Human-managed soils and soil-managed humans: An interactive account of perspectival realism for soil management

Kendig, Catherine (2024.0)

ABSTRACT ORIGINAL

What is philosophically interesting about how soil is managed and categorized? This paper begins by investigating how different soil ontologies develop and change as they are used within different social communities. Analyzing empirical evidence from soil science, ethnopedology, sociology, and agricultural extension reveals that efforts to categorize soil are not limited to current scientific soil classifications but also include those based in social ontologies of soil. I examine three of these soil social ontologies: (1) local and Indigenous classifications farmers and farming communities use to conceptualize their relationships with soil in their fields; (2) categorizations ascribed to farmers in virtue of their agricultural goals and economic priorities relied upon in sociological research; and (3) federal agency classifications of land capability employed by agricultural scientists. Studying the interplay of these social ontologies shows how assessing soil properties and capabilities are the result of previous agricultural strategies informed by culture, agroecological history, weather, soil biodiversity, crop rotation, and the goals held by decision-makers. The paper then identifies the soil relationships and interactions that constitute ontology-making activities. Building on recent work, I outline a novel interactive account of perspectival realism grounded in agricultural extension research and ethnopedological data that captures the haptic nature of farmers' soil strategies. This interactive account explains how ontologies are chosen, why they are chosen, and how they interact and inform soil management decision-making. The paper concludes by examining the values laden in these ontologies and those which are causally implicated in the choice of soil management strategies. © 2024 Author(s) published by the Journal of Social Ontology.