Ecosystem Research and Real-World Simulation

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Abstract

The object in question is an artificial water catchment that is a constructed natural site. "Chicken Creek" is a small hill several hectars large and situated in a former strip-mining area in North-Eastern Germany close to Cottbus. This initial ecosystem constitutes an ecosystem in its own right: It is an experimental site that simulates its own behavior in that it monitors its own performance. Chicken Creek is a specific kind of field experiment that abolishes the carefully maintained spatial separation between an experimental system and the natural system, features of which it is supposed to represent. The knowledge acquired in such projects often takes the form of an expertise that merges scientific background knowledge with experience gathered by observing the particular case. Both, real-world experiments and real-world simulations combine features of the lab-ideal and the field-ideal, and they thus connect instances of generalization and instances of individualization and valueladenness. The Chicken Creek is a paradigmatic case of this kind of conceptual merging and of mixed practices. It is a technoscientific object in the proper sense: it gathers together theoretical knowledge, instruments, skills, and purposes (see also http://www.goto-objects.eu). The artificial water catchment system was designed artificially, but it is treated as a natural system. It exhibits its own performance parameters and is thus a real-world simulation. It is an attractive object for scientists and it is unique. It pursues the lab-ideal of total experimental control in a field experiment, and finally it is a high-tech object. While science secures objects in the representation of facts, technoscience affords things through assemblage.

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