This Infinitesimal Moment of Now: Ice-Time

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Abstract
The Ice-Time project is a creative response to the precarious state of Earth's ecosystem. Ice-Time is an immersive cinema mediascape enacting the space-time of glacial ice. In the installation, the beholder experiences the time of a different form of matter as a somatosensory experience. Ice-Time’s images are hyper-realistic views of ice taken at all scales of space, from the microscopic to the planetary, collapsing the sensory distance between the body and the ice. The sound recordings draw one acoustically near the ice, simultaneously recorded using contact microphones and hydrophonics. The project engages interdisciplinary methodologies in exploring significant environmental challenges, challenges framed by the concept of the Anthropocene, the idea that humanity should now be considered a geological and terrestrial force.

This Infinitesimal Moment of Now
In the space-time tesseract of the geological, the simultaneity of space conjoins with the succession of time. All past, present, and future events, all states, coexist simultaneously. Reality comprises a hyper-volume of past and future matter extending along the limitless axis of time. This infinitesimal moment of now, the present, constitutes a continually shifting slice of this hyper-solid as it passes through our three-dimensional space.

Climate change is a defining issue of our time, precipitating unprecedented weather events, oil disputes, water wars, and refugee migrations while rising oceans and raging fires begin to redraw the global map of this planet's habitable spaces. The geological provides us a glimpse of time as a supra-dimensional force, a four-dimensional perspective that subsumes both past and future and whose deep-time view far exceeds human perception. The Greenland and Antarctica Ice Sheets function as frozen containers of Earth's atmosphere through time. The ice-cores excavated in Greenland and Antarctica provide a view 800,000 years back into the preterite history of Earth's climate.

How do we comprehend the recession of a glacier that progresses over three generations or the slowing of an oceanic current? (fig. 1.) Are we, as humans, capable of being sensitized to planetary scales of matter and time that are far beyond our physical perception (Latour 2006)? We have given ourselves technologically augmented vision supplemented by extended wavelength cameras, microscopes, telescopes, radar, sonar, and satellites. We have universal access to data shared over global machine networks. We live in the meta-dimensions of a redefined, disembodied world, full of strange data vistas surrounding us in manifold perspectives.

Fig. 1. Glacial retreat: Jakobshavn Glacier, Greenland from 1851-2014. (from Ice-Time, copyright Clea T. Waite 2017).
Filmed principally in Greenland in 2016, the *Ice-Time* project is a creative response to the precarious state of Earth's ecosystem. The project engages interdisciplinary artistic and scientific research methodologies in exploring significant environmental challenges, challenges framed by the concept of the Anthropocene, the idea that humanity should now be considered a geological and terrestrial force.

*Fig. 2. Ice-Time*, 2017, Clea T. Waite, immersive cinema installation and ambisonic soundscape, Copyright Clea T. Waite, 2017. (Waite 2017).

*Ice-Time* is an immersive cinema mediascape enacting the space-time of glacial ice. The installation constructs an embodied cine-poem whose spatiality is deciphered by the perambulations of the beholder. *Ice-Time* is configured of six video channels faceted amongst six large projections and a three-dimensional soundscape—fifteen simultaneous streams. The images are hyper-realistic views of ice taken at all scales of space, from the microscopic to the planetary, collapsing the sensory distance between the beholder's body and the ice. The sound recordings similarly draw one acoustically near to the ice, recorded using contact microphones and hydrophonics. An unfamiliar form of matter is experienced as somatosensory experience. The installation forms a crystalline, cinematic tesseract that examines our culture's altering perceptions of space and time, the deep time of Earth's environment, using polar ice as a unique window onto issues of climate change. The present effects of global warming on Greenland are a prelude, a four-dimensional vista into deep time. The mediascape immerses the audience in accelerating glacial time that instills the beholder with an implicit awareness of the environmental and cultural implications of polar ice (fig. 2).

**References**


**Biography**

*Clea T. Waite* is an intermedia artist, experimental filmmaker, scholar, and engineer whose artworks investigate the material poetics emerging at the intersection of art, science, and technology. She creates immersive, cinematic works engaging embodied perception, dynamic composition, and sensual interfaces—as well as one inter-species collaboration with several hundred spiders. Her artwork examines climate change, astronomy, particle physics, history, feminism, and popular culture. Waite received her Ph.D. at the University of Southern California in interdisciplinary Media Arts + Practice, combining a physics and computer graphics background from the MIT Media Lab with her current research in cinema, media art, and critical theory. Recent exhibitions include CODAME San Francisco, the ICC Tower Hong Kong, the Miraikan Museum, Tokyo, and the Boston CyberArts Festival. Waite has taught at the Academy of Film and Television, Babelsberg, Pratt Institute, New York, and the University of the Arts, Berlin.