PLURALISM IN THE PHILOSOPHY OF CAUSATION: DESIDERATUM OR NOT?¹

Leen De Vreese

1. Introduction

For a long time, philosophers working on the topic of causation have been looking for one univocal approach. "Causation" is nonetheless a concept widely used in a variety of reasoning processes. The difficulties experienced in searching for a unique approach able to deal with this diversity have changed the way philosophers think about causation. In the last couple of years, one can notice a shift in attention from the defences and elaborations of opposing univocal approaches towards the development of approaches that leave more room for diversity. As an effect, the topic of causal pluralism has enormously gained interest in the debates on philosophy of causation. This does not mean that pluralistic ideas are generally accepted. Currently, one can discern two camps. On the one hand, some philosophers still swear by causal monism and continue working in this tradition. On the other hand, a different group of philosophers considers a pluralistic view on the matter as a solution to the problems encountered in monistic causal approaches. However, since the debate on causal pluralism is scarcely out of the egg, it is unstructured and confusing, even on what "causal pluralism" itself means.

¹ I am greatly indebted to Erik Weber and Steffen Ducheyne for their useful suggestions and insightful comments on earlier versions of this introductory article. The research for this paper was supported by the Research Fund of the Ghent University through research project BOF2001/GOA/008 and by the Fund for Scientific Research - Flanders through research project G.0651.07.

Is it worth the effort to keep searching for a singular approach? Or can a pluralistic view offer us a more accurate picture of causation and our notion of it? And if so, how to develop a pluralistic theory on "causation"? All these questions lie at the basis of this volume of *Philosophica*.

In the following section, I highlight some reasons to become a causal pluralist. I will refer to James Woodward's *Making things happen* (Woodward, 2003) to point to some problems causal monists have to deal with and causal pluralists may be able to solve. I further distinguish between different ways to be a causal pluralist: one can approach causal pluralism from a conceptual, metaphysical or epistemological-methodological point of view. In section 4 of this introduction, I list the questions the contributors to this volume were asked to focus on in their papers. A short overview of the content of the contributions is given in the final section.

2. Reasons for and ways of being a causal pluralist

James Woodward recently made an important contribution to the philosophy of causation with the development of his interventionist theory of causation published in (Woodward, 2003). Woodward gives a univocal conceptual analysis of our notion of "cause" and is, from the beginning of his book, very explicit about his anti-pluralistic stance in this project. In the acknowledgements he consciously remarks:

Writers in the grip of a single, overarching set of ideas sometimes tend to suppose that these ideas can be used to resolve all of the extant problems in their subject area. I fear that I have not been immune to this impulse. (Woodward, 2003:vi)

The concept "cause" as defined in his interventionist theory is intended to be applicable to causal reasoning in as much disciplines as possible. Woodward clearly experiences the limited applicability of a causal theory as a problem. Only one single concept of causation covering

causal reasoning in all domains of science is acceptable.² Clearly, Woodward does not consider thinking in terms of distinct concepts of causation. He presents us a candidate for the one and only theory of causation and causal explanation in which the problems of alternative theories are said to be discarded. He describes the alternative theories as rival and competitive, and proclaims his own theory as "the most promising" over the whole line.

Indeed, Woodward managed wonderfully well to develop a theory applicable to a whole range of cases. However, one can wonder whether this generality is an advantage. As Woodward claims himself with regard to the general concept of explanation: "generality is not always a virtue" (Woodward, 2003:5). The question is whether the same problem does not also occur in the specific case of causation and causal explanation. Woodward's unifying aim leads indeed to some tensions in his approach. On the one hand, he claims that patterns of counterfactual dependence as revealed by his interventionist approach are the "objective core" behind causal judgments, but on the other hand, he is forced to accept the influence of interests and what causal reasoners interpret as "serious possibilities" as contributory in causal reasoning. By explaining causality and "resolving all extant problems" such as causal overdetermination, omission, prevention, etc. along the interventionist lines he seems to redefine the concept "cause" such that it fits the theory rather than the reverse. Consequently, although Woodward claims to lean on causal intuitions and rejects alternative approaches on the basis of their incongruity with these intuitions, some elements intuitively perceived as causes are claimed to be wrongly entitled as "causes" on the basis of his own theory, while other elements intuitively not perceived as such are presented as "real causes" by Woodward. To give just one example as it was criticized by Glymour:

A woman's sex or race cannot, according to Woodward's constraint, be a cause of her treatment by someone else, since there are no interventions on either feature with suitable invariance.

² Woodward nonetheless recognizes that one can discern different kinds of causes, e.g. total causes, direct causes, contributing causes, etc. However, these different kinds of causes should all be captured by means of his single notion in terms of interventionist counterfactuals.

Woodward argues that sex fragments into many different variables, ranging from genotype to employer beliefs about a person's sex. Claims about sex as a cause, he argues, are typically ambiguous. Granted, but philosophers are skilled at disambiguating when they want to and I think the point remains that genotype is not, on his view, even a remote cause of an individual's treatment by others. These last cases are in my view regrettable consequences of trying to found a theory of causal explanations on interventions. (Glymour, 2004:789-790)

The question is then whether Woodward has the right to use these subtle manoeuvres for the benefit of uniformity? Since we can't avoid being confronted with contradictory causal intuitions³, every monistic causal approach will need to revise our notion of "cause" such that inconsistencies in our intuitions are decided. Hence, a big challenge for a conceptual causal monist is to find an objective and convincing criterion to justify that one should revise one's causal intuitions precisely in the way suggested by the approach defended. In fact, Woodward does not seem to have such a criterion, except for the strong belief in his own theory, to justify his revisions. Such arbitrary revisionism might be overcome by a pluralistic approach, in which contradictory intuitions might be explained by different, but equally acceptable, approaches to causation.

A second aspect of causal reasoning that causal monists do not take into account, is that the context of the reasoning process and/or the context in which the causal event itself arose, can influence our causal judgments. Even if one is convinced that "causation" can be captured by a single concept, what will be selected as "the cause" may vary dependent on these contextual factors. On the other hand, contextual factors may also take part in deciding which approach to causation is appropriate in the situation under consideration, and may hence further justify a non-univocal approach to causation. A second challenge for the causal monist is thus to avoid that his general approach, which is denying contextual elements of possible importance for causal decisions, becomes too uninformative to characterize everyday causal reasoning.

³ Christopher Hitchcock presented in his article *Of Humean Bondage* (Hitchcock, 2003) a whole range of examples on which our causal intuitions can disagree.

However, one can also argue for or against causal pluralism from a totally different point of view, namely from metaphysical convictions. Phil Dowe, for example, clearly defends metaphysical causal monism (Dowe 1992, Dowe 1995, Dowe 2000). He is convinced that, from a metaphysical point of view, causation is a univocal relation describable in terms of conserved quantities at the physical level. Dowe nonetheless admits that we use other concepts of causation, incorporating for example prevention and omission. He labels the latter kinds of "causes" "quasi-causation" and admits that it is not necessary for practical purposes to distinguish "quasi-causation" from real causation (Dowe, 2004).

Woodward does not offer metaphysical reasons to underpin his monistic conceptual approach. What he does use to underpin his conceptual approach are arguments from a scientific point of view. Witness, for example, Woodward's reaction to Skyrms' pluralistic ideas (see Woodward, 2003:91-93) that all of the criteria for causation have more or less equal weight and that we hence have to think of causation as a cluster concept involving all these approaches:

whatever the appeal of the cluster concept account as a description of the concept of causation with which we ordinarily operate, it is a problematic account from the point of view of methodology - it is not a concept we should adopt. On the one hand, if we formulate the cluster theory in such a way that satisfaction of all of the above criteria is necessary for the application of the concept "causation," we will exclude a large number of scientifically interesting cases of causation. On the other hand, if we say that "most" or "many" of the criteria must be satisfied or that some criteria are more "important" than other or that "different criteria will be weighted differently in different contexts," then unless we can explain with some precision what the quoted phrases mean, we will end up with a concept of causation that is vague and unclear, and the application of which to specific cases is uncertain and contestable. [...] One of many virtues of a monocriterial view like the manipulability theory is that it forces investigators to be less vague and noncommittal about what they mean when they use this word ["cause"]. (Woodward, 2003:93)

First of all, I think Woodward (just like a lot of other participants in the causal pluralism debate) fails to make a distinction between arguments

underpinning conceptual causal pluralism and arguments underpinning epistemological-methodological causal pluralism. Further, if we read these arguments of Woodward as supporting epistemological-methodological causal monism (along with conceptual causal monism), they can still be questioned. Will all investigators in all domains of science indeed be able to be clearer when they are forced to use a single limited concept of causation? And is it on the other hand really unimaginable to develop some precision with regard to the view that "different criteria will be weighted differently in different [scientific] contexts"? Monistic oriented philosophers of science will probably be easily convinced, but it might not be so for pluralistic oriented ones.

The ultimate question regarding Woodward's recent contribution to the philosophy of causation is then: is the generality with regard to the concept "cause" as purchased by Woodward a real virtue and the right approach to the subject? The contributors to this volume were presented with this and related questions, which will be listed in the following section.

3. The topics of this volume of Philosophica

In the previous sections of this introduction, some questions regarding causal pluralism have already arisen. The following questions served as a guideline for the contributors.

First of all, some questions related to the very general question whether causal pluralism is something we should avoid or rather endorse:

- Is it possible and/or necessary to find one singular and overall concept of causation?
- Do some counterexamples form a thorough reason to entirely reject a theory of causation?
- Is generality a virtue with regard to the characterization of causation?
- Is it necessary and/or possible to develop a pluralistic view on causation?
- Will a pluralistic view offer us a more accurate picture of the causal reality?

Secondly, some questions related to the elaboration of such a pluralistic approach to causation:

■ How to develop this pluralistic characterization?

- What kinds of pluralism should one embrace with regard to causation? Conceptual pluralism? Ontological pluralism? Epistemological pluralism? Methodological pluralism?
- What is the importance of the intuitive conceptions of causation? Should a theory of causation try to get grip on their diversity or should it rather redefine the concept to maintain one general criterion? And how to do this?

Lastly, what are the consequences of choosing for a pluralistic approach?

- Will a pluralistic approach to causation necessarily end in a vague and unclear conception which is difficult to apply in practice?
- What will be the concrete consequences for future research when adopting a pluralistic approach?

4. The answers of the contributors

The previous sections already made clear that the dispute on "causal pluralism" is not at all battled out. On the one hand, the idea of "causal pluralism" is not generally accepted and on the other hand, the notion itself can be understood and filled in in many diverse ways. This is also clear from the contributions in the volume at hand. A uniform idea on what "causal pluralism" means, and on whether it should in some way or other be accepted as a fruitful approach at all, certainly does not arise from the aggregate of these contributions. The most important thing these contributions illustrate might precisely be this diversity of ideas on "causal pluralism".

Raffaella Campaner and Francis Longworth both approach causal pluralism from a conceptual point of view. In *Mechanisms and Counterfactuals: A different glimpse of the (secret?) connexion,* Campaner holds a plea for using two concepts of cause at the same time when performing a conceptual analysis, namely a combination of a counterfactual and a mechanical approach. She argues that these approaches complement each other and are of equal value and importance. While the mechanical approach has an important explanatory role to play, counterfactuals are important for their heuristic capacities.

Francis Longworth, in *Causation, Pluralism and Responsibility* begins from Ned Hall's position (2004) that "causation" has to be interpreted as a disjunctive concept in which, contrary to the conceptual pluralism of Campaner, either of the disjuncts (i.e., production or dependence) is sufficient for "causation". Longworth presents some counterexamples to Hall's approach, and then explores whether the introduction of the notion of "responsibility" offers a means of evading these counterexamples.

Jon Williamson argues against causal pluralism in *Causal Pluralism versus Epistemic Causality*. His arguments are mainly based on metaphysical convictions. He maintains that causation is not physically real, but has to be analysed in terms of rational beliefs. Our rational causal beliefs yield one, singular concept of cause, making both metaphysical and conceptual causal pluralism false. However, this singular concept of cause is multifaceted in the sense that there are several different indicators of causal relations. Consequently, Williamson does accept a certain kind of epistemological causal pluralism.

The last two contributions of the volume approach causal pluralism from a scientific point of view. Federica Russo focuses on the social sciences in *The Rationale of Variation in Methodological and Evidential Pluralism* and defends a monistic epistemological account. She argues that, despite methodological and evidential pluralism in the social sciences, one is confronted with a monistic epistemology which is based on the rationale of variation. She further argues that her approach helps in liberating the social sciences from the hallmark of being inferior to the natural sciences.

Lastly, in my own contribution entitled Causal Pluralism and Scientific Knowledge: an Underexposed Problem, I argue more generally that an epistemological-methodological approach to causal pluralism should be valued as a line of approach on its own. I further defend epistemological-methodological causal pluralism by demonstrating and arguing that we need different causal concepts to gain scientific knowledge. On the one hand, we need different causal concepts for different scientific domains, and on the other hand, we might even need different causal concepts within singular scientific domains.

5. Conclusion

Although the contributions in this volume will not at all settle the dispute on "causal pluralism", we hope they will help us one step further in the development of arguments pro and contra causal pluralism, and in clarifying what causal pluralism could signify for the philosophy of causation.

Universiteit Gent (UGent) Leen.DeVreese@UGent.be

REFERENCES

- Dowe, P. (1992), "Wesley Salmon's Process Theory of Causality and the Conserved Quantity Theory," *Philosophy of Science*, 59, pp. 195-216.
- Dowe, P. (1995), "Causality and Conserved Quantities: a Reply to Salmon," *Philosophy of Science*, 62, pp. 321-333.
- Dowe, P. (2000), Physical Causation, Cambridge: Cambridge University Press.
- Dowe, P. (2004), "Causation and Misconnections," *Philosophy of Science*, 71, pp. 926-993.
- Glymour, C. (2004), "Critical notice. James Woodward, Making Things Happen: A Theory of Causal Explanation," *British Journal for the Philosophy of Science*, 55, pp. 779-790.
- Hall, N. (2004) "Two Concepts of Causation," in: Hall, N., Collins, J. and Paul, L.A. (eds.), Causation and Counterfactuals (pp. 225-276), Cambridge: MIT Press.
- Hitchcock, C.R. (2003), "Of Humean Bondage," British Journal for the Philosophy of Science, 54, pp. 1-25.
- Woodward, J. (2003), *Making Things Happen. A Theory of Causal Explanation*, Oxford: Oxford University Press.