

HABITS OF THE ANTHROPOCENE

Richard Beckett

The Bartlett School of
Architecture,
University College London

If the Anthropocene marks the end of a period of certainty that mankind's triumph of nature would secure the human, the current period of uncertainty is driving an evolving recalibration of the position of the human in negotiating our contemporary challenges. Within this more-than-human discourse in architecture, the role of contemporary computational design in shaping our future built environments must position itself in ways that embrace the emergent, but also seek to restore, reconnect, and repair damaged ecologies. Securing the human requires strategies that seek to secure multiple forms of life, both biological and artificial, and must operate at multiple scales. These activities have important ontological, political, and aesthetic consequences for the field to contend with. While operating within the intellectual space of the 'Anthropo-scene' (1), we must be conscious that these habits are informed by mostly northern, urban voices. It is important to consider the knock-on effects on those in the 'Anthropo-not-scene': (2), parts of the world currently not operating in this space and who are disproportionately affected by the current planetary epoch.

To explore these positions, the ACADIA 2023 Conference gathers some of the leading and most innovative design work operating across practice and academia addressing

these issues. These practitioners are increasingly spanning multiple disciplines to establish novel and alternative habits for material computation, ways of making, and architectural operation. The projects presented in these proceedings highlight these emerging transitions which are shaping the development and use of artificial intelligence (AI), machine learning, and mixed realities in design and computation, alongside new material narratives of material circularity, living agencies, and interfaces with the bio-digital.

NON-HUMAN AGENCIES

The conference proceedings make visible how digital design practice is becoming increasingly interdisciplinary, engaging architectural methodologies with other fields of enquiry, including synthetic biology, immunology, machine learning, and mixed realities. Collaborating and co-designing with these 'others' requires a reframing of design modalities where the decentered human is recalibrated as a multispecies body, coded by genes and big data sets, interfacing in novel operations with machine intelligence. Some of these habits require new thinking and new technologies, but may require older ways of conceiving and operating. The projects selected for these proceedings

describe methodologies and techniques driven by material agency, collaborative procedures, and hybridized knowledge that inform complex non-human entanglements with physical and computational matter.

NOVEL ECOLOGIES

The following projects selected for the proceedings highlight the ongoing convergence of physical and digital territories and the novel ecologies that emerge. The subsequent development of digital tools, platforms, and new digital modes of production are engaging with traditional knowledge towards the protection of existing and new territories at a range of scales from the material to the planetary, mediating resources, rights, and exposures to the uncertainty of contemporary nature.

These novel design ecologies supersede traditional natural and artificial dichotomies, informing new bio-digital relationships and new scenarios with self-assembling materials, microbial systems, and online modes of spatial production where digital information and data are becoming increasingly trained, embodied, and inhabited. At the planetary scale, this involves whole ecosystems and exploration of extraterrestrial ecologies to explore human expansion and settlement beyond the confines of our planet.

HABITS OF THE ANTHROPOCENE

The projects presented at the ACADIA 2023 Conference have been assigned into three key themes which seek to highlight the predominant conversations happening within the current discourse in the field.

1. Material Transitions presents a series of projects that are challenging engrained habits of unlimited raw material consumption, operating instead in ways where material resource is understood through its fragility, and whereby new approaches towards material hybridity are developed and framed through their entanglements with ecological systems. The projects outline a series of approaches which transition from material narratives of permanence, inertness, and sterility, exploring instead opportunities and agencies of waste materials, biological materials that are grown and harvested, and materials that support multispecies cascades. These material transitions are informed by the biological and robotic processes that shape, monitor and tend to them.

2. Fabricated Transitions frames design projects exploring disruptive making processes where the role of

robotic technologies, AI, and mixed realities are explored alongside a re-engagement with practices of craft, lost knowledge, and local practices. In these projects, digital fabrication approaches are reshaped in response to topics, including new and emergent resource streams, virtual spaces and realities, assisted assemblies, and intelligent geometries. These automated fabrication and assembly processes are challenging the realities of material waste and hazardous labor alongside exploring novel and complex geometries that incorporate material sustainability while disrupting traditional delivery methods for building.

3. Operational Transitions highlights a collection of projects exploring contemporary shifts in building planning and operation through concepts of distributed ownership models, integrated platforms, and reconfigurable spatial conditions. Computational workflows embrace uncertainties of co-creation and decentralized participation in creating space, while digital textiles facilitate sensory perception and communication, mediated through human-computer interactions. Demonstrations and realizations of physical prototypes continue alongside the emergence of online models that are increasingly inhabitable and embodied as fully digital ecologies.

In defining the conference theme, there was a desire to take a new look at the discourse of design and computation and their motivations within the post-pandemic condition of strained norms. Questioning the human tendency to return to our old habits or to define new ones has become part of everyday life. The projects collected and presented in this volume highlight critical examples of these ongoing transitions in work currently occurring in the field. These transitions towards new ways of doing and being look forward, but are clearly aware of what may soon no longer exist. Embracing the presence of this uncertainty can offer a new lucidity to the computational agenda. We will use these paranoias and provocations to drive the discussions at the conference through a collation of projects, papers, field notes, and workshops.

REFERENCES

- [1] Lorimer, Jamie. "The Anthro-scene: A guide for the perplexed." *Social Studies of Science* 47, no. 1 (2017): 117-142.
- [2] De la Cadena, 2015: *e-flux journal* 56th Venice Biennale – SUPERCOMMUNITY – Uncommoning Nature