



## Cohabitation: Subverting Anthropocentrism in Architectural Discourse

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# **Cohabitation: Subverting Anthropocentrism in Architectural Discourse**

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**Abstract.** The research situates itself in the wake of the widespread ecological crisis effect caused during the current geological epoch called the *Anthropocene*. This makes the *Anthropos* (humans), the superior agency in determining the planet's current sustainability and at the centre of the current earth's ecological system, putting them above the hierarchy. This is the basis of the word *anthropocentrism*, where everything revolves around the needs of the human. The research attempts to address the sovereignty humans enjoy in this current ecology of various humans and non-human actors and the potential implications of climate change and global warming caused by the carbon footprint the *Anthropos* have exerted on this terraform. The built ecology also becomes an important contributor to this increase in the ecological crisis. Even though much effort and inquiry have been made towards ecologically sensitive and resilient built ecology they remain as bucolic aspirations with material paradigms, organizational issues and resource distribution. Accommodation of other species which are not usually domesticated has not been addressed within the current paradigms of architectural discourse. Can we subvert this *anthropocentrism* in our built ecology to create a cohabitation environment that is inclusive of various species each in symbiosis bringing their own set of benefits? The research stems from this ideal and banks on the fearless feminist and post-humanist enquiry of Donna J Haraway in "*Staying with the Trouble: Making Kin in the Chthulucene*" and the idea of Terrapolis where architecture becomes an n-dimensional space which is inclusive of various human stakeholders, but also non-human species and inorganic agents to create a cyborgian-prosthesis framework. Even though these ideas may seem radical, the research attempts to ground them in reality by taking existing precedents as models of enquiry and reappropriating them into architectural thinking and discourses. These precedents also include the author's architectural design explorations to address the ecological problems and their resilience through intersectional enquiry, considering social, political and ecological factors.

**Keywords:** Cohabitation, Anthropocene, Queer, Built Environment, Ecology.

## **Anthropocentric Paradigms in Architectural Discourse**

The *Anthropocene* is a geological epoch that was conceived as a concept in light of the level of human impact on the earth's geomorphology. This situates the *Anthropos* (humans) as the superior agency in determining the planet's current sustainability and at the centre of the current earth's ecological system, putting them above in the hierarchy. This is the basis of the word *anthropocentrism*, where everything revolves around the needs of the human. This idea of anthropocentrism and its myriads of complex materialist ontology tends to give sovereignty to humans within the complex ecology of humans and non-human actors and is dismissive of the absolute truth (Ferrando 2016, 243-256). The research is situated in the context of potential implications of climate change, global warming and loss of urban species. Some of the events that have unfolded during this proposed epoch are acidification, ocean warming and rapid coral reef ecosystems depletion.

*“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 a 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”* (Corbusier 1987). 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 and address the issue of extensive carbon footprint production. 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 queer-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 both other humans as well as 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, and interpretations, a chimaera of materialities, where architecture becomes the agent to make kin. Every human, non-human agent and the 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*

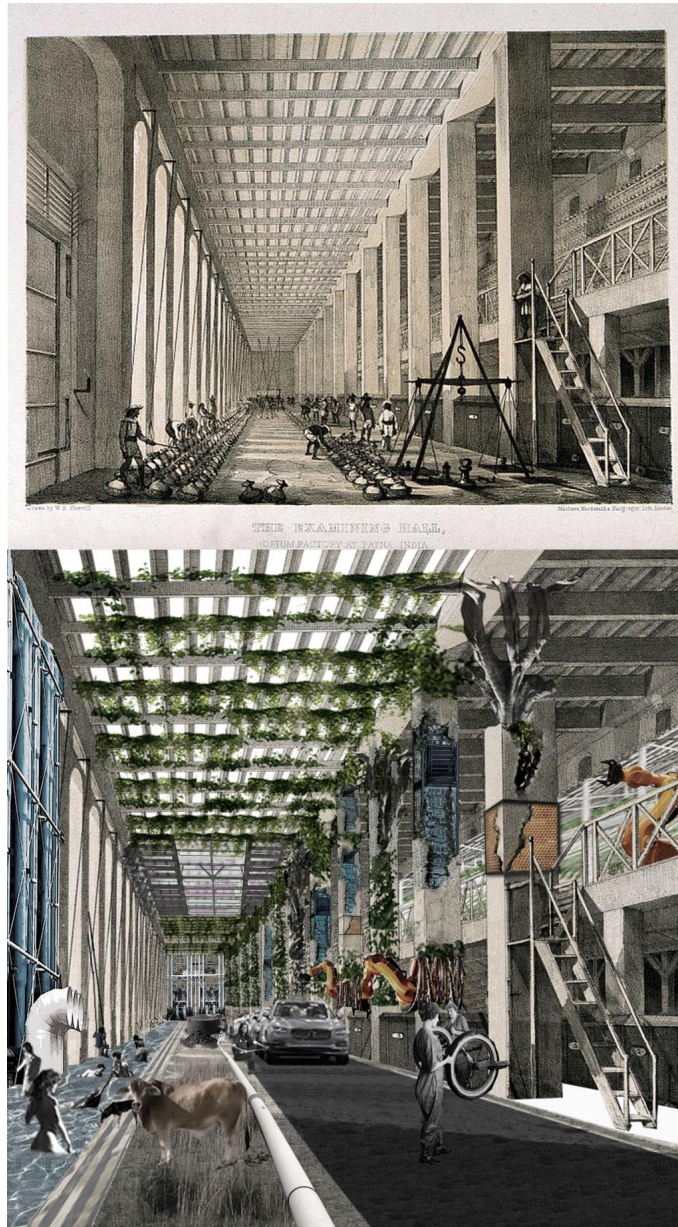
*Ω (omega) = recuperating terra's pluriverse*

*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 often removed elements such as dirt. These physical qualities of terrapolis are taken forward primarily from the phenomenological reading of the site and context which has the potential to derive architectural parameters for cohabitation.

## Architectural Interpretation of Terrapolis: Post-Humanist Illustration



**Fig 1.** *Source:* An Anarchistic Production by Author (*Source:* Aswin Senthil 2021)

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 and drawings of the factory, an artist's illustration is made of the ways in which the building might transform given the ecological distress that the world is undergoing considering a post-humanist discourse.

In the initial illustration, Opium Factory is depicted as a product of colonization 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)

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. For example, Baubotanik uses living trees as structural members to house architecture which was inspired by Meghalaya's tree bridges, thereby making the structure part of the carbon cycle in a better and ecologically sensitive way. (Oommen 2015)



**Fig 2.** Baubotanik Architecture | Shows the integration of trees as structural members for inorganic architecture. Inspired by Meghalaya's Aerial Root Bridges. (Source: Archdaily)

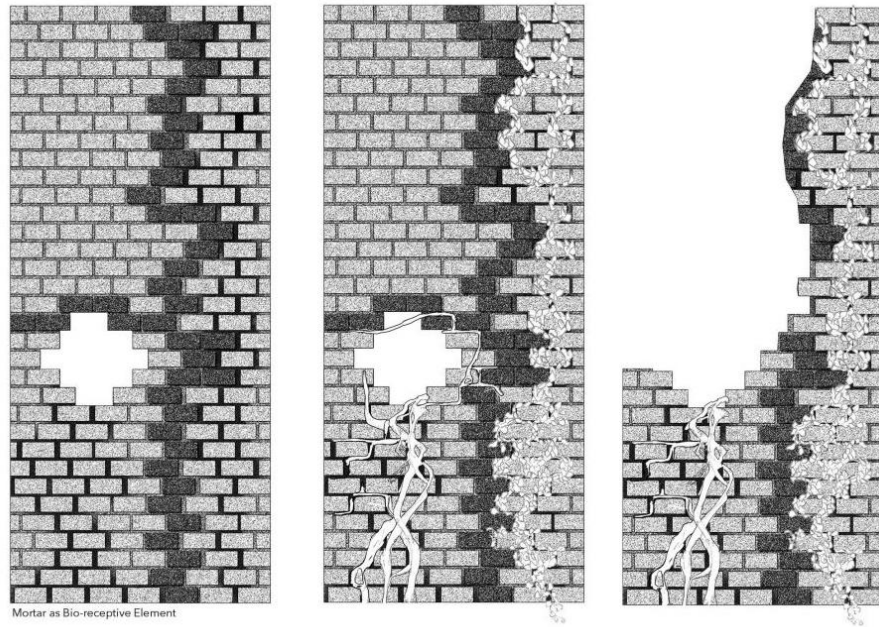
## Phenomenological Interdependencies

Seeing architecture as a Terrapolis enables us to recognize these interdependencies between reachable and nearby actors. They may be self-organized phenomenologically, as a result of accidental and available proximities of various actors, their origins and causes, directions taken, alignments offered, and familiarities forged. 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 are 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 encounter 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, 121). 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 and uncertain process. (Aswin Senthil 2021)





**Fig 3.** Mortar as a bio-receptive element and Brick protrusion to control biological colonization (Aswin Senthil 2021)



**Fig 4.** Mortar as a bio-receptive element and Brick protrusion to control biological colonization (Aswin Senthil 2021)

## 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 inform 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. Anna Tsing in her anthropological works insists that contamination and dirt are extremely necessary for collaborative survival.

*“How does A gathering become A “happening,” that is, greater than a sum of its parts? One answer is contamination. We are contaminated by our encounters; they change who we are as we make way for others. As contamination changes world-making projects, mutual worlds—and new directions—may emerge.”* (Tsing 2015, 27)

Every species require collaboration to survive, even the ideas of domesticated animals were 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.

## Need for Ecological and Social Intersectionality

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, 27)

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 one of my ongoing researches of the informal settlements of Foreshore Estate, a fisherfolk community in Chennai, 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 can sustain themselves but are also domesticated as pets. This documentation is possible only through the phenomenological reading and mapping of the site. More formally designed areas and sites tend to strip away these coalitions and the agents that enable them. The informality of human settlements becomes essential for such interdependencies to exist. (Aswin Senthil 2022, 37-43)

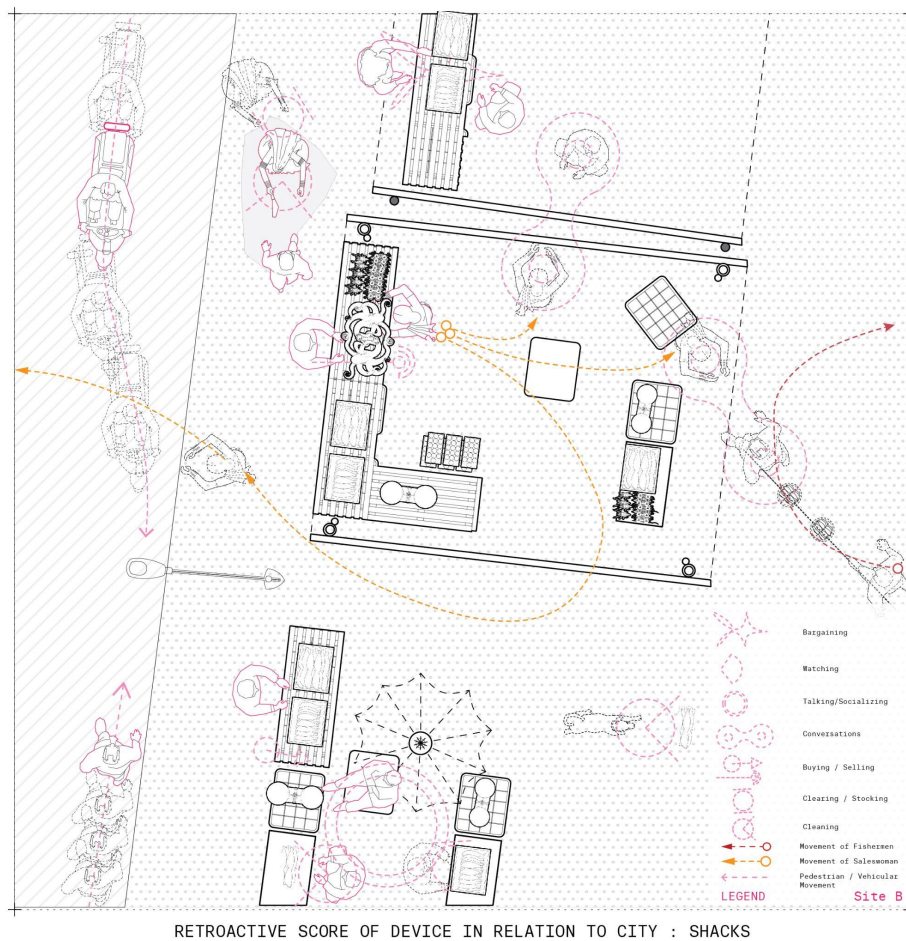


Fig 5. Phenomenological mapping of Foreshore Estate (Aswin Senthil 2022)

*“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)*

Why does it become critical to discuss social and economical factors concerning the built environment, intersectionally with ecological factors? In another ongoing research, I’ve been part of in collaboration with CitiStrata in Chennai, it has been noted that these informal ecologies to ecological fragilities. This contributes to the reason why slums are cheaper to live in. It becomes imperative to look into the Marxist concept of *primitive accumulation* where social or ethnic groups which historically have a better standing in society take advantage using hereditarily accumulated wealth over the socially or economically dispossessed groups.

*“..entailed taking land, say, enclosing it, and expelling a resident population to create a landless proletariat, and then releasing the land into the privatised mainstream of capital accumulation.” (Harvey 2005, 149)*

The groups with ethnical privilege such as upper castes and ethnical races use their accumulated capital to occupy desirable and profitable areas in a city and push the ethnically and economically vulnerable to the less desirable parts of the city which are plagued with ecological fragility. These regions are typically vulnerable to disasters such as floods and earthquakes or diseases. For example, the fisherfolk communities in Chennai live in close proximity to the sea. Even though they require this proximity, they are more vulnerable to the effects of rising sea levels, cyclones and flooding. Moreover, other slums in Chennai can be noticed to be adjoining the extremely polluted rivers of Koovam, Adyar and Buckingham Canal making them more prone to disasters such as flooding, landslides and also water and airborne diseases.

### **Precedents of Spaces Subverting Anthropocentrism**

The mapping of Foreshore Estate further revealed how the spaces are queered through the constant adaptation and appropriation of the nomadic structures such as fisherman shacks, which encouraged hybridization of programs, and territorial ambiguity, which creates opportunities for negotiations and blurs binaries and produces shared spaces in the form of urban commons. These structures also give agency to the users and sellers who can constantly build and unbuild the structures frugally through available materials. These structures are of human scale and enabling them to incrementally grow. The ongoing research further indicates that the lessons of informality can be easily applied in formal environments (Aswin Senthil 2022, 37-43). The urban informality that fosters the *dirtiness* and agents of coalitions can easily exist within the crevices of the formal built environment as demonstrated by my social design

project called *Angaadi* in Chennai for Prayogshala x 13thParallel. It is a farmers market built of recycled and reused materials similar to the fisherman shacks in Foreshore Estate which inserts itself within a formal residential colony. (Prayogshala 2021)

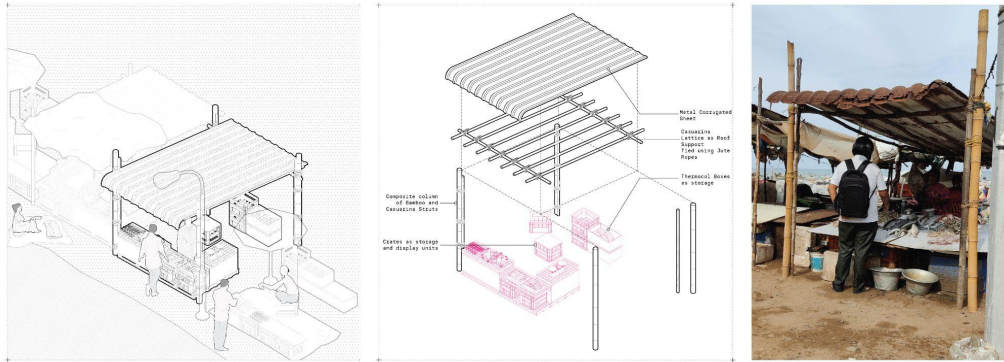


Fig 6. Nomadic Device -Fish shacks in Foreshore Estate, Chennai. (Aswin Senthil 2022)

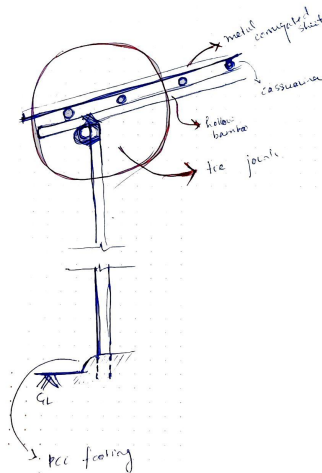


Fig 6. Nomadic Device and Drawings by Aswin Senthil -*Angaadi* - Social Design by Prayogshala x 13thParallel. Source: (Prayogshala 2021)

To take forward the above-mentioned ideas of *dirtiness* to an urban scale, a space much similar to dirt, neglected and usually removed and considered to have a non-essential character are the 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 toward 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 colonization and 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 and Boer 2019)

## **Resistance to the Hypothesis**

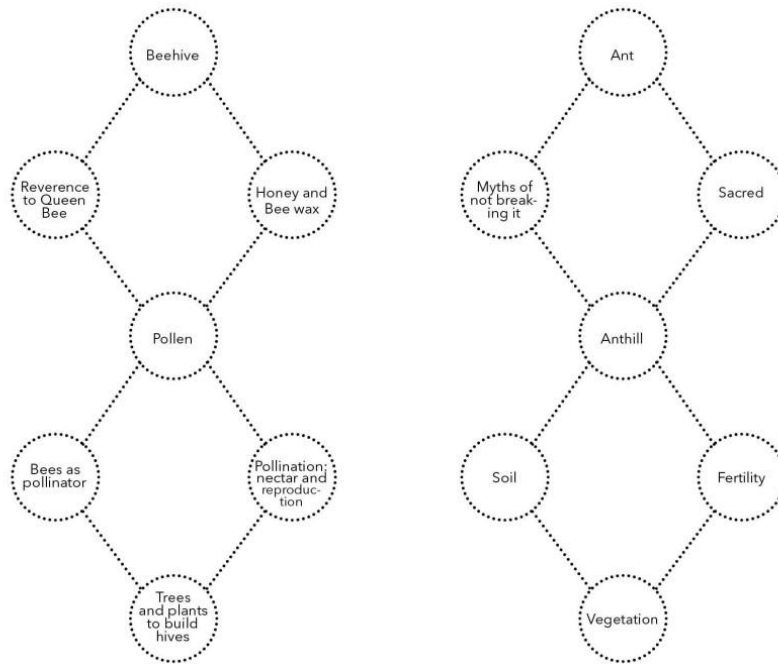
The research initially addressed that the current inquiries and paradigms of architectural discourse especially with regards to ecological resilience and conservation are highly contested because of contradictory certainties of interpretation of social and environmental fragilities. These contradictions are often dismissed because nature is generally considered as an unproblematised ‘other’ that is exclusive of culture (Soper 1995). 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 become evident considering this culture-nature dichotomy (Owen 2008, 40-56).

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 on the 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. (Goel 2019)



**Fig 5.** Socio-ecological construct: Cultural Interfaces as Practices (Goel 2019)

## 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 the 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. This thinking will also enable us to act intersectionally, considering ecological, social, economical and political factors. 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 elitist man and his products having critical agency and sovereignty over the disregarded other?

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