

Paradigms of the Post Natural is a thesis that utilizes imagery and storytelling to critique present practices of design which disregard the protection of our environment. We are interested in current environmental degradation characteristics of the era of the anthropocene where human-centric design methods have manipulated and exploited the ecosystem in which we coexist with other organisms as destructive pursuits of human development. Our inspiration developed from a shared interest in the conservation of non-human organisms. Specifically, we are interested in ecocides, areas in which animals are forced to adapt as they experience the human destruction of their habitat. Examining areas of environmental exploitation has made us aware of the extreme genetic adaptations that species are undergoing.

We focused on the Athabasca Oil Sands in Alberta, Canada, and Chernobyl in Ukraine, two preeminent sites where industrial activity has caused direct threat to the well-being of humans, fauna, and flora. Chernobyl is a prime example of a present-day disaster that has had long-term effects on the genetic evolution of species native to this environment. The consequence of the release of toxic material, such as iodine and cesium, is the creation of a radioactive wildlife refuge. After humans were evacuated from the site, other living species were left behind to absorb the contaminants. Although investigations have shown that wildlife is flourishing in these areas, they are doing so in ways that are inhumane and outside normal ecosystems. The effects of the radioactive materials include, but are not limited to animal mutations and genetic abnormalities such as body malformations and deformities.

The Alberta Oil Sands is one the largest deposits of crude oil in the world. It also highlights the detrimental effects of human transformations on landscapes. At the current rate of oil extraction in Alberta, the reserve is expected to deplete by the 2030s. The process of extracting oil poses a variety of environmental hazards. Part of this is due to the approximately two million acres of boreal forest that was clear cut for this industrial development. Tailing Ponds, contaminated areas that store wastewater from the extraction of bitumen, are another major concern for the environment. These sprawling waste ponds release heavy metals into groundwater which pollute nearby rivers and streams. In the Athabasca River, researchers have noted deformities and tumors in species such as the walleye fish. Other species also threatened include beavers, deer, and bighorn sheep, as well as an array of birds.

In researching these sites, we became fascinated by the consequences to wildlife of these human-induced environmental changes that have direct impacts on animals' well-being. In order to depict these unimaginable environments that are a result of human destruction, we chose to collaborate with artificial intelligence (AI). We began designing radically transformed environments with text-to-image generators, specifically MidJourney. Our original photo series employed text constraints and parameters for the images to follow the same aesthetic principles. Site-specific research determined our text parameters. Using keywords such as "Iodine-131" and "polycyclic hydrocarbons", which are compounds found on both sites, helped us visualize the toxic destruction. Other terms, such as "grotesque" and "photo-realistic" helped maintain a consistency in the aesthetics of these scenes. After generating our productions we decided it was necessary to enhance them by zooming on specific moments, which led us to create material studies influenced by the characteristics of the generated sceneries. Fusing our images with physical models resulted in a feedback loop that allowed for more precise aesthetic depictions

more control over the final representations generated by AI. We used various materials to reflect the detailed environments of our initial series, providing us the ability to precisely recreate the animals' habitats. Alternating between MidJourney and model-making was crucial for the development of the final images. This was our approach to manipulate and imagine alternative futures.

Throughout this thesis, we imagined how these ecosystems and the accompanying organisms would look if we continued to practice design and construction the way we do currently. Our thesis depicts the possible evolution of these environments and the species affected. The atlas we produced was devised to mimic a National Geographic issue in the year 2550. Emphasizing the effects of the Chernobyl nuclear disaster and the continuous oil extraction of Alberta, we are able to depict the ways in which these organisms are gradually adapting to living in these conditions. In collaboration with AI, we depicted the potential evolution of these environments as toxicity and human waste influence the native species. For example, in our projections, ducks (page 12) now live within the old tailing ponds as if they were rivers, and are immersed within the oil infested gooey water. The water bodies of these areas seen on pages 43 through 50, are now picturesque ecologies infiltrated with toxicity, causing intricate effects. Other examples, such as the fish on page 83, highlight how walleye fish may adapt to have thick scales and tumors in order to protect themselves from the toxic water. These years of adaptation and evolutionary abnormalities will make the walleye unrecognizable. Frogs, as seen in pages 131 through 136, begin to develop abnormalities in their appearance due to the iodine toxicity that has been absorbed by their skin.

We hypothesize that in 2550 every square mile of Earth will continue to thrive, despite extreme ecological conditions. While some animals struggle to survive in these environments, others adapt to their new conditions. They develop unique behaviors and traits, and alter their living conditions to thrive within the desolate landscapes of beautifully toxic yet flourishing environments. The atlas documents a paradigm shift in the relationship between humans, flora, and fauna, where the lack of human contact becomes a defining characteristic of the new era.

By speculating on imagined ecosystems, we challenge present practices which contribute to climate change and environmental degradation. Furthermore, we are critiquing societies inaction to address climate change. We reject architects' predilection for greenwashing. The impact of current "ecocides" are already threatening all types of organisms around the world. We hope that these imagined environments will shed light on the extreme transformations of our environment if we do not change our practices. Natural and artificial disasters are not just environmental changes that humans will continue to face. Animal and plant species, essential to the thriving of environments, will also experience the same challenges.

This thesis aims to present a future world created by humans, determined to exhaust natural resources and ignore environmental signs of change. Critiquing the flaws of human dominated practices, we provide a depiction of the inevitable evolution of our environment and embrace the beautifully toxic and grotesque environments that are evidently created. The Ecocide lives on, fusing and entangling organisms with chemical substances that swarm through the environment. Once the landscapes have been continuously and permanently destroyed, new interpretations of design can be examined. What emerges is the aesthetic sublime; environments that simultaneously have the power to compel and destroy us.