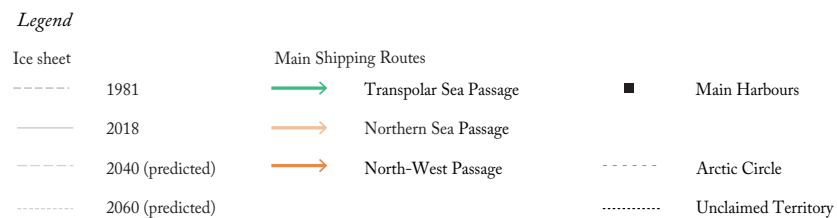
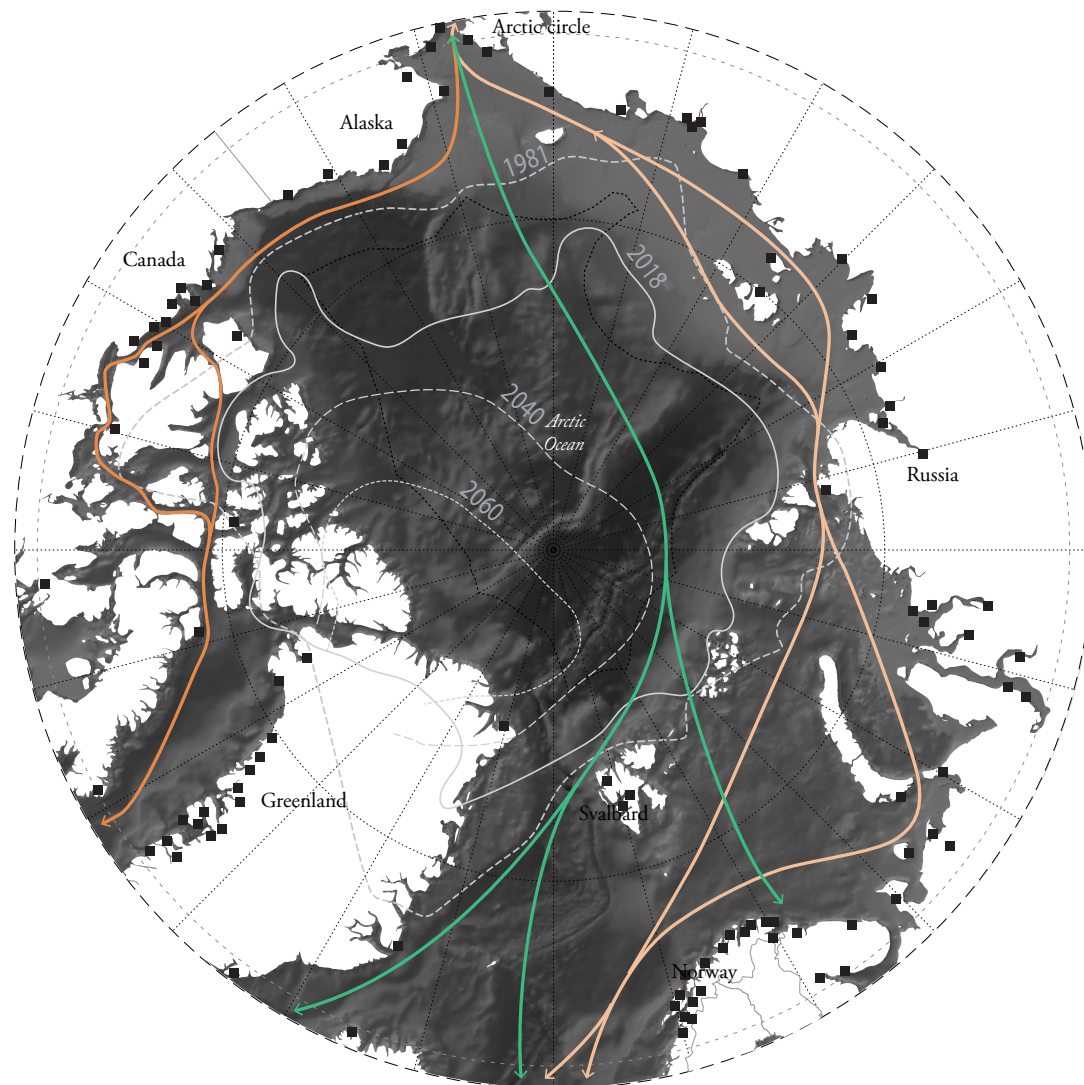


*ARCTIC FRONTIER:  
fragility of the monument,  
power of the environment*

Emily Aquilina

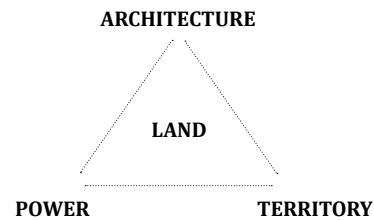
ARCHITECTURE / POWER / TERRITORY

# ARCTIC FRONTIER

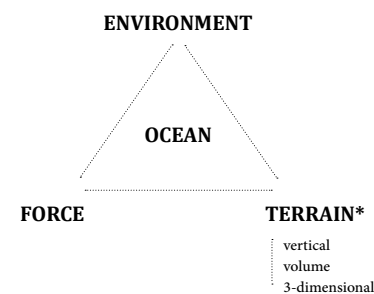


This thesis has evolved at a time where the current politics of climate change is experiencing a global shift in perspective; 2018/2019 witnessed outcries of activism and calls for a global climate emergency. Throughout the development of this project I have witnessed a shift in media and perception of climate change; with a specific focal lens on the Polar regions. Emerging as a response to the changing global trends of territorial claims within the Arctic region and the rapid melting of the ice in the Arctic Ocean. The challenge of a new fragile landscape emerges and the question of how we can approach the urgency of a rapidly changing climate. In order to understand the complex conditions and factors that have influence within the Arctic Ocean an initial (and ongoing) process of mapping conflicts documented the disruptive forces that are materialising through the current, past and future economical, geopolitical, environmental and ecological problems the earth is facing on a planetary scale.

CONCEPTS



CONTEXTUAL



My research emerged as a two-part process that developed in conjunction with one another as a process;

a) My context analysis resulted in an understanding of the human value and perception of the Arctic using 3 analytical tools; cartography and narrative, a polar comparison study between the Arctic and Antarctica and a site visit to Svalbard, an archipelago located deep within the Arctic circle. The overall conclusions of my Arctic research established 2 key points; firstly, the environment is the ultimate power force —the region is governed by its extreme environmental conditions to which its statelessness can be attributed to— and secondly that throughout its human history the Arctic has only been valued as a resource/place of extraction.

b) My theoretical approach investigates the intersection of the concepts; architecture, power, territory. The overall conclusion of these 3 concepts shift their application from the territorial context of land and the built landscape into the context of the ocean, challenging the current understanding and dynamic between them. Where territory is explored through the notion of terrain, a term that considers volume, the three-dimensional space or verticality of territory, power is expanded to include earth forces and architecture is inherently linked to environment.

Thus, the conclusion of my research and transition towards design emerged from the power of ecological and earth forces found within the arctic and that it is integral for architects to design with consideration to the invisible processes that exist within the environmental conditions and fragile context of the climate. As architects we should seek methods of spatial solutions that design with the intrinsic values found within the environment (speed, temperature, condensation, pressure and density). The lack of human value for the Arctic's environment needs to be reconsidered in our approach towards development and the built environment. Finally, this project deconstructs the concept of territory (control) and reconstructed through the verticality of the atmosphere, surface and subsurface 'terrain'.

Humans have literally gone to extreme and far measures for the extraction and exploitation of resources within the Polar North- reflecting the values of the past, present within the Arctic. This project seeks to reverse the image of conflict (arctic as purely a tool for extraction) through the proposal of a system that harvests the environmental forces and conditions that exist within the extreme climate through the relevant lines of enquiry;

*Can we imagine a future for the arctic beyond purely exploitative measures and can we instil environmental value into the arctic that exceeds the extraction of resources?*

*Is there an alternative approach to extractive measures? Can it be productive for the environment?*

*Can we work together with earth forces and ecological processes to create alternative ways of valuing the Arctic and its critic yet fragile environment?*

To summarise, my project emerges as a series of architectural installations with the purpose of materialising the ecological processes existing within the region, acting as a form of demonstration. Each individual installation harnesses an existing ecological process rendering the invisible environmental processes visible. It is at the point of intersection of intermingling and relational exchanges of the system as a whole that this project develops. The development of my design using the environmental and ecological processes to create architectural interventions that support, stabilise and enhance each other enabled me to reflect on my role and position as an architect and the profession. Reflecting on this project I have learnt that the architect should not be limited to designing through their conventional tools of measurement, that it is critical for us to design using intrinsic values found within the environment to create a more holistic approach and positive feedback for the fragile ecologies that exist around us. Through architectural activism we have the power to instil environmental value into one of the most critical ecosystems existing on this planet, the Arctic.

The final synthesis and reflection upon my overall process of research, analysis and design can be understood through Levi Bryant's Onto-Cartography and his three dimensions of geophilosophy: cartography, deconstruction, and terraformation (Bryant 2014). Through the tools of cartography; mapping, analysis, comparison, time and experience I was able to draw relations and map interactions enabling me to understand the organisation of assemblages and ecologies within the Arctic. Deconstruction is where the relations between disruptive forces are severed or simply put, deconstructed. Within my thesis the deconstruction process can be identified through the development of my theoretical concepts; architecture, power, territory as well as the conflicts within the Arctic. Finally, the critical transformation from research to design is understood as the terraformation dimension or the "building of worlds" (Bryant 2014).

My project materialises as the active construction of alternatives, enabling humans the ability to escape existing conditions with the addition of a new path of movement. Thus, projecting an alternative future through the relations and intermingling of ecologies and the built environment.

To end my reflection, a quote from Levi Bryant -  
"These practices are undertaken not simply for the sake of understanding worlds, but more fundamentally for the sake of producing more just, equitable, and sustainable worlds." (Bryant 2014)