

Unit 18

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Re/De - constructing Ecology

What can the Natural afford to the Urban?

The ecology of large geographical features like mountains, rivers and oceans are extremely diverse in their animal and human occupation, as in its abundance of material and non-material boundaries. Those large natural designs often organize places in a fundamentally a-political manner, out of line with the idea of nation states politics, resulting in territorial division. Nature's diplomacy enables natural features to be the fundament for a bricolage of nations, cities, cultural life styles, climatic conditions, material resources and buildings to coexist in a convoluted three-dimensional patchwork. What many times maps divide, natural features organize. Forcing interactions both in abrupt as in continuous ways. The very notion of travelling in nature, is a way to discover the change in culture and environment. Wandering from plateau to creeks to peaks, life is shaped in symbiosis with the local geographical conditions.

This year, Unit 18 will investigate an urban architecture in relationship to landscape materiality. More specifically, as in the overlap of the ecology of places (with its unique geographical, biological and climatic conditions) and its allowance to build, inhabit and explore the so-called natural habitat. Working around the thematic of "affordances", students will learn how to design both practical and more symbolic layers in architecture. The idea of affordances, originally conceived by psychologist James J. Gibson relate to plausible actions and readings of an object or the environment. Resulting in a multiplicity of possible perceptible, hidden or false conditions. In our studies these principles translate both in veiled more symbolic functions as well as in pragmatic solid geometrical features within the designed objects. We will see architecture from the ground up, through the design of specific architectural conditions in relation to its podium/context. Students will constantly bridge between reading, designing, analogue and digital crafting.

In order to study the relationship of changing use of land, nature and its physical and abstract markings or boundaries we will visit parts of the Andes in South America, the longest continental mountain range in the world. Home to the Inca civilization. We will visit multiple urban and natural phenomena at different altitudes and varying configurations. One of those will be the ancient ruins of Machu Picchu, where we will study the relationship in between the object and its landscape, via the material world of its constructs and artifacts. We will investigate Peru's capital city of Lima with its modern and colonial architecture near the Pacific Ocean. In Lima we will meet potential collaborators in the city to discuss its main urban challenges (i.e. air, water pollution), its future land boundary possibilities (but also enjoy its cultural traditions and fantastic cuisine). Trekking the Andes Mountain, we will discover how villages and settlements adapted in time and with its vast changing environment. Unit 18 will explore material behaviors, bridging between human and environment and the conflicts arising through those (non) material tensions.

March Unit 18 or Generational Phantoms mission statement is to produce expressive material research out of contentious and disputed natural/urban contexts proposing architectures which bring a sense of surprise and adventure. We call that political materiality. We believe that architecture is part of an essential interface between the human, the world and the environment. We use both local crafts and advanced digital designing tools so to enable a balance between the historical and an imaginative progressive material response.

Part 01 - The Out-Post at the end of the world.

In order to explore the relation between context, material and culture, students will start the year by designing an outpost for urban dwellers in a selected part of the Andes Mountain. Students will work with the context in terms of material choices between natural and artificial, local and foreign, fit and non-fit. Through Digital modeling workshops and analogue methods of fabrication we will explore the tangencies of affordance both in design, representation and non-material behaviors.

The final output will be an elaborate physical model and a collection of study models both physical

and digital. Using a given design methodology of de- and re-composition. Offering a deeper understanding of designed geometrical complexities in relation to material and cultural contexts.

Part 02 – Ecological Affordances

During the second part of the year students will transpose their material, cultural and formal experiments into the urban texture of Lima. In order to design the final project, students will determine new boundaries and interrelationships between the natural and the artificial. Using the idea of “affordances” as a design tool, a multiplicity of layers embedded in the designed proposal will deal from more practical to symbolic notions of architecture.

Year 5 will develop their final project utilizing the thesis as a research base element in tight connection with the unit brief. While Year 4 will investigate their final architectural proposal with a rigorous technical knowledge in both materials, fabrication and environmental issues provided by the unit and DR tutors.