

The Power of Signs: Environmental History as the Interfusion of Meanings and Metabolism

We do not need to revisit the histories of “idealism” and “materialism” in Western thought to recognize how difficult it is to simultaneously acknowledge the semiotic and the material aspects of social and natural processes. The interaction of subjective and objective factors tends to be so difficult to handle that many academic approaches simply choose to disregard one or the other perspective. Several disciplines in the human sciences are internally divided by this difference in focus, and some have experienced historical oscillations between periods in which one or the other is dominant. An obvious and paradigmatic case is economics. For the past 150 years, economics has been dominated by a preoccupation with human desires and preferences – as measurable in terms of “willingness to pay” – rather than with the management of limited biophysical resources such as land, labor, materials, and energy. Far from “materialist” in outlook, neoclassical economic theory is so detached from the physical constraints of the biosphere that it is continuously being challenged by the heterodox schools of Marxist and ecological economics. Similar tensions divide fields like anthropology, where the obsession with human experience, symbolic systems, and identity tends to delegate concerns with the material conditions for sustainability to the margins. Recent attempts to escape from such anthropocentrism – under the banners of “posthumanism,” “the new materialism,” and “object-oriented ontology” – have also failed to address the specifically human impact on the world. A transdisciplinary field such as environmental history is well positioned to transcend this tenacious dualism and the inclination toward one-sided perspectives. It can neither limit itself to the history of human ideas about the environment nor to the biophysical transformations of landscapes but must examine how the production of cultural meanings intervenes in the material constitution of the biosphere. This means recognizing how even the ostensibly “materialist” concerns of economics hinge on the logic of a peculiar human sign system – that of general-purpose money. After a mere three centuries of global market expansion, this logic is transforming and jeopardizing the Earth System. We urgently need to understand the specific semiotic vehicles through which human meanings intervene in the biosphere, in order to be able to domesticate and restrain the currently disastrous trajectory of global metabolism.