

In defence of influence?

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David Lewis now holds that

- (L1) C causes E iff C stands in the ancestral of influence to E.
- (L2) C influences E iff (i) C and E are actual distinct events and (ii) there is a substantial range of C1, C2, ... of different not-too-distant alterations of C and a range E1, E2, of alterations of E, at least some of which differ, such that if C1 had occurred, E1 would have occurred, if C2 had occurred, E2 would have occurred and so on (Lewis 2000).

Jonathan Schaffer has argued that David Lewis's new account of causation identifies neither necessary or sufficient conditions for causation (Schaffer 2001). Unfortunately, although his discussion is stimulating and ingenious, it is defective in important places. In this brief note, I shall explain why. I then develop one of his cases in a way which seems to work better and use it to pose a challenge for Lewis. My discussion suggests that the very motivation which Lewis used for his theory, trumping cases, is responsible for where it goes wrong.¹

¹ I believe that the theory I defended in *Mind* 1999 can deal with trumping (the role of clause (IV) is of crucial importance) without giving rise to the problems identified in this brief paper. Nevertheless, I shall not seek to establish that here.

Here is Schaffer's rather dramatic counter-example. Pam is locked in a room with a simple on-off button which is activated just before she presses the button. Before that, the button was dead. Bob is locked in a room which contains a vast switchboard which enables him to modify Pam's signal or electrocute Vic himself and closed circuit TV revealing Vic covered with electrodes and strapped to a chair. Pam presses the button and Vic is electrocuted at t . Bob just watches what happens on TV. Intuitively, Pam is the cause of his electrocution and Bob's watching is not.

One of Schaffer's charges is that Lewis's theory does not get the verdict that Pam's button pressing is a cause. The only variation in Pam's button pressing is the time of the pressing or whether she presses at all. Bob can and, in one development of the case, would stop this having an influence on when Vic is electrocuted via his switchboard. He would quickly electrocute Vic if she were to fail to press the button by a certain time (Schaffer 2001: 15). Hence, Schaffer argues, Lewis must conclude Pam's button pressing is not a cause.

This is not correct. First, contrary to what Schaffer writes, it is plausible that the ancestral of influence holds between Pam's button pressing and Vic's electrocution. Pam's button pressing influences Bob's watching. If Pam were to press the button, Bob would see the signal (and, hence, would not act). If Pam were not to press the button, Bob would not see the signal (and, hence, would act). This is enough to count as a substantial range of not too distant alterations of Pam's button pressing. If Schaffer is right that Bob's watching influences and, hence, causes Vic's electrocution, by Lewis's lights, then Pam's button pressing comes out as a cause after all. Schaffer has just provided a truncated version of the third case Lewis considered as a reason for taking the ancestral (Lewis 2000: 193). So long as we stick with the idea of a back-up process which kicks in if the backed-up process fails, a manoeuvre of this sort will always be possible.

Schaffer mentions a variant of the case which does not face this difficulty. Bob presses his button regardless with the resulting signal trailing Pam's by a millisecond. In which case, appealing to the ancestral won't resolve the problem (Schaffer 2000: 16). Unfortunately, Lewis can wriggle out of that too. As a glance at the formulation of his theory reveals (and contrary to what Schaffer asserts), he does not require that the alteration of the effect must be substantial (Schaffer 2000: 11). A minuscule time difference will do. He appeals to this on occasions in his original discussion (Lewis 2000: 189). The problem is rather that, if Pam's pressing the button is so relatively uninfluential, Lewis's theory would suggest that it is barely worth mentioning as a cause. In this respect, his theory still seems to conflict with our judgements.

But perhaps not if we pay greater attention to what can be considered an alteration of Pam's button pushing. Why isn't Pam's pushing a button set

up to work earlier, or set up to produce a slightly larger delivery of electric current to Vic, an alteration of Pam's button pushing? Schaffer doesn't say. When Lewis discusses other cases, he is certainly willing to consider such alterations. For example, he considers Suzy's throwing *a much heavier rock* an alteration of Suzy's throwing a lighter rock (Lewis 2000: 191). So unless this kind of alteration can be ruled out in some principled way, he is at liberty to make this move regarding Schaffer's variant case.² If he is, then the variant case is no problem. Pam's button pressing is influential because Bob does not adjust his behaviour to take into account Pam's circumstances and what she does. He just acts regardless. So it looks as if either appeal to the ancestral of influence or more significant alterations will deal with Schaffer's first charge whatever form of case we consider.

Schaffer's second charge is that Lewis's theory proclaims Bob's watching a cause of Vic's electrocution in virtue of the fact that alterations of his watching include Bob's pressing buttons to electrocute Vic. Here it seems that Schaffer faces something of a dilemma. Either he takes Bob's watching to be the watching of a bystander, someone with no intention to intervene, or he takes Bob's watching to be that of a back-up man poised to act. If he takes Bob as a back-up man, then it looks as if it is not that counter-intuitive to claim that Bob is a cause of Vic's electrocution. After all, he could have stopped Pam's button from working or jumped the gun. On the other hand, if Schaffer takes Bob as a mere bystander, then it is not clear why Bob's various possible button pushings are alterations of Bob's watching. We now no longer have Bob's merely watching being one thing Bob the back-up man may choose to do. To this line of objection about Bob as bystander, Schaffer makes three responses. First, he argues that to rule out playing with the switchboard as an alteration of Bob's watching is ad hoc (Schaffer 2001: 17). This charge seems unwarranted. Watching with one eye, watching carefully, watching for a certain light, watching through binoculars, and not watching at all, all these seem to be alterations of watching as a bystander. Playing with the switchboard does not seem to be an alteration of watching. It is not even a not-watching. It is not ad hoc to rule out something counter-intuitive. Second, Schaffer argues that Lewis needs to consider the alteration to Pam's pressing in which she doesn't press but just stands around and watches so, by parity of reasoning, he must allow that Bob's button pressing is an alteration of his watching (Schaffer 2001: 17). If the point I made above about the kind of alterations to which Lewis can appeal regarding Pam is correct, he does not have to assume that Pam's button pressing is completely excised, a point he emphasizes (Lewis 2000: 190). However, for the sake of argument, suppose that Lewis does

² This would also, incidentally, deal with Schaffer's magical trumping version of the case. So I won't discuss it further (Schaffer 2001: 16).

need the complete excision of Pam's pressing the button. Then all he needs to consider is just that: that Pam does not press the button. It is tendentious to describe this as Pam just standing around and *watching*. Schaffer himself in another context argues that Bob's watching is logically and causally distinct from his failing to press a button (Schaffer 2000: 13–14). In which case, he is in no position now to claim that the first just amounts to the second in the present circumstances. The final point Schaffer makes is that we can make the alterations as 'near-in' as we like so that the merest movement – for instance, watching with one eye – would have an effect on the electrocution of Vic (Schaffer 2001: 17). If those were the circumstances, though, it is far less clear that Bob's watching is not *a* cause of the electrocution of Vic.

What adjustments to Schaffer's case do we need to get a working counter-example? We should focus on Bob the back-up man. Then there is no need to argue that Bob's watching is an alteration of his pressing the button. It is a potential cause in itself. Variations in what he sees lead to different actions. Suppose, in addition, that none of Bob's buttons enable him to stop or alter Pam's signal when the button is depressed at $t - 1$. They just work if she presses the button at another time or not at all. Then it would seem that Bob's watching cannot be a cause of Vic's electrocution. Omission or attempted intervention would make no difference to Vic's electrocution then. Yet alterations in Bob's watching clearly influence Vic's electrocution. He could have brought about the electrocution earlier and at different strengths. He could have stopped her signal at the time it occurred if his watching had been in front of a working button. Bob's actual watching (just shortly after $t - 1$) would be counted as a cause when it should not be.

How might Lewis deal with this type of case? The very feature of his account which enables him to deal with some trumping cases (i.e. it does not insist on 'whether-whether dependence') gives rise to the problem in this case.³ In the past, Lewis has shown a willingness to allow his intuitive causal judgements to govern his conception of what counts as close possible worlds (Lewis 1979). He may show just as great a willingness to allow his intuitive causal judgements to mould his conception of alterations. In which case, I think it is legitimate to wonder whether Lewis will be able to

³ There is a general question of whether Lewis's approach is well-motivated by trumping. It seems that the laws of magic in the case discussed are rather too convenient. What happens if it is a law of magic that the first spell of the day, if it is at 12 noon and to turn a specific prince into a frog, will be matched by the enchantment at midnight, and so on? Once Lewis allows magic into the equation, he needs a way of limiting its scope so that some influence will still be revealed. I know of no way of doing this which is not ad hoc. In this I agree with Schaffer 2001: 16; Collins 2000: 231; and Jacob Rosen.

devise a similarity metric of alterations which, on the one hand, allows that Pam's pressing a button with a different switchboard set-up is an alteration of her button pressing and, on the other hand, does not allow that Bob's watching at a slightly different time when the button is working, or at the same time with the button working after all, is an alteration of his watching at $t - 1$. Certainly it will not appeal to a pre-theoretically intuitive notion of alteration. Minor differences in timing will be considered 'too-distant'. Of course, Lewis may respond that Bob's watching really is a cause after all – another spoil to the victor (Lewis 2000: 189). I do hope that's right. I might get lots of things done.⁴

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