

SENTIENT CITIES

VIBECODING ARCHITECTURE VOL. 2



MEDIA X DESIGN LABORATORY SPRING 2026

This studio investigates how architecture can become a key element in the evolution of the sentient city: an urban environment where computational systems and generative AI are no longer accessed through discrete devices, but diffused across the urban fabric, embedded in intersections, facades, transit networks, and domestic spaces.

Building on the Fall semester's investigations into generative design workflows, vibecoding, and LLM-assisted spatial modeling and conceptualization, students will explore how cities think and feel, and use this as a basis for developing context-specific, responsive spatial forms.

The cities studied in the first semester will serve as living laboratories, offering both real and speculative contexts in which to imagine new **Peripheral Typologies**. These will operate as nodes in a broader cognitive urban system. If the first studio focused on designing the "urban brain," this studio will address the organs, nervous systems, and distributed sensors that contribute to the city's underlying pulse: its patterns, rhythms, and emergent behaviors.

At the core of the studio lies a question: how can future architectures begin to sense and respond, not only for human users, but with and through machines? Beginning with architectural "elements," traditional components

such as balconies, corridors, doors, pathways, ceilings, and patios, students will develop grounded, contextual interventions that allow intelligence to act publicly and legibly. They will consider questions such as: What are the aesthetics of data? How can cognition be spatialized? How might flows of sensing, computation, and action take on physical and cultural meaning in the city? What if a city begins to dream? What would those dreams be, and what roles would citizens play in them?

The goals of the studio are threefold: (1) to critically deploy LLMs and computational tools to design architectural elements and interventions that participate in emergent urban intelligence systems; (2) to develop new types of distributed civic peripheral typologies that can react and respond within a sentient urban fabric; and (3) to articulate an architectural language for urban sentience, forms that embody the city's perceptual and cognitive capacities.

This intensive studio will make use of advanced digital tools. Experimental and remote LLMs and MCP agents for spatial modeling will be used in exploratory ways. A range of software, scripts, and plugins for mapping and open geodata analysis (including Rhino & Grasshopper, QGIS) will support successive phases of the design process.



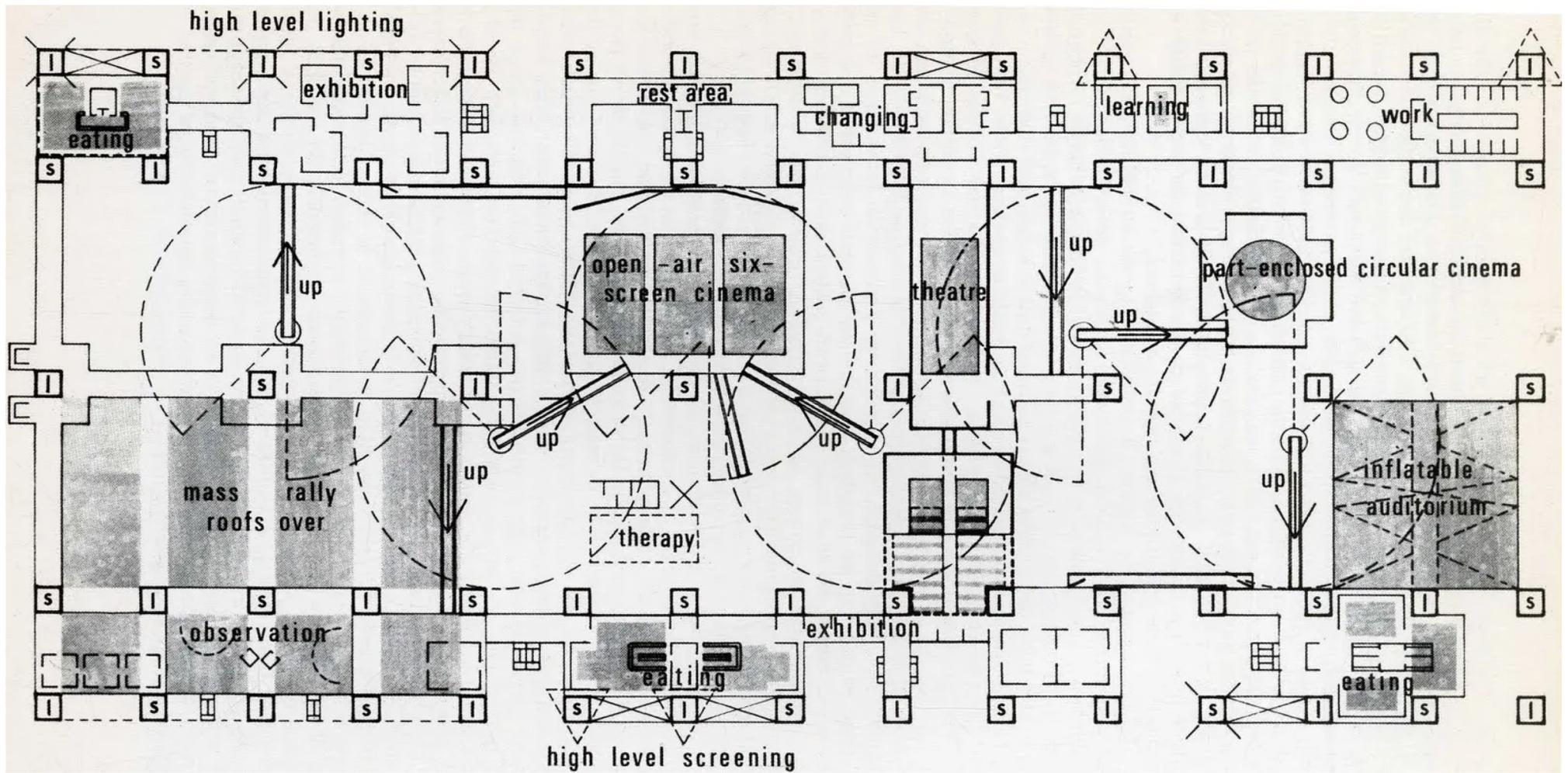
Breathing Room
Bianca Tse, AI Generated Image (Midjourney), 2022



Untaken Photo
Bianca Tse, AI Generated Image (Midjourney), 2022



Imaginary Friends
Bianca Tse, AI Generated Image (Midjourney), 2022



Cedric Price
The Fun Palace - 1961



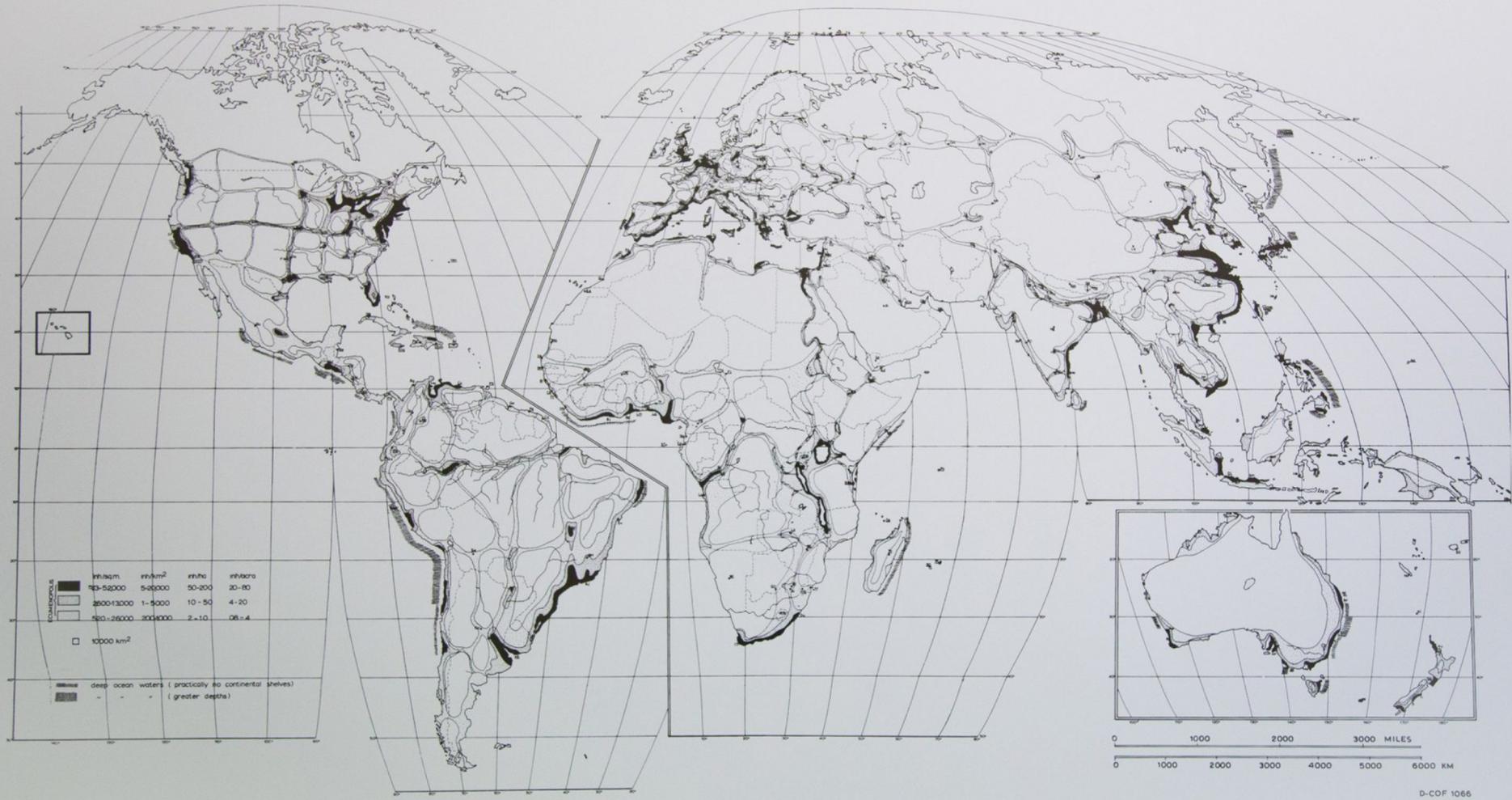
“I sing the city.

Fucking city. I stand on the rooftop of a building I don’t live in and spread my arms and tighten my middle and yell nonsense ululations at the construction site that blocks my view. I’m really singing to the cityscape beyond.

The city’ll figure it out.”

The City Born Great
N. K. Jemisin, 2016

ECUMENOPOLIS 2060

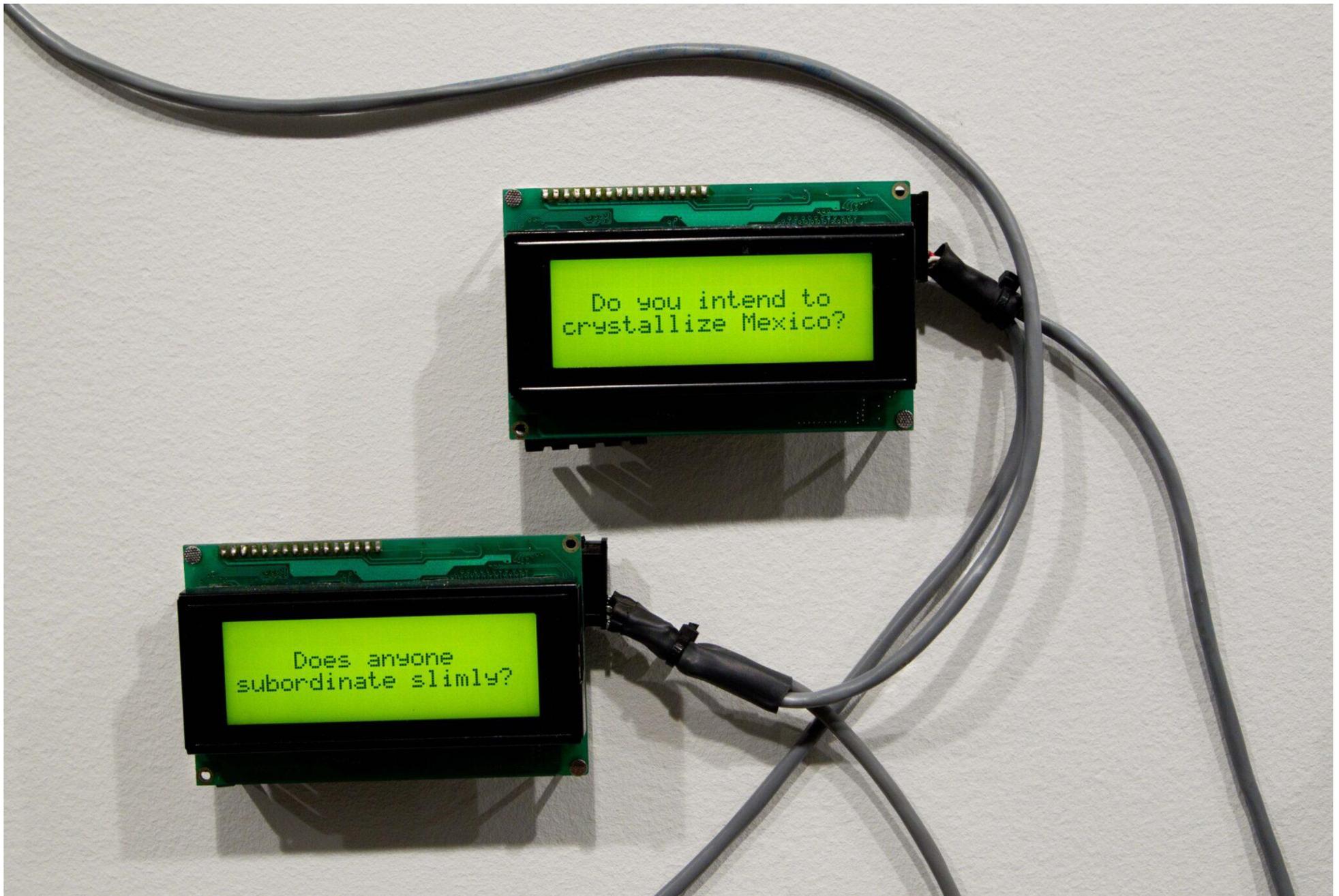


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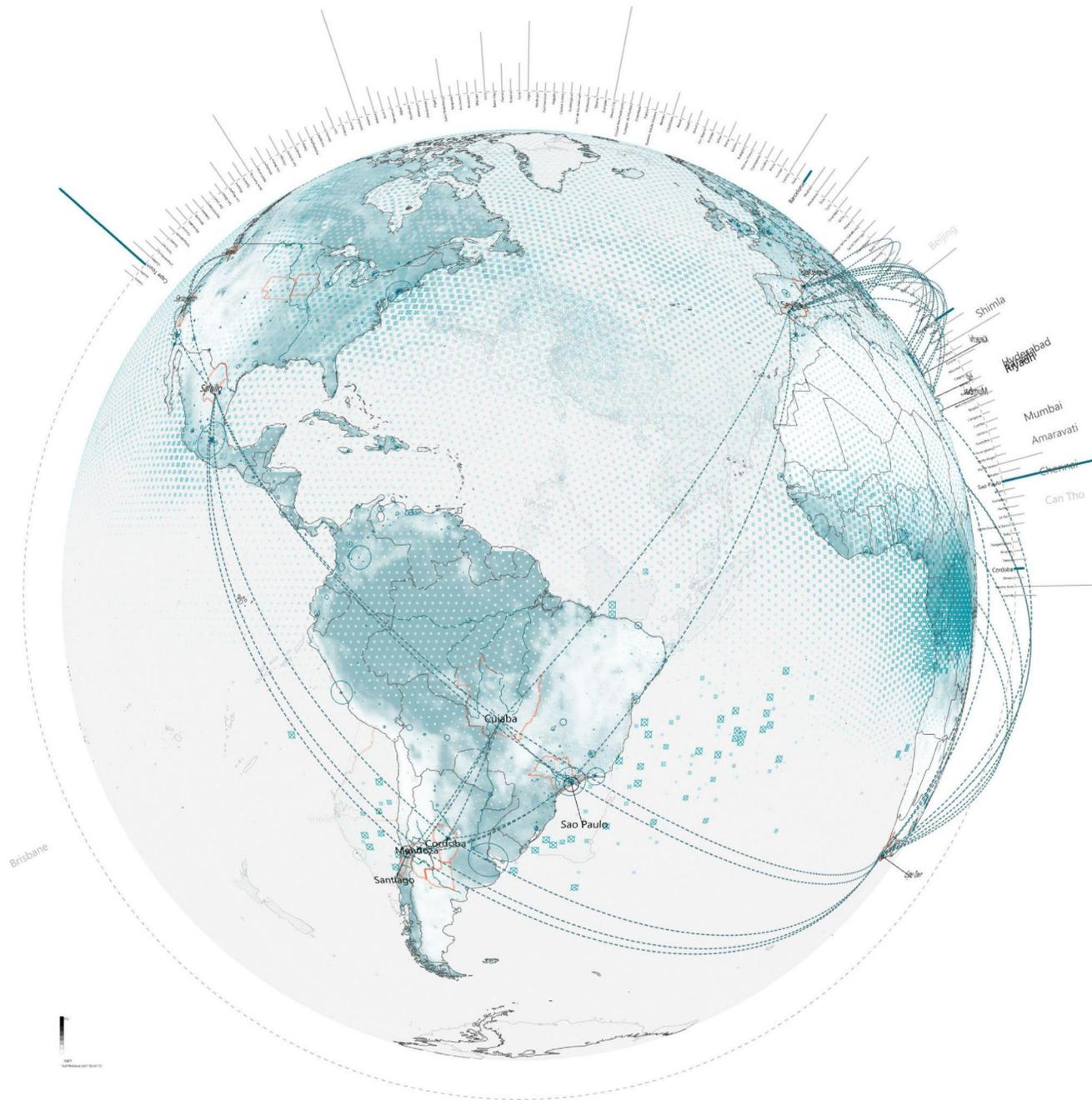
Ecumenopolis
Constantinos A. Doxiadis, 1967



Elements of Architecture
Rem Koolhaas, 2014



33 Questions per Minute, Relational Architecture 5
Rafael Lozano-Hemmer, 2000



Global Mapping of the Water Crisis
Anja Ils, Barbara Umrossy - Osaka Countertactics - Media x Design Lab, 2023