

Teaching Posthumanist Site Analysis

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Site analysis is a process of discovery. It is the moment in a project where conditions and experiences are studied to create key insights and constraints, informing the rest of the design process. To fully uphold an architect's responsibility to the global community, site analysis must move beyond its basis in humanist, and human-centric, philosophy to establish design priorities and constraints that respond to the needs of humans and the full biosphere in which we live. Posthumanist site analysis responds to human experience, but not solely, decentering it among studies designed to expose the needs and experiences of multiple species and processes interacting with, or impacted by, the terrain marked off as "site".

When learning how to conduct site analysis, students' sense of self-awareness—and how they think about reality—forms the basis of how they perceive, understand, and assess those existing conditions and potentials. Teaching posthumanist site analysis, then, calls for a teaching method that builds students' sense of self-awareness with a new mode of thinking about what the site is and what it can be. Informed by an inductive pedagogy, three key steps for this teaching method are proposed.

By laying the groundwork to create the cognitive context of posthumanist site analysis, we enable students to form a rationale for site and context investigations based on posthumanist philosophy that they can then sharpen, critique, and draw meaningful conclusions from to inform their further design process. This approach supports a fuller understanding of the reality of the site, allowing students to address the actual circumstances of participation, cohabitation, networked relationships, and shared habitats in which they are working. Creating a new relationship between the student and the environment ultimately supports reforming relationships between people, architecture, and ecosystems.

POSTHUMANIST SITE ANALYSIS

Site analysis is a process of discovery. It is the moment in a project where conditions and experiences are studied to create key insights and constraints, informing the rest of the design process. When learning how to conduct site analysis, students' sense of self-awareness—and how they think about reality—forms the basis of how they perceive, understand, and assess those existing conditions and potentials. In his seminal instruction to students of architecture, *Site Analysis: Diagramming Information for Architectural Design*, Edward T. White posits that "The major role of contextual analysis in design is that of informing us about our site prior to beginning our design concepts so that our early thinking about our building can incorporate meaningful responses to external conditions."¹ In the decades since White's publication, we've seen the human-centric, centralized approach he presented expand through research that—like the shift from humanist perspective to axonometric (or oblique) in early modernist design studies—decentralizes our mapping of experience to more fully expose networked conditions of human occupation within an environment. These decentralized site investigations often question boundaries and the relationship between what is considered "site" and what is considered "context". Still, while decentered from a design project site, they remain measures of human experience that are thoroughly anthropocentric and based in humanist philosophy. We can see a clear shift in the understanding of "sites as active networks" over time, but what new questions still need to be raised about site analysis in our posthumanist age?

While human rights values originating from humanist philosophy are held dear, anthropocentrism and its presumptive structures of power have, in many cases, been left behind.² To fully uphold an architect's responsibility to the global community, site analysis must move beyond its basis in humanist, and human-centric, philosophy to establish design priorities and constraints that respond to the needs of humans and the full biosphere in which we live. Posthumanist site analysis responds to human experience, but not solely, decentering it among studies designed to expose the needs and experiences of multiple species and processes interacting with, or impacted by, the terrain marked off as "site". We must move from the left diagram of figure 1, where

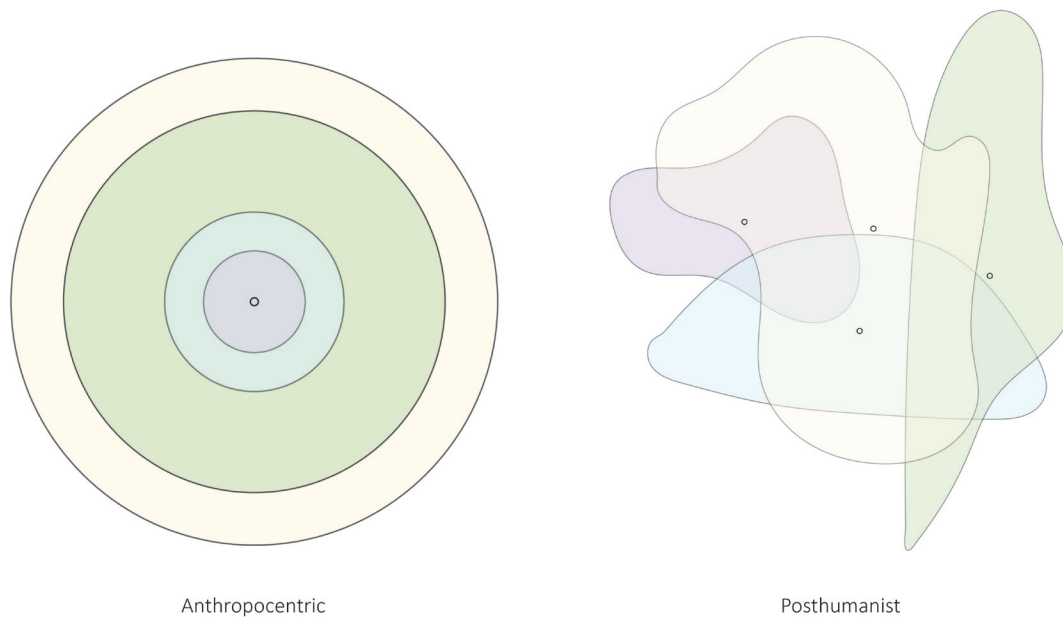


Figure 1. Anthropocentric and Posthumanist Thinking.

all conditions, activities, and experiences are thought of from a human point of view, to the right diagram where the reality of conditions, activities, and experiences from multiple subjects and processes are more fully understood. Ultimately, the insights, constraints, and priorities gained inform posthumanist design, one site at a time, ecosystem by ecosystem.

TEACHING POSTHUMANIST SITE ANALYSIS

Teaching posthumanist site analysis, then, calls for a teaching method that builds students' sense of self-awareness with a new mode of thinking about what the site is and what it can be. Informed by an inductive pedagogy, three key steps for this teaching method have been developed for second-year Bachelor of Architecture studios:

1. Fostering an expanded sense of self-awareness in students through critical literature reviews
2. Creating a dynamic reflection process for students—alternately collaborative and individual
3. Prompting a set of written inquiries, one for each proposed site study

By laying the groundwork to create the cognitive context of posthumanist site analysis, we enable students to form a rationale for site and context investigations based on posthumanist philosophy that they can then sharpen, critique, and draw meaningful conclusions from to inform their further design process.

This approach to teaching posthumanist site analysis builds on two key concepts. Foundational to this work is the understanding

Gomez-Luque and Jafari discussed in *New Geographies 09: Posthuman* that posthumanism is not a new or future circumstance.³ We live in a posthumanist world and posthumanism seeks to know how we exist, presently. A second premise comes from Cary Wolfe's text *What is Posthumanism?*⁴ where he clarifies that posthumanism is not a wholesale rejection of humanist philosophy. Instead, it seeks to learn from humanism while exposing the destructive engines it generates. Posthumanism offers a way of thinking about how humans exist within an environment of non-anthropocentric conditions, decentering human priorities to more fully expose the reality in which we live. Doing so does not call for human experience to be diminished. Instead, it frees us to reverse architecture's destructive effects by creating built environments that are shared and rehabilitated.^{5,6} Figure 2 shows the overarching "both-and" relationships between humanist, posthumanist, and environmental sustainability site studies. Some sustainability studies focus on human comfort, while others prioritize symbiosis or the health of the environment over human processes, and human focused site investigations can be both within and outside of a posthumanist approach.

CRITICAL LITERATURE REVIEWS

At the second-year, arguably any, level, assigned readings form a crucial part of the learning process for students of architecture. In many ways, texts provide a kind of problem statement and become the cognitive context for the work of the studio as a whole—they prompt students to take positions, reason through dialog and exchange, and carefully select resources and information to inform their work. This is especially true for a studio that aims to develop posthumanist design work. Students must first ask, and answer, "What is posthumanism?" and "What kinds of

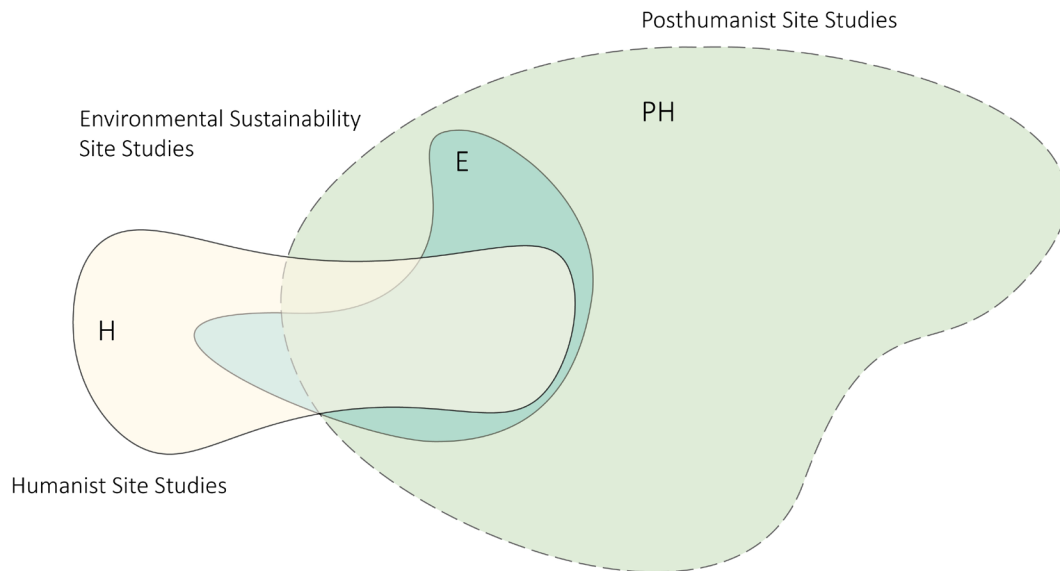


Figure 2. Site Study Type Relationships.

questions does posthumanism raise for architectural design?" before their first design concepts are drafted and developed. It can be helpful to assign texts in two stages—first to ground the studio in the terrain of posthumanism and then, later in the semester, to regroup with a second reading assignment, clarifying intentions and raising more pointed questions. Another helpful strategy is to group texts into two sets—one required, and one elective. The required set provides common ground while the elective set promotes debate and collaboration in studio discussions. Assignment prompts also support students' development of their own knowledge and positions throughout the semester. They can begin with close reading prompts such as "How might the author's comments relate to the formation of a design process? What would be prioritized?" and later raise more precise questions prompting consideration of site, client, program, and the student's design concepts.

Each of the texts discussed here plays a role in fostering an expanded sense of self-awareness for students and helps to establish the cognitive context for posthumanist site analysis. Far from a definitive list, this selection offers a set of resources that can be readily adapted for a variety of conversations within posthumanist design.⁷

What is Posthumanism?

In *What is Posthumanism?* Wolfe clarifies the relationships between humanism and posthumanism and between different uses of the terms posthumanism, posthuman, and transhumanism. He begins by calling on Michel Foucault's bracketing of "the historical appearance of this thing called 'man'"⁸, drawing out the cultural construction of such concepts as "man" or "human" by

way of "a change in the fundamental arrangements of knowledge"⁹ and leading to Foucault's statement that "man is an invention of recent date"¹⁰. A second "genealogy" for Wolfe's use of the term "posthumanism" involves a discussion of cybernetics, forming "a new theoretical model for biological, mechanical, and communicational processes that removed the human and Homo sapiens from any particularly privileged position in relation to matters of meaning, information, and cognition."¹¹

Wolfe ties transhumanism firmly to rational humanism as an idea based on the concept of human perfectibility. In this line of thought, transhumanism, sometimes referred to as posthumanism, uses the term to mean "beyond human" or "after human". With the discussion of Foucault, Bostrom, and others, Wolfe elucidates the difference between the "beyond Homo sapiens" theories of transhumanism and the "beyond humanist" philosophies of posthumanism.

For students of architecture, key themes of posthumanist thought provided in the "Introduction" to *What is Posthumanism?* are:

1. Recognizing and understanding "the decentering of the human in relation to either evolutionary, ecological, or technological coordinates"¹² and "engaging directly the problem of anthropocentrism".¹³
2. Realizing "what thought has to become" and the need for "a new mode of thought that comes after the cultural repressions and fantasies, the philosophical protocols and evasions, of humanism as a historically specific phenomenon."¹⁴

3. Erasing the dichotomous separation of humanity and animality and the elimination of speciesism.^{15,16}
4. Understanding posthumanism as both ahistorical and current in that it “names a historical moment in which the decentering of the human by its imbrication in technical, medical, informatic, and economic networks is increasingly impossible to ignore, a historical development that points toward the necessity of new theoretical paradigms.”¹⁷
5. Establishing the relationship between posthumanist and humanist philosophies. Posthumanism offers a critique of humanist philosophy, often showing how even its more admirable “aspirations are undercut by the philosophical and ethical frameworks used to conceptualize them.”¹⁸
6. Offering a decentered understanding of human experience and perception of the world—of reality—as one perception among many—that “neurophysiologically, different autopoietic life-forms” create their own reality and that “in doing so, the environment is thus different, indeed sometimes radically different, for different life-forms”. As such, “the world is an ongoing, differentiated construction and creation of a shared environment, sometimes converging in a consensual domain, sometimes not, by autopoietic entities that have their own temporalities, chronicities, perceptual modalities, and so on.”¹⁹
7. Enabling a description of “the human and its characteristic modes of communication, interaction, meaning, social significations, and affective investments with greater specificity.”²⁰

New Geographies 09: Posthuman

In *New Geographies 09: Posthuman*, Mariano Gomez-Luque and Ghazal Jafari write that posthumanism is not a new or future circumstance.²¹ It is our context and the more visible we make it, the more precisely we can respond. Explicitly connecting past, current, and emerging posthumanist conditions with “geographies” of design, they expose a breadth of impact and capacity for reframing non-anthropocentric sites and contexts.²² Each text in the volume offers the opportunity to expand awareness of the sometimes interacting, sometimes not, layers of reality described by Wolfe.

Silent Spring

As discussed in “Why Posthumanism?”²³ and “Envisioning for Posthumanist Design,”²⁴ Rachel Carson’s 1962 alarm bell, *Silent Spring*, sets off with three key paradigm shifts—in her audience’s experience, in scales of time, and in our understanding of the human body. She first transitions the audience’s experience with anthropocentric descriptions giving way to posthumanist assertions and language.^{25,26} Scales of time also shift from human perception and bodily time to evolutionary and geologic

scales—with this Carson identifies what would later be called the Anthropocene, stating “Only within the moment of time represented by the present century has one species—man—acquired significant power to alter the nature of his world.”²⁷ And through the first two chapters of *Silent Spring*, Carson introduced a new, decentered, understanding of the human body—not as an independent, self-contained object—but as inseparable from, and participating in, the larger environment.^{28,29}

A Contradictory Mandate?

“The National Park Service Act of 1916: A Contradictory Mandate?”³⁰ by Robin Winks dissects layers of anthropocentric meaning and intent in a historical analysis of the 1916 Act of Congress creating the US National Park Service.³¹ This look into the perceived tension between conservation and human enjoyment within the primary, defining, purpose of the National Park Service brings to light layers of human-centric motives and those that decenter human beings in policy debates. His analysis reveals the anthropocentrism of arguments for using the “productive” “resources” of national park lands—diverting or damming river water, cutting forests for timber, and grazing “livestock” for food—versus recreational uses of park lands by individuals or groups—and contrasts these with historical arguments for protecting the entire ecosystem within park bounds. Winks untangles the controversy and shows that the primary mission of the national park service is, and always was, conservation. But in doing so, he bifurcates the stated reasons for conservation—one branch thoroughly human-centric, the other, moving toward policies that decenter human beings in order to prioritize others and the natural environment. The human-centric branch calls for the conservation of “scenery” and “historic objects” with the other branch conserving “the natural...objects” and “wild life” within the parks. “Scenery” itself is further bifurcated. The section “What is Scenery?”³² is key to Winks’ argument and exposes the inherent anthropocentrism of terms used to describe what exactly is being conserved (and “enjoyed”) in national parks where Winks points out that the “sense of ‘scenery’—that it represented a viewpoint, or perspective, that was wholly to be determined by humans—is reinforced when one notes the second definition, ‘the painted backdrops on a theatrical stage.’” He points to how the policy defines the human relationship with nature to ensure human enjoyment of the scenery, the “aggregate of features” within a view or vista—not the of the park itself. His reading, then, ultimately exposes the anthropocentric motivation behind creating the park service while also decentering human occupation of park lands and describing human use through vantage points. We can look, but not disturb, or, in the language of the 1916 Act, “impair”. The text offers students the opportunity to see and distinguish between humanist and posthumanist motivations, to create criteria for reasoning between the two (despite their conflation), and to recognize the philosophical underpinnings of intent and debate in US policymaking.

The Trouble with Wilderness; or, Getting Back to the Wrong Nature

As discussed in “Envisioning for Posthumanist Design,”³³ two themes in William Cronon’s “The Trouble with Wilderness,”³⁴ support posthumanist site analysis. First, his argument makes the humanist dualism of man–nature or artificial–natural irrelevant. His critique of the “complex cultural construction called wilderness”³⁵ does not argue that we occupy wilderness, instead, he erases the conceptual dualism that has kept “nature” idealized, separate, and remote from people. By removing the territorial boundaries around civilization and nature, his text prompts a discussion of shared environments for students of architecture. A second theme decenters the human, acknowledging the “autonomy of nonhuman nature.”³⁶ Together, these two themes reframe “sites,” not just as places of use or potential, but as places of responsibility.

DYNAMIC REFLECTION PROCESS

With this approach, it’s helpful to distinguish between the two sets of reading and reflection. The first reading assignment is an opportunity for students to take notes and annotate their set of required and elected texts and then write a one-page statement discussing the impact various positions toward posthumanism have on making design decisions. Writing this statement prepares students for in-class discussions and offering students topic prompts facilitates the formation of discussion groups.

First Reflection Outcome

In one case, topic prompts focused on developing an understanding of the term “posthumanism”, how the term was used in the course, and what impact posthumanist philosophies might have on design and design thinking. Each group then led a class discussion on their topic, resulting in a new vocabulary set of designations for the posthumanist design approaches discussed. The set included: *shared ecosystem, human- and ecosystem continuity, cohabitation / shared environment, habitat restoration/creation, symbiotic building + occupied environment, timeless/flexible program, leave no trace / minimized disruption, deference to, resiliency + flexible interaction with natural systems, nonpolitical geographies, and judicial use / off the grid.*³⁷ These designations were considered fluid and the language created helped to hone student’s thinking for their final posthumanist site study proposals later in the semester.

Second Reflection Outcomes

In multiple semesters, detailed reading prompts were used with the second set of texts at midterm. In one case, students were asked to consider how many types of co-present territories might be present at the site, what scales of time exist in the site, what subjects are being designed for, what outcomes or performances are being designed for, how decentering of the human condition is taking place, what priorities have been suggested, and how those priorities relate to architectural design.

Students formed discussion groups that led to a larger class discussion³⁸ and themes developed around how site concepts are constructed, how time exists within a site, and human/non-human circumstances.

The “site” discussion group started by contrasting human and non-human site conditions. Students questioned how sites are conceptually constructed for humans, formally—through policy, legal definitions, and infrastructure; informally—through culture, community, and territories; and technologically—through data and access to information. These ways of understanding or identifying the site were contrasted with non-human site conditions and boundaries created by migration patterns, animal movements, plant biomes, geologic construction processes, soil structures, light levels, solar paths, air flows, watershed flows, various types of habitats and non-human technology. William Cronon’s text was pivotal as students then turned to question the binary structure of their discussion (human/non-human) and began working a direction that explored “What players/actors/subjects/agents/ processes exist and how are they interacting?” Site conditions were then discussed in terms of the biosphere the site is embedded within.

Scales of time as they exist on a site became the next topic of discussion. Students weighed time in terms of types of occupational time—such as work, life, and leisure; lifespans and the experience of time—human and other species lifespans, geologic time, solar and lunar time, seasonal time, and the perception of time; and designated time—such as days of the week or holidays—and how it affects others. They questioned how coexisting time frames could be studied within a site, thus starting to erase distinctions between site and program.

The “program” group led discussions on client and co-client types, programmatic responses to each client group, and the outcomes or performances being designed for. People—project clients and community members—and non-humans—animals, plants, fungi—were discussed as client groups with design performance measured for cohabitation within the site. Building on the discussion of time, future inhabitants of the site also became client groups. Program outcomes for the future selves of human inhabitants, different human occupants over time, and the future needs of plants and animals within the site led to programs prioritizing flexibility, adaptability, and variations in permanence. Past or potential inhabitants became another focus, creating programs to support endangered species and address habitat loss. Program was discussed in terms of multiple scales of site: the immediate site—its access, circulations, priorities; the site embedded within the surrounding environment—continuous water flows, tree canopies, habitats; and the site within a global context, contributing to the impact of compounded habits.

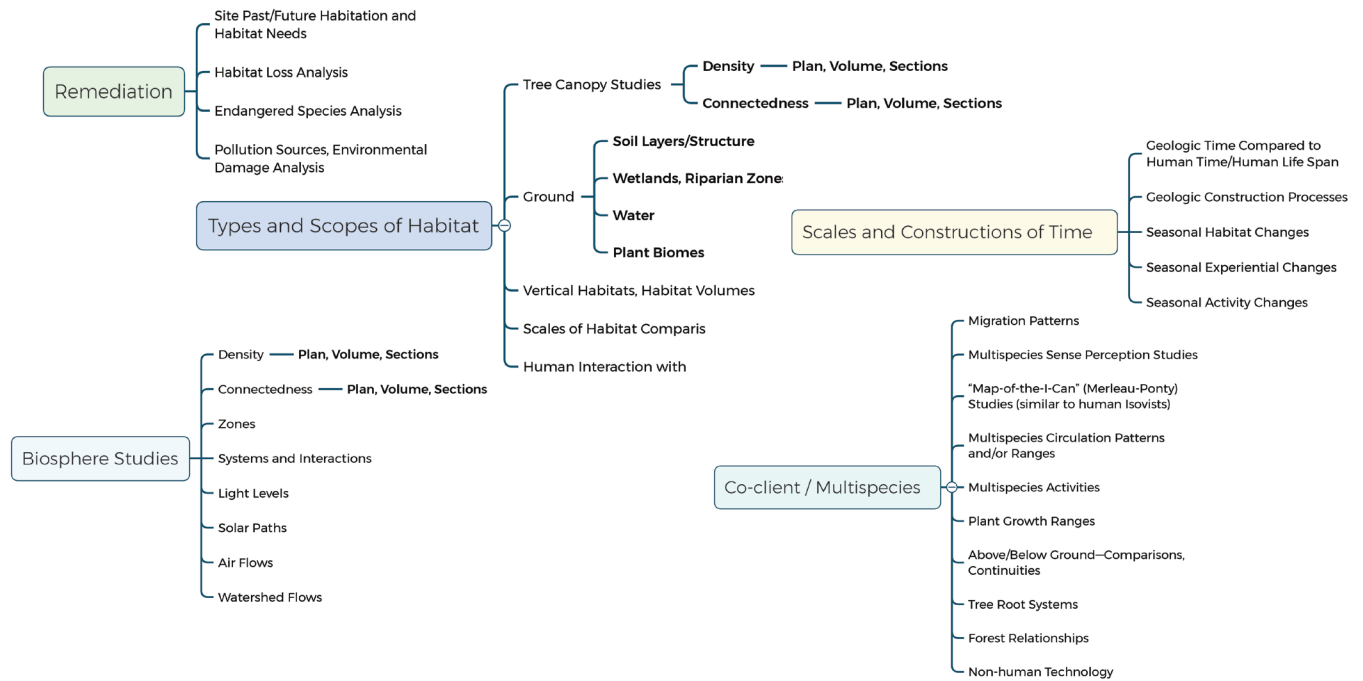


Figure 3. Posthumanist Site Study Topics. (Drawn with Xmind. V 22.11(3771). Mac OS. 2023.)

The discussion concluded with thoughts on how posthumanist priorities could inform various design processes and the artifacts of design (drawings, models, constructions, etc.). Students began to work with layered studies to expose overlapping “sites” or “worlds”³⁹ existing with the site or explored multiple, coincident scales for various client groups. Phenomenal, experiential drawings and design processes began to include sense perceptions of wild animals, domesticated animals, and plants. Ultimately, the studio discarded many of the distinctions between site, client, and program for their design work.

SITE STUDY PROPOSALS

Creating written proposals for each site study is the third key step to teaching posthumanist site analysis within an inductive pedagogy. In this project phase, students were asked to create a procedure for each site and context study, establishing: the goal of the study, the study’s constraints and process, the graphic media used, and the study’s format. Each study was a series of five to seven observations, although the actual number of layers, times, incidents, actions, conditions, etc., observed was based on the reasoning of the proposal.

Outcomes

Between multiple studios, posthumanist site studies have been proposed to investigate human and multispecies experiences and activities within the site and surrounding areas, to understand the history and potential of the site in multiple time frames, and to learn about the site’s participation in its biosphere.

One study contrasted human time to geologic time on the site, decentering the human narrative about site features. Another explored movement and growth patterns for existing site vegetation. This study established constraints for the buildable area of the site and the project and site were designed as a whole, to grow and change over time. Other studies sought to establish existing nonhuman movement and activity across the site’s context. Habitats were studied across the site’s context in plan and with site sections or photo studies. One example established vertical zones of use and activity within a site, while another identified radically different site conditions, and design constraints, that changed seasonally with deciduous trees and migrating birds. Watershed flows across the terrain and human infrastructure also overlaid tree canopy boundaries to understand relationships between light, water flows, and habitat within the site so that the project could be designed to maintain environmental continuity. One study investigated historical changes to the site’s terrain over time and mapped regional human-generated habitat declines associated with an endangered bird species. The project was designed to reintroduce its lost habitat and support the endangered species’ activities, creating an architecture for them. Another student analyzed site color pallets from multiple species’ visual perceptions and developed color pallet zones across the site, responding to three species’ heights and activities, that informed the final design proposal.

CONCLUSION

Figure 3 provides examples of site study topics drawn from this work, grouped as either *Biosphere Studies*, *Remediation*

related analysis, *Types and Scopes of Habitat* studies, *Co-client/Multispecies* studies, or *Scales and Constructions of Time* studies.

Posthumanist site analysis recalibrates students' understanding of the biosphere, biomes, material circumstances, processes, and constructions of "site" in the location of their projects. This approach supports a fuller understanding of the reality of the site, allowing students to address the actual circumstances of participation, cohabitation, networked relationships, and shared habitats in which they are working. Creating a new relationship between the student and the environment ultimately supports reforming relationships between people, architecture, and ecosystems.

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