



**SRISHTI MANIPAL**  
 INSTITUTE OF ART, DESIGN  
 AND TECHNOLOGY  
 (A Constituent Unit of MAHE, Manipal)



**MANIPAL**  
 ACADEMY of HIGHER EDUCATION  
 BENGALURU CAMPUS  
 (Institution of Eminence Deemed to be University)



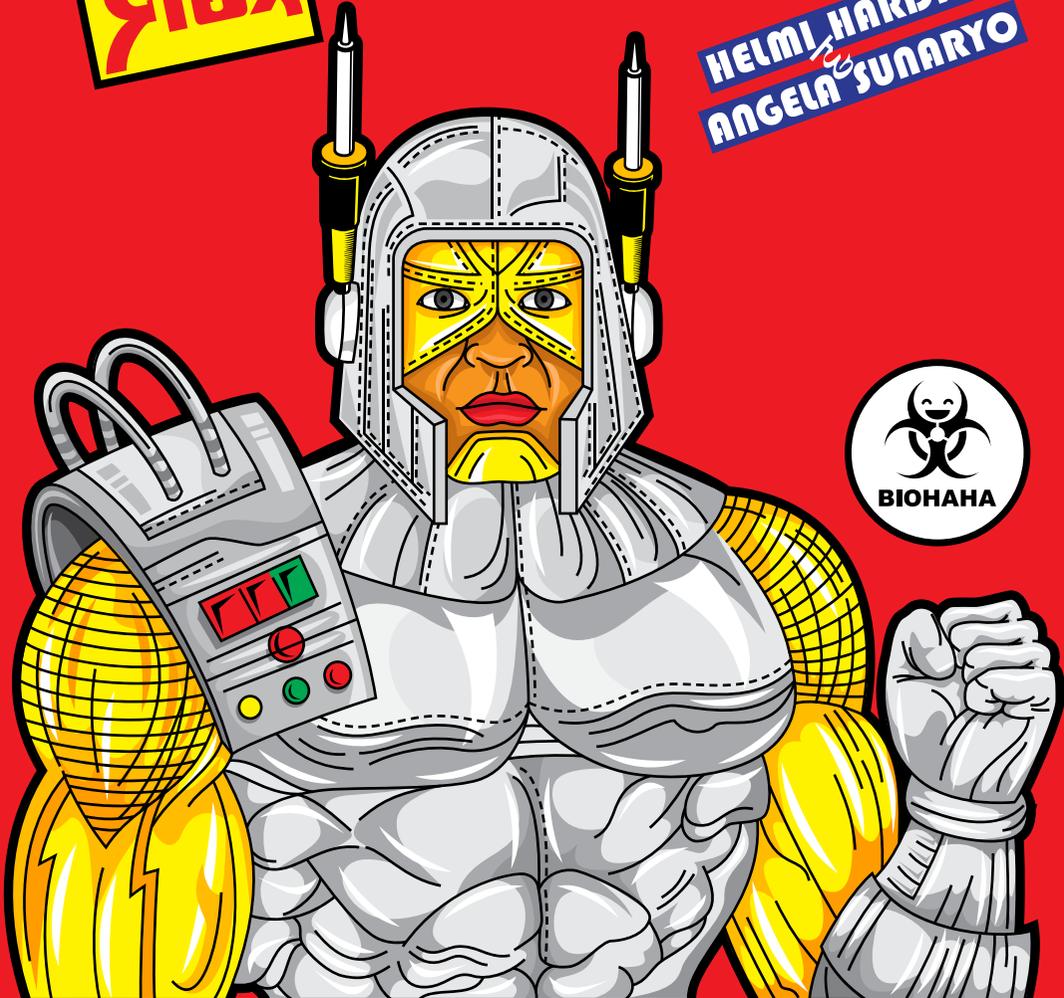
<https://bio-haha.github.io/sensewalking/>  
[hahabiohaha@gmail.com](mailto:hahabiohaha@gmail.com)

# इंसिडर पेचीकॉन्क

**खर**

A PLAYFUL GUIDE FOR GENERATIVE SENSE INTERPLAY

**HELMI HARDIAN**  
**ANGELA SUNARYO**





**BIOHAHA**

*Pause. Breathe. Let the space introduce itself.*

# इंफिडर पेचीक्षंठि

फ़ाइल

A PLAYFUL GUIDE FOR GENERATIVE SENSE INTERPLAY



EXERCISE I  
FOOTWORK



EXERCISE II  
TUNING IN



EXERCISE III  
SMELL NOTES



EXERCISE IV  
TASTE RAVE



EXERCISE V  
TEXTURE IMPRESSION

# इंसिडर पेरीक्षंदि

## फ्लक्स

A PLAYFUL GUIDE FOR GENERATIVE SENSE INTERPLAY

**Sensewalking Flux** is a participatory research workshop that explores multi-sensory navigation and experimental sound-making as methods to perceive and interpret the space. Through three phases, **Sensewalking & Mapping**, **DIY Bio-Synth Assembly**, and **Collective Audio-Visual Performance**, participants document embodied experiences and translate them into sound-based expressions.

This project unfolds in three phases:

// **Sensewalking & Mapping** – Participants engage in guided sensory walks, using their bodies as instruments to navigate space through **sight, sound, touch, smell, and taste**. These observations are recorded through sketches, textures, and notations, forming a generative **graphic score** that captures an intersubjective experience of the urban environment.

// **DIY Bio-Synth Assembly** – Participants assemble a light-sensitive synthesizer that converts visual stimuli into sound, creating a tactile and sonic link between perception and the environment.

// **Collective Audio-Visual Performance** – The generated score serves as a guide for an improvised performance in public space, merging movement, sound, and visual projections into an intersubjective ecology between body, space, and technology.

This project highlights **spontaneity, perception, and intersubjectivity**, fostering an egalitarian interaction between the space and its inhabitants. By positioning the space as a "**living instrument**," Sensewalking Flux celebrates the unpredictability that emerges from the ecotone between body, space, and technology.



# MARK YOUR CALENDAR!

## Srishti Manipal Institute of Art, Design and Technology - Interim 2025

**Location:** SMI, MAHE BLR Campus, and a venue in the city  
Bengaluru - India

**Date:** 24th November to 20th December 2025

**Exhibition:** 18-20th December 2025

**Time:** 9 AM - 4 PM (TBA)

**Participants:** SMI Interim project offered as one of the choices of interdisciplinary open electives. The student cohort will comprise students from diverse disciplinary backgrounds within the field of art and design. This year, over 600 students are participating, and there are around 35 projects. Around 20-24 students would be signing up for this project.

### Schedule

#### Session 1 | Sensewalking & Mapping

We begin by tuning our senses to the space. Guided sensewalks invite the group to navigate space through touch, sound, smell, and sight, recording impressions as sketches, textures, and notes. These embodied observations become the foundation for graphic scores that translate perception into visual rhythm.

#### Session 2 | DIY Bio-Synth

The focus shifts from sensing to making. Participants assemble light-sensitive biosynths that transform light and shadow into sound, exploring how perception and environment merge through simple circuits and gestures.

#### Session 3 | Research & Production

Participants revisit chosen sites or materials, translating sensory notes into compositions or installations. Studio sessions focus on refining concepts and preparing for the collective performance.

#### Session 4 | Exhibition & Collective Audio-Visual Performance

All elements converge in a live audiovisual performance and exhibition. The space becomes an instrument: light, sound, and movement unfolding in real time as a shared act of listening.



# Sensewalking & Mapping

## Seeing Beyond Sight: A Sketching Exercise

Sketching is more than just drawing what's in front of you—it's a way of learning to see. It trains us to observe details, patterns, and relationships between spaces, objects, and people. Sketching helps us analyze our surroundings, making us more aware of the invisible forces shaping them.

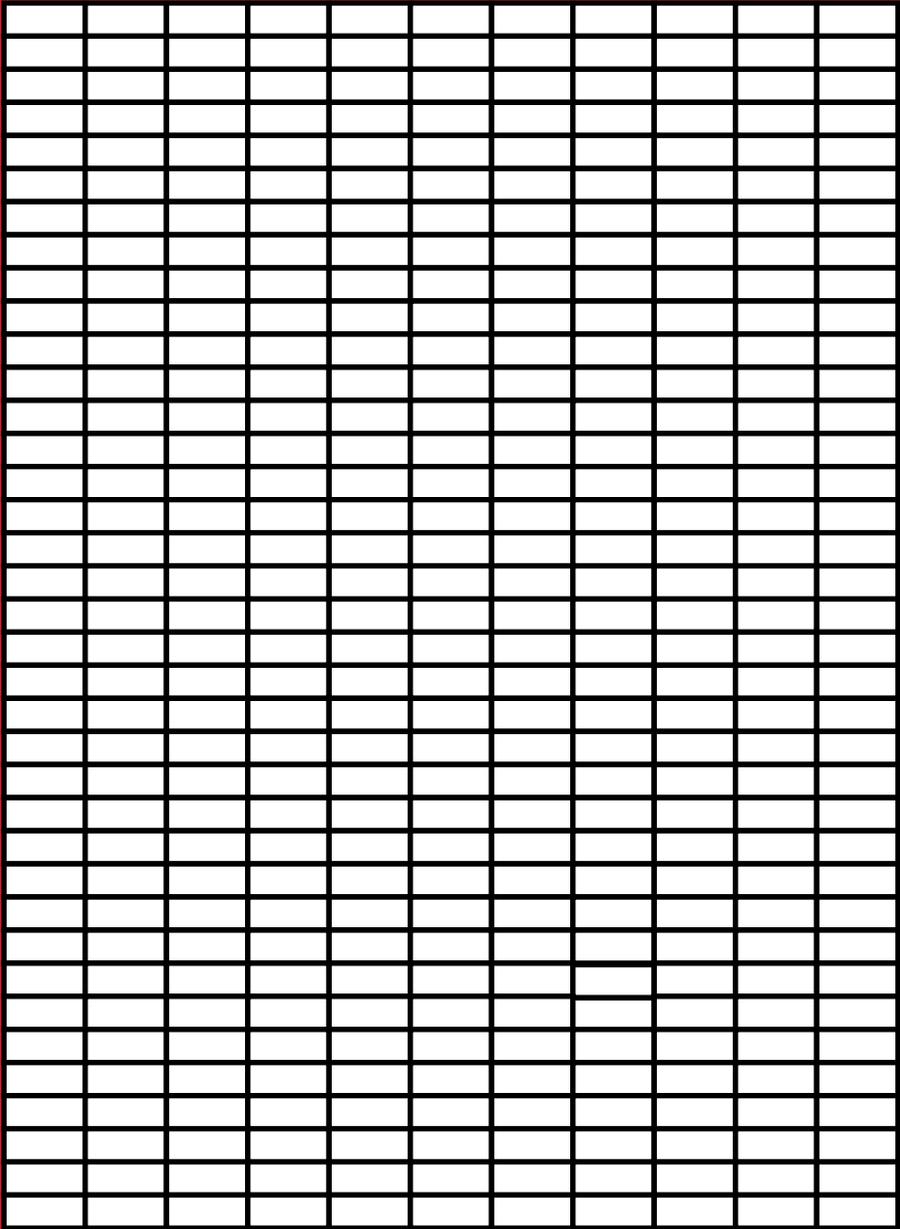
As Norman Crowe and Paul Laseau put it,  
*"Seeing is a necessary prelude to visual expression."*

Eric Jenkins expands on this, explaining that sketching is a bodily interaction:

*"It is necessary to learn from the world by engaging in its reality—its materials, its columns, its smells, its temperature."*

But here's the twist: sketching isn't just about what's in front of us. It's also about what we feel, remember, and imagine. There are two ways of sketching:

1. **Referential Sketching** – recording exactly what you see.
2. **Analytical Sketching** – capturing movement, patterns, and sensations beyond the visual.





## Exercise 1: Footwork – Mapping the Unseen Movements

Every step tells a story. Movements—whether human, animal, or even mechanical—shape the rhythm of a place. Let's capture these unseen patterns through sketching.

### Try this:

// Find a space where people (or creatures) are moving—maybe a busy street, a park, or a café.

// Observe the movement. Where do people walk? Where do they pause?

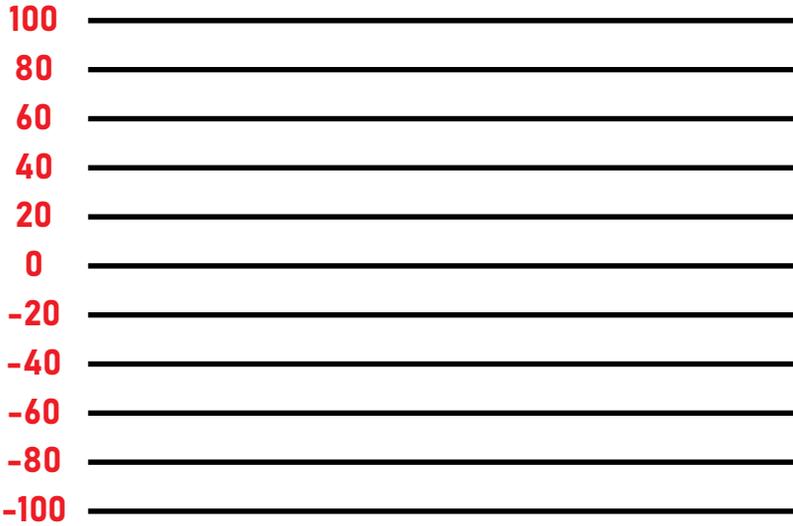
// Now, sketch the movement—not the people themselves, but the *pathways* they create.

// Can you show the difference between a steady walk, a hesitant pause, or a sudden sprint?

// What would movement *sound* like if it were a shape?

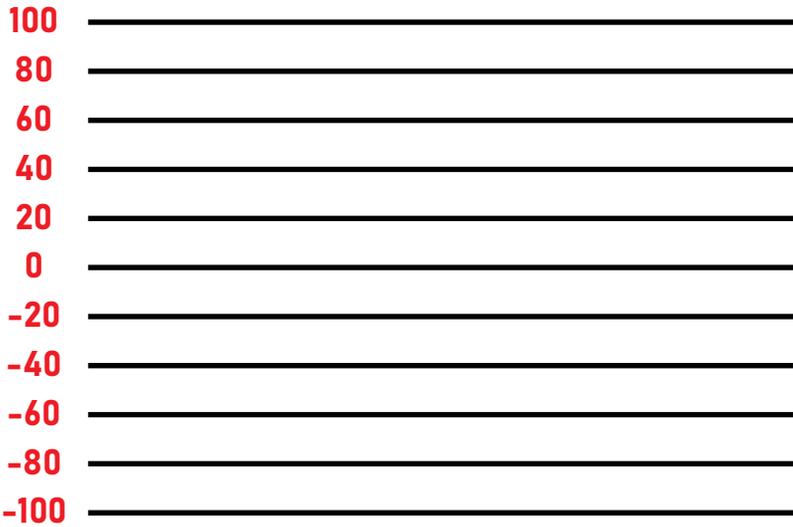
Location:

Time:



Location:

Time:





## Tuning In: Listening to Space

*"Architecture shapes sound, and sound shapes architecture."*

– Lupton (2018)

Sound surrounds us in ways sight cannot. Close your eyes in a crowded café, a marketplace, or a quiet alley. The space hums, murmurs, clicks, and echoes. It reverberates against buildings, dissolves into the wind, or lingers in forgotten corners.

### Exercise 2:

## Tuning In – Drawing with Your Ears

**Listen deeply.** Can you see a space just by listening?

**Try this:**

// Choose a spot to sit or stand. Close your eyes. Just listen.

// Start documenting the sounds—write them down, sketch their shapes, or record them as voice notes.

// What's the loudest sound? The quietest?

// Can you feel vibrations in the ground? In your body?

// If sound had a texture, what would it be? Smooth? Rough? Fuzzy?





## Smellscapes: Mapping Invisible Memories

Smell is the most *unnoticed* but *memorable* sense. A single scent can transport you back in time—a childhood home, a street market in another city, the salty breeze of a distant beach.

Pallasmaa calls this the “*space of smell*”, where scent engraves itself into our perception of place. In urban design, scent can reveal the history and character of a space, influencing how we navigate it.

### Exercise 3: Smell Notes – The Space’s Invisible Layers

**Try this:**

// Take a slow walk and focus only on smell. What do you notice?

// Are the smells pleasant or unpleasant? Do they remind you of something?

// Where do certain scents appear and disappear?

// How does smell shape your experience of a place?

**Pro tip:** Try mapping your journey using only smells. Imagine drawing the city with scent trails instead of streets.



%	SWEET	SALT	SOUR	BITTER	UMAMI
100					
90					
80					
70					
60					
50					
40					
30					
20					
10					
0					

- 
- 
- 
- 






## Taste Rave: Flavors of the Space

Taste is a multi-sensory experience. It's not just about flavor—it's about texture, temperature, smell, and even sound (think of the crunch of chips or the fizz of soda).

We often say we "*eat our way through a city*", and for good reason—food plays a major role in how we experience urban life.

### Exercise 4: Taste Rave – Sensing with Your Tongue

Try this:

// Pick three foods—bonus points if they're new to you!

// Before eating, observe: What do they smell like? Feel like? Look like?

// Close your eyes as you take a bite. What textures do you notice?

// Does the taste remind you of another place or memory?

// Can you describe the flavor using words, colors, or even a drawing?

Location:

Time:

---

---

---

---

Notes:





## **Texture Impressions: Feeling Space with Your Skin**

*"Touch is the mother of all senses."* – Pallasmaa (2005)

Touch is how we first experience the world. Before we see clearly, we *feel*. Spaces aren't just visual compositions—they have textures, temperatures, and sensations that define how we experience them.

Buildings aren't just shapes; they're warm, cool, rough, smooth, grainy, or metallic. Our skin sees just as much as our eyes.

### **Exercise 5: Texture Impressions – Reading with Your Hands**

**Try this:**

// Find different surfaces—walls, fabrics, tree bark, metal, glass.

// Close your eyes. Run your hands over them. What do they feel like?

// Can you describe the textures in words?

// If you were to draw this feeling, what would it look like?



## Final Thoughts: What Did You Discover?

Senswalking Flux isn't about *finding* something specific—it's about *noticing* what's already there. Every sense tells a different story of the space, and together, they create an experience that goes beyond just looking.

### Some final prompts to reflect on:

// Did you notice something today that you had never paid attention to before?

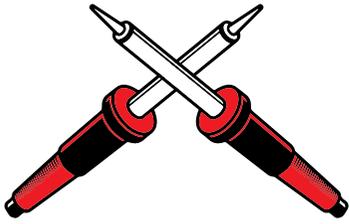
// How did different senses shape your perception of a place?

// Did mapping movement, sound, smell, or texture change how you understand the space?

// If you could create a map that isn't based on streets, what would you include?

Senswalking is a way of tuning in—to the environment, to others, and to yourself. Keep sensing, keep walking, and keep rediscovering the world around you.

# Reflection:



## DIY Bio-Synth Assembly

### Let's Make the Space Sing!

Before we step into the sensory field, we need a way to translate the unseen (light, movement, and energy) into something we can hear. That's where DIY Bio-Synths come in!

### What's a Bio-Synth?

Think of it as a tiny electronic creature that listens to the world in ways we can't. Instead of using a microphone, it captures **light intensity** and turns it into **sound**. The brighter the light, the louder or higher the pitch. Kind of like the space humming its own tune!

### What We'll Do

// **Assemble Your Synth** – We'll guide you through building a simple bio-synth using sensors, circuits, and a bit of magic.

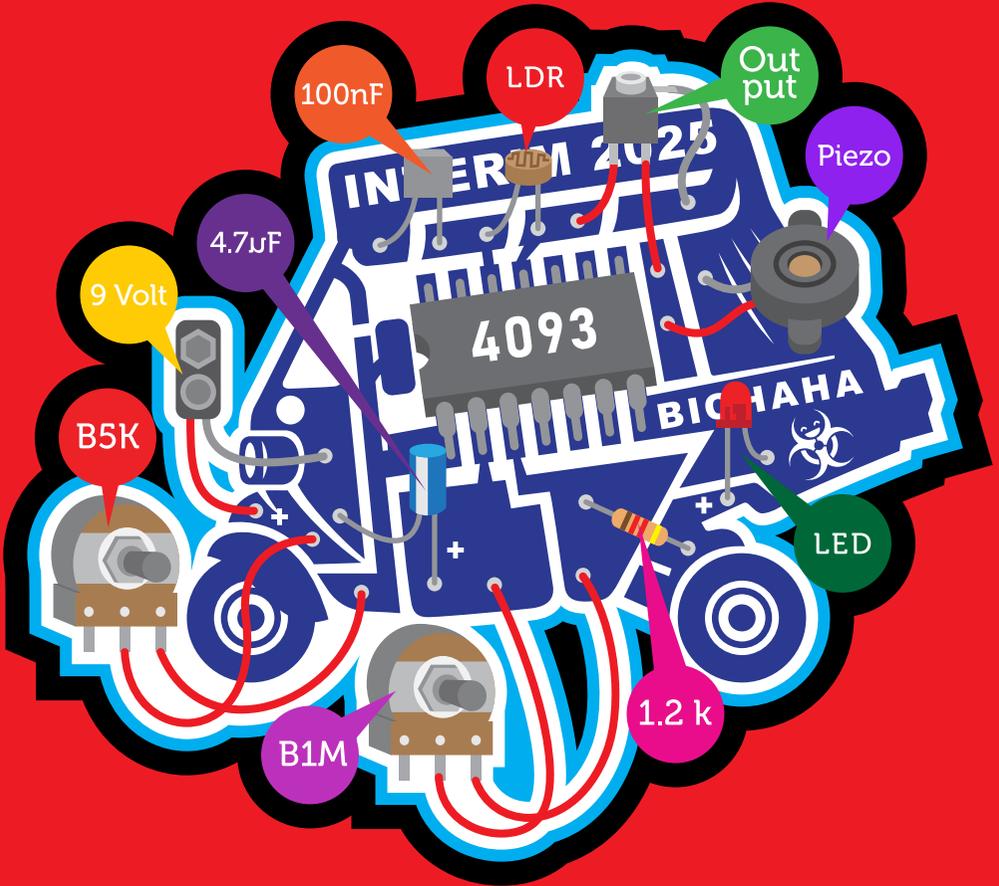
// **Experiment with Light & Sound** – Wave your hands, block the light, or let the sunset play its own melody.

// **Play with Perception** – Try different angles, surfaces, or use your phone flashlight. You can also use your **graphic score**, the sensory impressions from all five senses, now transferred onto acetate sheets as a tool to shape the sound through light.

### Why This Matters?

This isn't just about making cool noises (though that's a bonus). It's about **expanding perception**, listening to the environment beyond human senses, and finding new ways to interact with the environment.

**Ready to tune in? Let's build, explore, and make the space sing!**



# Reflection:

## Collective Audio-Visual Performance

### Welcome to the Flux!

This is not your usual performance. No set melodies, no fixed rhythms —just you, your hands, and the light-sensitive soundscape we create together. Imagine mapping a space through sound, translating movement into frequencies, and letting light shape our sonic world. Ready to dive in?

### How It Works

Each performer holds a **transparent acetate sheet** with **black marker patterns**—this is your score. By moving your hands along the drawn paths, you control how much light passes through. These light variations are picked up by **DIY synthesizers**, which respond through potentiometers or variable resistors, translating gestures into sound.

// More light = Higher frequencies or increased modulation.

// Less light = Lower frequencies or subdued sound.

Meanwhile, the space is part of the composition. Shadows, external light sources, and movement introduce unexpected shifts. Our **live digital processors**—one on **sound mixing & FX**, the other on **visuals & LED mapping**—shape this real-time dialogue, amplifying the space's hidden textures into an immersive performance.



# Composition Structure

Like a space breathing in cycles, the piece unfolds in three evolving phases:

## I. PER SENSES – Structured Exploration

Follow the path. Performers closely trace the drawn lines on their acetate sheets. Let your touch guide the light, let the synths whisper what they sense. This phase is about precision, listening, and feeling the space as it is.

## II. UNISON – Free Interaction

Loosen up! Break free from strict paths. **Explore textures, alter light exposure, interact with the sonic space.** The space is alive—let it breathe through you.

## III. DISRUPTION – Environmental Interference

External light sources shift, shadows block paths, sudden brightness challenges control. Adapt, respond, and find harmony in the chaos. The composition is no longer just yours—it belongs to the space, to unseen forces at play.

## Beyond Sound: Live Processing

Throughout the performance, digital elements enhance the experience:  
// **Live Sound Engineering** – Mixing raw DIY synth outputs, adding textures, effects, and spatial depth.  
// **Visual & LED Mapping** – Reacting to performers' gestures, transforming light distortions into projected visuals.

## You Are Part of the Space

The space is not just a backdrop, it's the instrument. Through Sensewalking Flux, we dissolve the lines between performer, space, and observer. We play the unseen frequencies of the space, sculpting them into fleeting moments of sound and light.

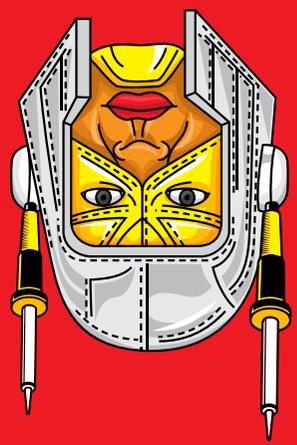
So, let's listen with our hands, see with our ears, and move through light.

Let the flux begin!

**Reflection:**

**Notes:**

*Now that you have seen differently, how will you walk tomorrow?*



## About

### About SMI Interim 2025

The SMI Interim is an annual experiment in collaborative learning hosted by Srishti Manipal Institute, where artists and designers from across the world work closely with students through a four-week immersive project. Each edition invites practitioners to explore new forms of making, thinking, and community engagement.

For 2025, Interim unfolds amidst global uncertainty, inviting artists to respond to environmental fragility, social inequities, and the shifting boundaries between the handmade and the machine-made. It asks how creative practice can become a space of care, resistance, and collective imagination. A site where making becomes both a gesture of attention and an act of renewal.

### Biohaha

Biohaha is a collaborative platform that explores the boundaries between art, biology, technology, and subculture in Indonesia's social, cultural, and climatic landscapes. Co-founded by media artists Helmi Hardian and Angela Sunaryo, Biohaha explores innovative yet accessible approaches to interdisciplinary research and creation. Their activities include experimental workshops, DIY biology tools made from repurposed materials, and participatory projects that foster sustainability, creativity, and knowledge-sharing across communities.

Senswalking Flux aligns closely with the spirit of SMI Interim 2025 by responding to environmental fragility, social inequities, and the shifting boundaries between the handmade and the machine-made through embodied, collective practice. By merging sensory walking with DIY sound-making, the project reclaims slowness and tactility in a digitally accelerated world, turning perception itself into an act of care and resistance. Through the interplay of body, environment, and circuitry, it proposes a form of creative practice where technology becomes relational rather than extractive. A shared ecology of attention that nurtures collective imagination and redefines what it means to make, listen, and coexist. conscious society.



अरे शुक्ररसिया भाई!  
अगली बार मेलिटरेट करे, पार!



**BIOHAHA**

⊗ Biohaha 2025  
Biological Weapon and  
Poisonous Plant Specialist

Bandung - Indonesia  
hahabiohaha@gmail.com  
<https://bio-haha.github.io/sensewalking/>