A Causal Spectrum: A Causal Model based on Multi-faceted Notion of Causality

Marzieh Asgari-Targhi
School of Computer Science, Jack Cole Building, North Haugh, St Andrews, KY16 9SX, Scotland, UK

Abstract: Cartwright in her (2004) paper takes a pluralistic approach to causation. Inspired by Pearl’s (2000) multi-faceted notion of causation and Cartwright’s approach, I suggest a Causal Spectrum, a model in which all the causal models are arranged according to an agent’s amount and more importantly type of knowledge about a causal event. The more efficiently we use our knowledge of causal situations the more we are able to choose the right analysis to reason causally. I have arranged the existing models of causality along this spectrum. The spectrum shape, going from left to right, starts as a line, and divides into a number of branches. The initial line corresponds to the basic positions, Humean regularity, intervention or manipulation approaches. The branches are probabilistic models of causality, then counterfactual models and the logical methodology. After presenting the causal spectrum, I analyse an example in detail showing the application of the model.