



Jahanara Nares

*Selected Work: Systems, Space, and Human Experience*

2026

## *Architectural Studio Project - Cooper Union* **\_Inner Library**

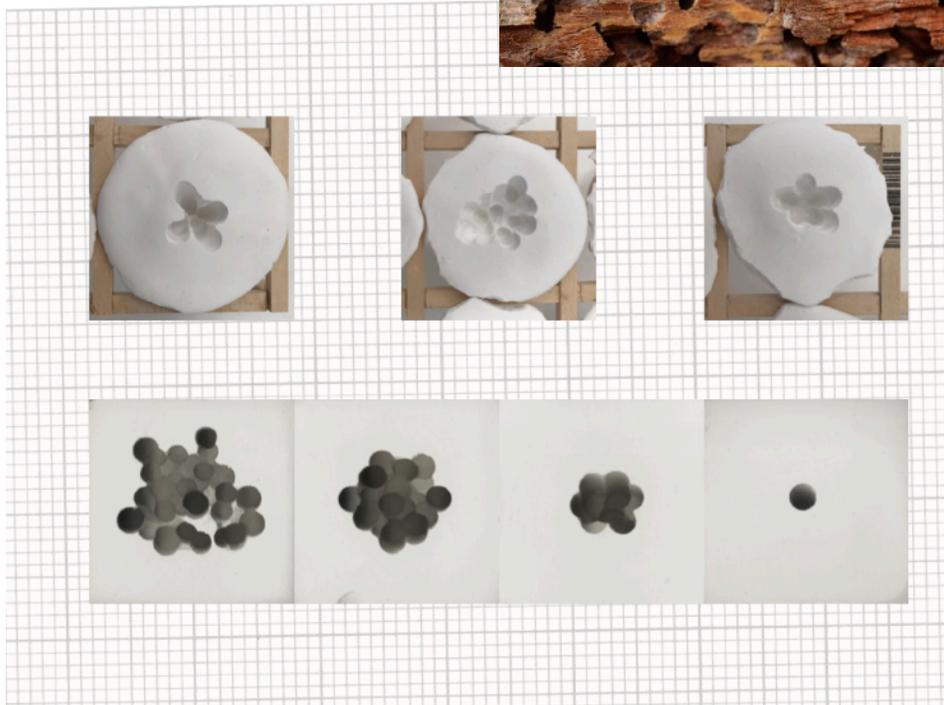
Inner Library is a 'buried library' concept inspired by termite cave systems. The project proposes a structure that moves downward into the earth, using depth, enclosure, and sectional variation to organize public, yet intimate spaces. The design creates a sequence of shared reading rooms interwoven with small, cave-like niches sized for one or two people, allowing moments of privacy to coexist within a collective environment.

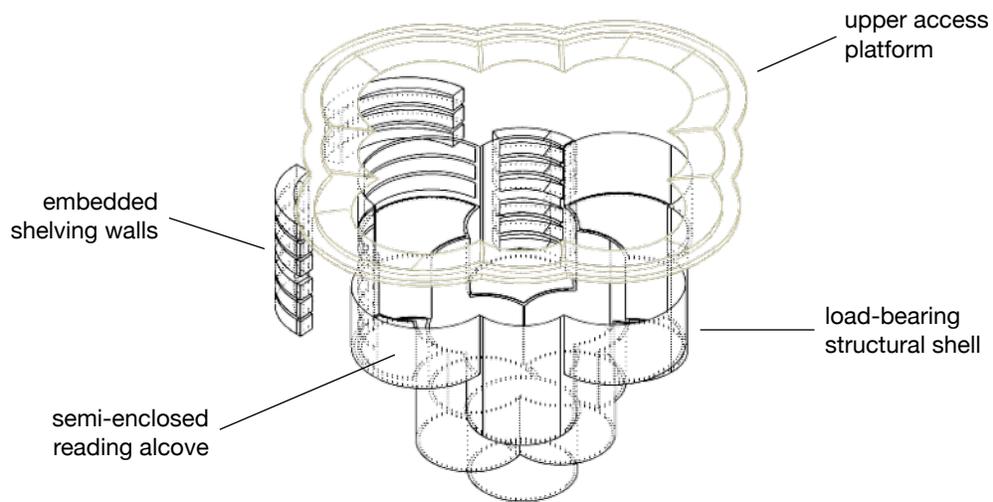
By emphasizing excavation, gravity, and interiority rather than vertical monumentality, the project questions dominant architectural narratives of boundless expansion, proposing instead an architecture oriented toward

reflection,

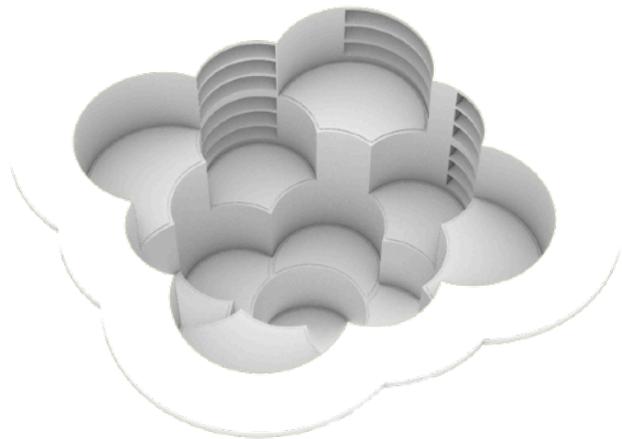
connection,

and inhabitation.





The library is conceived as a carved, load-bearing timber shell with a glass skylight enclosure (not shown)



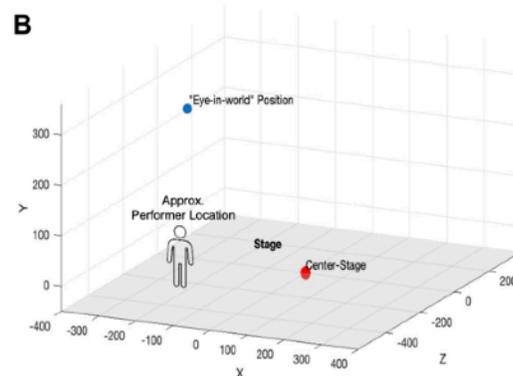
in which structure, furniture, and program are integrated into a single inhabitable mass



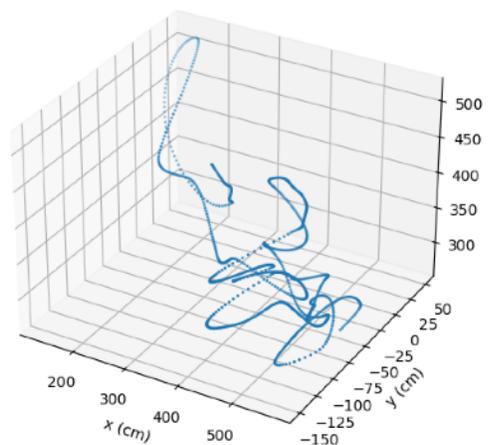
## Design Research / Spatial Analysis **Collective Attention in Performance Space**

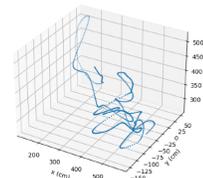
This neuroaesthetics-research project examines how groups of people attend to space together during live performance. Using eye-tracking data collected from audience members, the work maps how collective focus converges and shifts over time in relation to spatial layout and performance movement dynamics.

By translating gaze data into spatial and temporal diagrams, the project reveals moments of heightened synchrony, where attention aligns across the audience. These patterns suggest how sightlines, spatial configuration, and narrative cues which unfold over multiple temporal scales guide shared experience - insights relevant to the design of performance venues, exhibitions, and shared interior spaces.

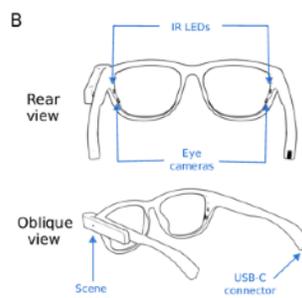


3D Gaze Trajectory — Participant\_A



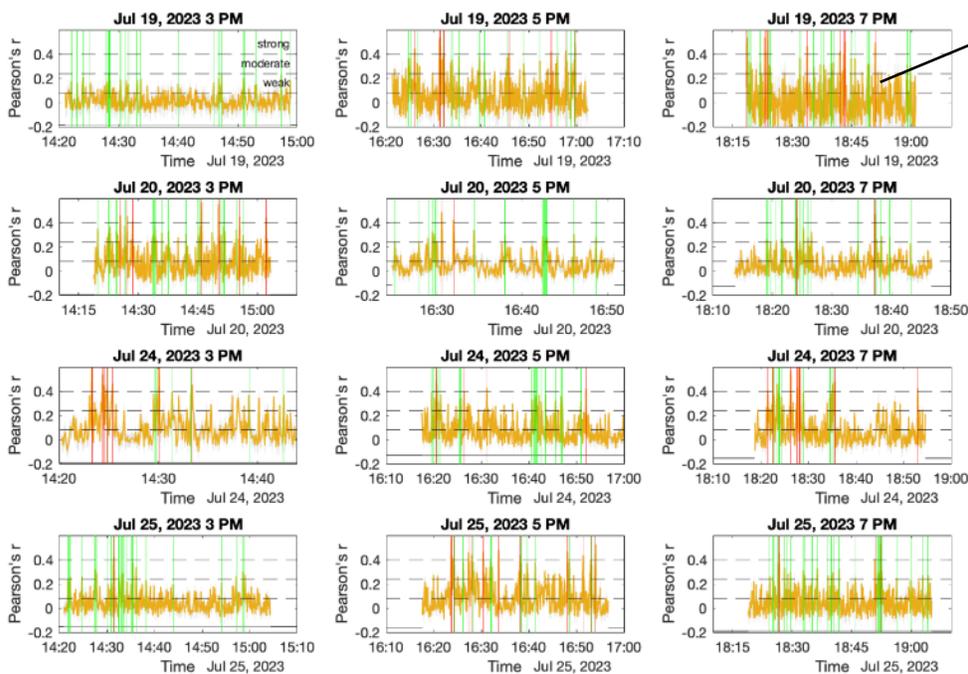


Moments of shared focus emerge across the audience over time,  
as measured by collective eye movement.



Average Pairwise Synchrony  
Window Size: 5 sec  
High Synchrony Moments

High Synchrony Moments  
— strong (>0.40)  
— moderate (>95th percentile)



Moments of shared gaze within fast cortical time-scales often coincided with quick, salient movements by the performer

*e.g. the quick flutter of a bright red fan, or a sudden turn by the performer*

In collaboration  
with *Neurolive*  
(<https://neurolive.info/>)  
University College  
London  
(UCL)



Analysis & code available on GitHub: <https://github.com/17inares/gaze-synchrony-3d-thesis>

Image Credits: Neurolive (UCL); Pupil Labs GmbH

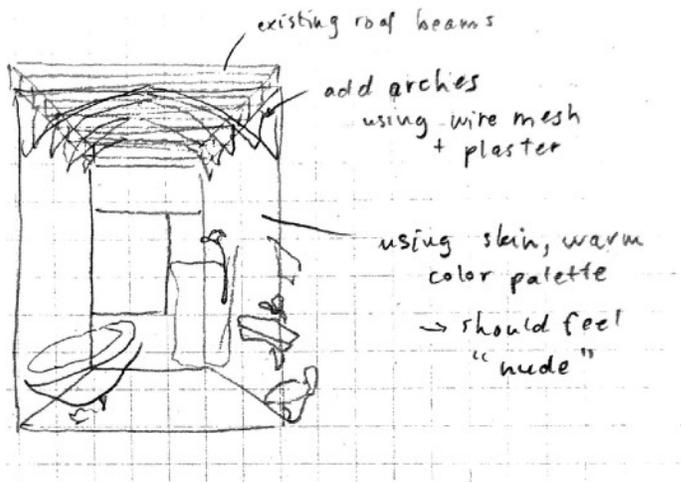
## *Built Installation / Spatial Experiment* **\_Rest Room**

Rest Room is a site-specific architectural installation situated within the master bathroom of a private residence in London. The project investigates the bathroom as a space of physical and psychological reset, a place where bodily function, cleansing, and privacy commune.

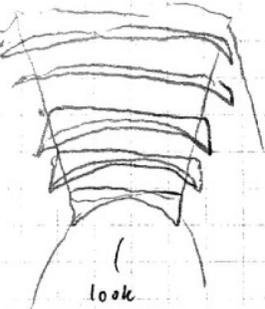
By intervening in one of the few available spaces of private withdrawal within public space, the bathroom installation explores how structural enclosure and tactile surfaces shape experiences of innate resonance with spaces. Constructed over a six-month period, the work was realized through hands-on fabrication and installation, responding directly to the constraints of the existing space.

The project was presented as part of an exhibition distributed throughout the house, alongside other installations and live performances, positioning the bathroom as an architectural site rather than a purely utilitarian room.

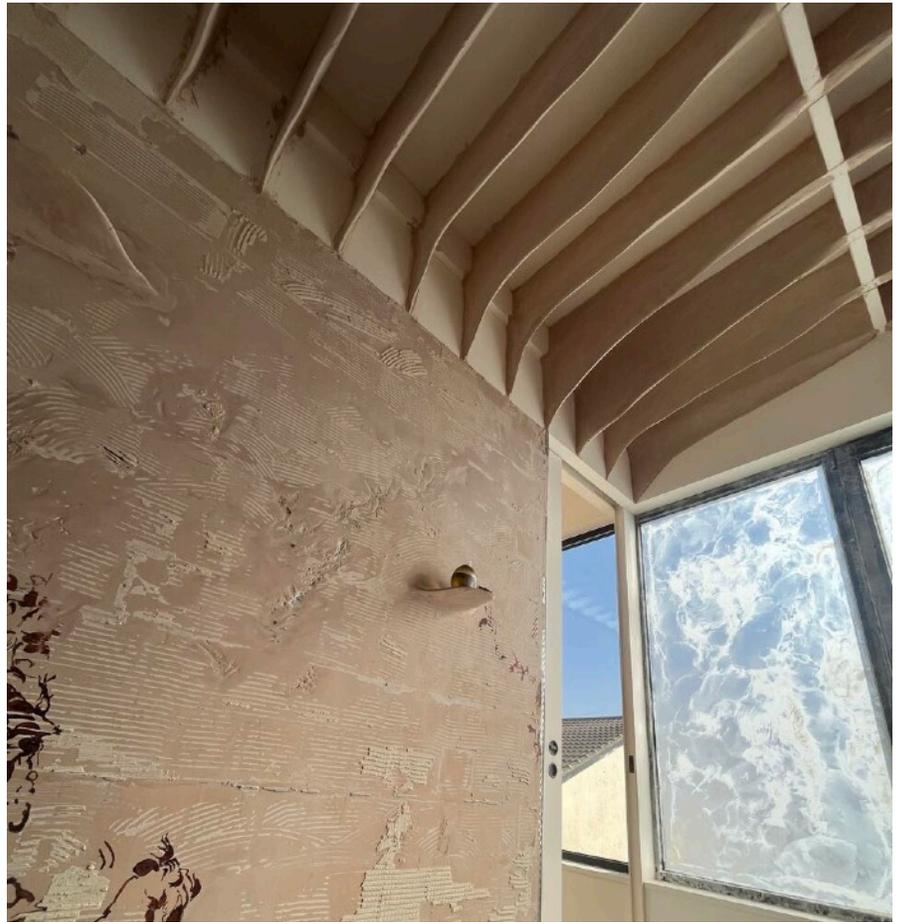




VIEW LOOKING  
UP:



look  
like the  
inside of a  
body -  
the "bones" of  
the house



This project was built while artist-in-residence  
with Chelsea College of Arts in London.



Floor details, hand-carved



## Urban Spatial Analysis / Design Research **\_New York City Rats**

This project investigates how urban wildlife navigate and inhabit urban infrastructure, using New York City rats as a lens into overlooked spatial systems. Drawing on NYC OpenData, subway entrance locations, and proximity analysis, the work maps potential movement patterns through underground networks and liminal spaces of the city.

The project reframes urban wildlife as part of the ecology of the city, shaped by architectural thresholds, waste systems, and human circulation. By translating datasets into spatial diagrams, the work explores how data-driven insight can inform more ecologically-minded approaches to urban design and infrastructure.



*Inspired by the increase in rat sightings during the Covid-19 lockdown.  
Built in 2021.*

## Selected months from 2025

March



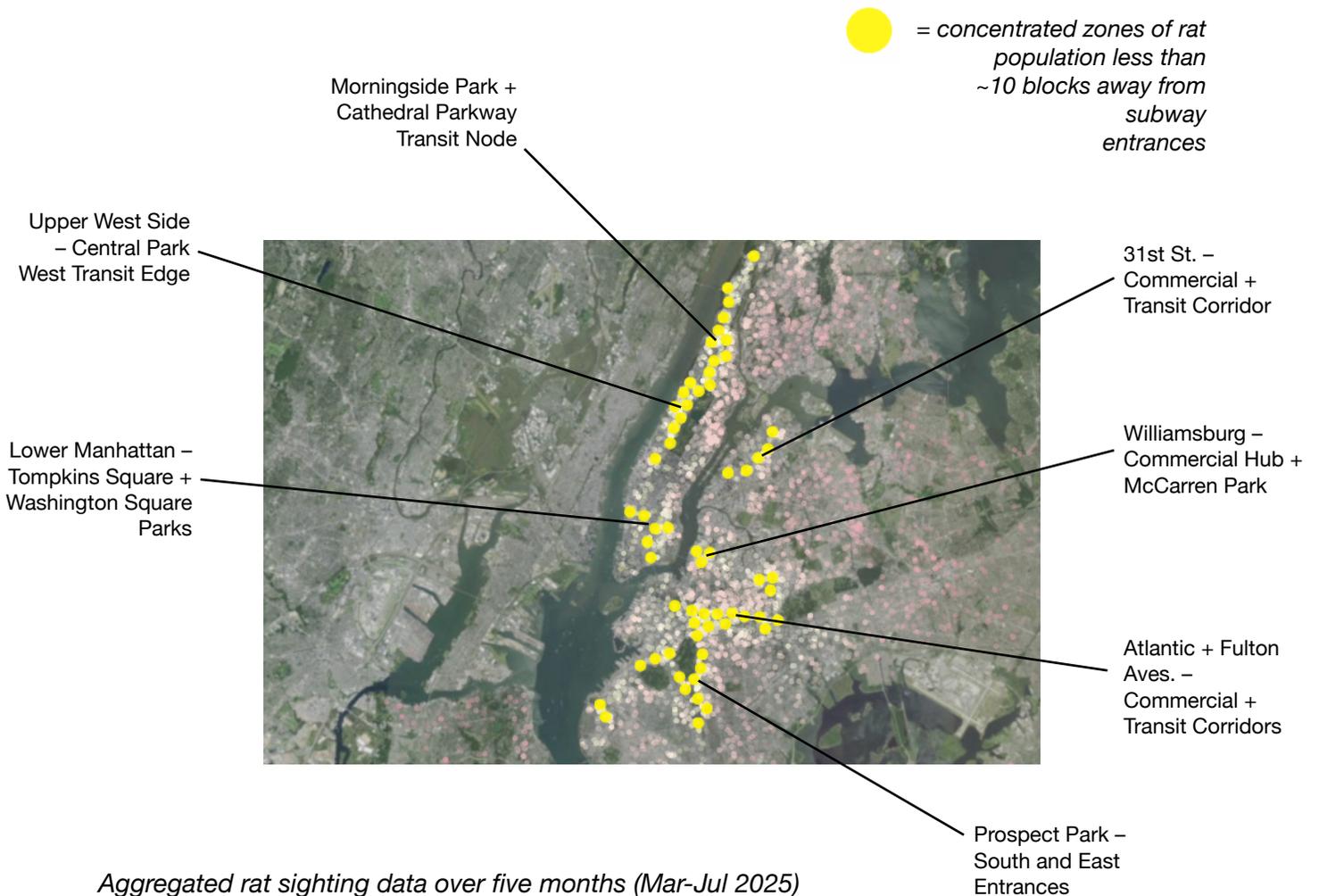
April



May

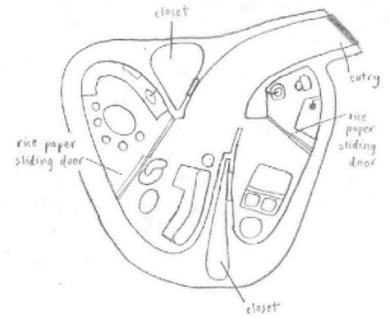
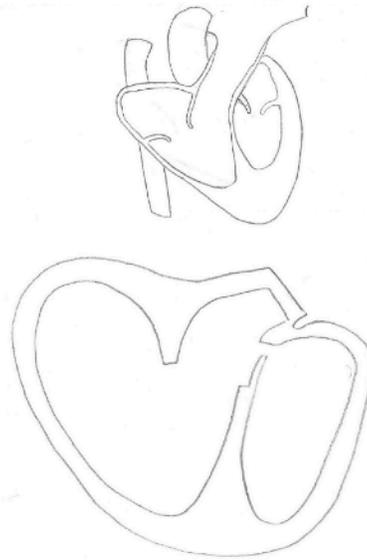
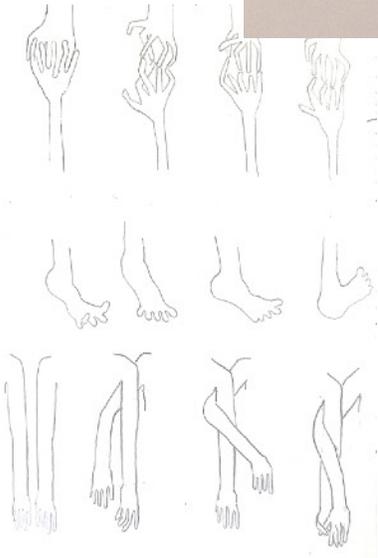
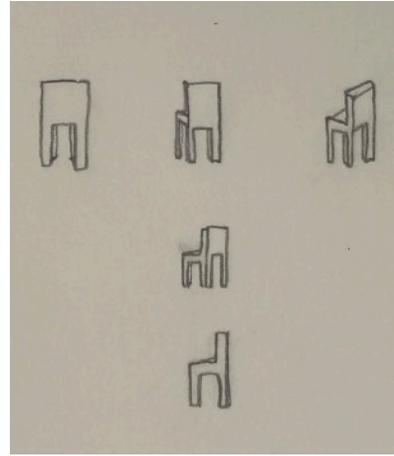
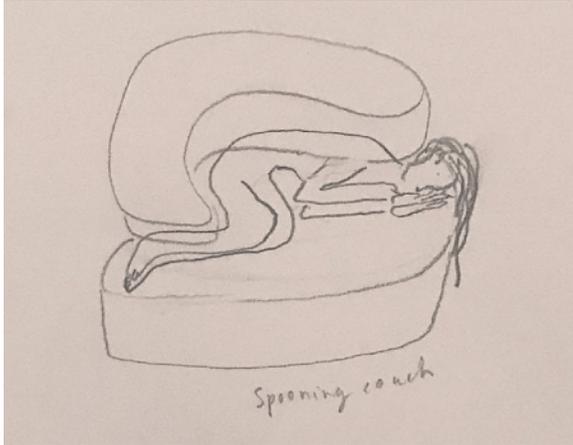
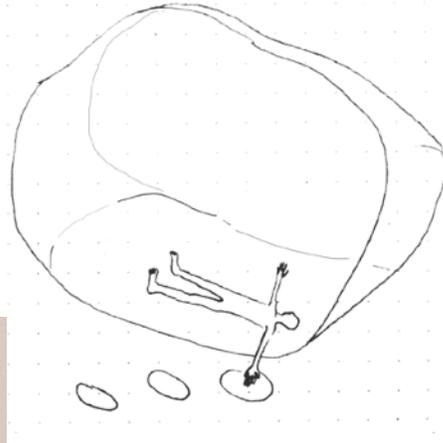


*Hubs of concentrated rat populations near to subway entrances emerge along park edges and transit corridors*



*Aggregated rat sighting data over five months (Mar-Jul 2025)*

Sketches \_ Personal Objects

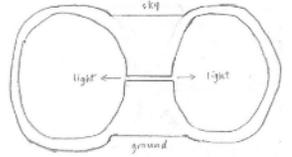
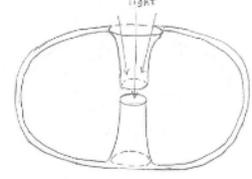
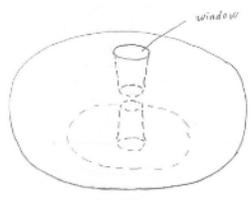
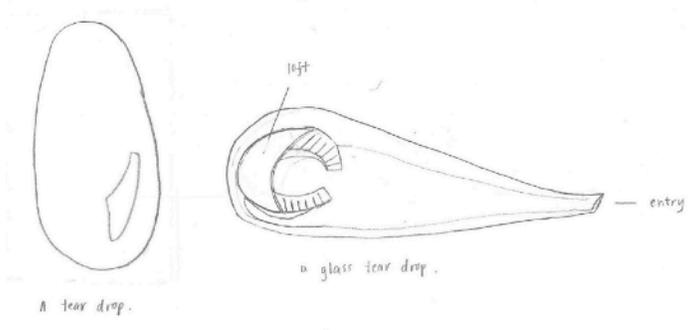


A heart house.

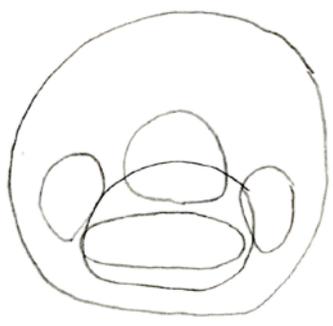
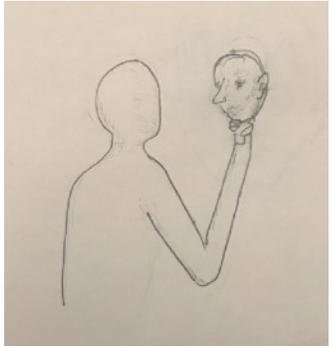
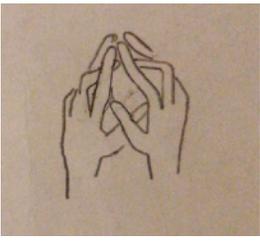


study of objects 9.1.

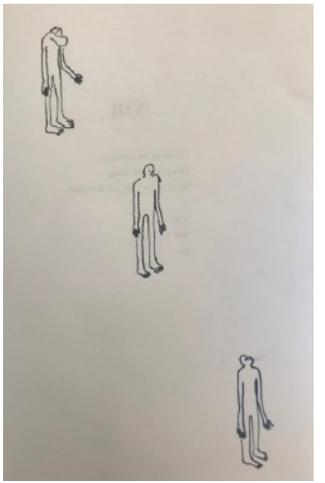




two rooms connected by a strip of light.



open orb  
inside the fire



## Additional context

My work sits at the intersection of architecture, computation, and cognitive science, with a focus on how spatial systems shape collective and individual experience.

The selected work involves conceptual design, computational analysis, design research, and conceptual spatial studies. Supporting material, including code and extended datasets, is available upon request or via GitHub (links included above).

I'm interested in applied design research roles supporting evidence-based spatial design.

— Jahanara Nares

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[GitHub](#) · [LinkedIn](#)