Sea ice out of time: Reckoning with environmental change

Yip, Julianne (2022.0)

ABSTRACT ORIGINAL

In September 2007, Arctic sea ice plummeted to a shocking record minimum at the time. The amount of ice lost that summer was equal to that lost over the previous 25 years. As Arctic sea ice escapes scientists' predictions, scholars in the social sciences and humanities have critically interrogated "nature"/"culture" divides that treat the time of nature as unchanging and distinct from human beings. This essay examines what concept of time emerges through Arctic sea ice as an analytic lens. By this, I mean scientific knowledge of sea ice and the conceptual possibilities for thinking ice temporalities and environmental time-reckoning that it opens up. Attending to these possibilities suggests different kinds of "clocks" to help reckon the time of environmental changes in the form of (1) climate anomalies (e.g., deviations in ice thickness), which offer a different way of telling environmental time that attends to the physical specificity of substances; and (2) the Arctic Oscillation, a semi-periodic world weather pattern that emerges from the thick of relationships among ice, atmosphere, ocean, and now humans, generating a collective planetary time. Finally, I argue that the relational human–nonhuman production of planetary time shifts the focus in social studies of time from collective time-reckoning, which assumes entities have a socioculturally determined concept of time, toward temporal coordination as a less anthropocentric mode of ordering shared realities. Coordination decenters "the Human" as an epistemic ordering principle and enlarges ordering to include a diversity of nonhuman ways of being. Through temporal coordination, environmental prediction would be the ordering of a collective reality that a multiplicity of human and nonhuman ways of being make together rather than the search for a more precise clock, or development of better technoscientific means to capture nonhuman temporalities external to human beings.