

The Expanded Environment

The Expanded Environment



Biodiversity in the News

by **Ned Dodington** · March 22, 2024

We were very excited to read JuanRamon Rubio's article in Texas Architect Magazine which amplifies the call for...

THE EXPANDED ENVIRONMENT

The Expanded Environment is a nonprofit 501c3 organization devoted to demonstrating alternate ways of responsibly and synthetically integrating biological and ecological agents into the built world. Its goal is to assist governments, municipalities, provinces, organizations, businesses, and individuals to understand, appreciate and envision a more productive relationship between architectural and biological systems.



The Urban Rookery

by **Ned Dodington** · January 9, 2024

Rookery: a colony of breeding animals, generally birds. A rookery is generally reserved for a colony of gregarious...

INTRODUCTION TO ANIMAL ARCHITECTURE



The Multispecies Metropolis

by **Ned Dodington** · April 23, 2023

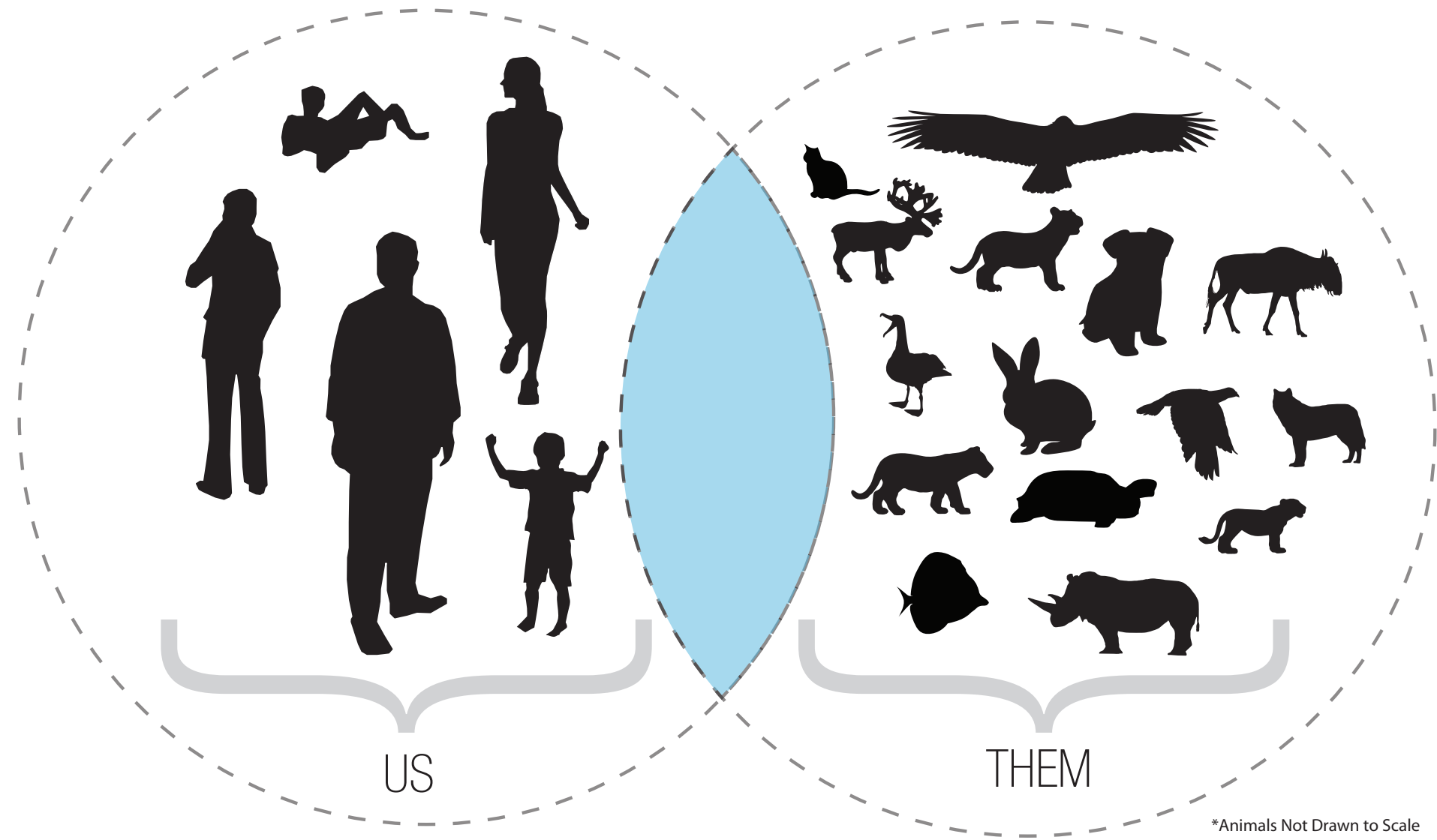
We are so pleased to share with you an upcoming event in

FOR SALE! HOW TO DESIGN WITH THE ANIMAL

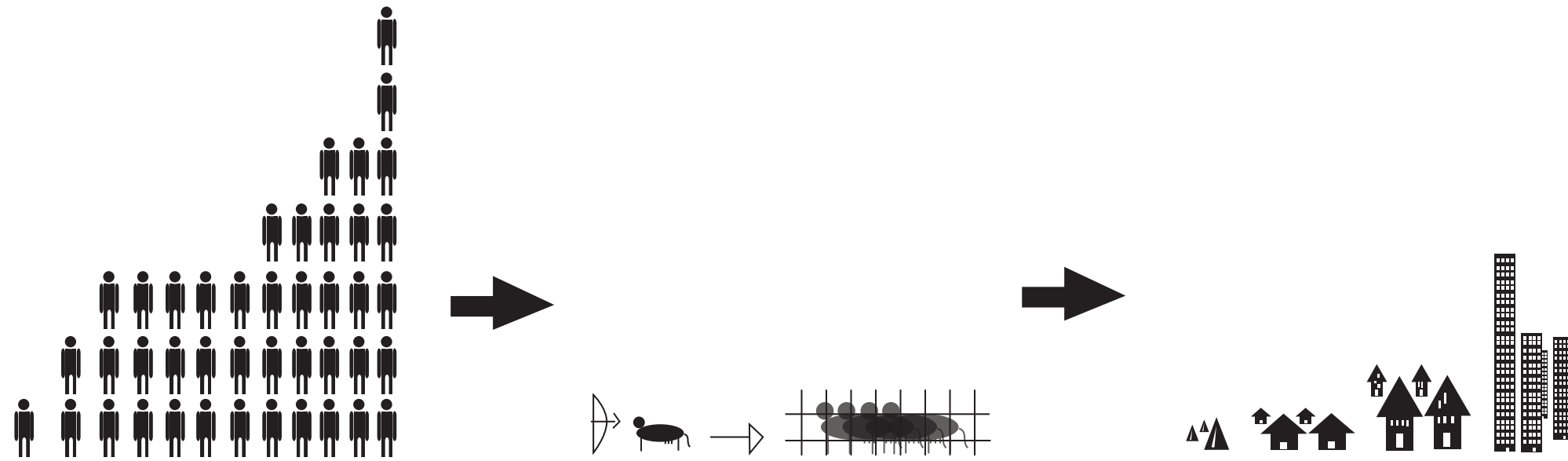


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EXPANDED ENVIRONMENTS AND THE OBJECTS BETWEEN THEM



...is a project about bridging the humanist divide between
“us” and “them.”

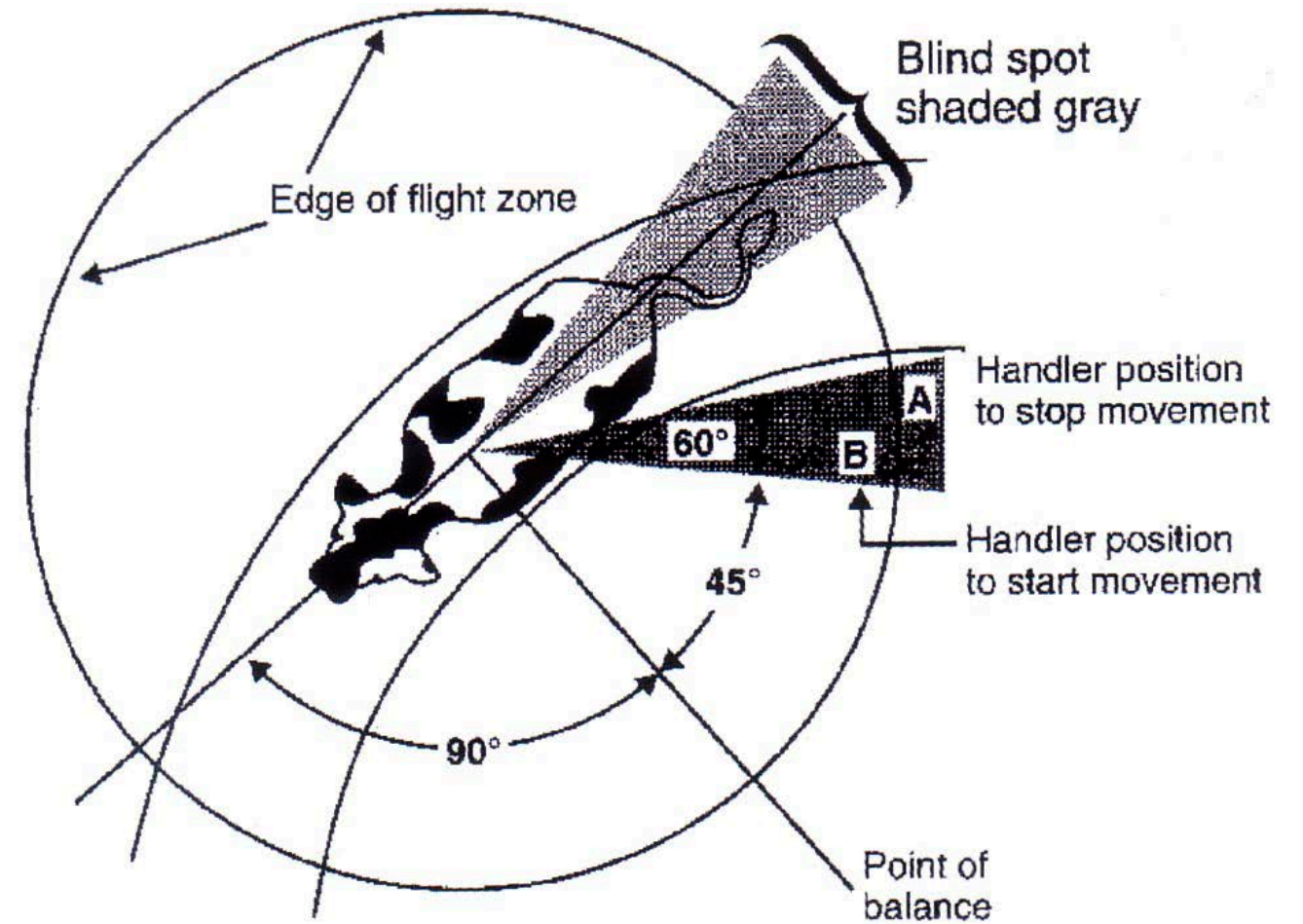


Population Growth

Animal Husbandry

Urbanization

...the history of Architecture is a humanist history and guilty of relegating all other species of life to the status of second-class beings.



...is a project about what it means as an animal to make and delineate space.

MONSTER

SUBMIT YOUR PROJECT The Expanded Environment wants your multi-footed, multi-dimensional, impure, unholy design proposals. Show us your ideas about how extreme combinations of architectural form, material, and programs can reshape not only our built worlds but the way we think of them. Submissions can include past work, current research and built or unbuilt projects. Written and previously unpublished essays are also accepted and will be judged in their own category. Projects should focus on solving, addressing or proposing architectural and/or urban issues and must actively incorporate at least one, if not more non-human design partners. Winning entries will be announced late-summer 2010 and will be eligible for publication and exhibition. The First Place winner will be entitled to a \$500.00 cash reward. Details at www.expandedenvironment.org

Sponsored By:



Register: **May 29, 2015**
Submissions: **June 20th, 2015**
Winners Announced: **August 2015**

Entrance Fees:
Students and student teams: \$50.00
Professionals: \$150.00

JURY COMMITTEE:
Ariane Lourie Harrison
Critic, Yale University and Pratt Institute, GAUD
Ryan Ludwig
Architect, AOP / Adaptation of Parts
Catherine Ingraham
Prof. of Arch., Pratt Institute, GAUD
Haldre Rogers
Ecologist, Rice University
Mason White
Assoc. Prof. of Architecture, University of Toronto
Antonio Torres
Beastmaster, The Bittertang Farm
Michael Loverich
Beastmaster, The Bittertang Farm

www.expandedenvironment.org/monster

URBAN ANIMAL

THE 2012 ANIMAL ARCHITECTURE AWARDS

JURY COMMITTEE:
Ned Dodington
Director, Animal Architecture
Simone Ferracina
2012 An.Arch Awards Laureate
Fritz Haeg
Artist
Christopher High
Assoc. Professor Rice University RSA
Jonathan LaRocca
Editor, Animal Architecture
Kate Orff
Asst. Professor Columbia GSAPP
Founder of SCAPE
Susan S. Szenasy
Editor in Chief, Metropolis Magazine

Urban areas are quickly becoming the densest concentrations of human life on the planet and with that comes the well documented positive and negative impacts to local biodiversity and ecologies. But humans are not the only urban animals - squirrels, pigeons, mice, crows, raccoons, beetles and others are all species identified as synanthropes - animals that "live near, and benefit from, an association with humans and the habitats that humans create around them." These are highly-urbanized non-human animals and our potential design partners. Expanded hetero-cultures, urban agriculture, and a flexible, more resilient urbanism are all potential benefits of cross species collaborations. What other benefits exist?

SUBMIT YOUR PROJECT

Animal Architecture wants your ideas about how synanthropic design can reshape, expand and redefine the context of urban thought and space. Submissions can include past work, current research and built or unbuilt projects. Projects should focus on solving, addressing or proposing urban issues and must actively incorporate at least one, if not more non-human design partners. Winning entries will be announced mid summer 2012 and will be eligible for publication and exhibition. Details to follow.

Register: **May 13th 2012**
Submissions: **June 11th 2012**
Visit: www.animalarchitecture.org



All Creatures Great & Small

www.animalarchitecture.org

What: **The Animal Architecture Awards**
Register: **May 1st 2011**
Deadline: **June 12th 2011**
web: www.animalarchitecture.org/register
cost: **\$25 Students, \$50 Professionals**

Jury Committee Members:

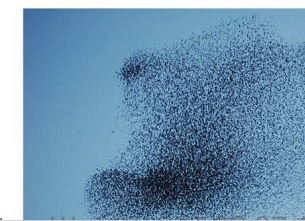
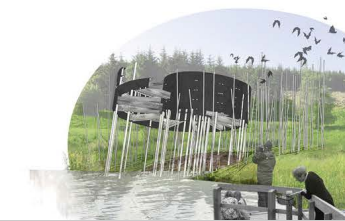
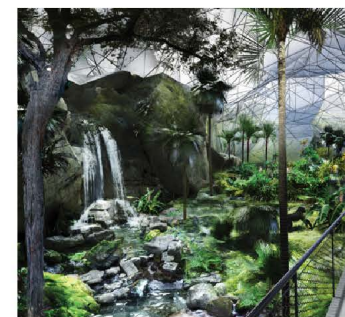
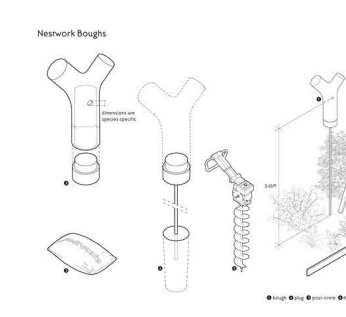
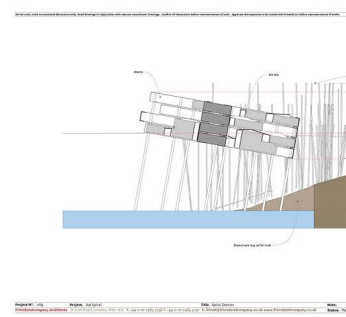
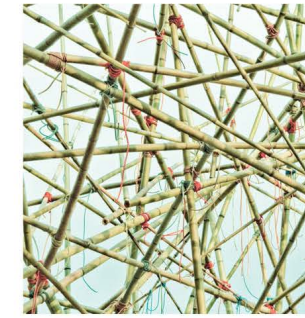
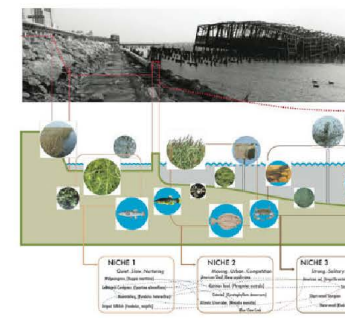
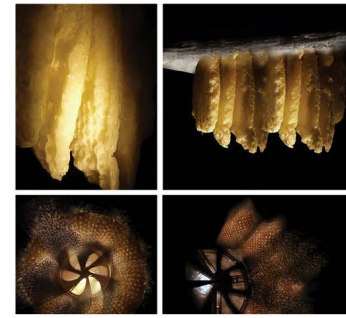
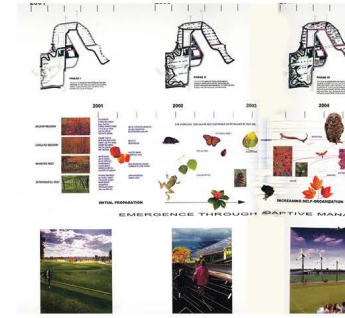
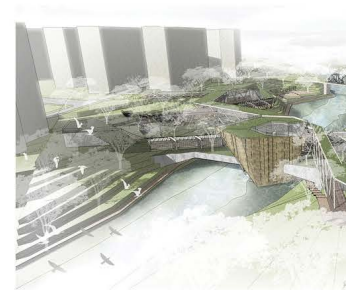
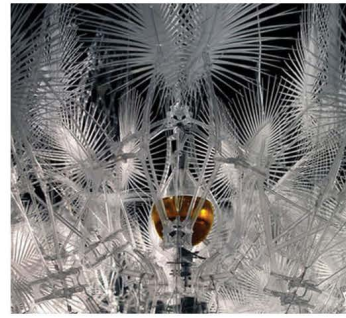
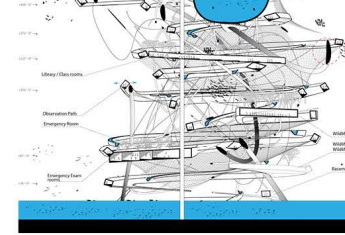
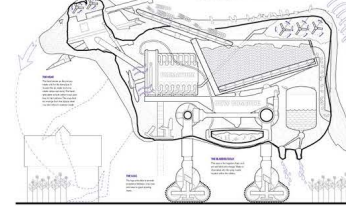
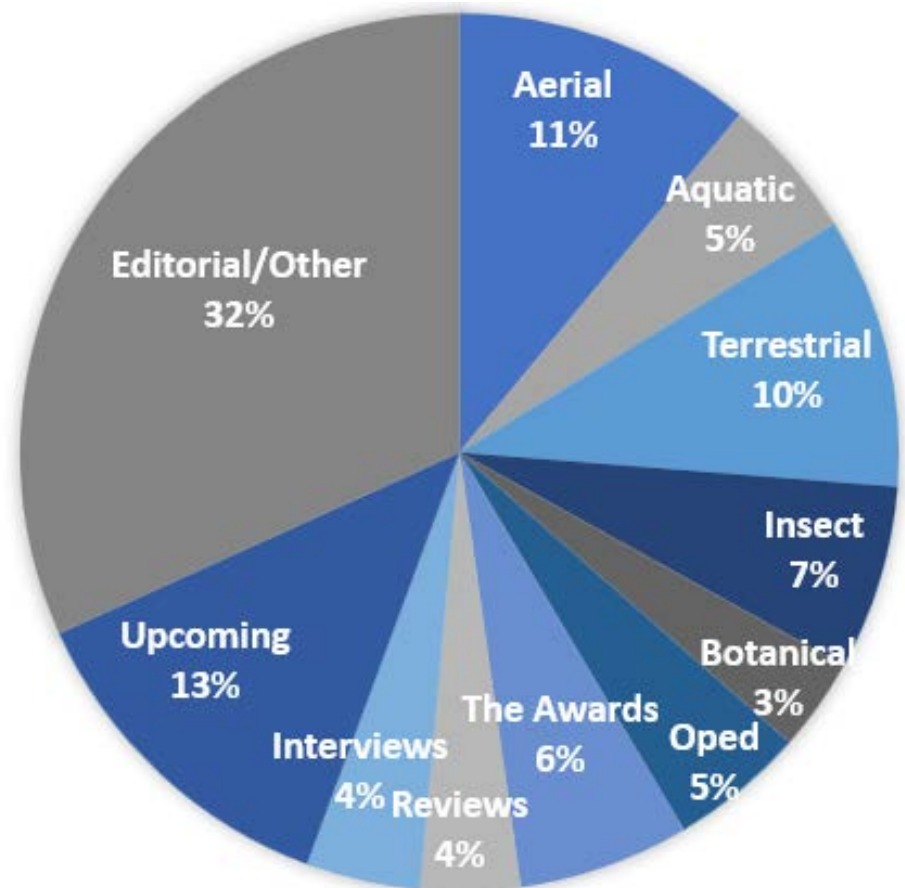
Ned Dodington, Founder Animal Architecture
Jon LaRocca, Founder Animal Architecture
Neeraj Bhatia, Rice university/Infranet Lab
Joyce Hwang, Asst. Professor of Architecture
University of Buffalo NY
Geoff Manaugh, Author BLDG BLOG
Cary Wolfe, Series Editor *Posthumanities*
Alison Hunter, Visual Artist
Sanford Kwinter, Prof. of Architectural Theory and
Criticism, Harvard GSD

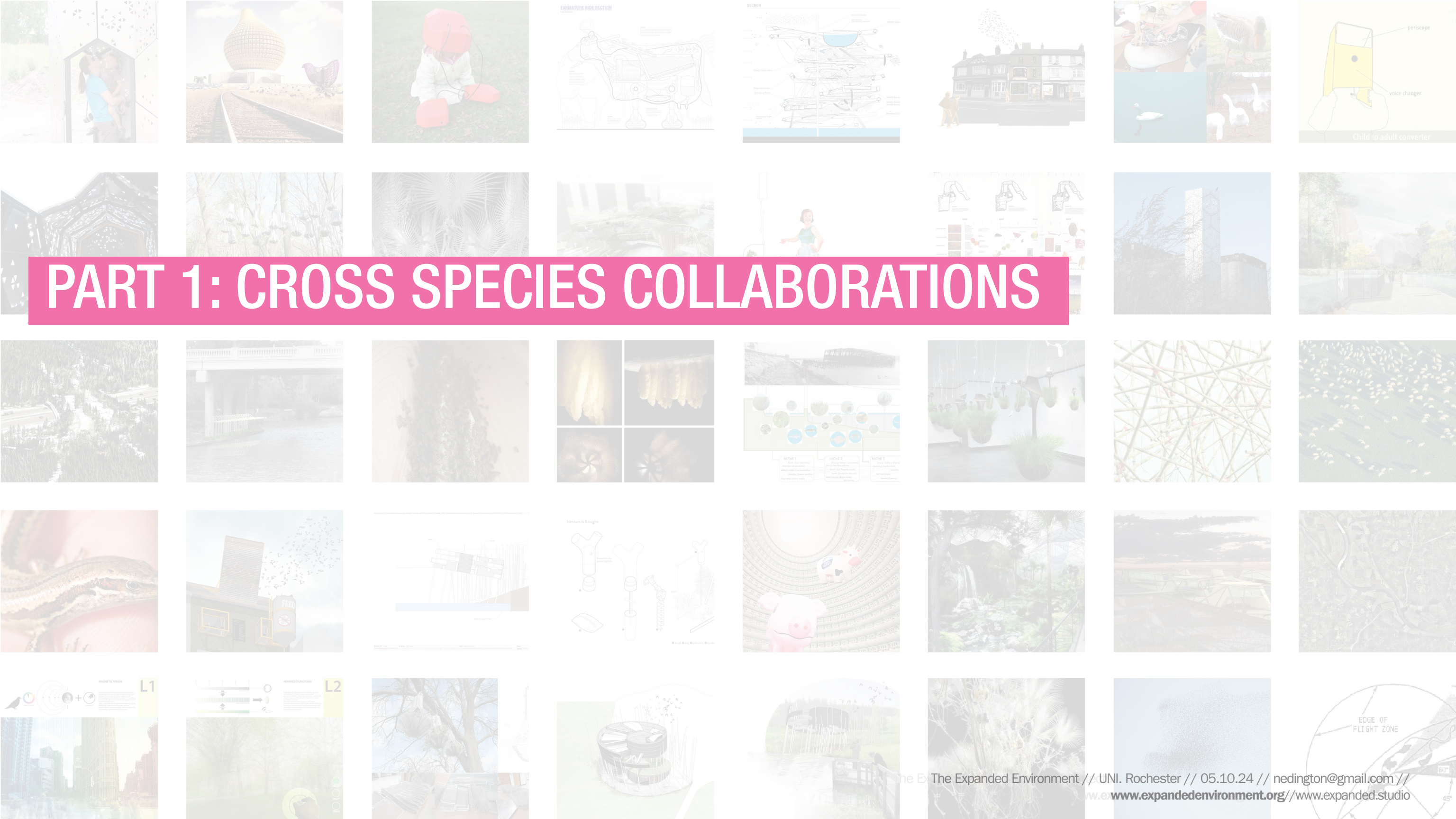
Animal Architecture seeks projects that engage the lives, minds and behaviors of our alternate, sometimes familiar companion species -- insects, birds, mammals, fish, and microorganisms - each one with unique ways of world-making. As our society re-examines its place in the global ecology Animal Architecture invites your critical and unpublished essays and projects to address how architecture can mediate and encourage multiple new ways of species learning and benefiting from each other - as we say it here: to illustrate cospecies coshaping.

SUBMIT YOUR PROJECT Submissions can include past work, current research and built or unbuilt projects. Winning projects will be selected for public exhibition and recognition. Details online.



Animal Architecture





PART 1: CROSS SPECIES COLLABORATIONS

SYNANTHROPIC HABITATS

SOFT SYSTEMS

POST ANIMAL PROJECTS

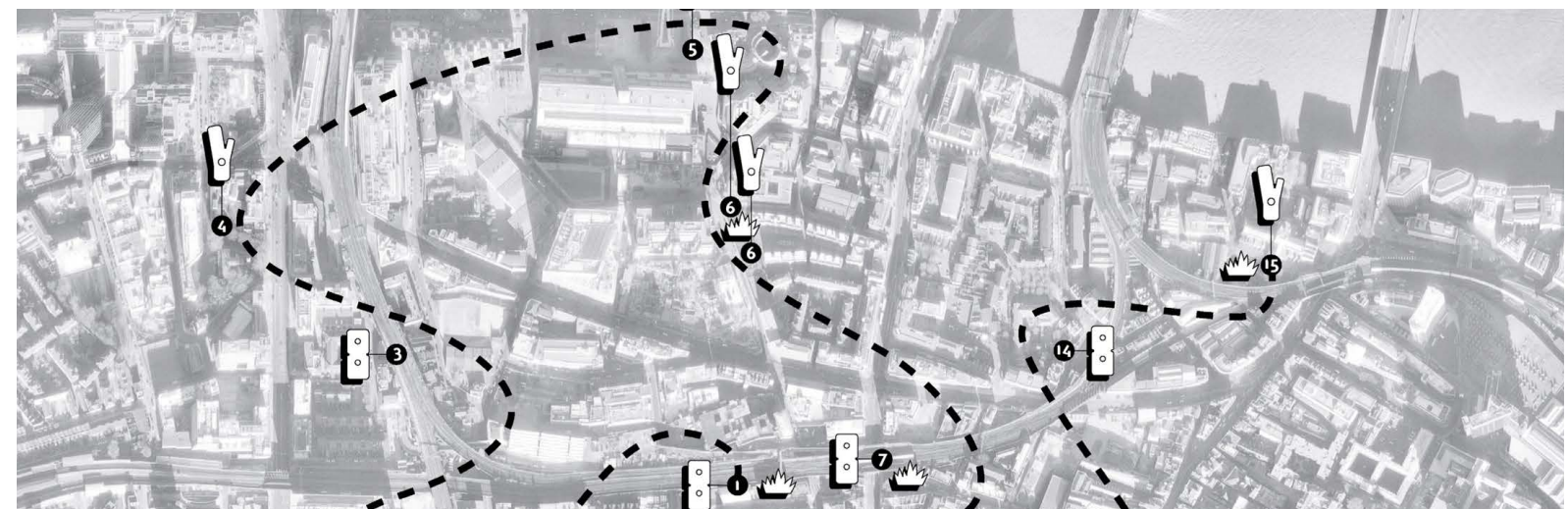
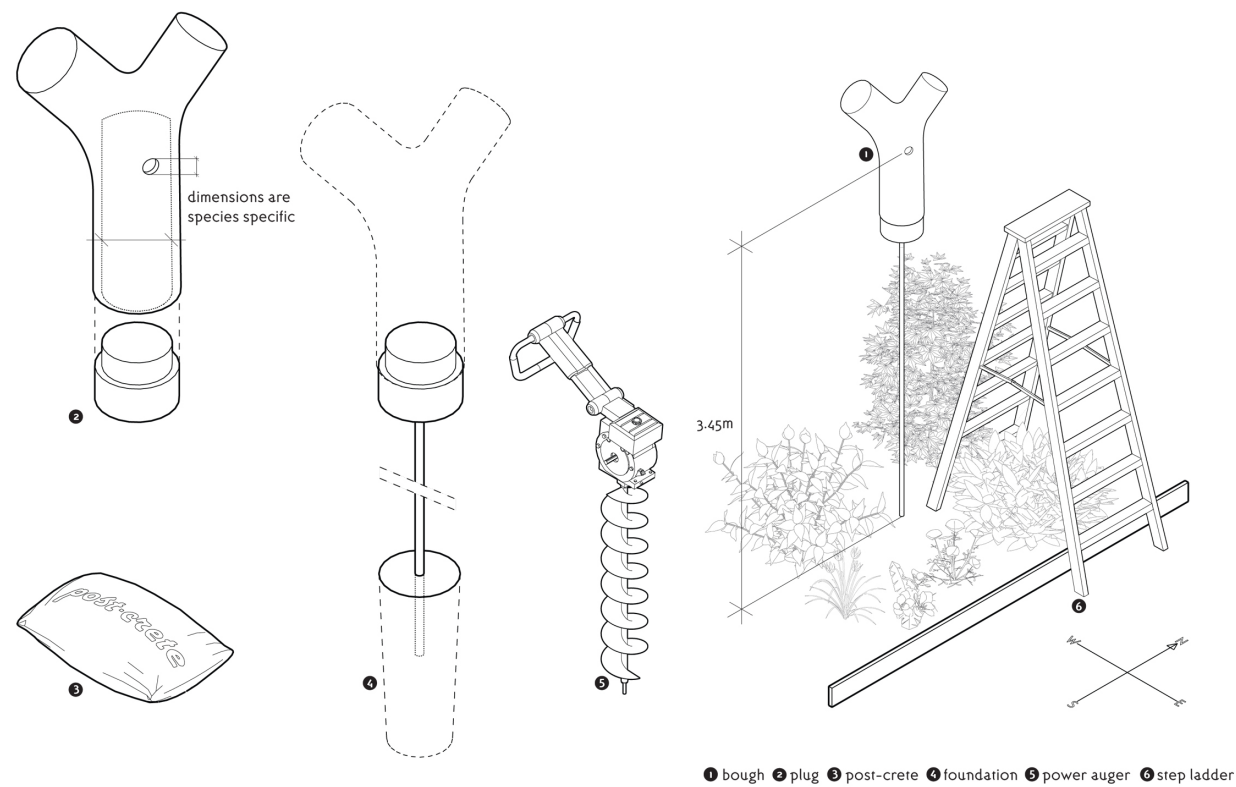
SYNANTHROPIC HABITATS

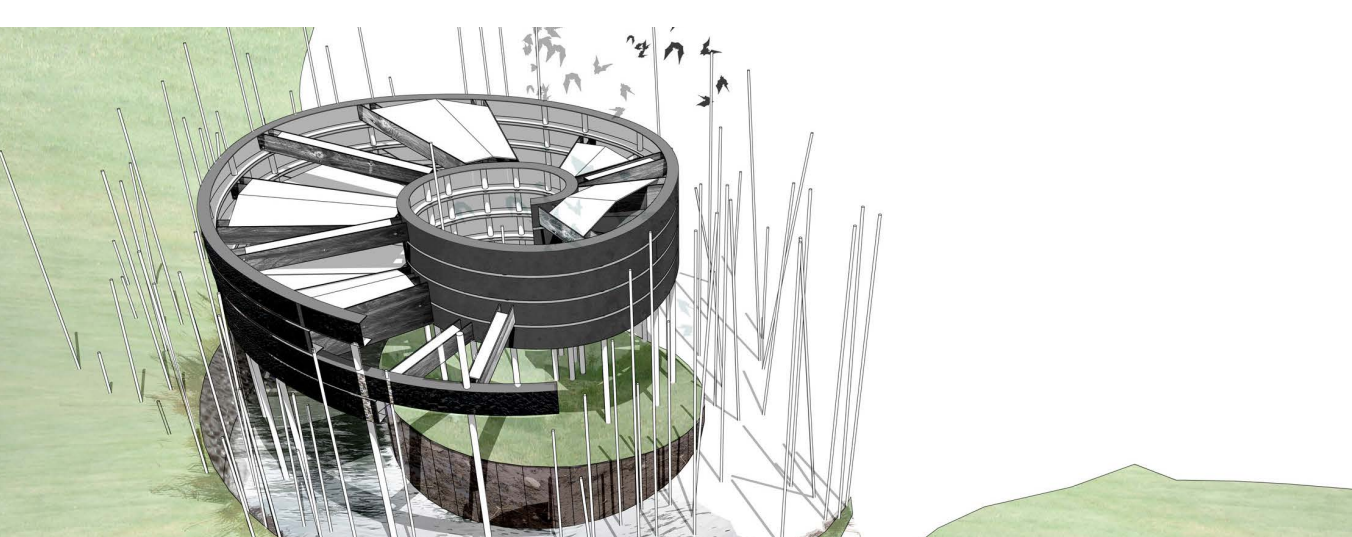
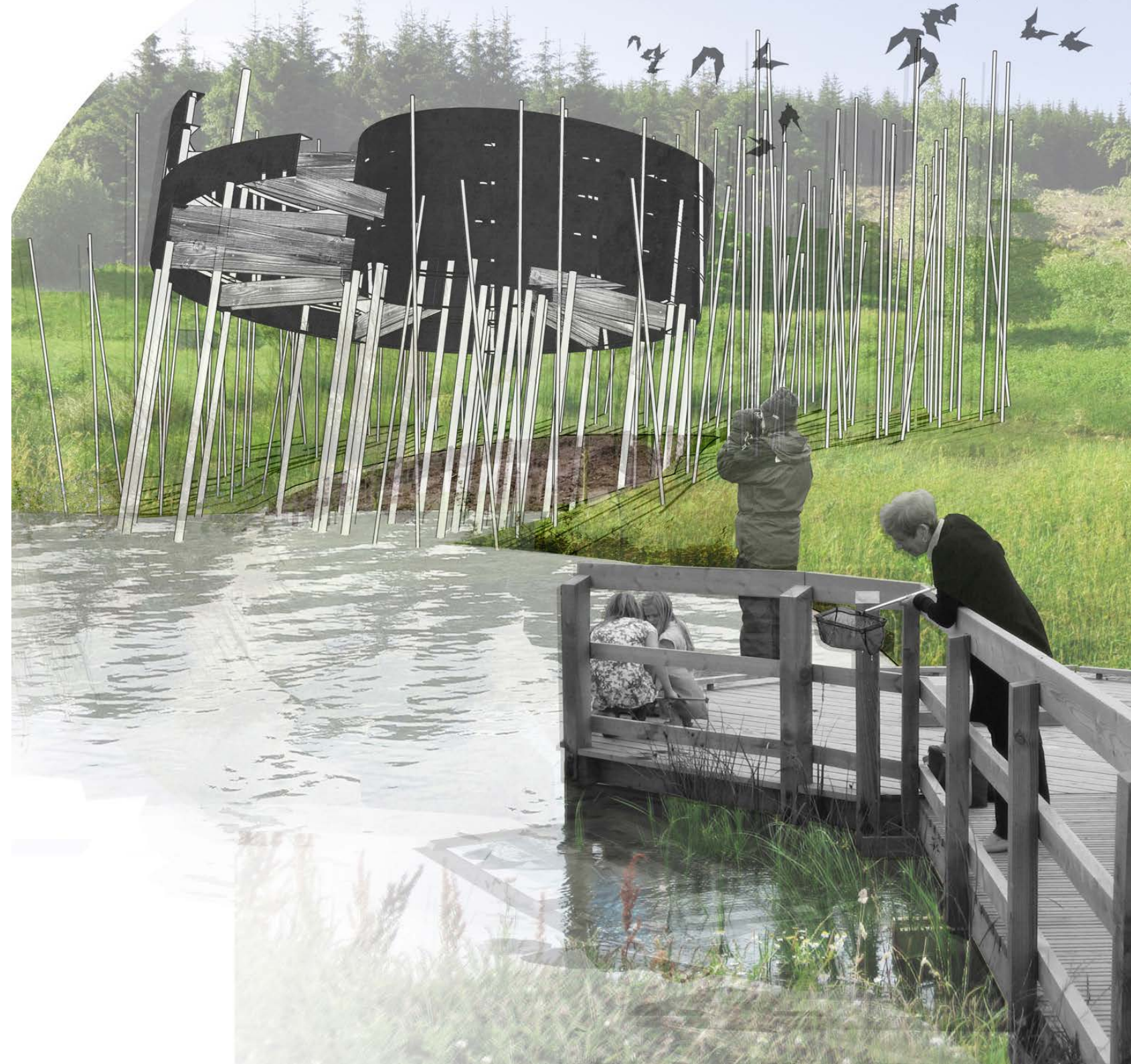
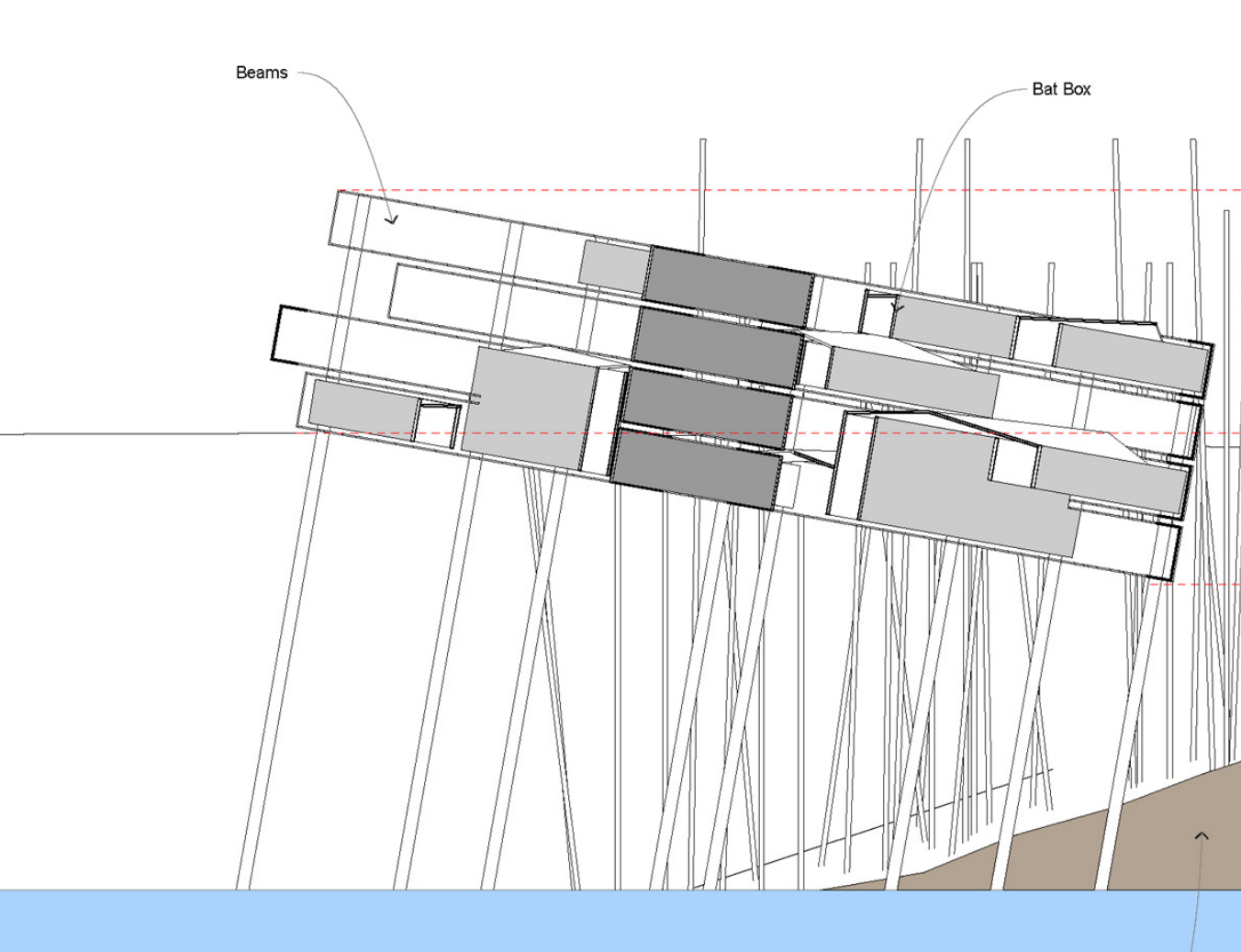
- \ Illustrate Cross-Species cohabitation design scenarios
- \ Seek to design for, improve and invite alternate human/animal hybrid environments
- \ Offer Symbiotic Design Solutions (Positive Animal + Human)

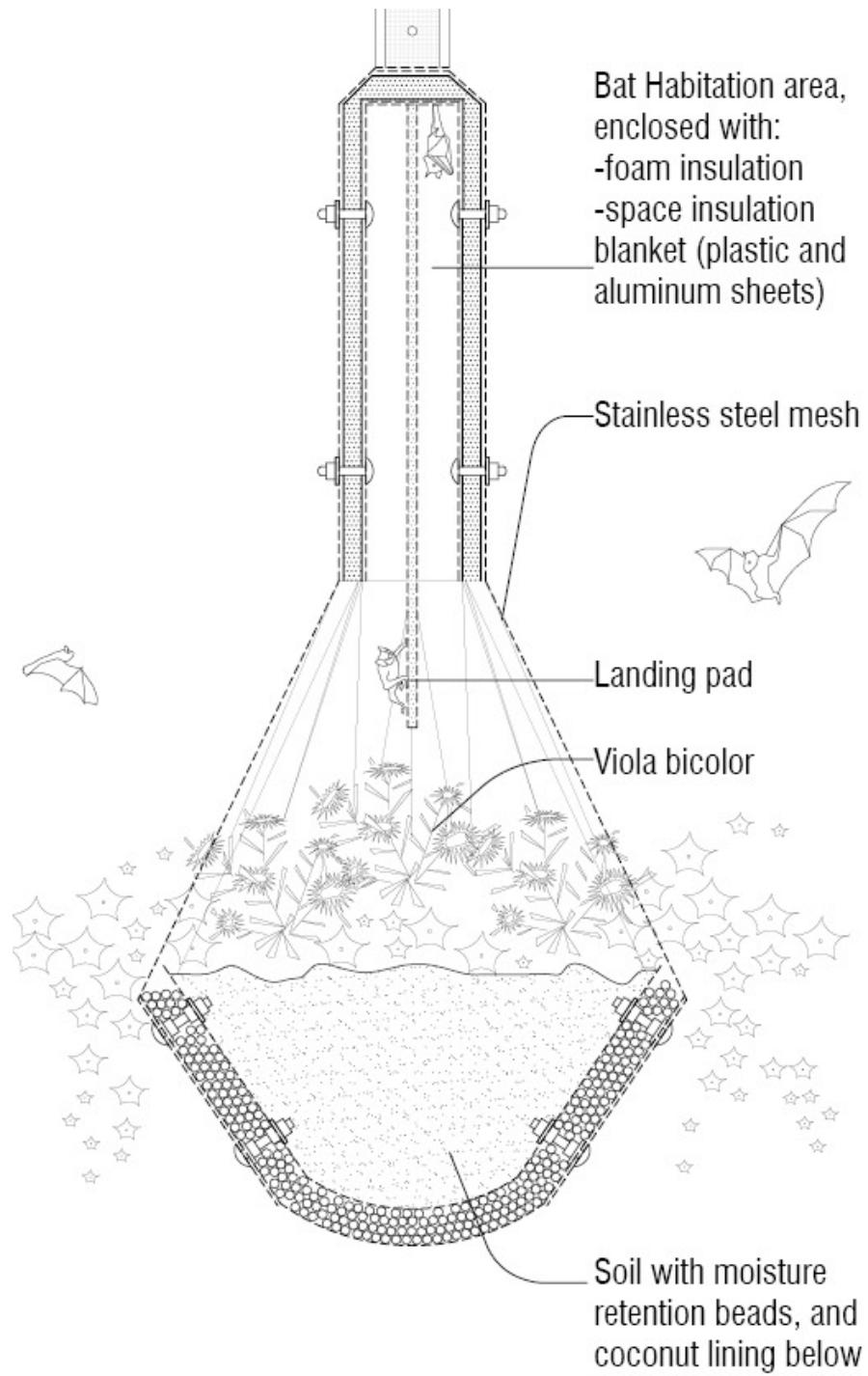
SYNANTHROPIC HABITATS



Nestwork Boughs









GBHNPCB

prototype for a GARDEN BUILDING WITH HOST AND NECTAR PLANTS FOR CALI'S BUTTERFLIES and Actions to Promote a Social Network of Environmentally Aware Gardener-citizens in Cali

HUSOS: Diego Barajas
Camilo García with
Amaro – Biologist
(with the special ass
the Fundación Zool



bushes



climbers

Host and nectar plants (climbers and bushes) positioned on the building and related butterfly species.

The garden building is an attractor of Cali's butterflies, containing information on the environmental quality of the region and its biodiversity. At the same time, the GBHNPCB serves Taller Croquis as an indirect marketing strategy that is part of the spatial exploration of the multifarious *Caleño* identity for the business, given the challenge that its global expansion entails.



40

butterflies species



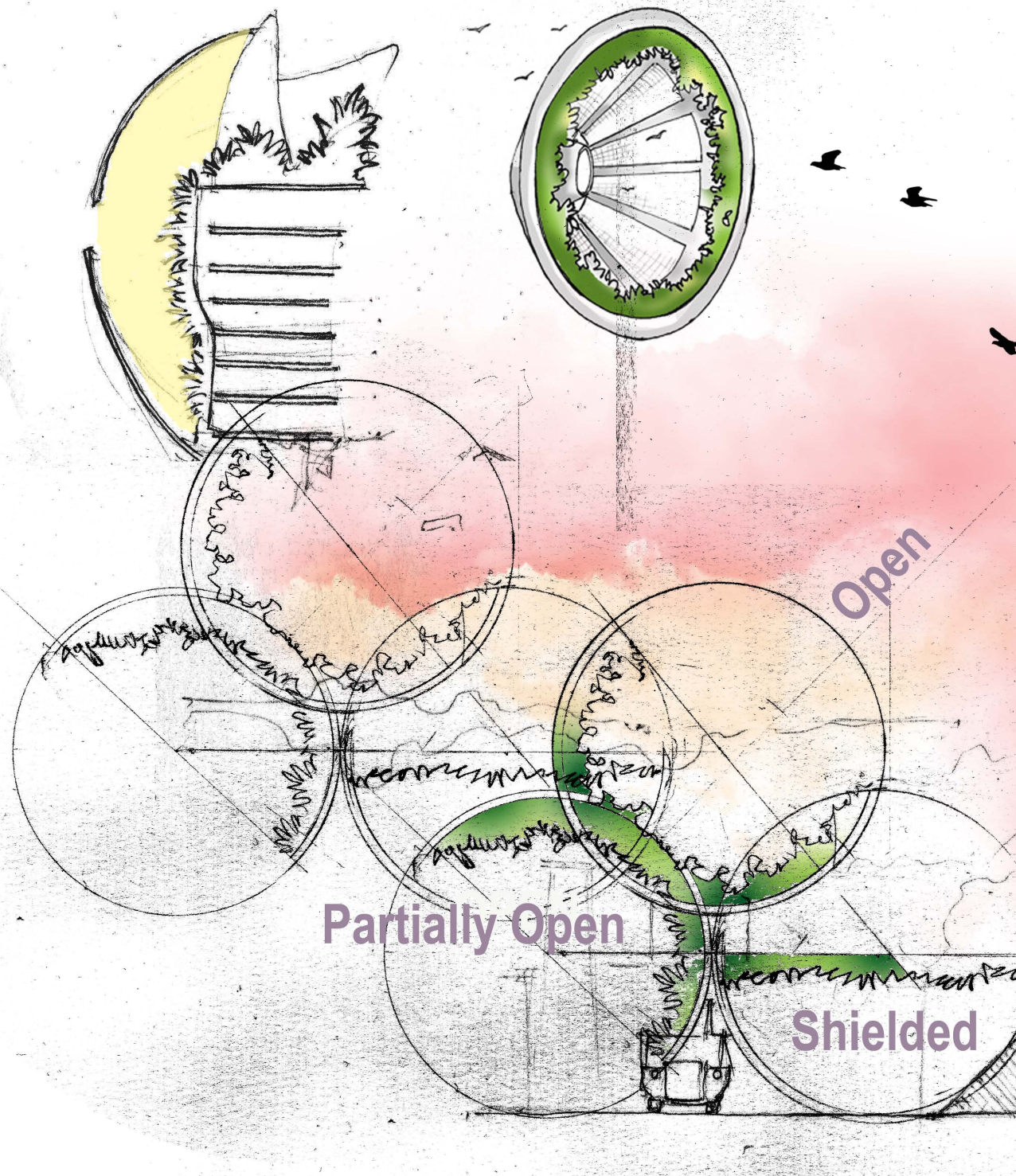
39

* in areas of the garden with less sunlight exposure than that required for host and nectar plants, other local species are planted, especially ferns and different types of philodendron, which require less sunlight.



SOFT SYSTEMS

- \ Large scale ecologically minded projects
- \ Seek to minimise detrimental human habitation
- \ Weaken human development and augment existing ecological patterns (tendency to “wish away” the human).
- \ Can tend towards the Super-Structural



BUILDING ARCHITECTURE AND SPARROW CONSERVATION IN URBAN AREAS

AMARTYA DEB¹, and M.JAYASHANKAR²

¹DEPARTMENT OF ARCHITECTURE, UVCE, BANGALORE UNIVERSITY.
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HOLLOW ECOSYSTEMS



House sparrow (*Passer Domesticus*)



Spanish sparrow



Eurasian Tree sparrow



Sind sparrow



Russet sparrow

POSSIBLE CAUSES OF DISAPPEARANCE

HABITAT near farms and godowns.
FOOD insects, seeds and fruits.
NESTING in holes.
BREEDING SEASON winter.

- increasing noise levels
- changing local climate
- increase in CO₂ levels
- depleting natural habitat

THE HOLLOW ECOSYSTEM MODEL

In an attempt to make the birds physically present within our vicinity -the model is aimed at providing them a MORE NATURAL HABITAT than just coops or niches. The concept is to provide large spaces partially enclosed to separate NOISE and POLLUTION but having enough openings to allow LIGHT and VENTILLATION through it. The spaces formed inside are large hollow spaces which allow birds inside to fly in, out and around freely. They avoid heavy MAINTAINANCE as far as possible and are reasonably low on STRUCTURAL LOADINGS when compared to terrace gardens of similar order.. The concept can be adapted to suit various situations as dispalyed.



If we like the birds and love their beauty then we should stop looking for them and instead make our surroundings more inviting for them to come to us.

MODEL #1 group level

plug-in consisting of **FRAME + MESH + IVY** for skyscrapers. No direct access to prevent unnecessary physical human interference.

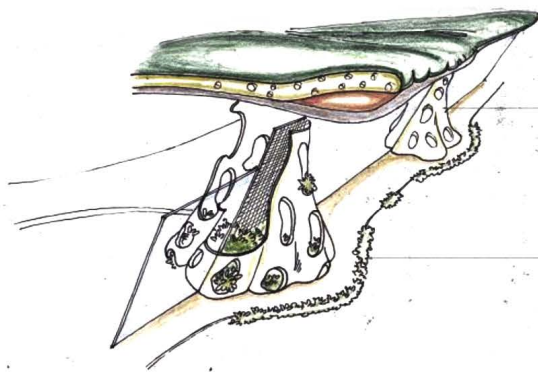


figure : showing different layers of construction.

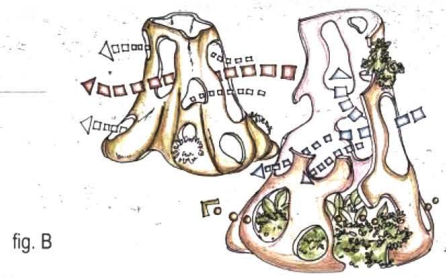


fig. B

The **LAVA COLUMNS** are hollow so as to allow shrubs inside. The shrubs form a critical habitat for insects which are food for birds. A mesh separates the insects from spreading indoors. Padding on the roof top and columns reduces noise and the perforations can be customised to protect birds from other interferences.

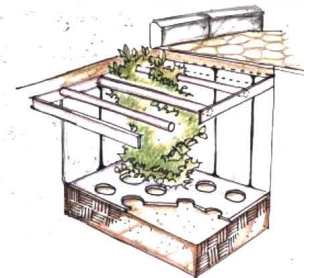
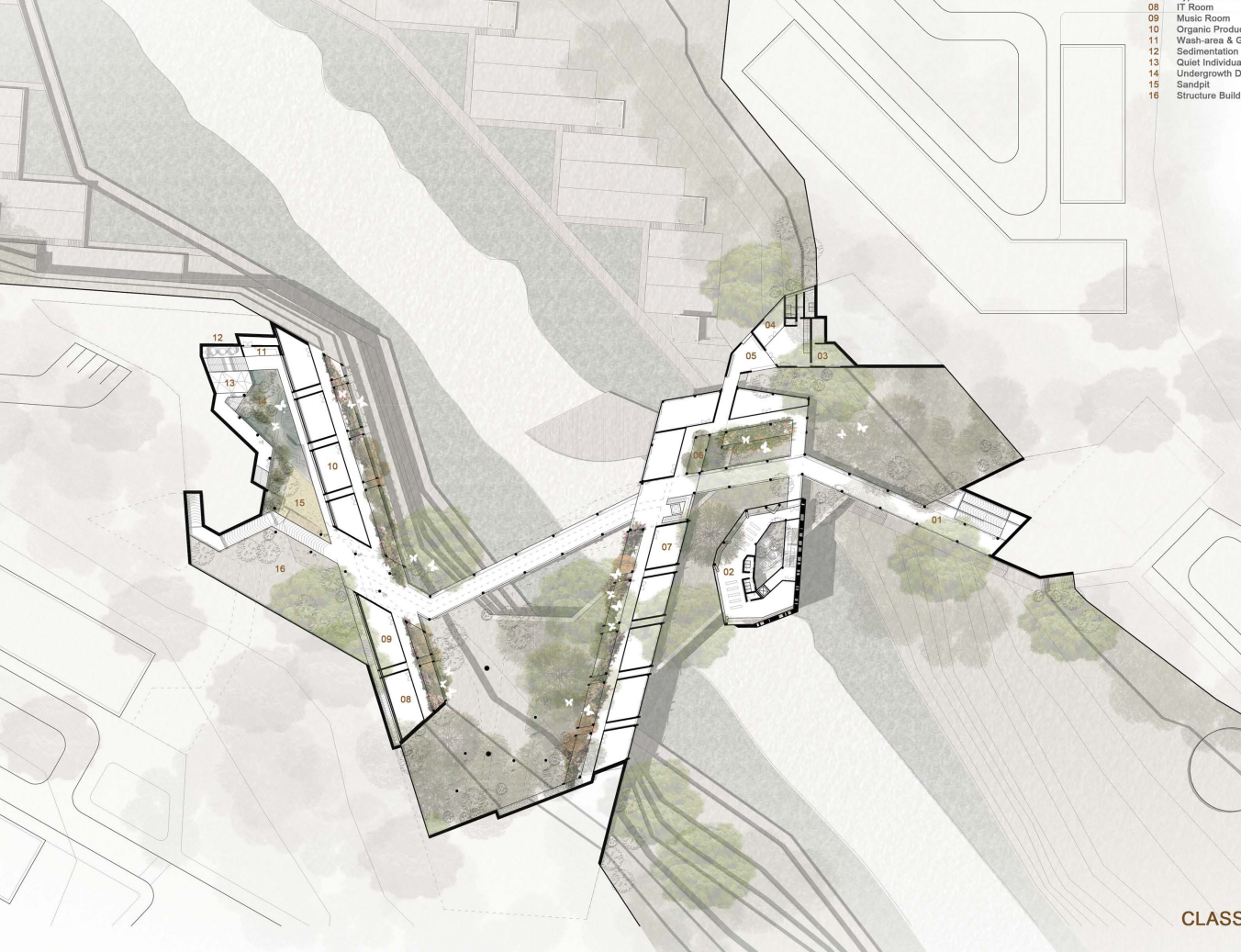
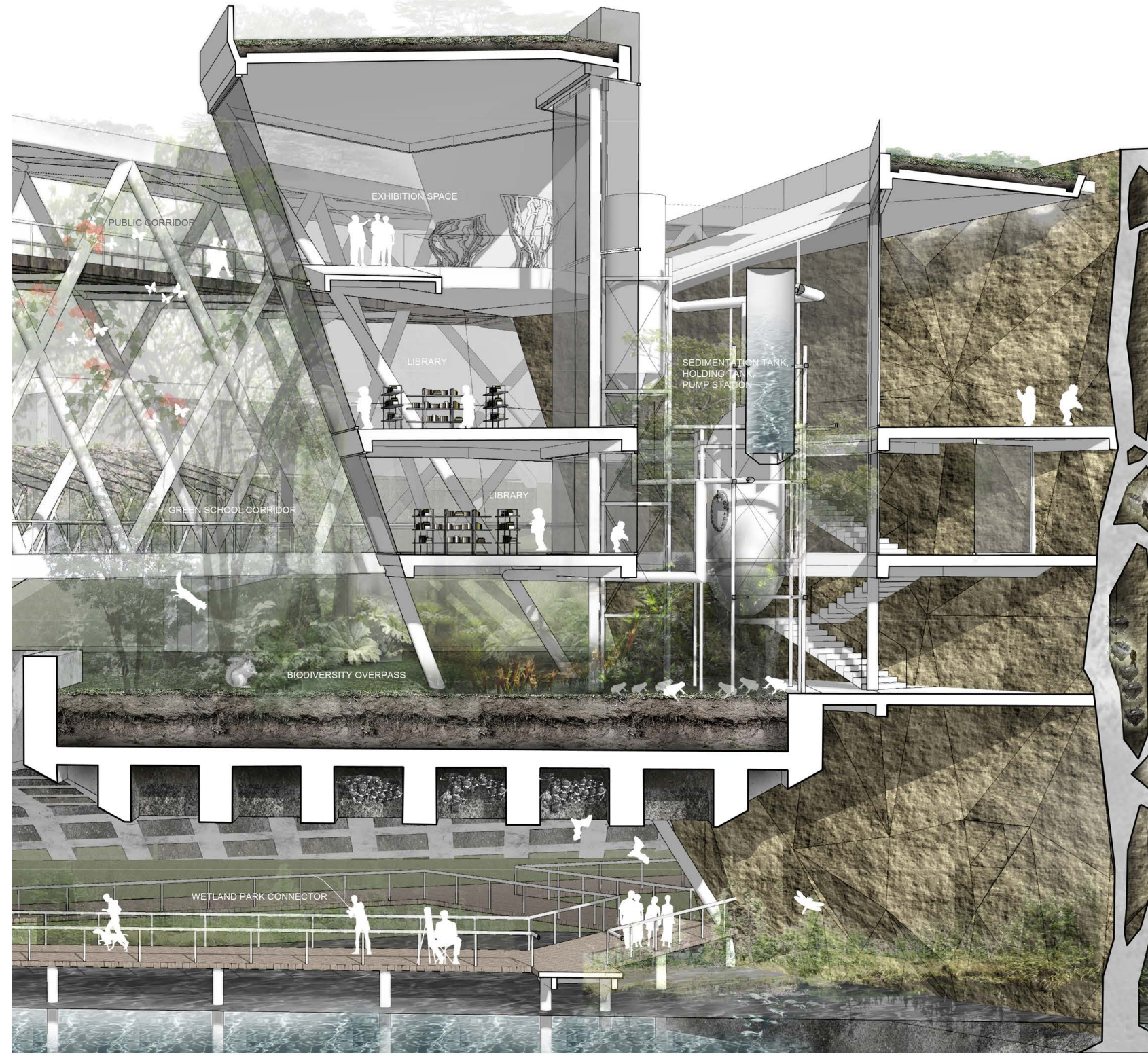


fig. B

These drains allow water to percolate, plants to grow and encourage a submerged ecosystem.



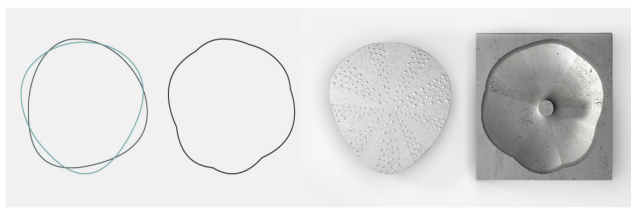
CLASS



Design details

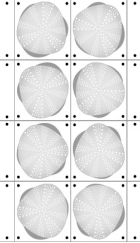
In order to maintain the use of the pipe as a walkway (and take pressure off other areas of the beach) the pools have to be concealed and the walkway left intact. This was achieved by building the tile of two parts: A pool and a cover that are assembled leaving a gap for water and marine creatures to get in and out.

The contour of the pool is obtained by overlapping the shape of the cover stone twice with a 45° in between. This creates the entrance gaps into the pools and allows for two different possible placements of the cover on the pool which, together with 4 possible orientations of the tile, account for 8 possible tile configurations.

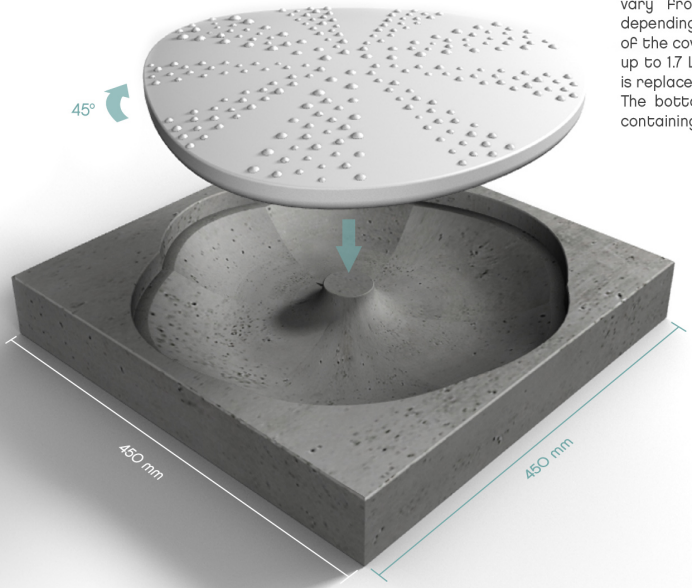
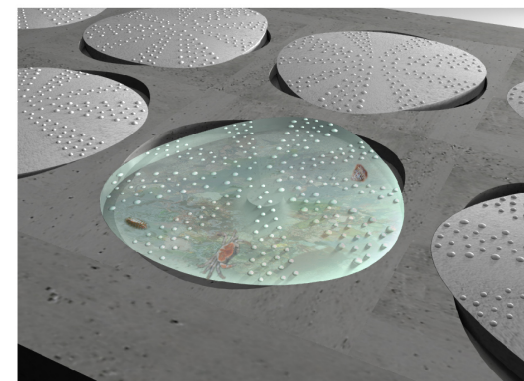


The entrance holes to the pool vary from 10mm to 25mm depending on the orientation of the cover. The pool can hold up to 1.7 Liters of water that is replaced with every tide. The bottom part of the tile containing the pool is made of

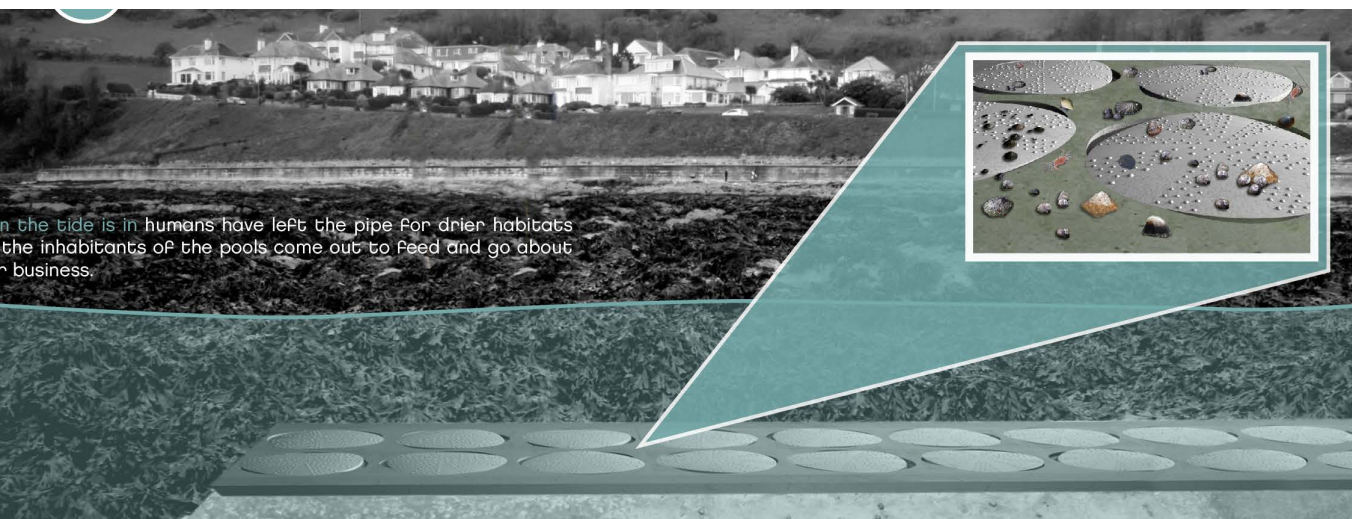
grey concrete while the cover is made of white concrete and is textured with 240 rounded bumps to create more traction for walkers.



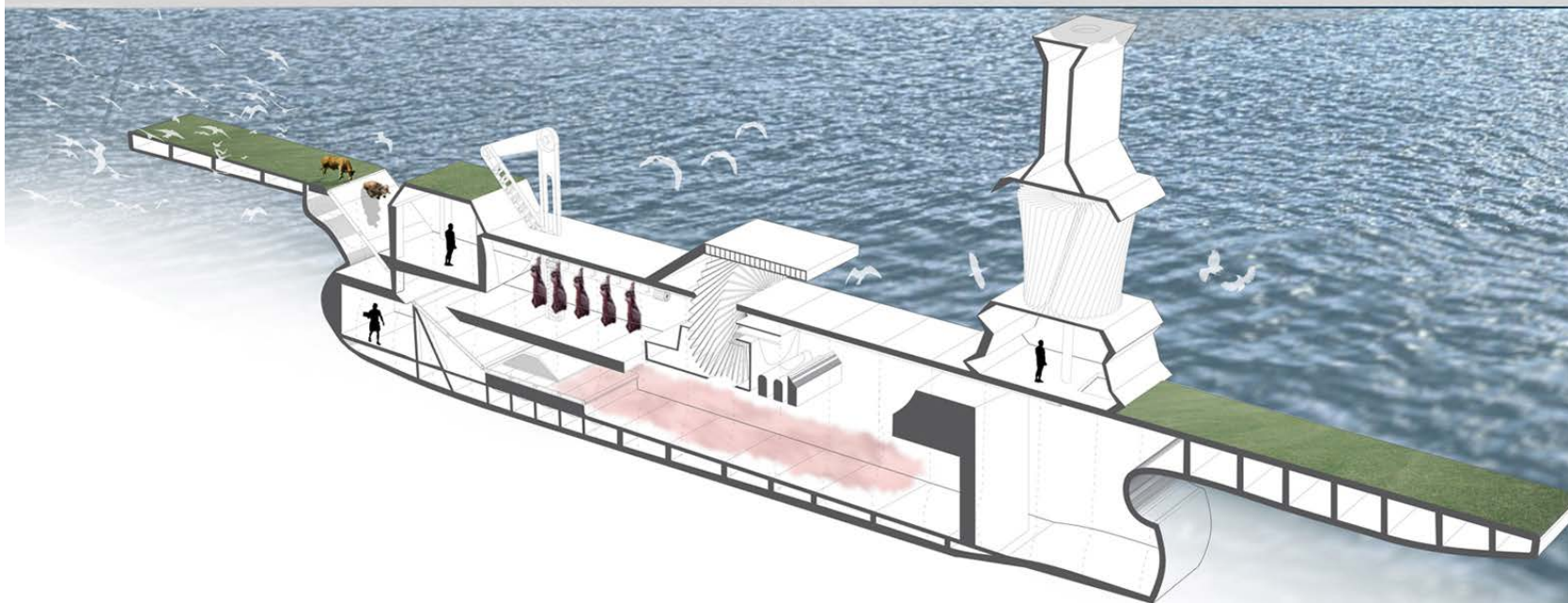
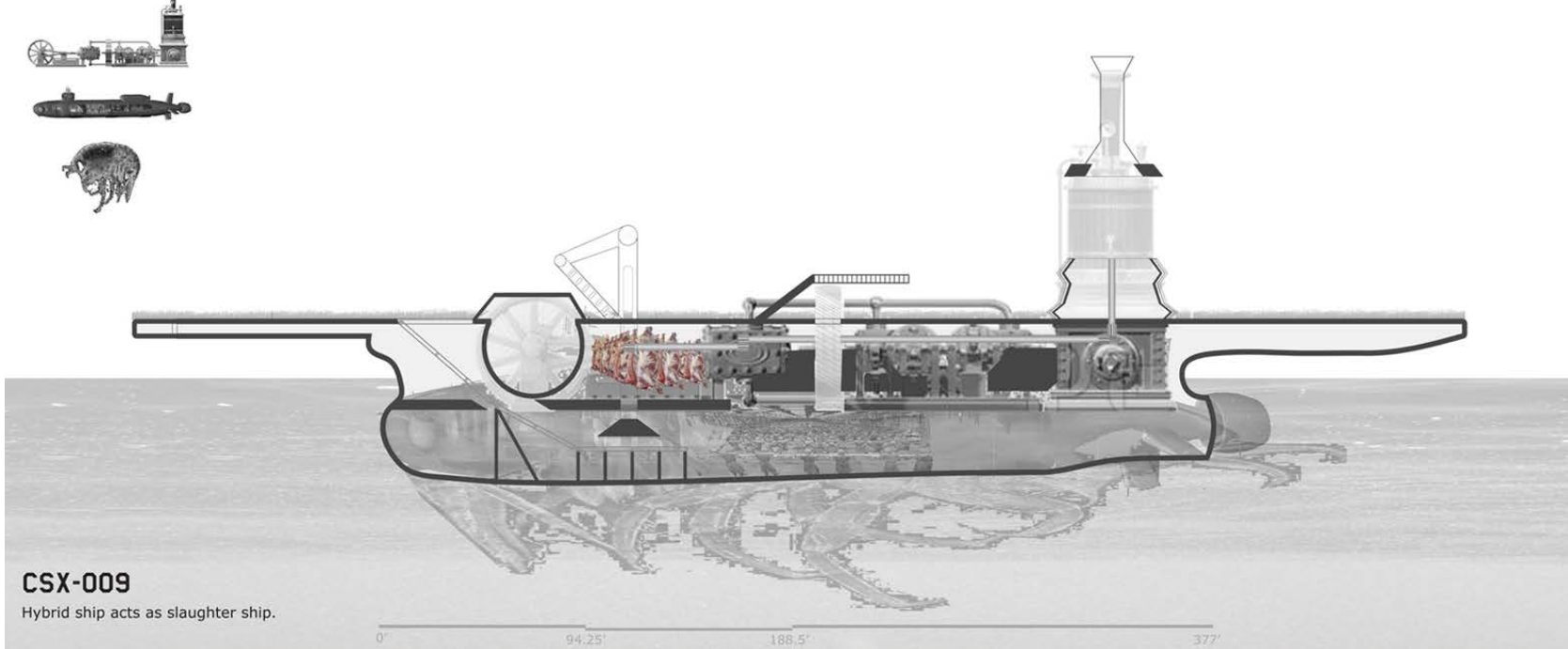
The concrete cover stones can be replaced with glass ones to offer a view onto the life inside the tiles.



Hannifore project / Daniel Metcalf / danielm@amail.com



is to redesign the external cover of the pipe by integrating wet habitats beneath the cover. The pools are designed to be used by walkers to attract intertidal species that graze on the slippery green algae that grows up on the walkway.



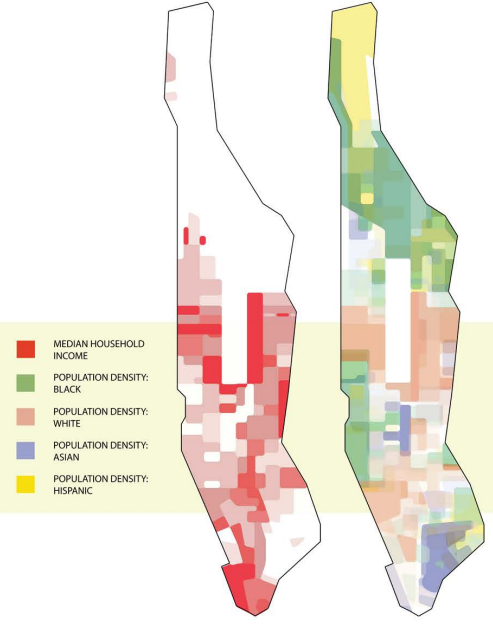
POST ANIMAL PROJECTS

- \ Seek to change the hearts and minds of human individuals.
- \ These are the art-pieces, installations, virtual reality games, temporary interventions that directly aim to change the way humans think, and obliquely to influence the way we live.
- \ we are asked to leave the comforts for our Human-centric worlds and to join Jacob Von Uexkull on his famous sunlit walk in a wild, insect teaming field.

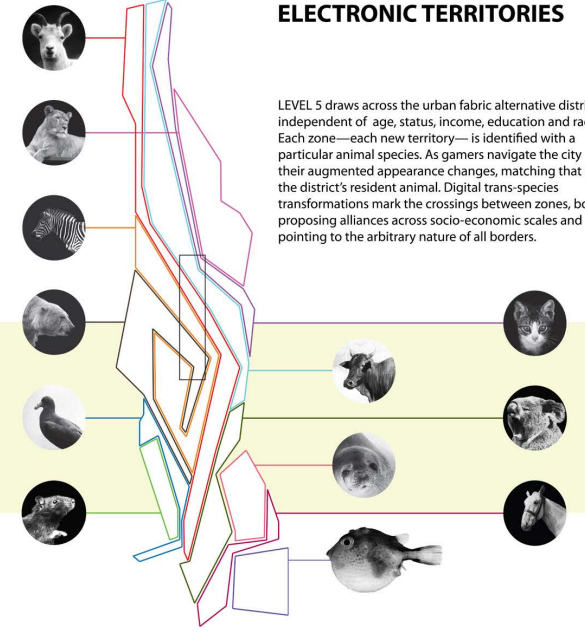
ELECTRONIC TERRITORIES

L5

LEVEL 5 draws across the urban fabric alternative districts independent of age, status, income, education and race. Each zone—each new territory—is identified with a particular animal species. As gamers navigate the city their augmented appearance changes, matching that of the district's resident animal. Digital trans-species transformations mark the crossings between zones, both proposing alliances across socio-economic scales and pointing to the arbitrary nature of all borders.

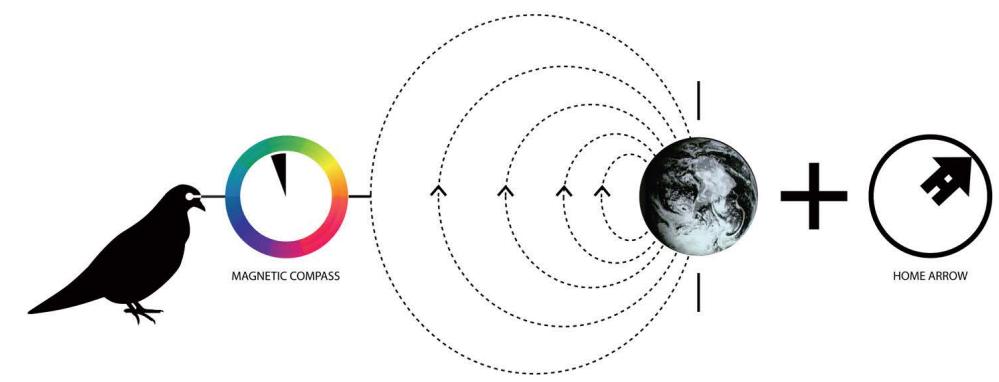


- MEDIAN HOUSEHOLD INCOME
- POPULATION DENSITY: BLACK
- POPULATION DENSITY: WHITE
- POPULATION DENSITY: ASIAN
- POPULATION DENSITY: HISPANIC



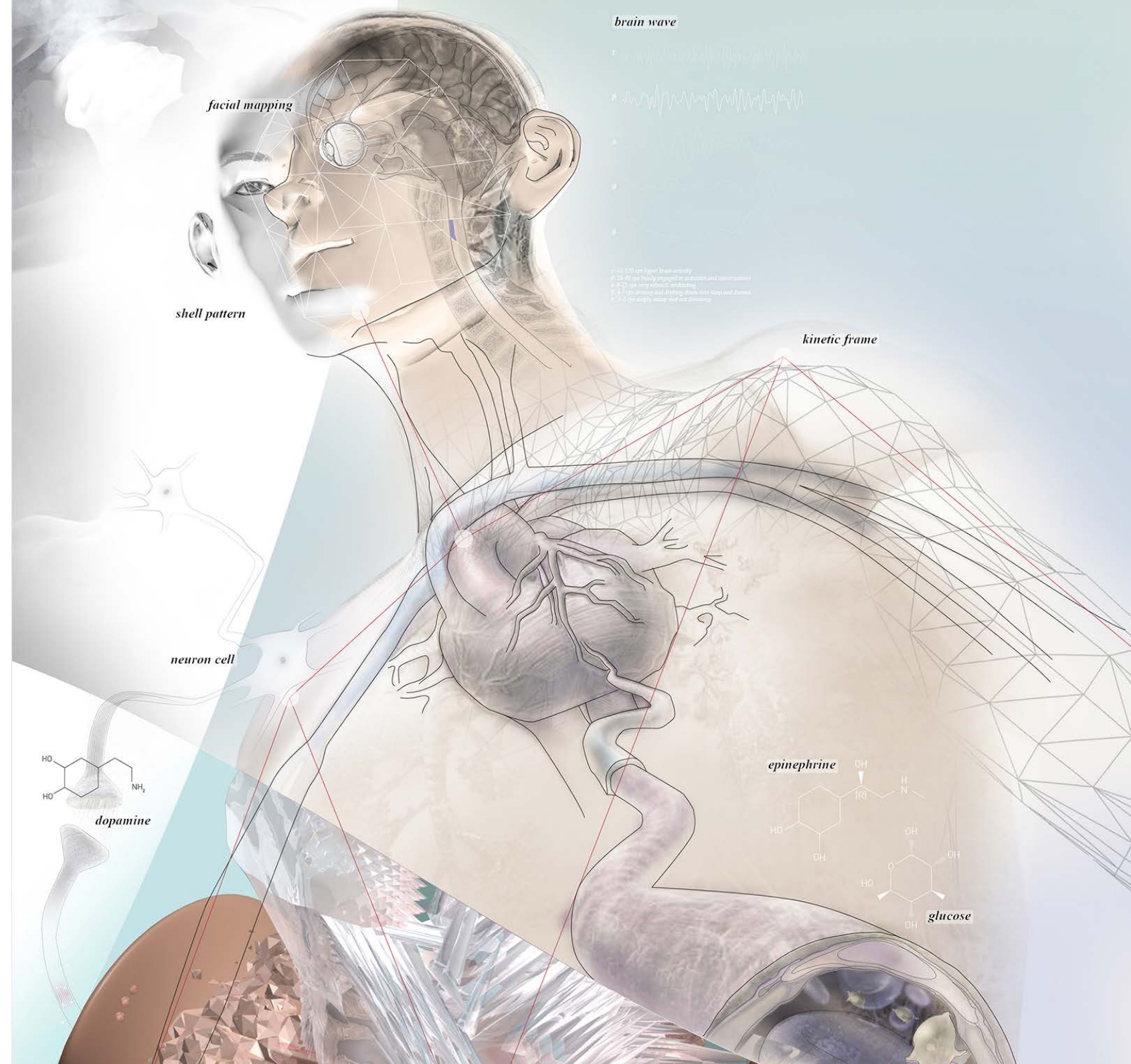
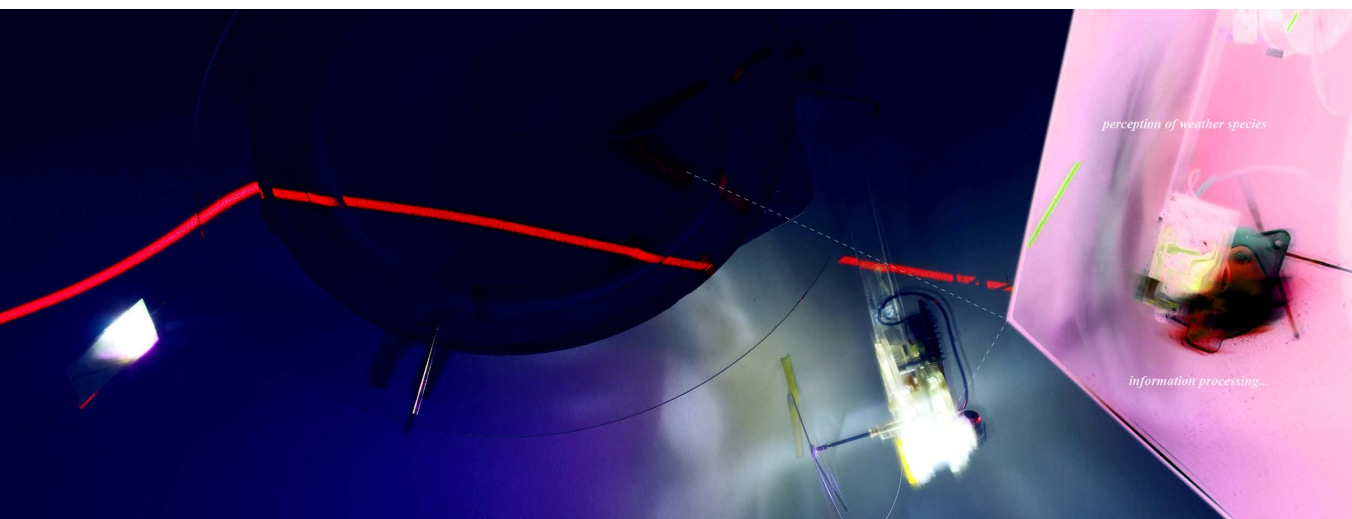
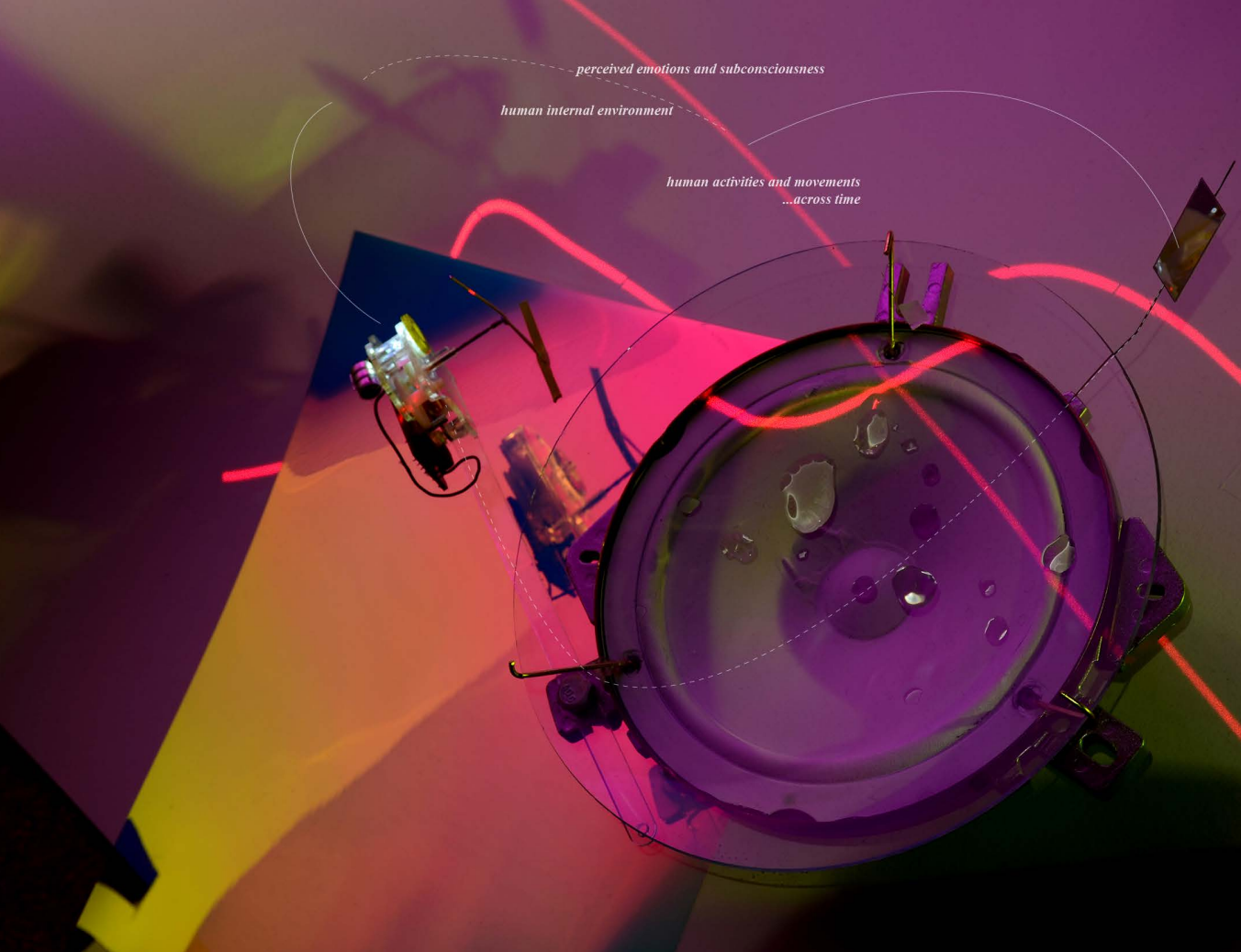
MAGNETIC VISION

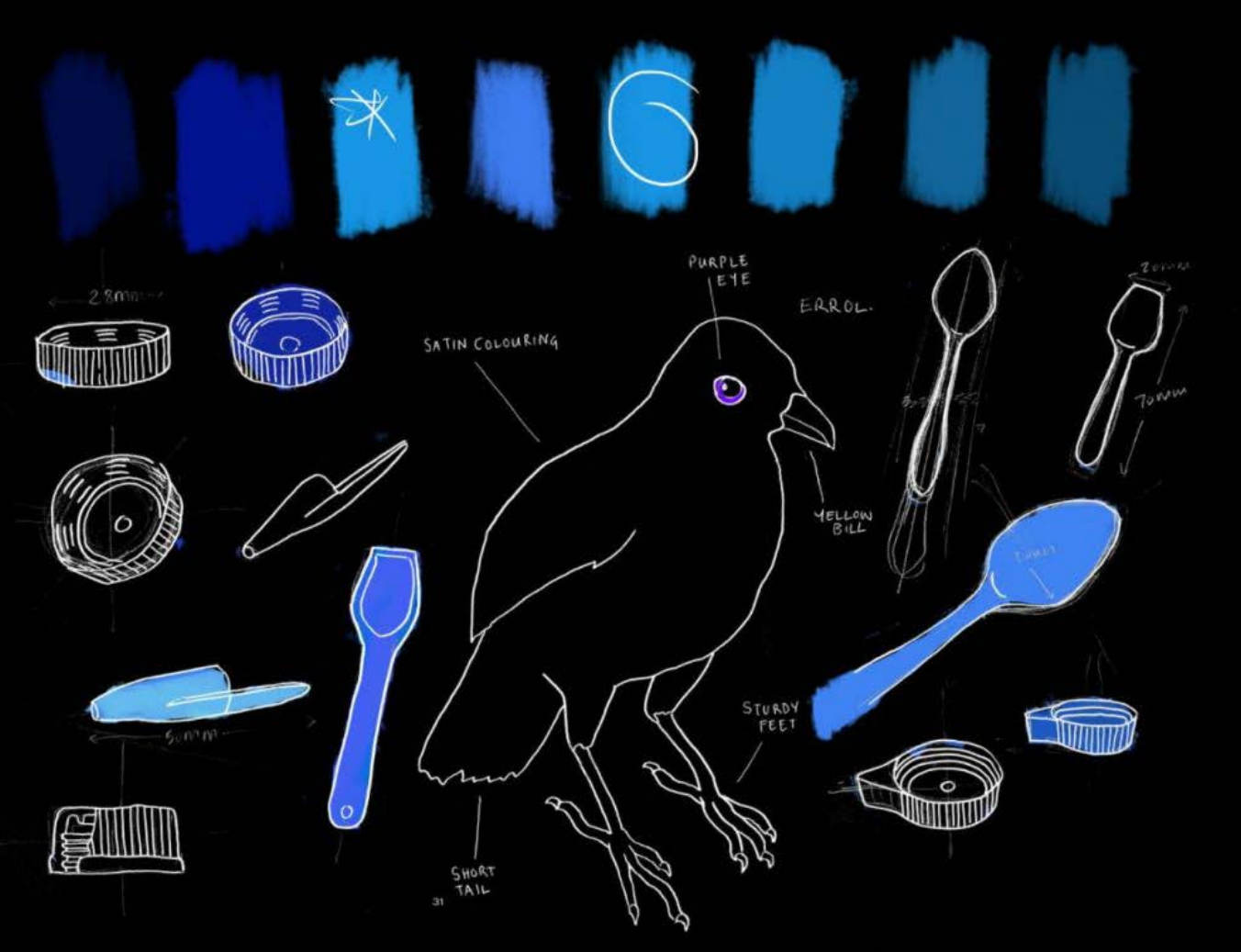
L1



Some researchers believe that magnetoreception in migratory birds occurs through biochemical reactions that are influenced by the Earth's magnetic field. One hypothesis is that chemical receptors concentrated in retinal cells superimpose directional color patterns on the bird's field of vision. LEVEL 1 translates the locational information of a Global Positioning System into such a visual compass. Gamers learn to orient themselves and to navigate their surroundings via environmental color cues.









Fly-Space mapped by spiders



Open Objects

The idea is to redesign the external cover of
building up on the walkway.



Open Objects



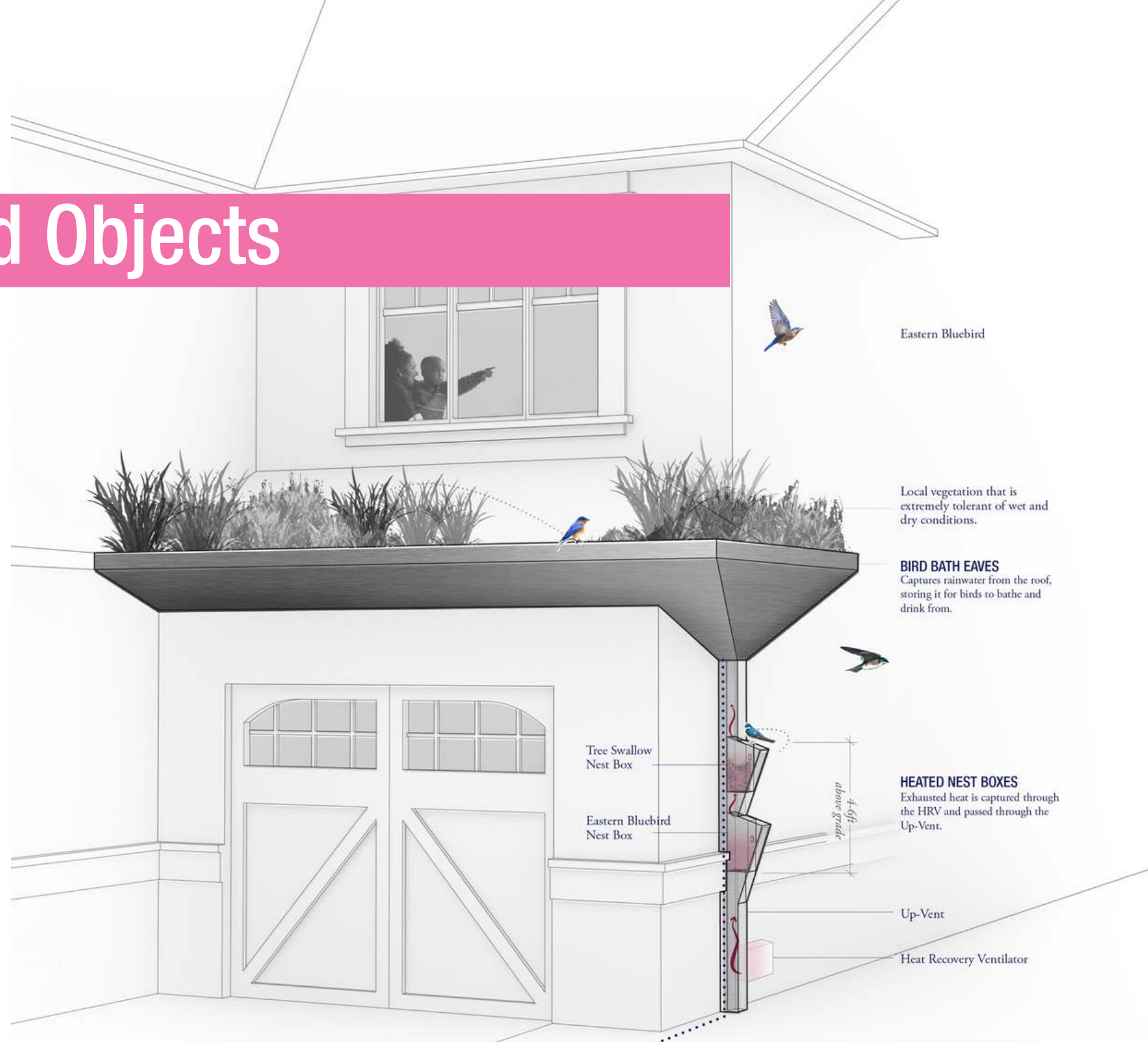
Transported Experiences



Compromised Objects




Compromised Objects



We are already participants in
cross-species habitats.



A large flock of birds is seen flying out of a brick and metal chimney. The chimney is cylindrical, with a brick upper section and a metal lower section. The birds are silhouetted against a light, hazy sky. The text is overlaid on the left side of the image in white font on a pink background.

**The built world is already
colonized and creatively
inhabited by non-humans.**

Maybe we can be better at it.

The Expanded Environment