

OTHERWORLDLY

New colonies of the Anthropocene



Dan Tobin Smith, *Into the Unknown*

"If at every instant we may perish, so at every instant we may be saved."

~ Jules Verne, *Journey to the Center of the Earth*

Designing for the Anthropocene

What does it mean to live and design in the age of the Anthropocene? Human activity is now considered the dominant influence on the earth's climate and geology. The world has never in its 4.5 billion years of existence experienced such acceleration in its transformation. In the studio we argue that what is required to address the scale of issues resulting from the warming climate is a seismic shift in both the way we live in and design environments. Our current relationship to nature and its resources is no longer a sufficient response to these volatile conditions, but could be reimagined as a key driver in the way we design communities that are versatile, resilient and resourceful. The built environment must adapt to the continuously changing surroundings. New cultures must emerge from these strange new natures. It is time to explore new tools and envision radical strategies for harnessing energy from and in symbiosis with nature, and visualise the emerging architectures and urban ecologies.

From the narrative to the generative

As climate change prophesies unfamiliar scenarios that defy traditional understanding, we turn to fiction and computation as a portal through which to explore the unimaginable. The strategies of world building in fiction will equip us with the instruments to question the status quo and envision alternatives. We will borrow techniques and learn from storytellers, filmmakers, writers and animators to help us map current conditions, predict their development, communicate ideas and construct storylines. Computational design techniques will in turn ground these speculations, by helping us to examine the inner workings of the physical world and guide the process of constructing responsive forms and spatial relationships.

At the core of these techniques is the principal of understanding and communicating reality through process and time, cause and effects. Through time-based media, we will test how these design processes can simulate systems and transformation, and how their unpredictability can in turn create architectures that are adaptable to their changing surrounding. We will explore swarm behavior and storyboarding, force fields and film, flux and fiction, computation and comics, collisions and keyframes. In this way, and in our role as architects, we are best placed to critically examine and negotiate between fact and fiction. The studio will combine the narrative and the generative, to develop both a contemporary design language and a critical response to some of architecture's most urgent questions. We will project rigorous and radical design proposals, a collection of new forms and new stories to address a world yet unknown.

Nausicaä and the new ecologies

Venturing into the world of the unknown, we will explore alternative relationships with nature as imagined in the speculative worlds of film. In one such world, "Nausicaa of the Valley of the Wind", a community of post-climate survivors struggles against their environment where nature itself has mutated and the very air they breathe is toxic. Only by settling and building a home in a windswept valley where the breeze blows away the atmospheric pollutants and the windmills draw clean water from deep beneath the earth can they continue to live. Films like "Nausicaa" use narrative form to engage us in a critical discussion around our relationship to nature and the roles technology may play in the augmentation of the environment. Whether its in the sea of decay in "Nausicaa", the rubbish filled planet Earth in "WALL-E" or through the petrol guzzling gangs in the deserts of "Mad Max", these stories will act as prompts in our studio where we will invent our own new ecologies.

Studio Ghibli, still from *Nausicaä*Neri Oxman, *Death Mask*

Discovering new worlds

We will begin by looking at different media of storytelling, and exploring ways to build a new world through plot structuring, storyboarding, character building. Through simultaneous studies of computational design techniques, we will investigate the phenomena of natural resources and seek to simulate the inherent logics of ecosystems, from molten lava to wave formations, glacial flows to wind patterns and swarm behaviour. In parallel we will research specific types of renewable energy infrastructures and look at the technologies involved in harnessing these forces and designing with them.

This work will inform the development of a speculative scenario of a world that has evolved around one of these natural phenomena. We will then travel far into our fictions and place ourselves in these imagined environments, and like explorers discovering lost artefacts of a strange civilization, we will design and manufacture new artefacts of our own that embody the principles of this new world. Imagined as props from a set, they could be masks or costumes, devices or machines, tokens or totems.

An expedition to the centre of the earth

Following in the footsteps of Jules Verne's protagonists from his classic novel, we will go on an expedition toward the Arctic Circle and explore alien landscapes. As the world's most forward thinking energy economy with an incomparably advanced renewable energy infrastructure, Iceland has forged an intrinsic relationship between its people and its land. We will see the steam of geothermal power plants, the glow of hydrogen fuel stops, the electromagnetics of the aurora and the immense power of glaciers and volcanoes. The diverse and eerie landscapes will provide a stimulating setting to think about the issues surrounding climate change.

Inhabiting uncharted territories

Expanding from the speculative scenarios developed in the Autumn term, individual projects will design the architectures and communities that now populate these worlds. You will design the forms of inhabitation and occupation that could grow within the ebbs and flows of your chosen natural phenomena and energy infrastructure, be they for climate refugees or scientists, children or elders. The architecture will be tightly integrated with and informed by the computational and narrative techniques we have been experimenting with. You will develop a final drawing set that will tell the story of your new colony and the landscape they occupy. Plans and sections will be considered as storyboards and comic strips, renderings will act as stills from an animation. The pieces you produce will not be static but engage with time, cycles and flows and you will visualise the life of your other world.

Through this process, we will explore themes of climate resilience, investigate the impacts of an architecture seamlessly embedded in nature, and challenge how urban development grows around energy sources. Could these systems be an integral part of a continuous urban fabric? Could we engage them as a new kind of landscape we can build on and live in? This is an opportunity to experiment with new ways to approach resources, infrastructural, architectural and environmental design. Through these fictions, we will think about how alternative landscapes generate alternative communities and design the artefacts, systems and structures of a new ecology.