

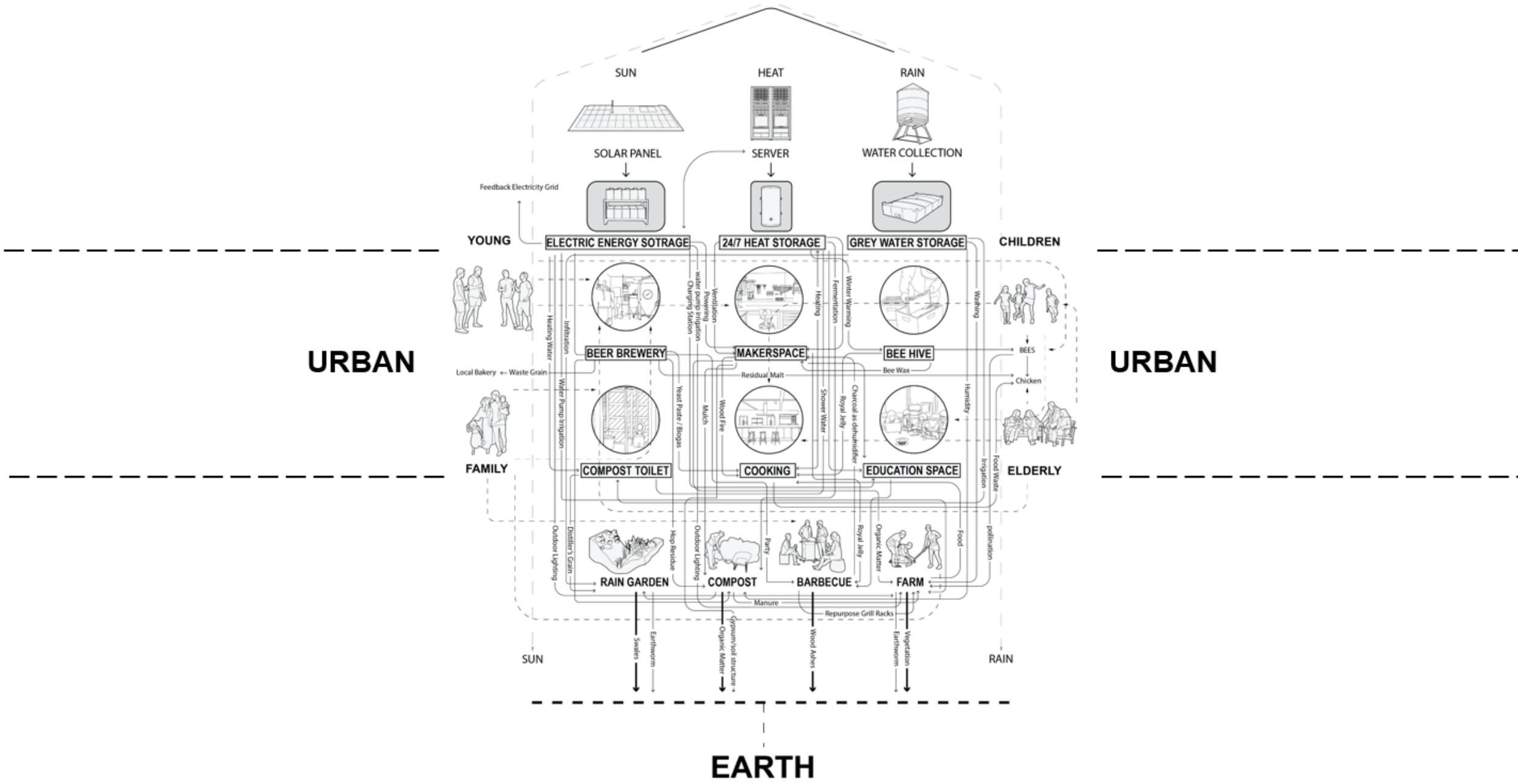
will wang **LW3054** msaad

STUDIO

GSAPP Summer 2023

Urban Soil | Critic: Fuminori Nousaku / Mio Tsuneyama

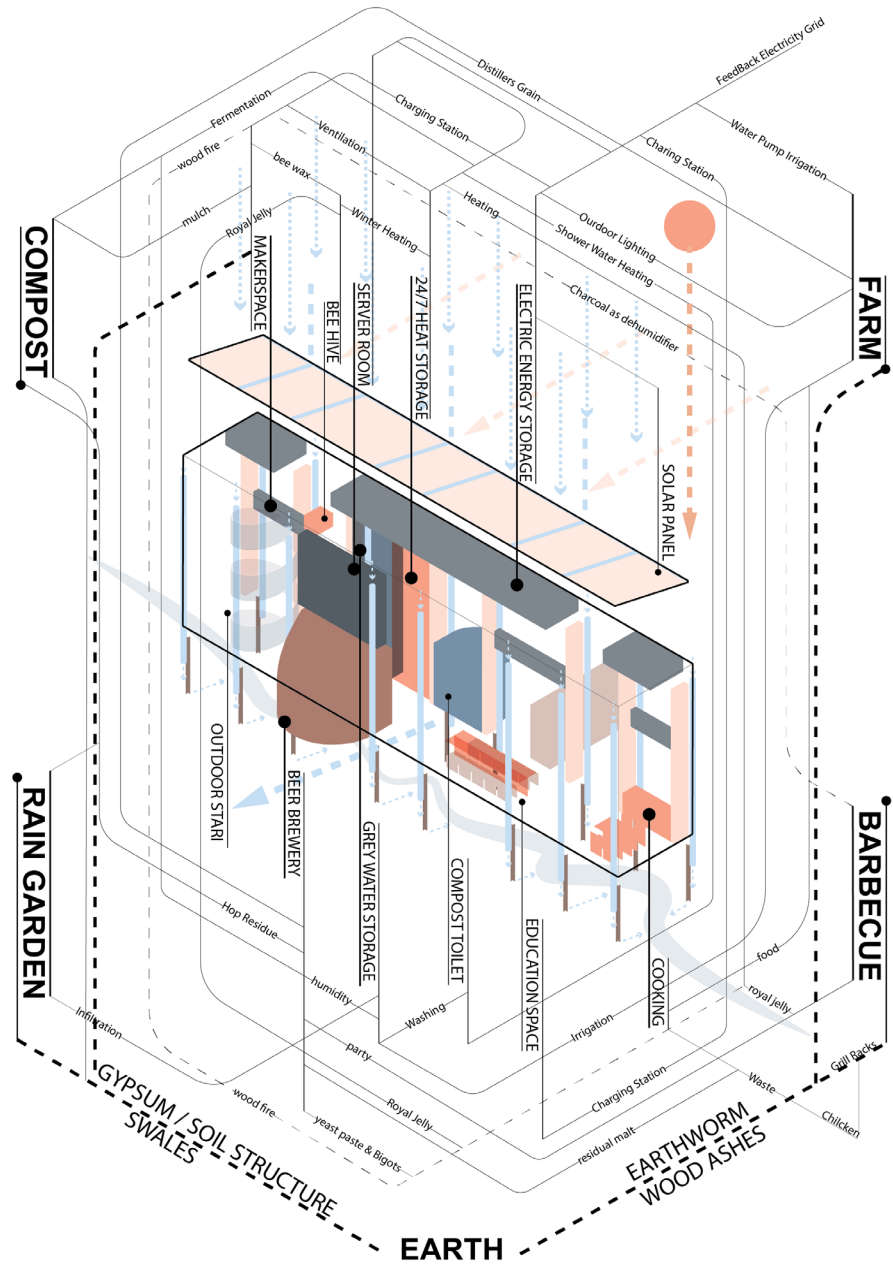
SKY



URBAN

URBAN

EARTH



Bee nest boxes can be made from various materials, including wood, bamboo tubes, or cardboard. They often have holes or tubes of different sizes that act as nesting chambers for various species of solitary bees. Placing bee nest boxes in gardens or natural areas can help attract and support solitary bees, which, in turn, can aid in pollination and support the overall health of ecosystems.

BEE BOX

SOLAR WINDOWS

Solar windows are a developing technology that incorporates transparent solar cells into windowpanes. These windows can generate electricity from sunlight while still allowing light to pass through and illuminate indoor spaces.

solar panel systems may include battery storage to store excess electricity generated during peak sunlight hours.

This stored energy can be used during periods when the solar panels are not producing electricity, such as at night or during power outages.

BATTERY STORAGE

WATER CONSERVATION

Greywater irrigation helps reduce freshwater usage for outdoor irrigation, promoting water conservation.

GREYWATER IRRIGATION SYSTEM

Implementing a greywater irrigation system requires careful planning and installation to ensure proper distribution and to avoid potential health or environmental risks.

LIGHTING FIXTURES

Solar outdoor lighting systems include various types of lighting fixtures, such as LED (light-emitting diode) lamps, floodlights, path lights, garden lights, and security lights. These fixtures are powered by the stored electricity in the batteries.

SENSOR IRRIGATION SCHEDULE

Greywater should be applied in a manner that allows the soil to fully absorb the water between irrigation events. Overwatering should be avoided to prevent waterlogging and potential root health issues.

Using red light in a greenhouse can have specific benefits for plant growth and development, especially during certain stages of the plant's life cycle. Red light is one of the essential wavelengths of light in the visible spectrum, and it plays a crucial role in photosynthesis and photomorphogenesis (the process by which plants respond to light).

RED LIGHT

FARM TO FOLK

Farm outdoor dining provides an opportunity for diners to connect with the source of their food. Guests can often see the fields or animals from which their meal's ingredients were sourced, fostering a deeper appreciation for the food and its origins.

HOOKS HANGERS

The storage wall usually includes a variety of hooks and hangers of different sizes and shapes to accommodate various tools with different handle designs.

SOIL POROSITY

The pore spaces in the soil are essential for water infiltration. Soils with higher porosity allow more water to enter and move through, while compacted soils have reduced porosity and lower infiltration rates.

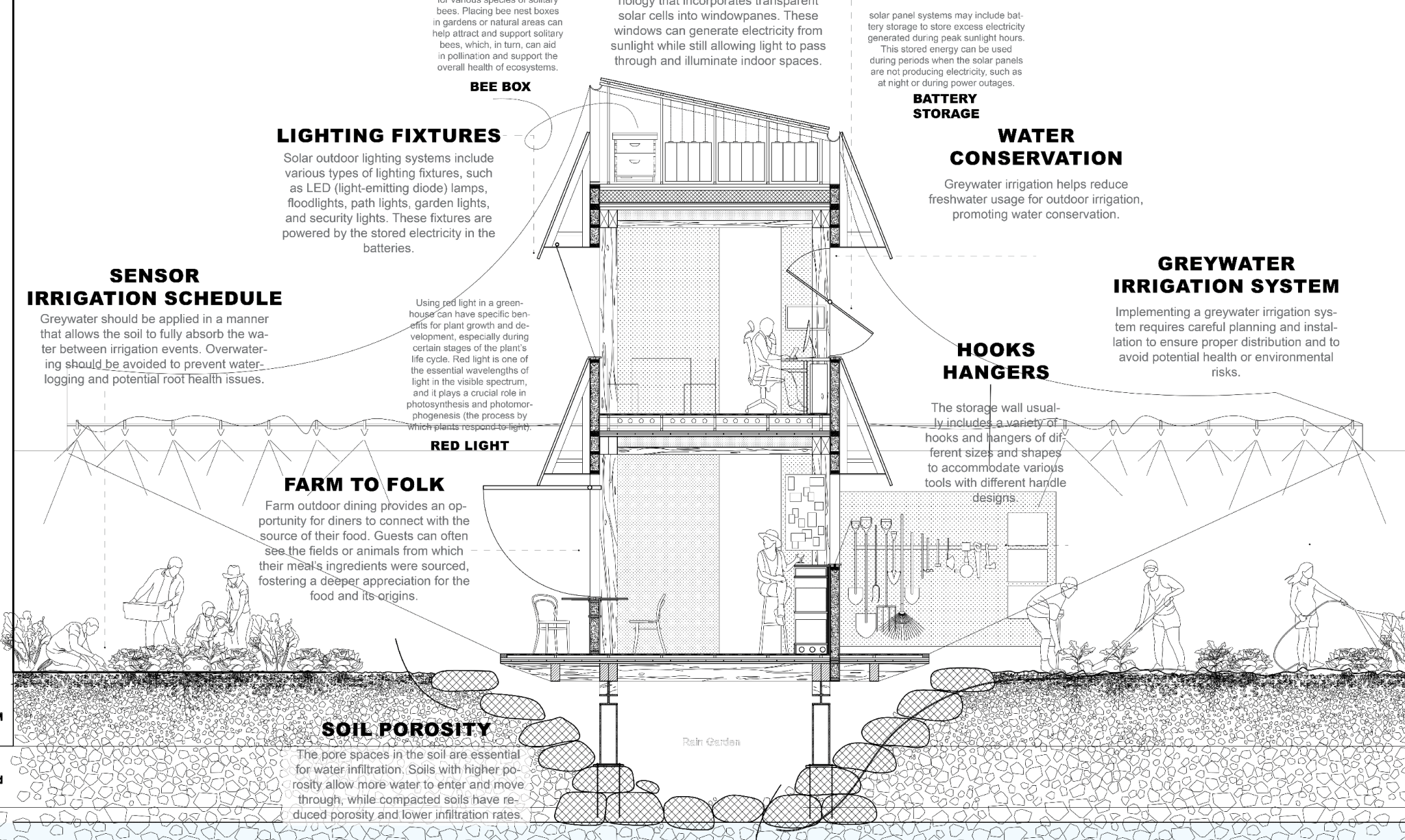
Rain Garden

LOAM

SANDY LOAM

Gravelly Loamy Sand

WATER TABLE



STUDIO

GSAPP Fall 2023

Extreme Scale | Critic: Wonne Ickx | Team with Lucy Baird

XS - 500 sqft

post office
cafe
bakery
clothing store
barber
florist
artist studio
tailor
bar

S - 1 000 sqft

post office
cafe
bakery
clothing store
barber
florist
artist studio
tailor
bar

M - 2 250 sqft

medical center
greenhouse
restaurant
clothing store
daycare
dance studio
art studio
pharmacy
bakery
yoga studio
beauty services
bicycle rentals

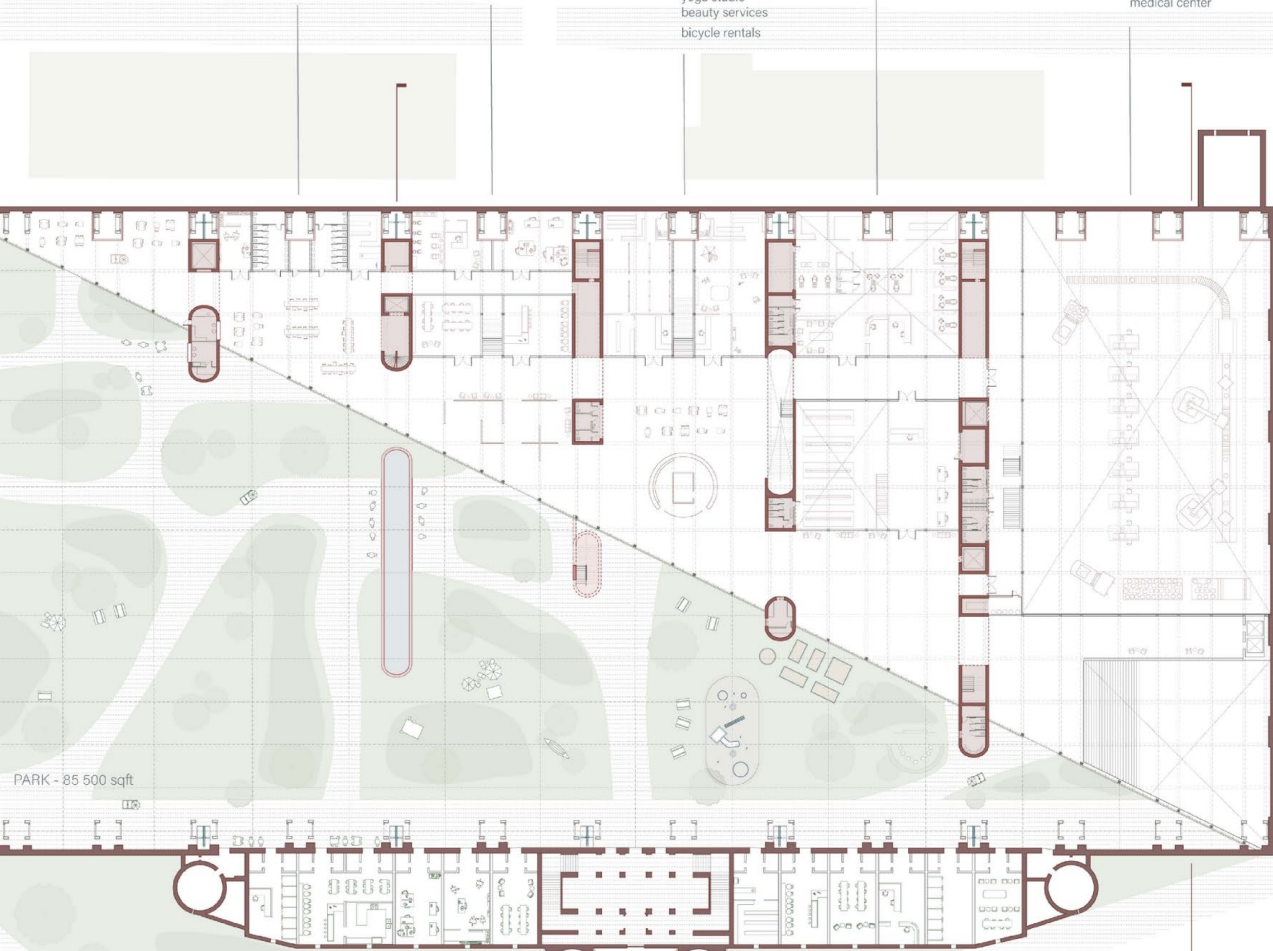
L - 5 250 sqft

medical center
greenhouse
exhibition space
offices
studio
gym
theatre

XL - 25 000 sqft

film studio
greenhouse
manufacturing
museum
offices
library
event venue
market
metal / wood shop
medical center

WEST 195th STREET



PARK - 85 500 sqft

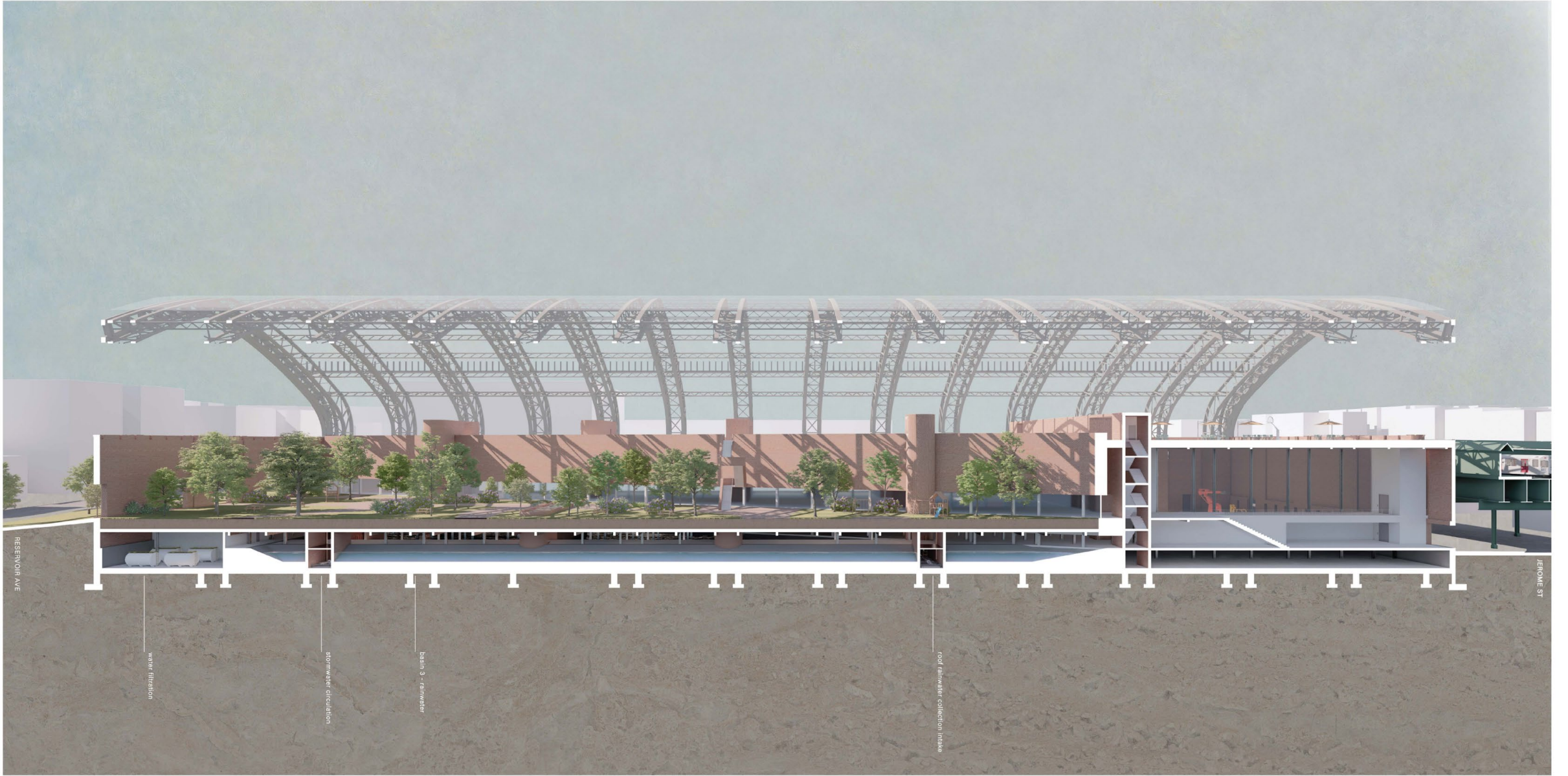
JEROME STREET

RESERVOIR AVE

KINGSBRIDGE ROAD WEST

PARK LEVEL PLAN





RESEVOIR AVE

water filtration

stormwater circulation

basin 3 - rainwater

roof rainwater collection intake

JEROME ST



Elective

GSAPP Fall 2023

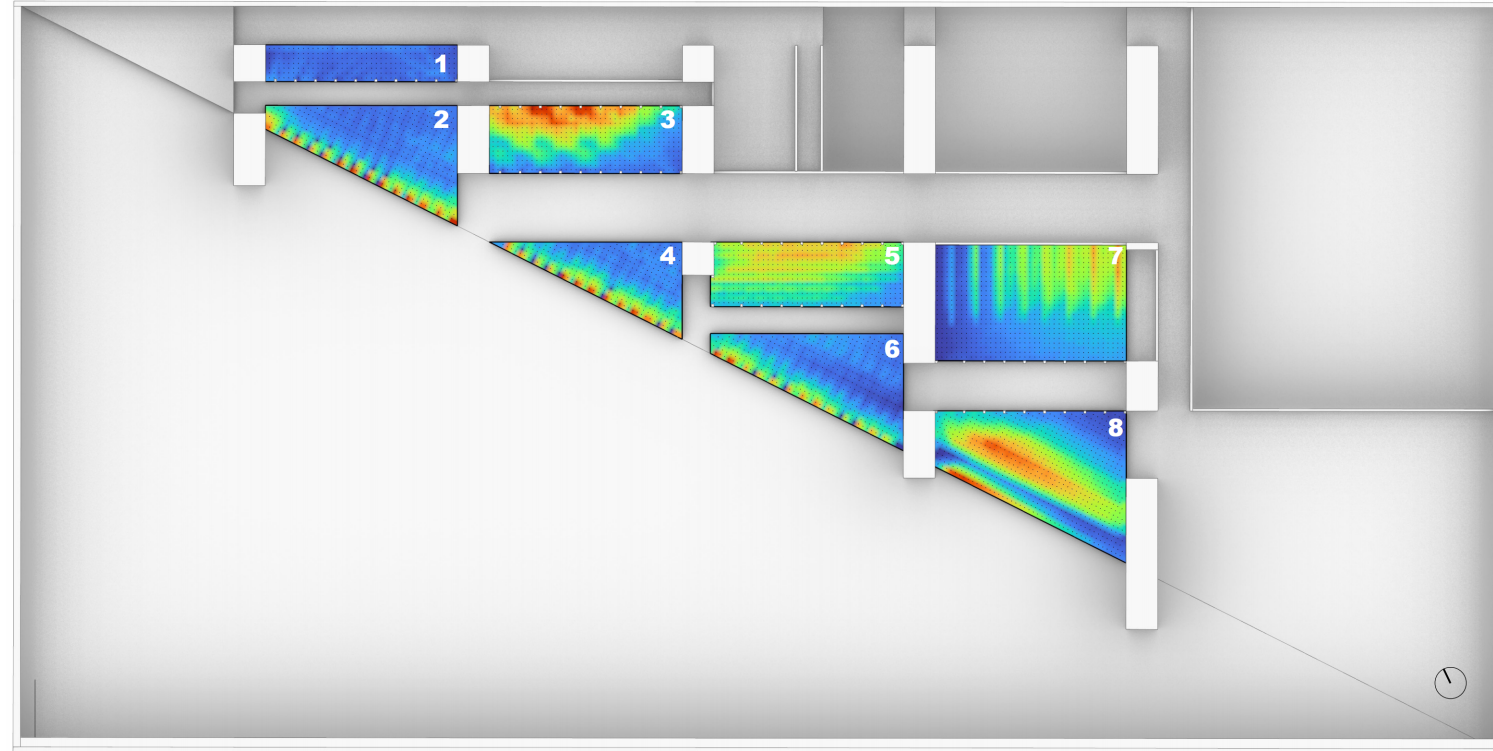
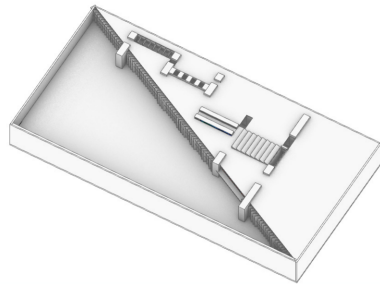
Daylight, Metabolism | Critic Elliot Glassman

Credits 3

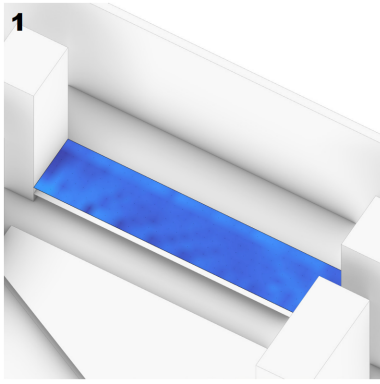
sDA_{300/50%}
85.1%

ASE_{1000/250}
4.6%

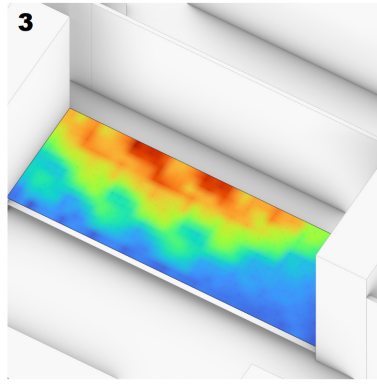
Avg lux
1629



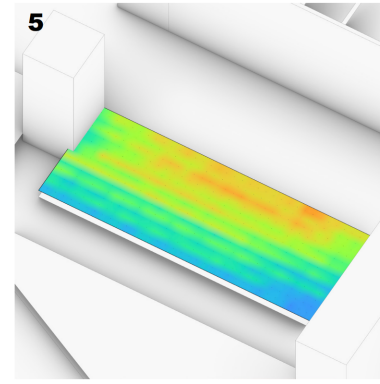
SKYLIGHT OPENINGS / SHADINGS



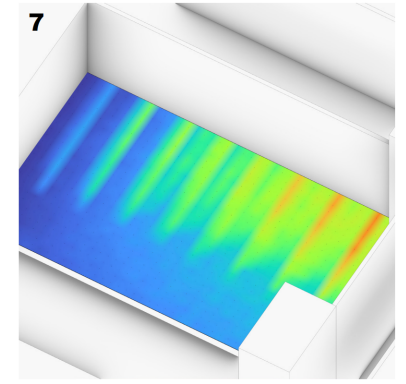
1
sDA_{300/50%} 72.89%
ASE_{1000/250} 0%
Avg lux 558



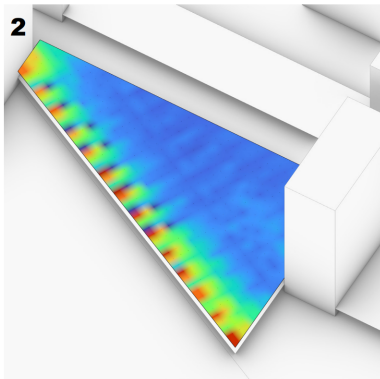
3
sDA_{300/50%} 99.82%
ASE_{1000/250} 1.28%
Avg lux 2172



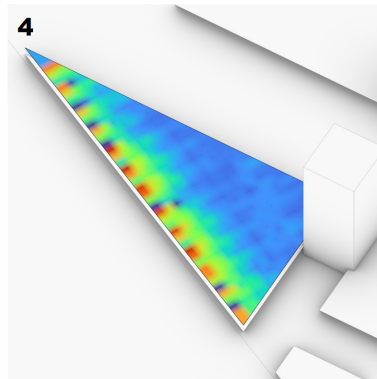
5
sDA_{300/50%} 100%
ASE_{1000/250} 0.99%
Avg lux 2386



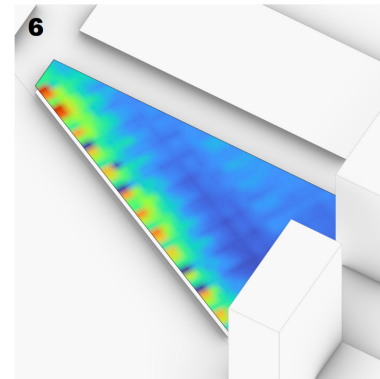
7
sDA_{300/50%} 84.72%
ASE_{1000/250} 0.64%
Avg lux 1474



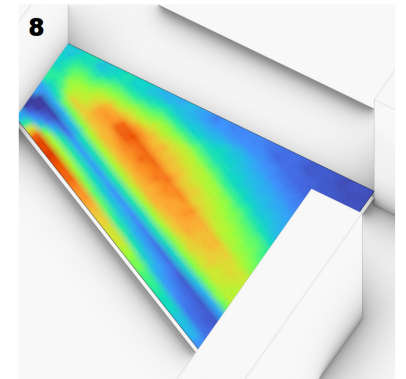
2
sDA_{300/50%} 75.82%
ASE_{1000/250} 8.18%
Avg lux 1205



4
sDA_{300/50%} 77.03%
ASE_{1000/250} 14.86%
Avg lux 1470



6
sDA_{300/50%} 78.53%
ASE_{1000/250} 5.22%
Avg lux 1146

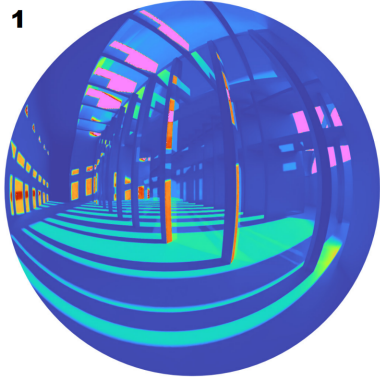


8
sDA_{300/50%} 85.73%
ASE_{1000/250} 7.44%
Avg lux 2041



SKYLIGHT OPENINGS / SHADINGS

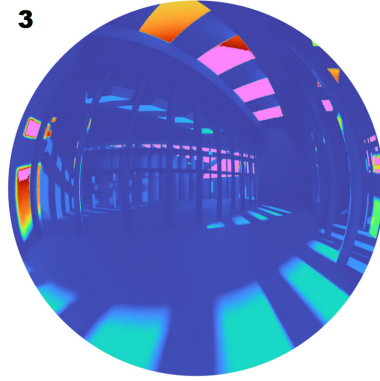
LEED v4.1 Option 1
New York LaGuardia AP, NY, USA



sDA_{300/50%} 72.89%

ASE_{1000/250} 0%

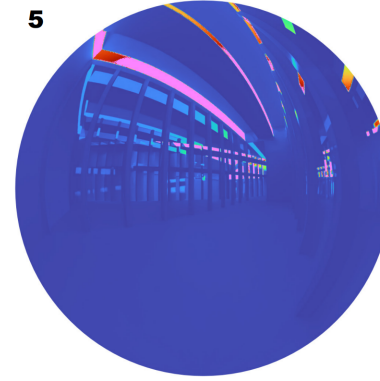
Avg lux 558



sDA_{300/50%} 99.82%

ASE_{1000/250} 1.28%

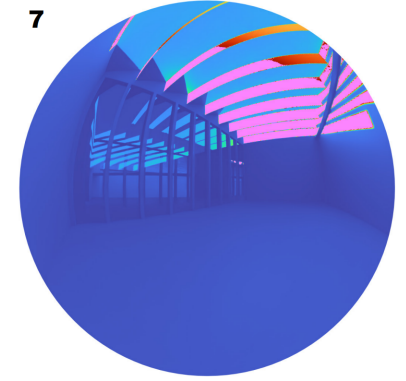
Avg lux 2172



sDA_{300/50%} 100%

ASE_{1000/250} 0.99%

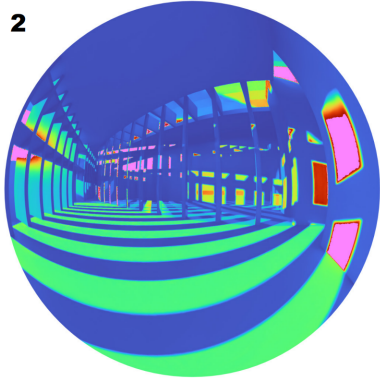
Avg lux 2386



sDA_{300/50%} 84.72%

ASE_{1000/250} 0.64%

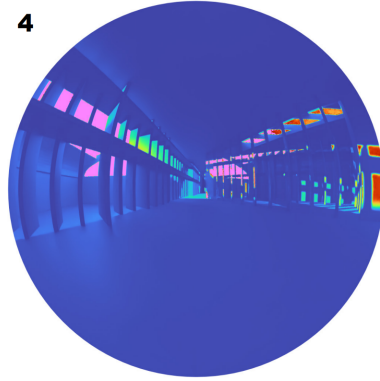
Avg lux 1474



sDA_{300/50%} 75.82%

ASE_{1000/250} 8.18%

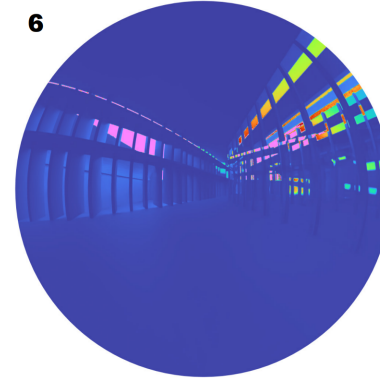
Avg lux 1205



sDA_{300/50%} 77.03%

ASE_{1000/250} 14.86%

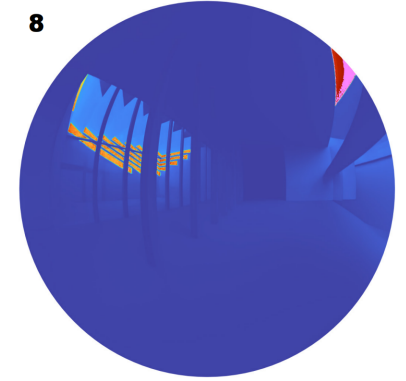
Avg lux 1470



sDA_{300/50%} 78.53%

ASE_{1000/250} 5.22%

Avg lux 1146



sDA_{300/50%} 85.73%

ASE_{1000/250} 7.44%

Avg lux 2041



STUDIO

GSAPP Spring 2024

Housing, nonfiction & Architecture | Critic: Michael Bell

“The primary conditions are that the house can be built now – that is, with **available resources—and that the materials used will not look shoddy after a little wear.**” we approached the problem by determining how large an area could be shut off from the weather in a building that could be built for **\$8000**. By making this the first consideration, rather than the number of cubicles—living room, bedrooms, bath, closets, etc. –usually thought of as basic, **we found that we could double the area of a conventional house of the same cost.**”

Charles Eames **1949**

EAMES



\$8000

People: 3 (Charles, Ray, Lucia)

Unit:1

Area: 1500 sqf

EAMES

LEVITTOWN



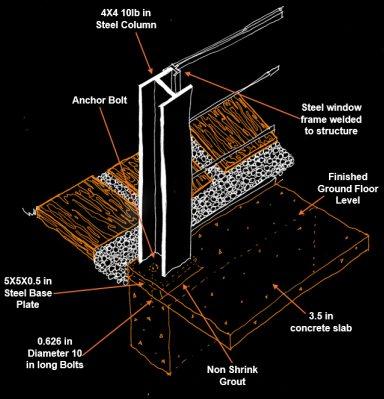
\$8000

People: 84,000

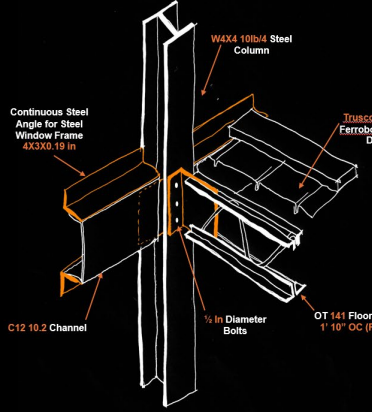
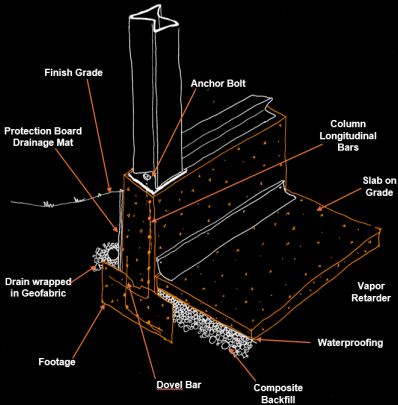
Unit: 17,000

Area: 750 sqf

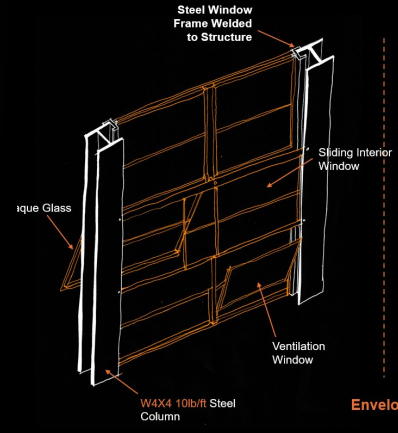
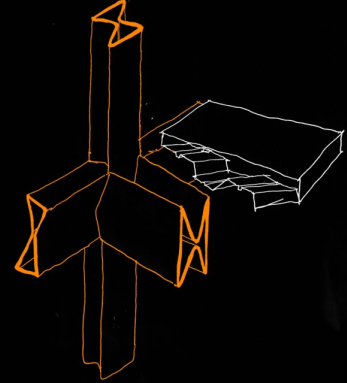
Levitton



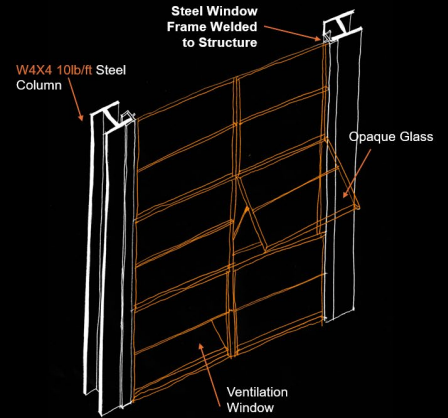
Substructure



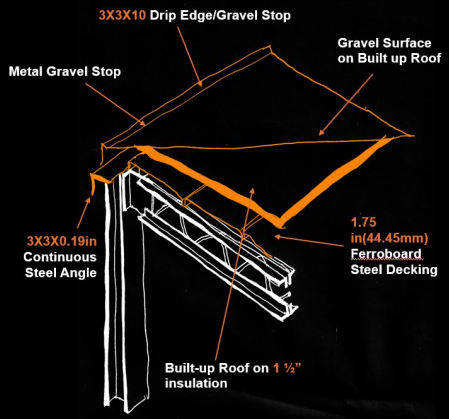
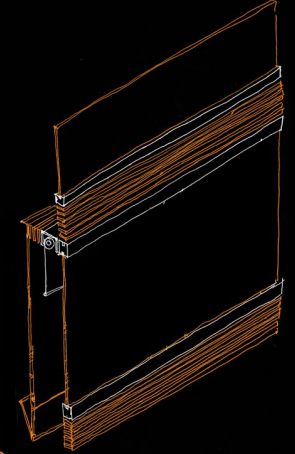
Superstructure



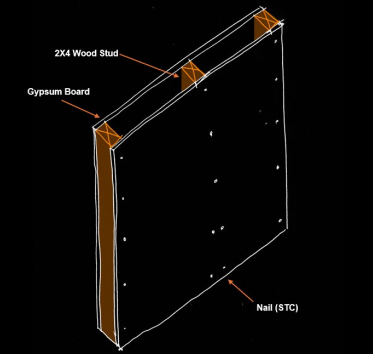
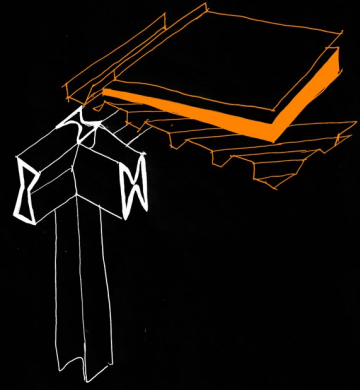
Envelope



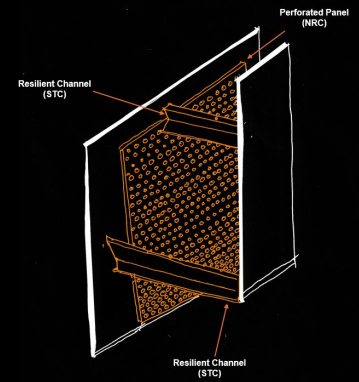
Vertical Enclosure

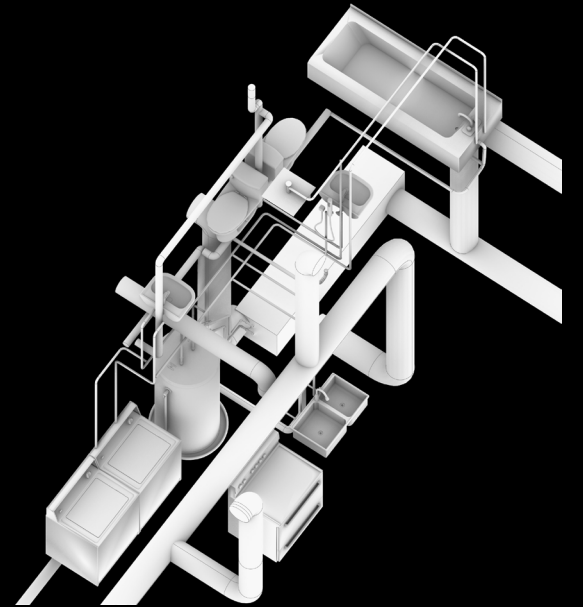
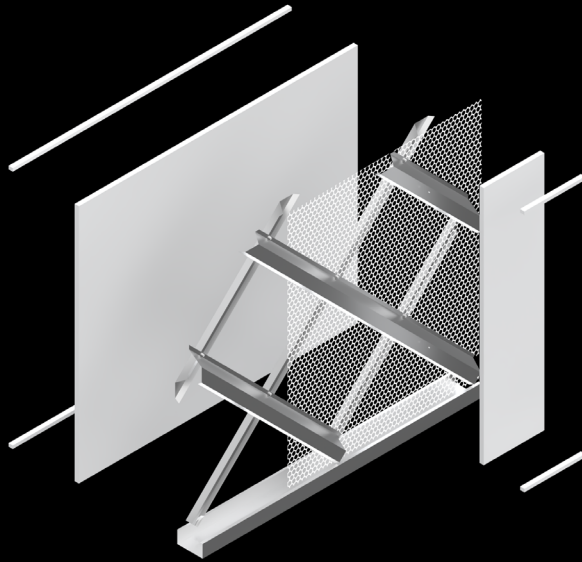
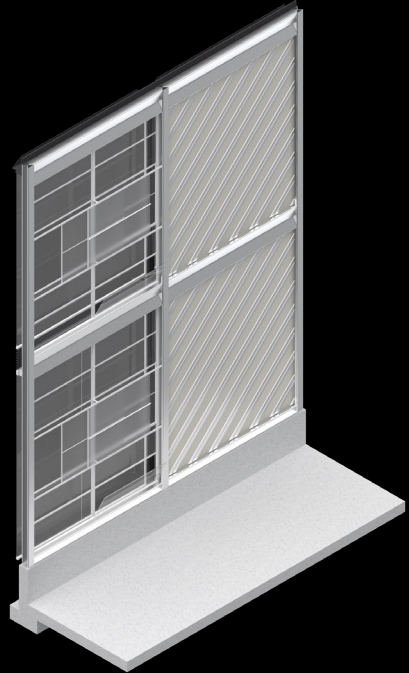


Roof



Interiors





Elective

GSAPP Spring 2024

Participatory Design | Critic Samuel

Evidence based vs Participatory

1960s



The trend towards **participation** can be traced back to social movements evolving in the 1960s, including those by women and students, or by those not only in the name of the environment **but also in health care.**

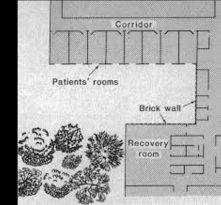
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3327827/>



There are three general types of anesthesia simulators: **realistic or hands-on simulators, screen-based simulators, and virtual reality simulators.** In addition, part-task trainers are available for specific procedures, e.g., intravenous access, endotracheal intubation, CPR. **The first realistic anesthesia simulator, Sim One,** was produced in the late 1960's, based on work done by J.S. Denison and Stephen Abrahamson at the University of Southern California.

Denison is in the background holding Sim One.

<https://cybernetc200.com/robots/1967-sim-one-denison-abrahamson-american/>



Floor plan of the second floor of the study hospital showing the three versus wall window views of patients. Data were also collected for patients assigned to third-floor rooms. One room on each floor was excluded because portions of both the trees and wall were visible from the windows.

Records on recovery after cholecystectomy of patients in a **suburban Pennsylvania hospital between 1972 and 1981** were examined to determine whether assignment to a room with a window view of a natural setting might have restorative influences. Twenty-three surgical patients assigned to rooms with windows looking out on a natural scene had shorter postoperative hospital stays, **received fewer negative evaluative comments** in nurses' notes, and took fewer potent analgesics than 23 matched patients in similar rooms with windows facing a brick building wall.

View Through a Window May Influence Recovery from Surgery Roger S ULRICH 1984

<https://cybernetc200.com/robots/1987-sim-one-denison-abrahamson-american/>



For the health care sector, Cahill has refined the concept for participation in health care to three levels:

patient partnership, patient participation, Patient involvement/collaboration'

Patient participation: a concept analysis, Cahill J. 1996

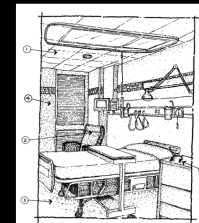
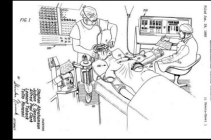
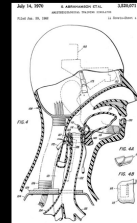
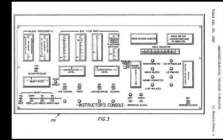
<https://pubmed.ncbi.nlm.nih.gov/5878417/>



Laing's experiment is considered an offshoot of the "anti-psychiatry" movement Laing, and other psychoanalysts like Thomas Szasz, David Cooper, and Franco Basaglia, **questioned the diagnoses of certain mental illnesses, shunned the drug- and surgery-centered treatments** of the time, and demanded reform of the asylum system, which often institutionalized individuals against their will.

1965 Radical Experiment by R.D. Laing, London

<https://www.theguardian.com/books/2012/sep/02/rd-laing-mental-health-sanity>



the architectural psychology movement eventually **drew criticism for its tendency towards 'architectural determinism'** – a confusion between correlation and causality with the implication that there were **mechanistic and causal links between the built environment and human behavior.**

if the demanding standards of proof used in medical research were used, almost all the studies would have to be regarded as **methodologically flawed or at least limited.** Unfortunately strongly held opinions are not the same as rigorously collected evidence.

Rubin, H., Owens, A. J. and Golden, G. (1998) Status Report: **An Investigation to Determine Whether the Built Environment Affects Patients' Medical Outcomes.** Center for Health Design, Martinez, CA.

https://www.researchgate.net/figure/Critical-Care-Room-Incorporating-Environmental-Strategies-to-Promote-Guest-courtesy-of-Fig_3276380

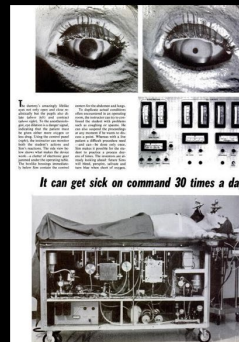


"Lean ... is 'lean' because it uses less of everything compared with mass production - **half the manufacturing effort in the factory, half the investment in tools, half the engineering hours to develop a new product in half the time.** Also, it requires keeping far less than half the inventory on site, results in many fewer defects, and produces a greater and ever growing variety of products."

The article, "Medical Taylorism,"^[1] by Pamela Hartzband, M.D. and Jerome Groopman, M.D., in the *New England Journal of Medicine*,



Deathproof Patient for Student Doctors



It can get sick on command 30 times a day

Life Magazine 8 December, 1967



Alma Ata Declaration of 1978

<https://cybernetc200.com/robots/1967-sim-one-denison-abrahamson-american/>

this demand towards health care systems, declaring that "people have **the right and duty to participate individually and collectively** in the planning and implementation of their health care'.

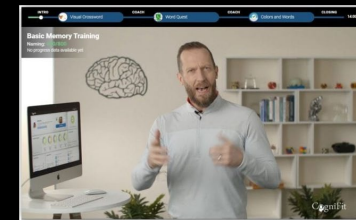


In 2001, Laerdal engineered the first fully automated life-like SimMan

<https://cybernetc200.com/robots/1967-sim-one-denison-abrahamson-american/>



Nursing practice labs like UVA's morphed into learning resource centers.



CogniFit Launches Innovative Brain Training Video Coaching Program

<https://blog.cognifit.com/video-coach/>

It is a **home-based, computerized, individualized cognitive training program.** Training rests upon the results of a baseline cognitive evaluation, the Neuropsychological Examination—CogniFit Personal Coach, which is repeated again in the end of the training.

Elective

GSAPP Spring 2024

Architect Writers | Critic Hilary Sample

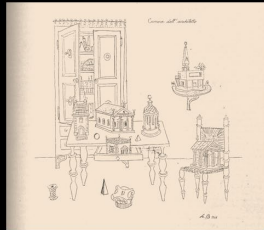
Writing vs Design

“

The guiding spirit of the old world was the **Academy** – a spirit that excluded artists from **industry and manufacture**, isolated them from the community and enveloped them in a fiction (art for art's sake) removed from the **real world**.

The **lack of vital connection** with the community inevitably led art into sterile speculation: the form expressed by drawing was confined to the pictorial plane, bearing no relation to **reality, material techniques of the economy**.

”



The Architect's Room

1943

Lithograph on cardstock, 29.3 x 35.2 cm. ILBPMB Collection.

The Design of Interior

1944

First published in *Domus* 198 (June 1944)

“

This is a country of **marvellous stones**, such as the quartz crystals that you can pick up from the ground in the mountains of Minas Gerais, in the fabled lands, or even in São Paulo state, where, some years ago, I found some really beautiful ones, perfectly **polished by nature**, serving as gravel underlay for the tarmac being laid on the road out of Ilhate.

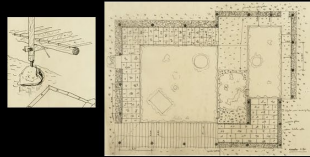
Consider it an **ethical demand for 'ornaments'** made of base gold, bronze, diamonds with visible inclusions, silver, chrysolite, quartz and coloured beryl. Ornament has been a constant in human history, since ancient times – **now in Brazil** we may perhaps see the **industrial design of high-end jewellery**, distinct from the diamonds and gold of high-society ladies.

”



Valéria P. Cirell House, São Paulo

1951



Stone Against Diamonds

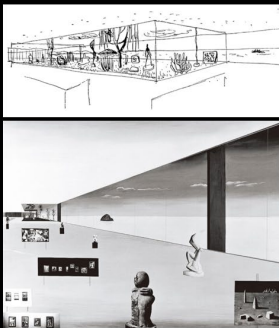
1947

São Paulo: Instituto Lina Bo [Bardi](#), 1993

“

A City's displays can undo years of efforts to correct and guide public taste. We are focusing our attention here on the middle classes and the newly rich (we might also have added the select elite): **the window displays** you find in working-class **neighbourhoods** are beyond reproach because they reflect the unerring taste of the people, **untainted by intellectual posturing**. Such displays, markets and fairs grow out of spontaneous movements unsullied by the snobbish routines of 'art' (in the current accepted meaning of that term, applied since the end of the nineteenth century) and help to create a pure atmosphere – something **the 'cultured' classes** can only attain through the strictest discipline and a rigorous selection process.

”



Museum on the Seashore, São Vicente

1951

Window Displays

1951

First published in *Habitat* 2 (October – December 1951)

It is also an **anachronism** to endow pure technology with an **expressive value**, which is not to be found in the technology itself, but arises only from its application. When technology's sole virtue lies in its **clean appearance**, it becomes mere decoration – as is the case with modern Italian architecture, especially from the north of Italy, which relies entirely on novelty for novelty's sake, on strangeness for the sake of strangeness – on things that might satisfy the eye, but not the heart or mind...

Indeed, we have to understand human beings as they are today – electrified, mechanized, tormented by the progress they have achieved but whose meaning they do not yet fully grasp – and to understand the **without presently accepting our personality as some external, pre-established factor**. This does not mean we are against culture, quite the opposite.

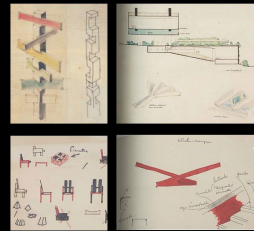
It is a problem that architects engaged with in the early days of the modern movement, and it is a legacy we have to preserve and maintain while freeing ourselves from the **imposition of those 'creator or beautiful forms'** who would bind humankind to forms defined by their own **swish individualism**, rather than attempt to understand and help people using their skills and experience – human, technical and naturally artistic.

”

Propaedeutic Contribution to the Teaching of Architecture Theory

Habitat, Ltd. São Paulo, 1957

a seminar text, published in Portuguese



Sao Paulo Museum of Art Detail of handrail

1957/58

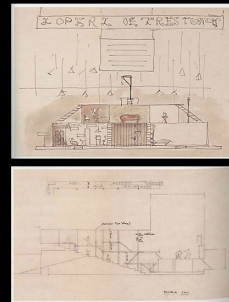
Ballpoint pen, marker, graphite, and colored pencil on offset paper, 15.5 x 24.5 cm. Collection of the Instituto [Bardi](#)/Casa do [Vidéo](#), São Paulo

“

Our new civilization is defined by its capacity to accept or confront, to renounce or overcome, its problems, including the problems of art. We can see the **dualism of artlessness** beginning to **move towards fusion and unification** with the emergence of a new kind of intellectual, one who focuses on contemporary cultural problems, **rejecting both the pedantic literary intellectualism and the limited scientific positivism of the past**.

The new humanism, with its technical worldview, tends to merge cultural problems into one other, through a **process of simplification**. The simplification is necessary, not only to grasp the technology – which in the years immediately before and after the war got into a vicious cycle of excessive details and organizational excess that reduced it to one almost baroque example: the automobile – but **the whole of human life**.

”



The Threepenny Opera

1960

Graphite and ink on parchment paper, 35.5 x 64 cm. Collection of the Instituto [Bardi](#)/Casa do [Vidéo](#), São Paulo

Technology and Art

1960

First published in *Diário de Notícias* (Salvador, Bahia), 23-24 October 1960

“

Each object tests the **limitations of 'deprivation'** of misery. And it is this, together with the continuous, insistent presence of the 'useful' and the 'necessary', which constitutes the value of this production, with its **poetics of things** that do not come for free, that cannot be conjured out of fantasy. The exhibition offers a critical overview of this **modern reality**, presenting an example of the direct simplification evident in forms that buzz with vital energy – forms of artisanal and industrial design. We insist that the identity of the object based on **technical production must be linked to the reality of the materials**, and not to some choreographed **folkloric formal abstraction**.

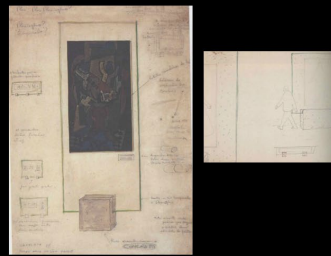
This exhibition is an accusation.

An accusation levelled by a milieu that refuses to despair of the human condition, despite being forgotten and treated with indifference. It is an accusation that speaks, not of humbleness, but of the desperate striving of a culture to rise above the degrading conditions imposed on it.

”

The NORTHEAST

1963

First published in *Arquitetura*, the catalogue of the inaugural exhibition at the *Usina* Museum of Popular Art, 1963

Curatorial Installation, Sao Paulo Museum of Art

1963

Watercolor, graphite, and collage on offset paper, 33 x 24 cm. Collection of the Instituto [Bardi](#)/Casa do [Vidéo](#), São Paulo

“

Regarding the **'new' organic architecture** of the latter half of the twentieth century, it seems that with a few exceptions – such as the great Frank Lloyd Wright, who stems from the nineteenth-century English Arts & Crafts movement, ...it should be seen as one of those movements which have arisen out of the desire to reform a whole swathe of western culture, but which **do little more than resurrect historical situations**, endow them with new meanings to defend the same old positions, and define that as progress. The same applies to the 'butalism', 'sclerism', 'happening' and other movements that can be constructed as reactions to rationalist shoe-box architecture...

But what American editor failed to notice was the danger of 'folklore' inherent in this attempt, which summary dismisses the legacy of a major movement, which when its true dimensions are grasped, the only means we have to move towards a new architecture – an architecture that uses rationalist instruments to measure the experience of 'non-perfect' and 'clustered cell' structures.

”

In South America, What's Happening after Corbu?

1967

First published in *Mirante das artes* 1 (January-February 1967)

“

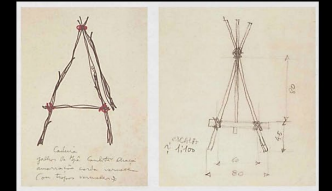
The popular culture of Brazil – a latecomer to the story of western style industrialization – still contains elements from prehistory and from Africa, which give it a **vital energy**. **All the contradictions inherent** in the great western misadventure are rapidly becoming apparent, pointing to a developing crisis. ... We must develop a collective consciousness – any diversion at this time is tantamount to a crime, in view of the erosion of our culture. **If it is the role of the economist and the sociologist to offer objective analysis**, then the artist must act as a bridge connecting not just with the intellectual but with the engaged public.

This urgency, this sense that we can't wait any longer, should be the real foundation for the Brazilian artist's work. It's a reality that does not need to be boosted by artificial stimulants but can draw on an immediate **store of cultural riches**, a unique anthropological inheritance sown with tragic and historic events.

”

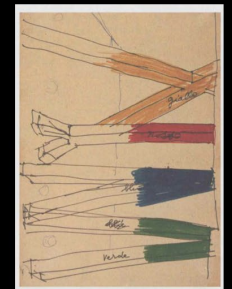
Planning the Environment: 'Design' at an Impasse

1976

First published in *Maisarquitetura* [2] (December 1975 - February 1976)

Roadside Chair

1967

Graphite on Parchment paper, 32 x 23 cm. Collection of the Instituto [Bardi](#)/Casa do [Vidéo](#), São Paulo

Walkways in the sports block, Secs Pompeia Factory

1977-80

Ballpoint pen and marker on parchment paper, 32.5 x 21.5 cm. Collection of the Instituto [Bardi](#)/Casa do [Vidéo](#), São Paulo

“

The **postmodern movement**, born in the United States, came to international prominence at the last Venice Biennale; reactionary and anti-contemporary, it **confuses the true meaning of history** with a **dubious return to historicism**.

All of this could be deemed an exaggerated premise for the presentation of a simple auditorium seat, but I offer this warning note on European misgivings about the postmodern in the hope that **Brazil will not blindly head off down the same path as those culturally bankrupt societies**.

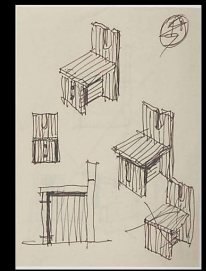
With regard to this little chair, made completely of wood and without upholstery, it should be recalled that **medieval plays were presented in public squares, with the spectators standing up and walking about...**

The wooden seating at Pompeia is a simple attempt to **restore to the theatre its quality of 'distancing and involving'**, rather than merely seating.

”

The Architectural Project

1980

First published in *Giornale L'Espresso* [1], *Cidadela da Liberdade*, São Paulo; *SESC*, 1986

Secs Pompeia Chair

1977-80

Ballpoint pen, Marker, and graphite on offset paper, 21 x 14.5 cm. Collection of the Instituto [Bardi](#)/Casa do [Vidéo](#), São Paulo

THANK YOU **2023-2024**