Towards a Posthuman Practice for Architecture and Urbanism?

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Introduction

As a humanist tradition, architecture, with all its associated professions and discourses, has developed within an anthropocentric (human-centred) thought-space. In these disciplines, ontological questions (questions about things in the world) have primarily centred around architectural objects and their human inhabitants. "Nature" in this space has always been a backdrop and resource for human agency and well-being. A tree is for a house and a land-scape is for a window.

In this commentary, I challenge this humanist tradition of architecture by drawing on posthuman discourses that argue for the decentring of the human subject and the rethinking of human-environment relations. Responding to intensified concerns around the detrimental effects of human activities at bioregional and planetary scales, I propose that the question of architectural sustainability requires a posthuman reframing. Writing from the perspective of an architectural practitioner, I argue that the isolation of nature from culture (the nature/culture divide) and the objectivation of nature in architectural traditions, present barriers to the discipline that can perhaps only be overcome through the cultivation of a posthuman architecture.

At the urban scale of design, I suggest that the humanist tendencies of objectification and isolation, which are productively challenged by posthumanism, also reveal themselves in the increasing incoherence of city fabrics and public spaces. Here, the rise of individuality and the atomisation of the collective architectural project by the individual icon can be seen in the cleaving of building from city (building/city). This cleaving, I propose, represents a dualism conceptually equivalent to the nature/culture divide. In both cases, by focusing on the object, we limit ourselves to single isolated performances and reduce the environmental capacity of our projects both culturally and ecologically.

The Problem of Decoupling

Within the anthropocentric tradition of architecture, questions of negative environmental impact or "unsustainability" have been largely conceptually absent or theoretical externalised. Historically, "nature" has been seen as a bottomless resource which is simply too vast and powerful for us to exhaust. Any measurable effects have been seen as peripheral and have been externalised from mainstream theory (Raworth, 2018, p. 152).

The arrival to the architectural imagination of our role in geo-scale anthropogenic effects (global climate change, mass extinction, etc.) has created a fissure in the foundation of architectural thought: a crack in the stonework of architecture that has created a growing tension between the theoretical mainstream – the core practices and concerns of our humanist tradition – and the question of worlds beyond the human.

For comparison, architecture's entanglement with economics has resulted in similar theoretical responses in both disciplines. When environmental "externalities" began to act back upon us, economists developed the concept of decoupling. The theory of decoupling imagines that it is possible to detach behaviour from consequence, or culture from environment. To resolve the unintended consequences of economic growth, decoupling should, for example, allow us to decrease material consumption and waste while continuing to increase economic growth. While there was an initial enthusiasm for economic decoupling, recent studies have shown that countries that identified as decoupled have in fact been outsourcing problems to other countries (Akizu-Gardoki et al., 2018; EEB, 2019).

The concept of decoupling is mirrored in architecture where the question of the environment has been annexed (or decoupled) to the tecno-economic space of building science. Here, in the simplified space of technological innovation, it is thought that new building materials and methods will allow us to decrease environmental impact while leaving the formal practice of architecture in undisturbed autonomy. In the logic of architectural sustainability, we may continue to pave paradise, providing we invent new cement substitutes to mitigate the release of carbon.[1]

This is evident in a recent proposal to more than double the size of an existing island in an archipelago in southern Norway. The proposal creates a new topography "inspired by the Norwegian landscape" while resembling an abstract machine cut topographical model. Proposed by a practice hailed for their forward-thinking sustainability agenda, the new construction will devastate an ocean ecosystem, continuing the urban project of hardening shorelines and overshadowing habitats (Gittman et al., 2016). The architects have said that, due to the marine conditions, there is no choice but to make it out of concrete, but that efforts are being made to use the best technology available in low-carbon concrete and that zero or even carbon negative solutions were being sought (Dezeen, 2021). It is a proposition which applies state-of-the-art innovation to the problem of carbon but remains decoupled from the problem of human exceptionalism (humanity's right to dominance over nature).

The issue exemplified in this project is not case specific but ontologically specific and systemic. In the discourse of sustainable development, human exceptionalism extends from the drawing board to the highest level of regulation and planning, where international environmental law and the UN sustainable development goals (SDGs) remain deeply anthropocentric, reinforcing the notion of decoupled growth without limits and therefore only risking further Anthropocene type effects (Kotzé & French, 2018).

However, while the term *sustainability* still has a powerful hold (linguistically if not conceptually), some attempts from recent decades to replace (or perhaps upgrade) sus-

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1.   With reference to the inimitable Joni Mitchell and her song *Big Yellow Taxi*

tainability with fresh approaches such as *Regenerative Design* or *Circular Design*, are now gaining momentum. While both regenerative and circular frameworks have merit, they are not synonymous with either each other or with sustainability, nor is any new branding or conceptualisation of the ecological question fully immune to the political forces and unchecked anthropocentrism that have rendered their predecessor "sustainability" functionally impotent.

Bill Reed, a key voice in the regenerative movement, explains the problem by using an asymptotic curve, where sustainability understood as zero impact equals infinity (Reed & Mang, 2012). In other words, the closer we get to our sustainability goals, the harder they are to achieve. Zero impact is a human concept that does not exist outside anthropocentric thought space. A regenerative design practice therefore requires an ontological leap into a space where humans are not non-player characters in nature but rather become positive players in a diverse set of ecosystems. Far from being a romantic notion, this is a position in nature where we have many good role models, ranging from fungi to beavers. These are understood as keystone species, defined as organisms that help define the entire ecosystem that they contribute to.

Assuming this leap is possible, according to the regenerative framework, the task at hand would then be two-fold. Firstly, we would begin to move through a period of restorative practices, seeking to rebalance ecological systems and redress geo-scale anthropogenic effects. For this first task, regenerative design closely follows its predecessor of permaculture: a field of bioregional land management and ecosystem design first introduced in the 1970s and a field that has been largely ignored by architecture and urbanism. However, it is in the second phase, where we move into a fully regenerative mode, that the framework departs from any familiar touchstones in ecological design, for it is here that we must address the cultural issues at the heart of ecological question, challenging our anthropocentrism and cultivating new ontological positions that might allow us to become, not ineffectual to nature or a neutral partner, but rather to "become with" nature or to re-join nature in an evolutionary gyre.[2] Here, the burgeoning field of the posthumanities is, in my view, a critical port of call and a fertile ground for architectural imagination.

Posthuman Architecture

What might a posthuman architecture mean? Posthumanism in architecture tends to conjure up sci-fi narratives and aesthetics of computational design and AI. It is more likely calling to mind the architecture of Zaha Hadid or Norman Foster than any aesthetic we might associate with, say, indigenous architecture or permaculture. The truth is it is "both and" because in contrast to the highly aestheticized world of design, posthumanist questions centre around "what things do" rather than "what they are". This makes for a very wide umbrella that is best described as total cartography of post-human possibility (Braidotti, 2013, p. 164).

One important distinction to make under this umbrella is its ontological and technological extremes. On the one hand, ontological or critical posthumanism has its roots in feminism and challenges the sexualised, racialised, and naturalised norms of "man" and "human" within humanism (Braidotti, 2022). Transhumanism, on the other hand, considers the posthuman not as a human critical of humanism but rather a human so modified and "perfec-

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2. In conversation with Bill Reed 'gyre' was suggested as the best way to describe the non-linear space of regenerative design and development thinking.

ted" through technological enhancement that it is no longer simply human (Humanism 2.0). This commentary is primarily focused on critical posthumanism, but it is interesting and helpful to draw similarities between the extremes of the posthuman in relation to architectural discourse. As an example, we might say that architecture's preoccupation with building science and technology as a singular source of sustainable solutions is philosophically transhumanist.

In this way, when applied to a specific discipline such as architecture, critical posthumanism has the power to be both explosive and incredibly productive, giving rise to transformative effects on both the definition of the subject of knowledge (what architecture is) and its modes of knowledge production (architectural research practice and pedagogy) (Braidotti, 2019, p. 42).

Applied to architecture, posthumanism challenges us to reconceptualise our ways of knowing and doing beyond the service of man or species, opening up our duty of care to all earthbound matter, both animate and inanimate. Put another way, a posthuman architecture asks of our practices what it means to be an architect in an era that is simultaneously more than human and less than human: more than human in its technological advances and less than human in its inhumane distribution and effects (Braidotti, 2019, p. 42).

Thus, if posthumanism offers the necessary framework for this ontological leap into regenerative and post-anthropocentric thought space, where might the grafting points with architectural culture be? In other words, where might we pare back to in the history of architecture, and its environmental quandaries, in order not to discount its humanist traditions but to bring them forward into this new ontological space?

Sustainability Paradigms

In a review of the last century of architectural sustainability, professor Shady Attia finds that there are broadly six paradigms to date (Attia, 2017, p. 8). The first paradigm 1906–68 he calls "bioclimatic architecture", which is roughly bookended by Frank Llyod Wrights essay *In the cause of architecture* (1908), summarising some early developments of his theory of *organic architecture,* and the publication of Carson's *Silent Spring* in 1962. The second paradigm centres around the key publications of Victor Olgyay's *Design with Climate* (1963) and Ian McHarg's *Design with nature* (1969) and closes with the energy crisis of the early 1970s. This second period, which Attia calls a paradigm of harmony, can be seen as an extension of the Frank Lloyd Wright period contextualised within the birth of the environmental movement. Following this, the paradigms that bring us to present day seem to follow the ebbs and flows of political preoccupations and might therefore be characterised as reactionary or palliative. They have been called environmental determinism, signifying a focus on quantifiable solutionism at the expense of all other factors (Leatherbarrow & Wesley, 2019, p. 19; Holmes, 2020).

The energy crisis produces "energy conscious architecture" (1973–1983). The era of the Brundtland report and the coining of the term *sustainable development* produces a "resource efficient architecture" (1984–1993). "Green architecture" (1993–2006) is triggered by the formation of the US green building council, who would go on to produce the LEED certification. And finally, the Kyoto protocol of 1997 produced "carbon neutral architecture"(Attia, 2017). Attia suggests that the coming paradigm will be regenerative architecture but, as I have argued, the question of how to proceed with the development of this paradigm requires some substantial reframing, which could suggest an alternative coming paradigm of posthuman architecture.

In their recent book *Three Cultural Ecologies* (2019), David Leatherbarrow and Richard Wesley plot a similar history of sustainability and argue that it is, perhaps, to this first period, exemplified by Wright and Corbusier, that we might return to for insight. For it is particularly in this period where the practice of architecture turned to "environment" in an integrated way, where a total practice combining cosmologies, ecologies, craft and formal practices was exemplified: the building and its environment-world as an assemblage rather than the atomised and quantified self of the architectural object and its technical performances that we see in later periods.[3] This building-environment assemblage is also what Ian McHarg was articulating in *Design with Nature* (1992) with his concerns for a comprehensive framework beginning from a bioregional understanding and moving right down to the scale of a building.

A critical insight from Leatherbarrow and Wesley's reading that supports Reed's diagram and the ontological challenge of future practice comes when they say:

> It was just at the time that the best and most progressive inventions of the modern tradition had reformulated the mutuality of ecological and cultural considerations, that "environmentally minded" critics and designers subordinated the second to the first. Assumed in this double error (historical and conceptual) is a third consequence that was even more problematic for the continuity of the modern tradition: the restoration of the two-world thesis, nature vs. culture, in order to give the new "environmental" architecture the task of making itself sustainable – a task we have said is in principle misconceived and in practice unmanageable. (Leatherbarrow & Wesley, 2019, p. 15)

Leatherbarrow and Wesley go on to propose the work of Frank Lloyd Wright, Le Corbusier, and perhaps McHarg and Olgyay, as functional grafting points for the development of a new architectural paradigm, arguing a return to a pre- "environmental" period to free ourselves from the pernicious effects of environmental determinism and the false concept of sustainability.

I would like to extend this thesis, focusing on the urban architectural tradition of "ensemble" and its instincts for collective and site-specific practice, as a link to the bioregional concerns of McHarg and Olgyay and a potential place from which to cultivate a posthuman architecture.

Architectural Ensembles

During my time at London Metropolitan University, where I studied architecture shortly after the turn of the century, there were two memorable concepts that informed the culture of the school. The first was Professor and Dean Robert Mull's interest in an ever-expanding notion of *Duty of Care*, and the second was Professor Florian Beigel's concept of *Architecture as City*.

For the feminist scholar Joan Tronto, imagining a caring architecture demands a total shift in perspective from a caring for "objects" and "things" to a caring for all those who are engaged and affected in the making of things. This form of caring is one that emphasises *process over project* and cultivates wide networks of relationship across the present as well as both forward and backward in time (Tronto, 2019, p. 28). This expanded notion

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3.   A take the term environment-word from (Frichot, 2018, p. 17)

of care articulated by Tronto is a deployable thought-tool that I am exploring in my own practice as possible lever for an ontological shift to a posthuman way of being in architecture.

In considering how my practice might rise to this challenge of cultivating an architecture of care, I find myself reflecting on the other founding statement from my days at London Metropolitan, that of Beigel's *Architecture as City*.

In the opening pages of a monograph by the same name, Beigel and his long-time collaborator Philp Cristou write:

> Over the past few years as the bizarre in architecture has begun to show signs of exhaustion, we have maintained a passion for architecture as city. This idea carries the potential for generosity of architecture. We feel relaxed with this as a starting point for design. Even the smallest urbanism, such as the bottles and tea caddies on the table forming the horizon in a painting by Giorgio Morandi can carry this idea of the city…architecture as city projects rarely result in single stand-alone objects…the expression ensemble is useful in this discussion [allowing us to ask] what can the ensemble do for the city? (Beigel & Christou, 2011, p. 1)

This notion of urban ensemble introduces a playful and relational idea of architecture opening up to neighbours with compositions of clusters and the space between in a way that expands our attention beyond the objects themselves and toward the collective qualities of the city. Indeed, in many of Beigel's projects, his formal pairings achieved an almost audible dialogue. These notions were deployed by Beigel at many scales, where expressions of architecture as furniture and architecture as landscape were explored as analogous to each other and the spirit of the city at large. While there is no doubt that their interest in architecture as city or ensemble was primarily a compositional practice of "objects" and "things", the interest in city is an opening towards a wider net of communal concerns.

When we begin to decentre our subjectivity and ask broad questions about communal effects, we have a tool in hand that helps to imagine a posthuman ontology for architecture. As architects, it is a key act of care (a duty of care) to observe, map and engage with the territories of our projects; the first of the twelve principals of permaculture is *observe and interact*. The Anthropocene has shown us that these territories are now vast, massively distributed in time and space to an extent that it is often functionally impossible for us to interact with their totality (Morton, 2013; Macfarlane, 2016). However, it has also shown us that it is not sufficient to consider any red line we might wish to draw around our projects a functional boundary of concern.

In addressing our ever-expanding duty of care, posthumanism then becomes a tool for observation and interaction with the lively territories of our projects. It is a hermeneutic practice (a constant cycle of learning and doing) concerned with the relations between human world making practices and the life-worlds of non-human actors that we are always already entangled with. What does a posthuman architecture or a posthuman urbanism look like? This is a question that can only be answered through a process of becoming. The answers will of course be diverse, but no matter what it looks like, the care will be in actions rather than appearances.

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