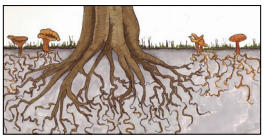
ACTIVE



MATTER

Between Antlers and Antennas

Initially, it was a passive thought. A brush against the tree bark strung a sensation of life, and upon closer inspection led a colony of ants orchestrated with such synchronicity to trace around the wooden grooves, while a kick would evoke a flight reaction from the birds nested above. I took a step back and saw an anatomy of trees that would make a forest, with constellations of clouds pooling atop the border of branches. For the first time, I witnessed so clearly the activity and aliveness of merging ecosystems, and I began to question this gradient of superiority and inferiority we seem to have established in correspondence to one's ability to evolve.

There is a tendency to separate ourselves from the biosphere when we discuss it. We speak of it the way one speaks of a roadside flower or a passing plane. Why don't we consider human language, emotion, and effort comparable to the migratory melodies of bonded whales, or the mycelial systems of fungi? In our anthropocentrism, could we consider that social behavior, and consequently, violence, a symptom of mediocrity? Could we consider modern cultures and, by extension, Occidental restrictions to be acts of censorship? Could we consider technology, and thus over-illumination, a sign of regression?

It can be understood as the quiet choreography of the world around us. It is the way cells, bacteria, and whole organisms self-organise without central control. Humberto Maturana and Francisco Varela describe these dynamics as autopoetic systems: self-producing networks governed by their own internal logic of life, yet fundamentally open to their surroundings, continually exchanging energy and information. This definition, while foundational, begs for further exploration.

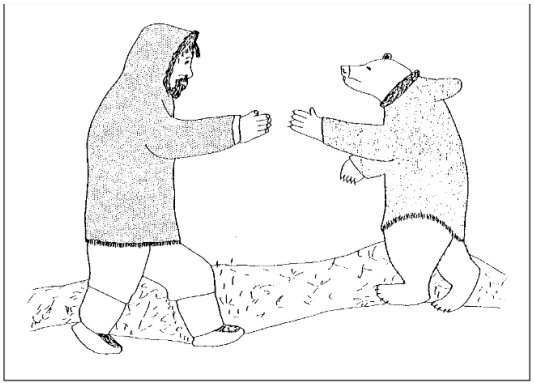
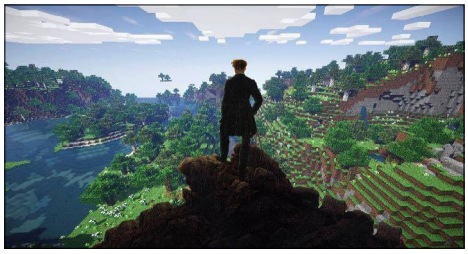


Figure 7.1 An Inuit man and a polar bear cordially greet one another. Drawing by Davidialuk Alasuaq, from the personal collection of Professor Bernard Saladin d'Anglure.

Thinkers such as Gregory Bateson extend this insight, terming it "the ecology of the mind", suggesting that cognition is not located in individual organisms but instead distributed across relational systems of 'differences that make a difference.' They are patterns of relation that stretch across bodies, technologies, memories, and feelings. As we begin to adopt active matter as a theoretical framework, we can recognize similar affective patterns but in different contexts.

A relevant example is the popular adventure game Minecraft. Its autopoietic qualities are evident through iterative acts of building, destruction, navigation, and a series of decision-making components that accumulate into a shared spatial memory, creating a world continuously remade by the very practices it enables. It is the same way that the cries of aquatic mammals can affect underwater vibrational fields, thereby influencing the shape and patterns of nearby embryos. It is the same with buildings that bend and breathe around their residents and neighbourhood animals, establishing an interdependent design system.



And it is strangely heartwarming.

A stone is not just there and idle. It cools the air, flattens a tire, blocks a path, bruises a knee, and holds a memory. We are all part of this enormous cluster of sequences of differences.

Active Matter: Between Antlers and Antennas challenges our understanding of aliveness by exploring the intersection of biology, architecture, and nonlinear ecologies that connect human and nonhuman actors. This serves as an anthology for the unseen cultural and natural shifts, as regarded by Godfrey Reggio: "the transiting from old nature – or the natural environment as our host of life for human habitation – into a technological milieu, into mass technology, as the environment of life."

Whether tracing the migratory pulse of birds, the synchronized sway of crops in the wind, or the familiarity of a nostalgic soundscape, this work hopes to explore how memory and emotion act as agents within the dynamics of active matter. Activity here is not only mechanical and technological, but it is also felt: patterned through care, resistance, attention, and longing. This project invites readers to think as beings that thrive openly on systems of active matter, to reconsider their role in the biosphere, and to discuss the natural intelligence that underpins all living systems. In doing so, we hope to cultivate new ways of seeing, understanding, and above all, coexisting in the interdependent worlds we inhabit together.