A More than a Human Mantra: Hybrid Futures for a Vanishing Frontier
848126 PJ Design Studio 2: Jade Bailey & Daria Smakhtina

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Ornithographies
Xavi Bou, photographer
of bird flight patterns
(2024).

Brief

True wilderness is hard to come by. For thousands of years, human progress has coincided, not coincidentally, with the relentless transformation of our natural environment. We have and continue to cut, burn, cultivate, and exploit the Earth's resources at an alarming rate in pursuit of survival, comfort, and advancement. This detrimental cycle has left important ecosystems unable to repair themselves and be forever altered.

The notion of wilderness reaches beyond untouched natural landscapes; it envisages a place where there has been little to no human interference. However, as we continue searching for more commodities, new space for human dwellings, and survivable climates, coupled with the globally encompassing effects of climate change, we start to eradicate the occurrence of true wilderness.

As we rely heavily on our natural landscape for survival, damaging them so irrevocably seems counterintuitive. Especially when the well-being of our planet and those we share it with are inextricably linked with ours. Effectively maintaining, re-cultivating, and expanding areas of true wilderness requires a fundamental shift in how we value and interact with our environment. Boding the question: How can we begin to understand, protect, and restore the delicate balance of life in these environments and re-introduce them into our urban realms through architectural edifices whilst designing for an entangled, human and non-human future?

Through this lens, the studio will explore architecture as a sensory machine that evolves from the characteristics of the selected site. We will investigate how to gather, respond to, and communicate ecological and sensory data through technological apparatus and architectural solutions. Within a conceptual framework, students will reflect on the current context of wilderness and imagine spaces for the present or future scenarios. Embracing experimental and novel approaches to architectural form finding, construction and inhabitation. Developed by experimenting with digital software to establish an alternative architectural design mode that combines high and low-tech techniques to inform sensitive and adaptive concepts to re-imagine and reestablish wilderness through architecture.

Students will work in groups to develop and apply building design strategies focusing on re-imagining and cultivating wilderness. The objective is to design an enclosed space by delving into an interspecies narrative that nurtures a dual agency of architectural and ecological programmes. Students are asked to design small-scale research centres specifically designed to cater for a chosen inter-species interaction, by exploring the principles of temporality, seasonality and inter-species behaviour patterns. Special attention should be paid to how materiality, frequency of inhabitation, and the life span of architectural layers play a role in creating these structures. Embodied with a 'small is beautiful' ideology, there should be a craftship to create intricate, sensitive, environmentally adaptive and conscious architectural structures promoting ecosystem resilience.

Methods
The 15-week-long studio is roughly structured into the following steps:

Research
- Select and understand the site by exploring the boundaries and characteristics of 'wilderness'.
- Simultaneously research an interspecies relationship and behaviour that will be the centre point of the narrative-driven project that has a past, current or predicted connection to the site.
- Allocate a type and method of data gathering, (remote and local sensors, satellite data, camera-traps, GPS collar-tracking, bio-acoustics recorders, etc.), to inform precise mapping and indicate the timescale of the project
- Collect available data, document, analyse and catalogue/visualise its qualities. Completed through model making and digital drawings

Concept development
- Consider the dichotomy and suitability of high and low tech approaches to design, materiality, how to gather and simulate data as a means to experiment with spatial typologies.
- Use an iterative design process to develop subtle and sensitive solutions using adaptive and data-drive design strategies. Informed by analysis of precedents, research, and formulation of architectural concepts.
- Designs should be directly influenced by the evolving narrative, therefore, the programme, and design will work hand in hand to 'rewild' certain domains through sensorial mediums.
- Focus is directed towards designing for changing seasons, life cycles and necessity. In result growth and decay/disassembly should be addressed.

Production
- Map behaviours and data that will directly influence the composition and location of the architectural proposals
- Renderings or animations showing the performance of the object across the seasons and timescale
- Digital drawings (plans, sections, details) for one or a number of the evolutionary stages.

Work will be undertaken predominantly in 3D, with an advocation towards the use of animation as a primary method of storytelling or a series of renders to showcase the performative nature of the design. Scaled drawings of components and spatial configurations will be coupled with model-making throughout the semester.
Final drawings will include (site map, plans, sections, details) of the proposed design at a particular point in time or a number of states.
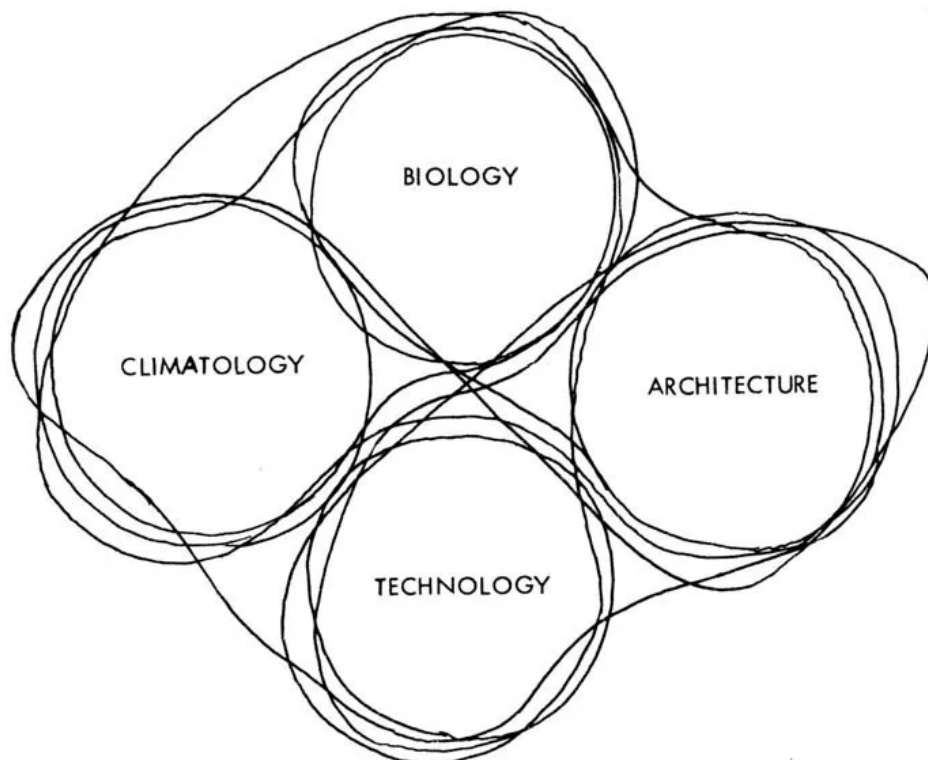
Interlocking Fields of Climate Balance.
Diagram by Victor Olgyay in his book Design with Climate (1963).

Site

Students will select a site from a given selection that has a ranging degree of wilderness characteristics.

Evaluation criteria

• Innovative design solution: Creativity and originality in translating the brief into architectural design.
• Technical Proficiency: Ability to develop a coherent concept and corresponding intervention.
• Contextual Sensitivity: Responsiveness of the design to the site and its challenges/temporal conditions.
• Presentation Quality: Clarity and professionalism in presenting the design process and final proposal.

Requirements

We expect an affinity for digital design tools and specifically invite those students to express their interest. While focusing on concepts and design development, we ask students to embrace the opportunities presented using advanced modeling and simulation software.

First meeting

05.03.2025, Spielwiese at SR HB West (3rd floor) - See VIS

Jingkieng Dieng Jri Living Root Bridges
Living elevated paths created by the Khasi tribe in India.

Inscape - Sonantian by artist Kohui
Audiovisual installation / Hardware, mixed media (2022)

Reading List:

Barber, D. (2021) Climate Histories [Podcast]. Available from: https://nightwhiteskies.com/epi-sodes/climate-histories (Downloaded: 27 October 2021).

Bridle, J. (2022) Ways of Being: Animals Plants, Machines: The Search for Planetary Intelligence. Penguin Books, London, New York.

Colletti, Marjan., Massin, Peter, eds. Meeting Nature Halfway: Architecture Interfaced Between Technology and Environment. Peer-reviewed. Innsbruck: innsbruck university press.

Larson, D., Matthes, U., Kelly, P.E., Lundholm, J., Gerrath, J. (2004) The urban Cliff Revolution. Origins and Evolution of Human Habitats. Fitzhenry & Whiteside, Canada and the US.

Kallipoliti, Lydia (2024) Histories of Ecological Design; An Unfinished Cyclopedia: Actar Publishers.

Morton, Timothy (2010): The Ecological Thought. Cambridge, Mass: Harvard University Press.