From Conceptual Analysis to the Analysis of Conceptual Practice

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Abstract

Traditional approaches in philosophy of biology focus attention on biological concepts and theories, evidential support, and inter-theoretical relations. Newer approaches shift attention from theories to theorizing, from concepts to conceptual practices, and from theoretical reduction to reductive retooling. They point towards broadening the scope of philosophical attention to investigation, and hence towards analyzing how the integration of practical know-how, concrete knowledge, investigative strategies and theoretical knowledge provide the basis for systematic investigation of the biological world. In this presentation, I will illustrate the shift from theory-focused to practice-centered epistemology by presenting an analysis of conceptual practice in contemporary genetics. I will show that geneticists have a flexible concept of the gene that can partition a DNA molecule in a multiplicity of ways. Shifting philosophical attention to conceptual practice in genetics reveals how biologists succeed in identifying and manipulating causal strands within systems of bewildering complexity.

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