
When the bio-sphere becomes a data-sphere: quantifying nature for big ecology

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Abstract

Session: "Predictive ecology in a changing world: from data to practice" (Vincent DEVICTOR; Sarah CALBA; James JUSTUS; Audrey COREAU). Several scientific disciplines have entered a "data world" following the information revolution, the development of computer networks and Internet facilities. In this talk, I will question whether, how, and why the raise of new techniques of quantifications has changed the perception of nature in ecological sciences. Using concrete examples, I will i) discuss how natural objects are transformed into data, ii) illustrate how a new spatiality and temporality emerge from this transformation, iii) assessed whether this process has created an autonomous data-sphere with its own normative and scientific rules. I will then propose a critical analysis of this transformation to show how it opens a route for new social strategies and uncertainties. Overall, this talk proposes to illustrate how ecology is, to some extent, progressively sharing similarities with what was identified as "big-sciences" and "techno-sciences" in modern epistemology.

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