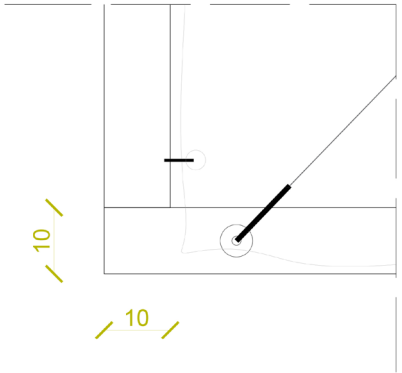
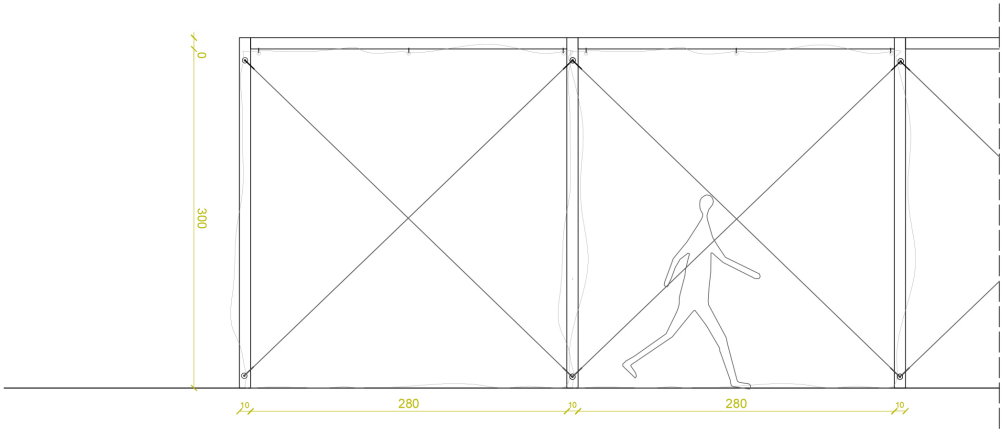
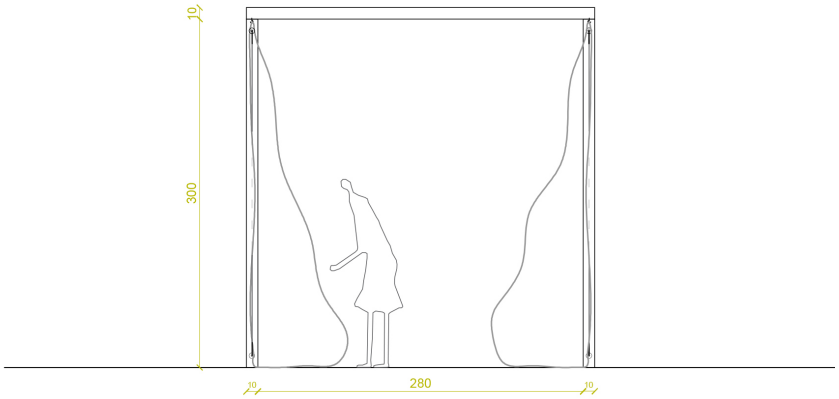
DETAIL DRAWING

Structural Drawings:
Top View
Side Elevation
Section
Joint Detailing









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BAUHAUS-UNIVERSITAT WEIMAR | MEDIA ARCHITECTURE

COST ESTIMATION

MATERIAL	QUANTITY	PRICE PER UNIT(€)	TOTAL(€)
1.STRUCTURE			
Timber Profiles (10cmX10cmX300cm)	63	24	1512
Garbage Stickers	12	5	60
Steel wires + joints	48	17	816
Mega-size Plastic Bags	36	50	1800
Screw	-	-	75
Metal Hooks	72	1	72
Metal L-profiles	122	0,45	54,9
2.TECHNICAL			
Arduino Uno	12	25	300
Ultrasonic Sensor	12	3,8	45,6
Blue LED	12	0,28	3,36
Red LED	12	0,28	3,36
Wires	-	-	20
Breadboard	12	1	12
Battery 9V	12	1,5	18
MP3 Module with speakers	12	30	360
SD Card	12	4	48
USB Cable	12	3	36
Fixation for each zone	12	100	1200
			6436,22

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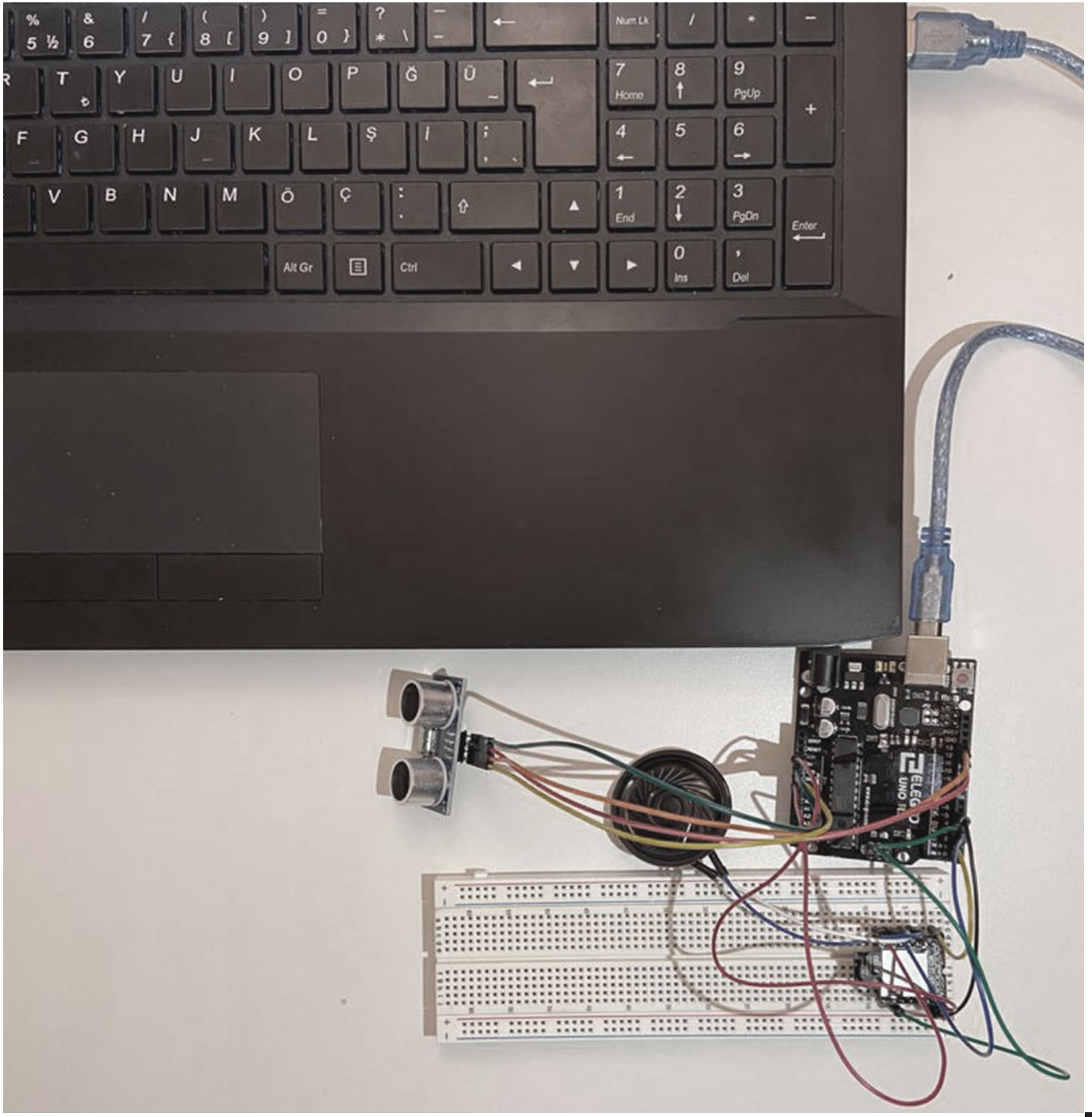
PROTOTYPE// TECHNOLOGY

SD Card
Ultrasonic Sensor
Mini MP3 Player Module
with Round Speakers



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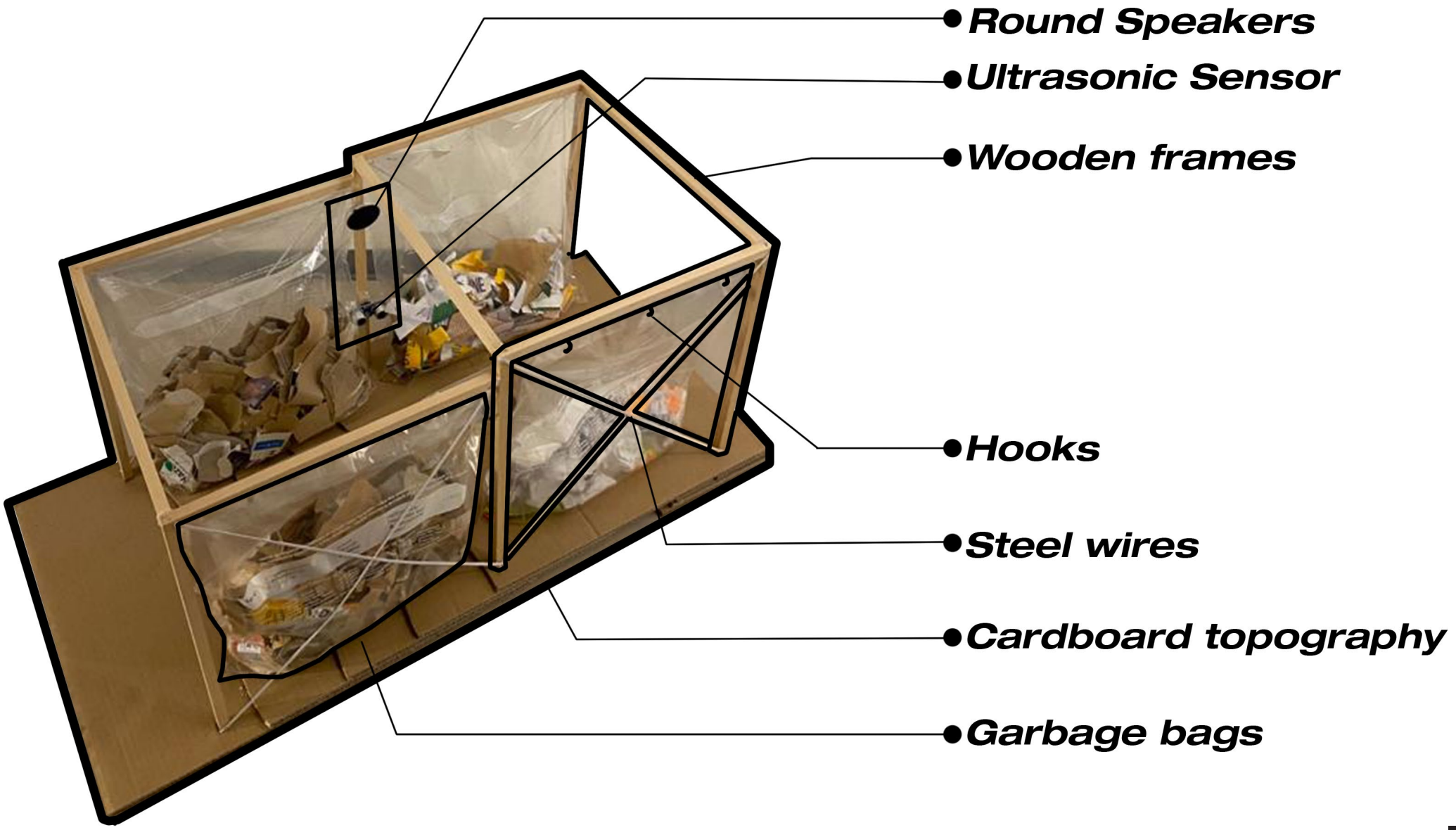
PROTOTYPE// MODEL



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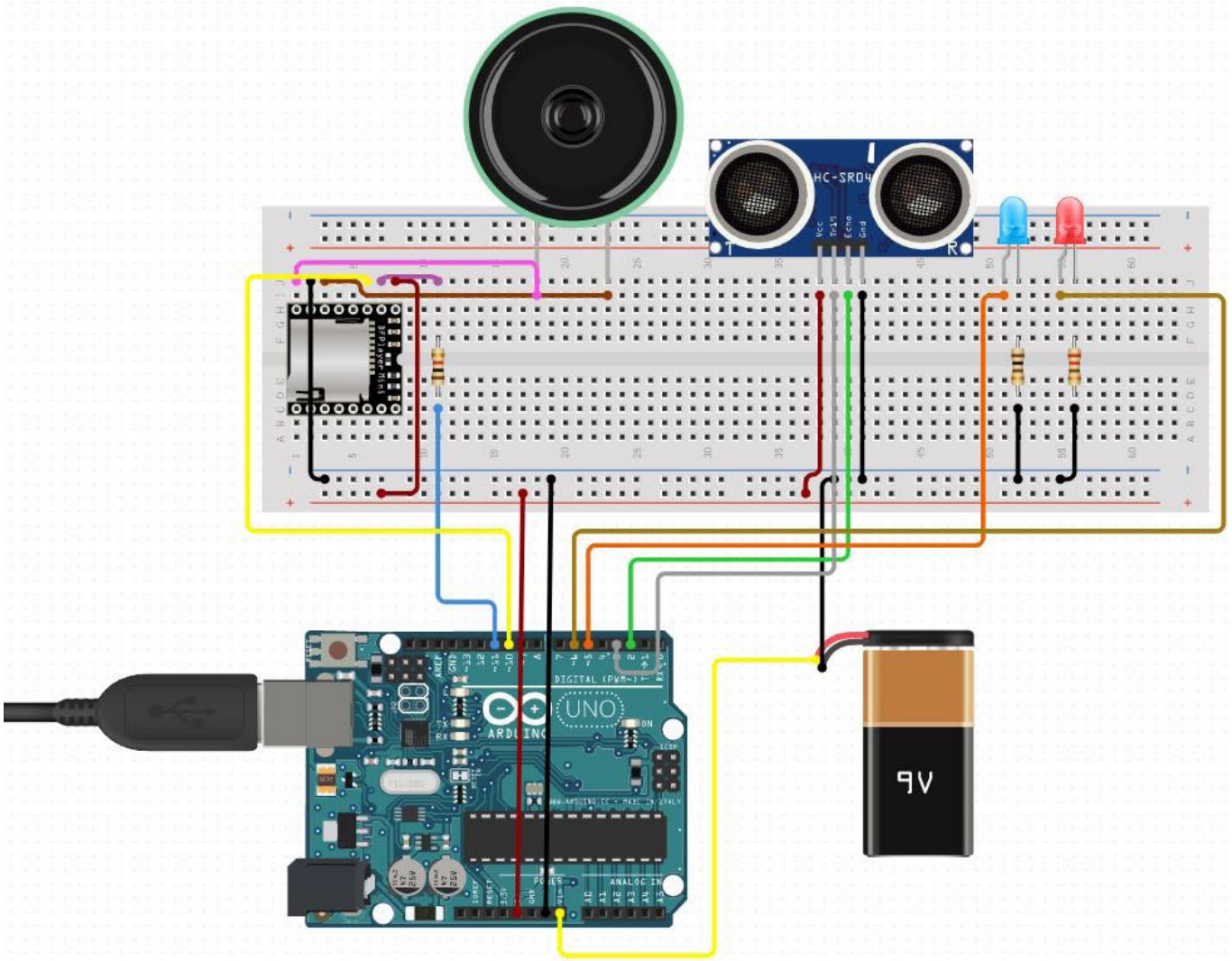
PROTOTYPE// ARDUINO



sketch_finit

```
#include <DFRobotDFPlayerMini.h>
#include <SoftwareSerial.h>
#include "Arduino.h"
// We used pins 10 and 11 to communicate with DFPlayer Mini;

const int trigPin = 3;
const int echoPin = 2;
int redLight = 6;
int blueLight = 5;

long duration;
int distance;

SoftwareSerial softwareSerial(10,11);

// Create the Player object;
DFRobotDFPlayerMini player;
void printDetail(uint8_t type, int value);

void setup() {
  // Initialize serial port for DFPlayer Mini
  softwareSerial.begin(9600);
  // Initialize USB serial port for debugging
  Serial.begin(115200);

delay(1000);

  //to check if DFPlayer is connected
  if (!player.begin(softwareSerial)) {  //Use softwareSerial to communicate with mp3.
    Serial.println(F("Unable to begin:"));
    Serial.println(F("1.Please recheck the connection!"));
    Serial.println(F("2.Please insert the SD card!"));
    while (true) {
      delay(0); // Code compatible
    }
  }
  else {
    Serial.println("Connecting to DFPlayer Mini F-A-I-L-E-D!");
  }
  Serial.println(F("DFPlayer Mini online."));


  //to set up volume
  player.volume(30);

  // Play the "0001.mp3" in the "mp3" folder on the SD card
```

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PROTOTYPE// ARDUINO

sketch_finit

```
  // Play the "0001.mp3" in the "mp3" folder on the SD card
  //player.playMp3Folder(1);

  Serial.println(distance + "cm");

  // integers for ultrasonic sensor
  pinMode(trigPin, OUTPUT);
  pinMode(echoPin, INPUT);
delay(1000);
  //integers of LED Ligts
  pinMode(redLight, OUTPUT);
  pinMode(blueLight, OUTPUT);
  delay(1000);
}

void loop() {

  digitalWrite(trigPin, LOW);
  delayMicroseconds(2);
  digitalWrite(trigPin, HIGH);
  delayMicroseconds(10);
  digitalWrite(trigPin, LOW);

  duration = pulseIn(echoPin, HIGH);
  distance = duration * 0.034 / 2;

  //to see cm in the console
  Serial.print("Distance from the object = ");
  Serial.print(distance);
  Serial.println(" cm");
  delay(10);

  if (distance >= 10 ) {

    // NO SOUND AT ALL ONLY BLUE LIGHT

    digitalWrite(blueLight, HIGH);
    delay(10);
    digitalWrite(redLight, LOW);
    delay(10);

  }
  else if (distance < 10 ) {
    // SOUND AND RED LIGHT
    digitalWrite(redLight, HIGH);
    delay(10);
```

sketch_finit

```
  else if (distance < 10 ) {
    // SOUND AND RED LIGHT
    digitalWrite(redLight, HIGH);
    delay(10);
    digitalWrite(blueLight, LOW);
    delay(10);

    static unsigned long timer = millis();
    //
    if (millis() - timer > 60000) {
      timer = millis();
      //     // player.next();
      player.playMp3Folder(1);
      delay(6000);

      //
      //
      //      // Set volume to maximum (0 to 30).
      //      // player.volume(30);
      //      // Play the "0001.mp3" in the "mp3" folder on the SD card
      //      //player.playMp3Folder(1);
    }
    if (player.available()) {
      printDetail(player.readType(), player.read()); //Print the detail message from DFI
    }
  }
  }

void printDetail(uint8_t type, int value){
  switch (type) {
    case TimeOut:
      Serial.println(F("Time Out!"));
      break;
    case WrongStack:
      Serial.println(F("Stack Wrong!"));
      break;
    case DFPlayerCardInserted:
      Serial.println(F("Card Inserted!"));
      break;
    case DFPlayerCardRemoved:
      Serial.println(F("Card Removed!"));
      break;
    case DFPlayerCardOnline:
      Serial.println(F("Card Online!"));
      break;
    case DFPlayerUSBInserted:
```

sketch_finit

```
      Serial.println(F("Card Online!"));
      break;
    case DFPlayerUSBInserted:
      Serial.println("USB Inserted!");
      break;
    case DFPlayerUSBRemoved:
      Serial.println("USB Removed!");
      break;
    case DFPlayerPlayFinished:
      Serial.print(F("Number:"));
      Serial.print(value);
      Serial.println(F(" Play Finished!"));
      break;
    case DFPlayerError:
      Serial.print(F("DFPlayerError:"));
      switch (value) {
        case Busy:
          Serial.println(F("Card not found"));
          break;
        case Sleeping:
          Serial.println(F("Sleeping"));
          break;
        case SerialWrongStack:
          Serial.println(F("Get Wrong Stack"));
          break;
        case CheckSumNotMatch:
          Serial.println(F("Check Sum Not Match"));
          break;
        case FileIndexOut:
          Serial.println(F("File Index Out of Bound"));
          break;
        case FileMismatch:
          Serial.println(F("Cannot Find File"));
          break;
        case Advertise:
          Serial.println(F("In Advertise"));
          break;
        default:
          break;
      }
      break;
    default:
      break;
  }

}
```

Done Saving.

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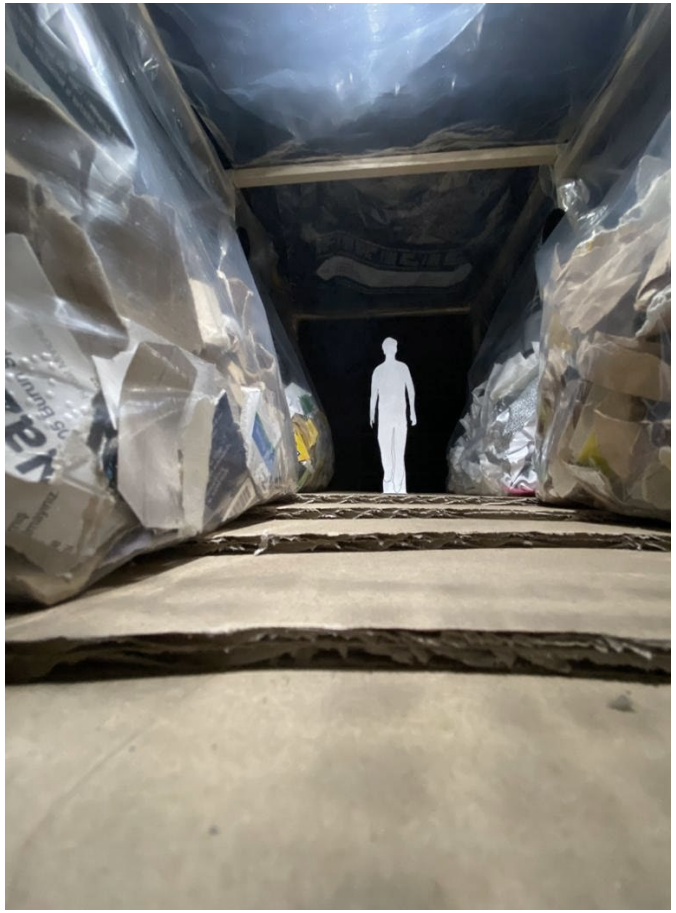
PROTOTYPE// PHOTOS



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PROTOTYPE// PHOTOS

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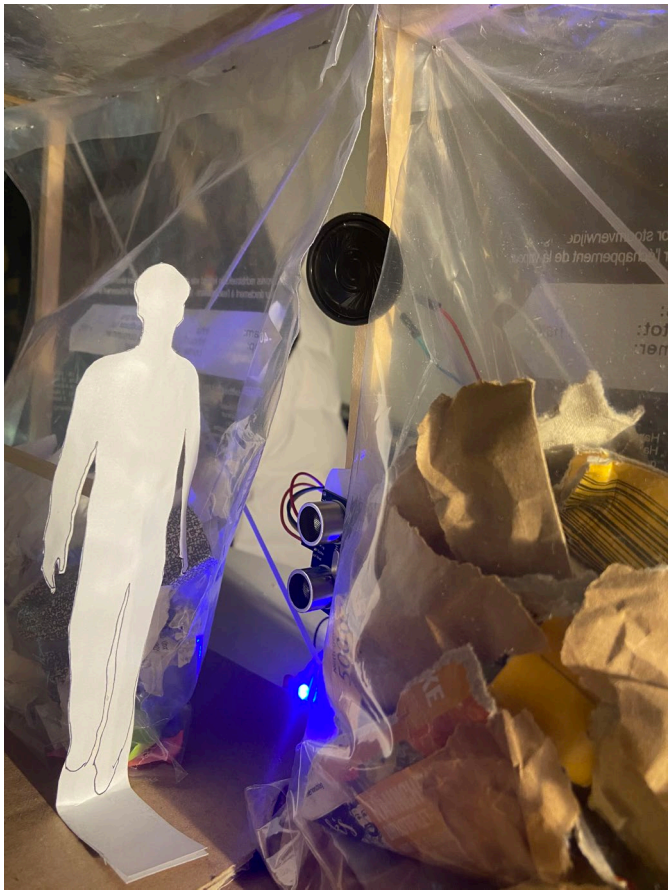
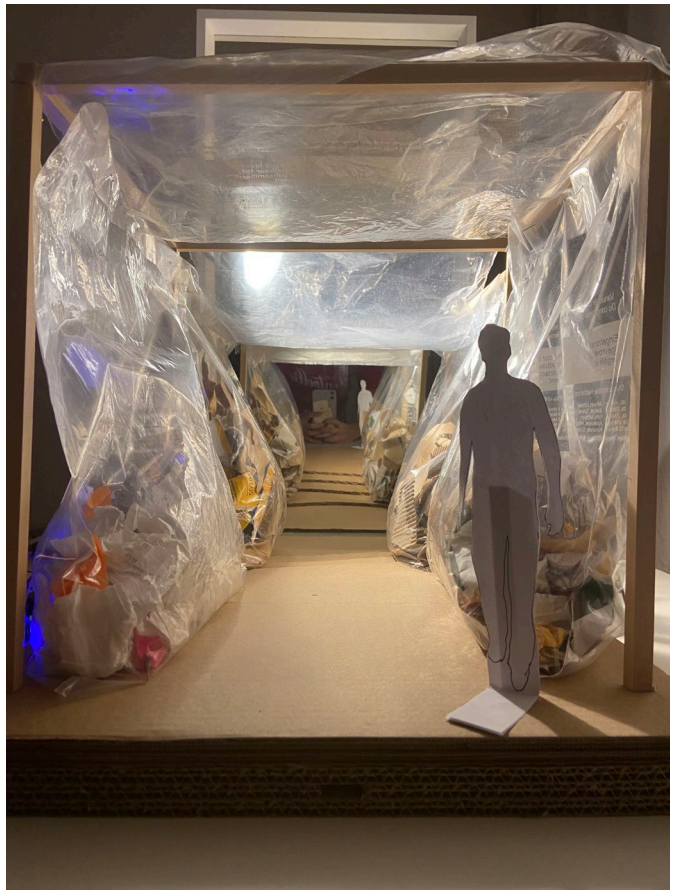
PROTOTYPE// PHOTOS





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„NEW NATURE IN PARK AT THE ILM”

VIMEO LINKS:
https://vimeo.com/510710970
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https://vimeo.com/510739072
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