

Concept Defectiveness and Amelioration

Ioannis Votsis

(NCH and LSE)

ioannis.votsis@nchlondon.ac.uk / i.votsis@lse.ac.uk

www.votsis.org

Concepts, like theories, come in various shapes and sizes. Some are narrow, others broad. Some are rigorous, others irreparably tethered in intuition. Some embody ideals of simplicity and unity, others exhibit intricate and tangled parts. Concepts can also be said to perform their epistemic duties more or less adequately and tend to succeed one another in history. In this talk, I explore the parallel lives of scientific concepts and theories with a view to an improved understanding of the structure and dynamics that underlie their formation, proliferation and elimination. To be more precise, I take a closer look at what happens when scientific concepts rival each other and offer some practical suggestions as to how we might go about picking winners. Among the various cases under consideration, I include those that concern *ceteris paribus* clauses, reasoning by analogy and debates that are at an impasse. The general picture I draw is one of science that can learn from its past mistakes by utilising formal tools (particularly logic) to diagnose and remove defective elements, the ultimate aim being that of providing more refined concepts and, by extension, a better understanding of the world.