



Cohabitation: Subverting Anthropocentrism in Architectural Discourse

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Anthropocentric Paradigms in Architectural Discourse

The Anthropocene, a geological epoch conceptualized in response to the profound impact of human activities on the Earth's geomorphology, positions humans as the primary force shaping the planet's current sustainability and occupying a central role in its ecological system. This concept underscores anthropocentrism, a perspective where human needs take precedence, establishing humans at the apex of the hierarchy. Anthropocentrism, with its intricate materialist ontology, grants humans dominance within the intricate interplay of human and non-human elements in the ecology, often disregarding absolute truths (Ferrando 2016, 243-256). This research is contextualized within the realm of potential ramifications of climate change and global warming. The research stems from Academic Studio held in CEPT University called Ecotone: The Sentient Ruins tutored by Prof. Sonal Mithal

“The scale of burning ambitions of fossil-making man—of this Anthropos whose hot projects for accelerating extinctions merits a name for a geological epoch—is hard to comprehend.”
(Haraway 2016, 46)

The built ecology becomes an inevitable part of the ecosystem where the process and product construction transform a multitude of ecological entanglements in its vicinity. The built environment has the potential to transform more than just the physical context leading to extensive carbon footprint production and urban species loss.

The current discussion on ecologically sensitive architecture extends only to bucolic aspirations within material paradigms, organizational issues and resource distribution. Even though they are legitimate inquiries, these formalist approaches can be rationalist and appear soulless and can be dismissive of other inquiries (Burke et al. 2016, 499-523). Designers have always been obsessed with the exploration of form, based on Corbusier's definition of architecture as the “*masterly, correct and magnificent play of masses brought together in light*” (Charles-Édouard 1923). This formal expression combined with a capital-driven perspective tends to be autocratic and dismissive of any resistance to this framework, resulting in overtones of power within the production of the built environment with regards to marginalized social groups, especially certain ethnic classes, gender, and queer populous. This obsession with purity in form is also disparaging to several non-human actors such as plants, animals and microorganisms. This exceptionalism is ultimately reflected in the humanistic modes of thinking and production of the built environment which separates it from the ecosystem around it. A disturbance in any part of that ecosystem can have more significant and prolonged implications.

The research would like to stress that these debates on sustainable and ecologically sensitive architecture and cities are because of various interests and agendas regarding the individual interpretation of social and environmental fragility which is defined by different aspirations towards a sustainable and inclusive future. Going forth, the research does not dismiss these contradictory certainties but insists that there must be inclusivity of the agency of other non-human actors to prevent the loss of these urban species. In this current ecological context, for architects who are transformers of urban built and unbuilt ecologies,

it becomes critical and imperative to consider other species while designing for humans.

Collaborative Sustenance and Resilient Futures

The premise and argument that is implicit in the research are to bring about a new and inclusive interpretation of ecologically sensitive systems and frameworks that foster multispecies cohabitation within the built environment, where the agency of humans and non-humans are equally important. This would mean a shift from the anthropocentric ideals is required. Donna Haraway in her fearless feminist inquiry in ‘Staying with the Trouble’ (2016) insists that the terra (earth) must be able to live and recover from the ‘trouble’ caused by the Anthropocene. It requires us to be cognizant of the present instead of being perturbed by a dreadful past or a dystopic future.

She proposes the idea of “*Making kin, not babies*” where humans must constantly interact and cohabit sustainably with non-humans. This kin (relation) making is with other humans and non-humans. Making kin allows for the complex interspecies relations to function, without giving ethnical sovereignty for the agency of space.

Deriving Architectural Parameters from Post-Humanist ideals

Haraway proposes the idea of *terrapolis*, a reformed world that offers opportunities for multispecies cohabitation. Terrapolis is an n-dimensional niche space where there is an integration of multiple temporalities, interpretations, and a chimaera of materialities, where architecture becomes the agent to make kin. Every human, non-human agent and inorganic substance becomes interdependent. These interdependencies foster an inclusive environment.

$$\int_a^{\Omega} Terra[x]n = \int \dots \int Terra(x1,x2,x3,x4, \dots ,xn,t)$$

$$dx1 dx2 dx3 dx4 \dots dxndt = Terrapolis$$

$x1 = stuff/physics, x2 = capacity, x3 = sociality, x4 = materiality, xn = dimensions-yet-to-come$

a (alpha) = Ecological Evolutionary Developmental Biology’s multi-species epigenesis
 Ω (omega) = recuperating terra’s pluriverse
 t = worlding time, not container time, entangled times of past/present/yet to come
 (Haraway 2016, 10)

Terrapolis can be potentially achieved through careful curation of materials, ideals, and elements that are often removed such as dirt. These physical qualities of terrapolis are taken forward from the reading of the site, context can derive architectural parameters for cohabitation.

Architectural Interpretation of Terrapolis -- Post-humanist Illustration

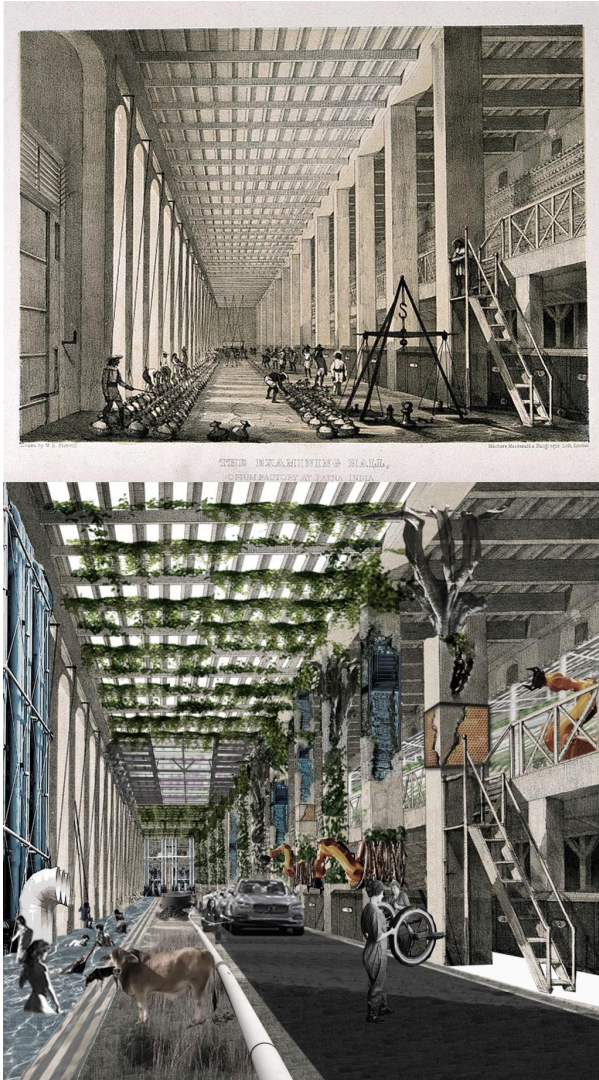


Fig 1. An Anarchistic Production by Aswin Senthil as part of Ecotone: The Sentient Ruins Studio, CEPT University, Tutored by Prof. Sonal Mithal

The illustration in Fig.1 uses the example of the Patna Opium factory to engage in the contemporary post-humanist discourse which challenges anthropocentrism. Using available illustrations of the factory, an artist's illustration is made of how the building might transform given the ecological distress that the world is undergoing considering a post-humanist discourse.

In the illustration, Opium Factory was a product of colonisation and exploitation, a plantationocene.

The opium factory was a place of slavery, racism and patriarchy for reeking the capital benefits. The illustration showcases a production unit that ensures the absolute freedom of individuals and species, an anarchic depiction grounded in reality. It is reinterpreted through feminist and queer lenses where social hierarchies are rejected and various plants and animals help in supporting and functioning the production plant with a prosthetic logic, where cohabitation is possible only through interdependencies. For example, the trees supporting the ailing architecture, cattle that produce manure which can be used as fuel to run the production unit and machines present only to reduce human error. It employs existing motifs of feminist icons such as *Rosie the Riveter* by Howard Miller and post-humanist proposals like Jamie North's *Rock Melt* to create a terrapolis. The illustration also 'stays with the trouble' by depicting a hydroponic cannabis shelf on the top level which undergoing a process of legalization, acceptance, or legitimization. (Aswin Senthil 2021 as part of *Ecotone: The Sentient Ruins Studio*, CEPT University, Tutored by Prof. Sonal Mithal)

The artist's interpretation of An Anarchistic Production is a post-humanist ideal, but these architectural interpretations are not far-fetched and can be grounded in reality and in practice. For example, in a landscape project at Saveetha University in Chennai, where I attempted and was able to control the growth of moss, algae and vegetation in brick pavers which act as ecological agents and interfaces for biological colonization. The bio-receptive conditions of brick had been carefully curated, controlled and monitored throughout time as it responded to the prevalent conditions concerning the control samples. It was observed that vegetal growth can be controlled and curated within the imperfections of the inorganic systems, in this case, loosely packed and cracked bricks enabled more biological colonization than well-packed and wire-cut bricks. Moreover, it was observed that careful curation of materials can also aid in biological colonization. Here, a mixture of cement and vermiculite was used as a binder in

certain areas which saw increased growth of plant and moss due to the increased porosity as opposed to the control samples.



Fig 2. Clockwise from Left - Experimental Sample Vs Controlled Sample, Integration of moss and vegetation in crevices of brick pavers, Cracked and loosely packed brick pavers enabling more vegetal growth (Source: Aswin Senthil 2022)

Phenomenological Interdependencies

Seeing architecture as a Terrapolis enables us to recognize these interdependencies between reachable and nearby actors. We can observe co-species contamination, symbiogenetic intermingling and inter-species entanglements that appear in the forefront. Every actor becomes an active participant in the *agencements* that shape their growth, development, and reproduction (Myers 2015, 235). These human and non-human agents lead towards life's entanglements: which is the disruptive processes of becoming resultant of our uncared side effects, certainties, and externalities (Tsing et al. 2017). These accidental and available proximities that enable fostering such interdependencies and cohabitation are only grounded in connectivity and encounters rather than differences and distances. Therefore it requires one to carefully understand the needs of these actors as stakeholders and calibrate the physical environment for their proliferation among the built environments.

To understand this argument, let's see an example of the simplest form of bio-receptive architectural element - a wall.

"...biologically receptive cementitious materials have been studied and chemically altered to provide pH levels, porosity values and water retention properties that are favourable for vegetation and microorganisms to establish and proliferate." (Cruz 2009)

By understanding the various physical and chemical characteristics of the potentially hybrid materials (chimaera of materials as explained in terrapolis), one can replicate the bio-receptive properties available in nature. These enable one to take existing precedents as models to reappropriate them within the physical built environment. For example, by chemically altering the cementitious properties of lime mortar by adding vermiculite, smaller plants can be grown and accommodated. (Lubelli et al. 2021). Moreover, by altering the physical form of the wall, through the arrangement of building materials, shape, mortar thickness, undulations, etc, the bio receptivity and biological colonization can be controlled and directed to specific areas even though it is a long uncertain process. (Aswin Senthil 2021).

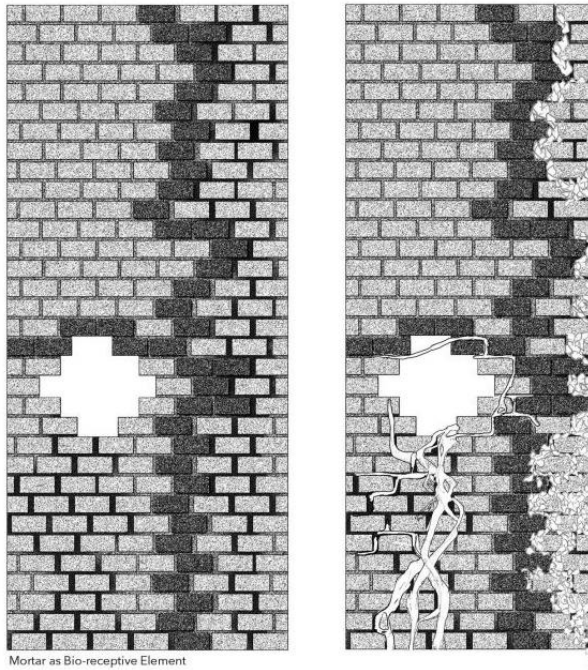


Fig 3. Mortar as bio-receptive element and Brick protrusion to control biological colonization (Aswin Senthil 2021) as part of Ecotone: The Sentient Ruins Studio, CEPT University, Tutored by Prof. Sonal Mithal



Fig 4. Mortar as bio-receptive element and Brick protrusion to control biological colonization (Aswin Senthil 2021) as part of Ecotone: The Sentient Ruins Studio, CEPT University, Tutored by Prof. Sonal Mithal

Space for Cohabitation

We as architects and designers always have used nature and its elements as an intrinsic part of architecture but one can observe a subjective bias towards this element. Architects, as mentioned before, were always obsessed with purity information where the logic of hypersterilization is practised through which all the supposed undesired elements are eliminated. The elements such as dirt which are part and parcel of the process and entropy of architecture are removed without consideration of their potential for ecological sustenance.

Every species require collaborations to survive, even the ideas of domesticated animals was based on such principles. To understand and recalibrate these ideals in a posthumanist manner we must consciously notice and experience these patterns of inclusivity phenomenologically. These can help us open up new avenues to challenge the normal perception of these matters and thereby provide a new way of engaging with them. When considering multispecies cohabitation we must be cognizant of the inclusion of materials and matters that foster this survival. To disinfect and sterilize is to remove the agents of this collaborative survival.

“What is lost when we clean away the dirt, when we brush all that unwanted detritus under the rug? Grave dangers to the arts of thinking, of noticing, of paying attention are presented, when too much is disinfected.” (Frichot 2019, 57)

Being cognizant of dirt and its phenomenological understanding lets us establish its agency in ecology and thus becomes imperative that one does not hypersterilize. Nevertheless, the research does not intend to promote all types of dirt but insists on the curation of specific types of dirt within architectural ecologies. For example, during a study by Architect Aswin Senthil, of the informal settlements of Foreshore Estate, a fisherfolk

community in Chennai, it was noticed that through the phenomenological reading of site it is revealed that in the fish market, the guts of fish that are generally disposed of as waste, here are thrown on the ground which feeds scavenging dogs, cats and birds such as crows, forming unexpected coalitions across species. Through the agency of dirt, the strays are able to sustain themselves but are also domesticated as pets.

“From her perspective as an ethnographer, Douglas argues that by tracking dirt we can gain an understanding of the interconnections and patterning of a world.” (Frichot 2019, 36)

Precedents of Spaces Subverting Anthropocentrism

To take forward the above-mentioned ideas to an urban scale, a space much similar to dirt, neglected and usually removed and considered to have a non-essential character are Ruins. Ruins, looking at it through a feminist and queer lens challenges the existing norm of exclusion and forwards itself as an inclusive space because they are more receptive towards biological cohabitation and inclusivity. Also, ruins are a result of the *Anthropocene*, a post-industrial landscape. These neglected spaces can be looked at as not failed buildings but as spaces that offer creative opportunities. They are more receptive to biological cohabitation because of limited human interaction, making it essential to look into how non-human agents proliferate in such spaces. Even on an ontological, ecological and ethical level, it helps us perceive how various temporalities of both humans and non-humans can be entangled.

“A culture so fixated on progress and spotlessness has difficulties dealing with the inevitable downward curves of universal laws. Ruins remind us of the volatility of economies and social relations.” (Minkjan 2019)

Resistance to the Hypothesis

The research initially addressed that the current inquiries and paradigms of architectural discourse especially with regards to ecological resilience and conservation are highly contested because of contradictory certainties of interpretation of social and environmental fragilities. These contradictions are often dismissed because nature is generally considered as an unproblematised 'other' that is exclusive of culture. This by definition creates an ecological cartesian binary and a culture-nature duality. This uncritical perspective would insist that there is only little that is truly natural. The Anthropocene's arrogant disregard for the environment is a progressive unfolding from the Platonic soul-body dualism. The post-humanist outlook as proposed has the potential to liberate nature from its supposed marginalised status by subverting the notion of excluded *otherness* by enabling opportunities for a negotiated cohabitation. The reasons for the neglect of non-human agents as the excluded other in environmental theory becomes evident considering this culture-nature dichotomy (Owen 2008, 40-56) (Soper 1995).

Can architecture be conceived as a literal interface to accommodate both nature and culture? The materiality that architecture uses are sourced mostly from natural sources. Whereas, its form and functions are culturally embedded. The ideological issue with this argument is that it further propagates the culture-nature dichotomy because of the insistence of exploitation of a passive body such as nature for the services of the *Anthropos* (Haraway 1991). This limitation is also can be seen as a challenge and opportunity to move the inquiries and discourses of sustainability from a minimal impact logic to a 'regenerative' agenda, which challenges the dualism of passive subject and dominant object bringing environmentalism with a larger socio-political dimension. Nevertheless, it is fascinating to see how much an established myth or superstition can ecologically

sustain an environment with equal involvement of social and cultural layers in a setting.

"Myths are dramatic in form, rituals persuade us by our own senses, lulling our critical faculties. We perform in rituals, and doing becomes mapping values of interlinked systems" (Myerhoff 1978:86, 163)

Aishwarya Goel's thesis on Unalienable land talks about how various social constructs such as myths and superstitions can be cultural interfaces for ecological practices.

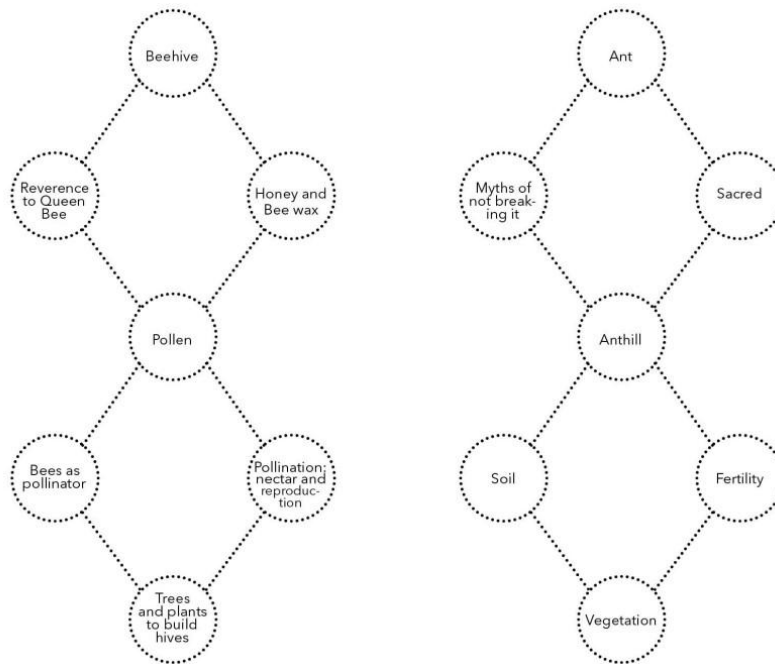


Fig 5. Socio-ecological construct: Cultural Interfaces as Practices (Goel 2020)

Conclusion

The research began with the argument in addressing the urgency of inclusion of various human and non-human stakeholders in the wake of the *Anthropocene* and the mass extinction it entails and was further reinforced by the works of anthropologists such as Donna J Haraway as a literary premise. It also defines the response-ability of architecture that would enable multi-species cohabitation. By identifying these empirical parameters and phenomenological observations in further studies with scientists and ecologists, that are rooted in specific contexts one can identify and understand exact conditions of growth. This enables a shift in design thinking that enables cohabitation which would subvert the insufficiencies of the anthropocentric thought processes. It further extrapolates qualities of spatial manifestation of posthumanist multispecies cohabitation that redefines the relationship between human and non-human and can be adapted into architectural thinking. Moreover, this thinking would not cause an erasure of culture-nature dualism but provide negotiable

boundaries for encounters with permeability, differences and unpredictability. (Sibley 2001, 239-250)

The posthumanist thinking of cohabitation has the potential to alter the ideologies and practises of allied fields for the better. For example, the field of conservation usually insists the building be pure to the context it was initially built, locking it in a time capsule. This would neglect the various adaptation and appropriations that happened over time as a result of changing needs and contexts. The research would hopefully leave you to ponder on these questions: Through multispecies cohabitation, is it possible to view the building as a sentient ruin? Constantly morphing, changing and queering, able to adapt and be inclusive. Can architecture be fluid and sentient, unshackling the volatilities of economies and social relations? Can we further subvert the dogma of man and his products having critical agency and sovereignty over the disregarded other?

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