Workshop

Theories of causation: mental causation, negative causation, and other challenges

Abstracts

Randolph Clarke

Title: Omissions, Causation, and Absence

Abstract: It is widely thought that an adequate theory of action must be a causal theory. Extending this thought to a general theory of agency, one that encompasses omitting and refraining as well as action, appears to commit us to absence causation. This paper examines where in a general theory of agency such a commitment seems to arise. Much of the focus is on whether a causal theory might encompass omitting and refraining without commitment to anything more than garden-variety concrete particulars as causal relata, and without commitment to causation where there is nothing at all that is the cause or the effect. I'll suggest that it is possible to avoid explicit appeal to such things, though doing so leaves us with a less unified theory than might be preferred.

Markus Eronen

Title: Interventionism and the Challenge of Psychological Causation

Abstract: The interventionist theory of causation is becoming increasing popular in both science and philosophy. Several authors have also argued that it provides a good account of psychological causation. In this talk, I argue that psychological systems are in fact not very amenable to an interventionist approach. The problems of variable choice, causal control and nonspecific interventions make it nearly impossible to discover or infer interventionist causes in psychology. This casts doubt on the idea that interventionism is superior to other accounts of causation in this context due to being closer to scientific practice, and undermines recent attempts at providing an evidence-based solution to the problem of mental causation.

Peter Fazekas

Title: A Dynamical Systems Approach to Causation

Abstract: Our approach aims at accounting for causal claims in terms of how the physical states of the underlying causal system evolve with time. Causal claims assert connections between two sets of physicals states—their truth depends on whether the two sets in question are genuinely connected by time evolution such that physical states from one set evolve with time into the states of the other set. We demonstrate the virtues of our approach by showing how it is able to account for typical causes, causally relevant factors, being 'the' cause, and cases of negative causation.

Alexander Gebharter

Title: Causal exclusion and causal Bayes nets

Abstract: In this paper I reconstruct and evaluate the validity of two versions of causal exclusion arguments within the theory of causal Bayes nets. I argue that supervenience relations formally behave like causal relations. If this is correct, then it turns out that both versions of the exclusion argument are valid when assuming the causal Markov condition and the causal minimality condition. I also investigate some consequences for the recent discussion of causal exclusion arguments in the light of an interventionist theory of causation such as Woodward's (2003) and discuss a possible objection to my causal Bayes net reconstruction.

Vera Hoffmann-Kolss

Title: Three Kinds of Causal Indeterminacy

Abstract: Most theories of causation rely on the assumption that causation is an all-or-nothing matter. If c and e and all the relevant background conditions are sufficiently specified, it will either be or not be the case that c is a cause of e. In this paper, I present three kinds of cases in which the question whether c caused e does not have a determinate answer: (1) cases recently discussed by Bernstein and by Swanson showing that the causal relation can be indeterminate if the causal relata are indeterminate, (2) cases that lead to Sorites paradoxes for causation and (3) cases in which causal claims are neither true nor false, but only true with a certain probability. These cases, I argue, provide strong evidence that indeterminacy is a real feature of the causal relation, and not just due to semantic ambiguity or epistemic limitations. I conclude that an adequate theory of causation should take the indeterminacy of the causal relation into account.

David Hommen

Title: Moore and Schaffer on the Ontology of Omissions

Abstract: In this talk, I discuss Michael Moore's and Jonathan Schaffer's views on the ontology of omissions in context of their stances on the problem of omissive causation. First, I consider, from a general point of view, the question of the ontology of omissions, and how it relates to the problem of omissive causation. Then I describe Moore's and Schaffer's particular views on omissions and how they combine with their stances on the problem of omissive causation. In the critical part, I charge Moore and Schaffer with inconsistencies and insufficiencies within their overall theories, and consider their replies.

Andreas Hüttemann

Title: Process Theories and the Problem of Preemption

Abstract: In this paper I will briefly present a process theory of causation in terms of quasi-inertial processes and interferences. In order to solve some longstanding problems in the causation literature such as the preemption problem it is essential to individuate the quasi-inertial processes appropriately. More particularly I will discuss some objections that have recently been raised by Hall & Paul and by Schaffer against process theories similar to the one I propose.

Beate Krickel

Title: Rejecting Two Objections Against Interlevel Causation in Mechanisms: Part-Whole Causation and the Exclusion Argument

Abstract: Many authors in the new mechanistic literature argue that mechanisms are the basic explanatory and metaphysical units of the special sciences. Mechanisms are held to come in hierarchies of levels that arise due to the fact that each mechanism is constituted by lower-level mechanisms. What exactly this constitution-relation amounts to is not yet well understood. In my talk, I will argue that mechanistic constitution can be analyzed in terms of causal relations between wholes and their parts. Hence, I do not only claim that there can be causal relations between levels, but also that these relations hold between wholes and their parts. Both claims are standardly taken to be highly problematic: first, it is argued that part-whole causation is impossible since it is incompatible with the various asymmetries of causation. Second, it is argued that interlevel causation is possible only if one gives up on the irreducibility of levels—as the so-called Exclusion Argument is supposed to show—which contradicts the general anti-reductionist convictions of the new mechanistic approach. I will show how my analysis of mechanistic constitution can avoid these two problems. My analysis is promising not only with regard to the new mechanistic approach. It also provides a new perspective on interlevel causation in general.

Stathis Psillos & Nikos Bisketzis

Title: Omissions, enablers and causation

Abstract: On many occasions, in everyday life as well as in the sciences, causation is taken to connect negative entities, which are taken to be absences or omissions. This kind of connection has been typically called 'negative causation'. The aim of this talk is to examine whether 'negative causation' constitutes a genuine causal relation. After a detailed analysis of the structure of cases of causation by absence and causation by omission, it will be argued that all cases of negative causation can be taken to be instances of preemption. It will be further argued that that though preemption has causal-like features, it is not a genuine causal relation. Furthermore, the case of enabling will be examined, which is often taken to be a causal relation. It will be argued that, as in the case of preemption, enabling has causal-like features without being a genuine case of causation. Hence, the causal understanding the world requires three (related by distinct) relations: causation, preemption and enabling.

Gerhard Schurz

Title: The Theory of Causal Bayes Nets and Its Empirical Content

Abstract: In the first part I give an axiomatic reconstruction of the theory of causal Bayes nets (TCBN) in which I consider the relation of "direct causation" as theoretical concept and the relation of probabilistic dependency as empirical (non-theoretical) concept. Based on this framework, the empirical content of the core and of several extensions of TCBN are investigated in the second part of my talk.