

DESIGNING FUTURES

Designing Futures for Intelligent Machines

Designing Futures #01



JOSE PEDRO SOUSA
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Architecture, intelligent machines, and post-human futures

Welcome to my newsletter. Here I explore the evolving relationship between architecture, technology, and digital culture — and the futures we are beginning to design and build together.



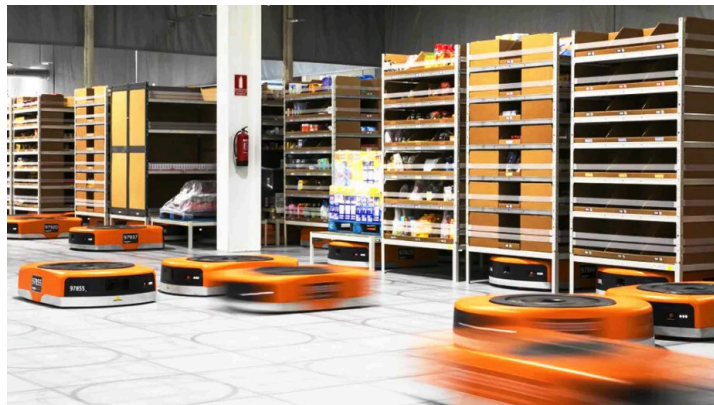
Cover of *Architectural Design*, 1967 issue on space architecture.
(Image: Architectural Design)

The image I'm using for this newsletter comes from the cover of a 1967 issue of *Architectural Design* devoted to space architecture. At the time, architects were imagining lunar habitats, orbital cities, and environments designed for life beyond Earth. Many of those projects were speculative, even utopian. Yet they reveal something important: **architecture has long served as a laboratory for imagining technological futures.**

Throughout the twentieth century, architects engaged enthusiastically with emerging technologies. From Buckminster Fuller's geodesic visions to the cybernetic environments imagined by groups such as Archigram, or the adaptive systems proposed by Cedric Price, architecture became a space where technological possibilities could be explored long before they became reality.

Today, however, the technological landscape is shifting again. Artificial intelligence, robotics, digital fabrication, and planetary-scale infrastructures are reshaping the environments we design and inhabit. But they are also producing something new: architectures whose primary users are machines rather than humans.

Consider the massive automated warehouses that support contemporary logistics. These environments are filled with sensors, algorithms, and robotic systems coordinating movement with minimal human presence. Data centers — the spatial infrastructure of artificial intelligence — represent another emerging architectural type: vast, energy-intensive environments designed primarily for machines rather than people.



Robotic logistics infrastructure.
(Image: Amazon Robotics)

Other emerging environments combine machines and biology. Highly automated greenhouses and vertical farms transform buildings into controlled ecosystems where sensors, robotics, and biological processes operate together.

In this sense, some of the most significant architectural projects of our time may no longer be designed for humans, but for intelligent machines.

These transformations extend beyond architecture itself. As artificial intelligence, automation, and digital infrastructures reshape the environments we build, they also begin to transform the organization of work, production, and social life. Questions about labor, abundance, and the role of humans in technological systems increasingly accompany the infrastructures that architecture helps to materialize.

Some thinkers even suggest that the human condition itself may be changing. From Ray Kurzweil's speculations about technological singularity to Yuval Noah Harari's reflections on the future of human agency, the possibility of a world in which machines play a dominant role — or even outlive their creators — is now openly discussed. At the same time, the human body itself is becoming a new technological frontier, from neural interfaces such as Elon Musk's Neuralink to broader speculations about human augmentation and post-human futures.

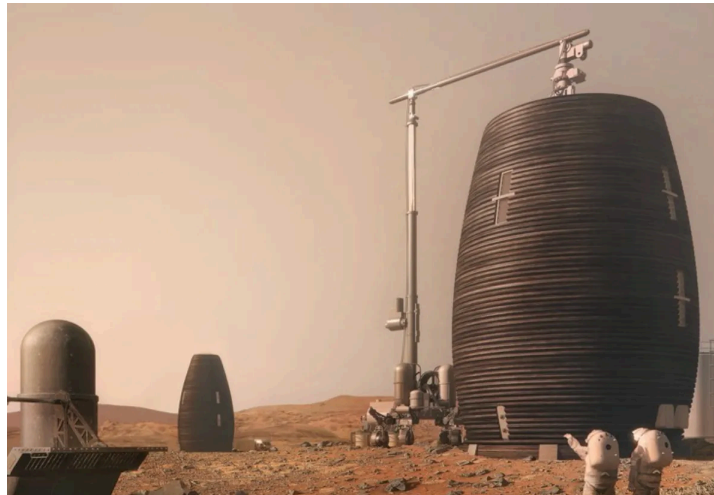
These concerns are not entirely new. Lewis Mumford famously described the rise of the "megamachine" — vast socio-technical systems coordinating human and mechanical activity at planetary scales. More recently, thinkers such as Manuel DeLanda have explored how complex material assemblages shape technological and social evolution. Today's infrastructures of artificial intelligence, logistics, and planetary computation seem to extend these dynamics into new territory.

Architectural thinkers have also begun to explore these transformations. Liam Young has described the emergence of "machine landscapes," while Marina Otero Verzier's

research on automated infrastructures points toward environments increasingly shaped by algorithmic systems.

These developments introduce a curious paradox. Architecture has traditionally been understood as the discipline that designs environments for human life. Yet some of the fastest-growing architectural programs today — data centers, logistics infrastructures, automated agriculture, sensor networks — are not built for human habitation at all.

At the same time, a renewed interest in space exploration is emerging. Yet even these visions of human expansion depend heavily on robotic construction and automated systems capable of building environments before humans arrive.



Robotic construction systems envisioned for building habitats on Mars.
(Image: AI Space Factory / NASA)

In other words, machines may increasingly become both the architects and the first inhabitants of the futures they help create.

It is precisely this tension — between human imagination, technological systems, and the environments they produce — that motivated the creation of this newsletter.

Through short essays and occasional notes from my bookshelf, I will explore how architecture engages with emerging technologies, how these technologies reshape our environments, and how both together transform the societies we inhabit.

The section **Designing Futures** gathers short essays reflecting on the relationship between architecture, intelligence, matter, and technological change. **Reading Futures**, in turn, draws from my personal library of books on architecture, technology, and digital culture — revisiting ideas that have helped shape how we imagine the future.

If architecture has always been a way of imagining the future, today it may also be a way of understanding the worlds that intelligent machines are beginning to build.

**If these questions interest you, subscribe to
receive future essays and notes.**



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Jose Pedro Sousa 3d



Author

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