Counterfactuals and the law

Simon Beck
Philosophy Department, University of Natal, P.O. Box 375, Pietermaritzburg 3200, Republic of South Africa

Received February 1993; revised April 1993

This article is concerned with the place counterfactual reasoning occupies in South African law, and how philosophy might be able to help the law. I point out some of the more important and unavoidable uses of counterfactual reasoning in our law. Following this I make some suggestions as to how philosophy, and especially informal logic, can be of help to the law. Finally, I make some suggestions as to how the law in its turn can help philosophy.

Hierdie artikel is met die plek van kontrafeitelike redenering in Suid-Afrikaanse reg betrek, en hoe die wysbegeerte die reg kan uithelp. Ek wys na van die meer belangrike en onvermydelike gebruike van kontrafeitelike redenering in ons reg. Ek stel ook voor hoe die wysbegeerte, veral informele logika, vir die reg van hulp kan wees. Ten slotte stel ek voor hoe die reg op sy beurt die wysbegeerte kan help.

South African universities face ever-increasing financial stringency. Because of this, academic departments are called upon to justify their existence — philosophy departments no less than others. In such an exercise of justification the question invariably arises as to what practical needs the courses taught by the department in question meet. Philosophers have tended to answer this question by pointing to, or introducing, courses on practical ethics and informal logic.

One other kind of course which has come to play a part here is the kind which establishes a link with some other discipline — courses on topics like medical ethics, or decision-making in business. An area which is much less well-charted is the ground where philosophy and law overlap. Jurisprudence may be familiar territory but there are other areas besides, and it is one of these that I wish to discuss. Through no more than a preliminary survey of the terrain, I hope to provide an indication of just how useful philosophy can be to the law, and to highlight one area where philosophers can put their subject to practical use.

1. Counterfactual reasoning

We believe that we know, at least some of the time, what would have happened if things had been otherwise than they actually were. For example, the 1992 South African rugby team would have been better received in France if they had shown signs of a sense of humour. And we know that if Lion lager contained no alcohol it would not satisfy. To reason about what would happen or would have happened is to reason counterfactually and, as these examples indicate, this is something we are well used to doing. Nevertheless, counterfactual reasoning is problematic for a number of reasons, most of which centre around the point that such reasoning is inevitably to some degree speculative.

This article is about counterfactual reasoning and its place in the law. In this context I have three aims. First, I wish to establish the importance and unavoidability of counterfactual reasoning in South African law. Second, I wish to make some suggestions as to how philosophy, and especially informal logic, can be of help to the law. Finally, I will make some suggestions as to how the law can help philosophy.

2. Counterfactuals in the law

While its importance is not restricted to that area of the law, counterfactual reasoning plays its most significant role in the law of *delict*: that area of the law concerned with cases in which injury is culpably inflicted, but in which no contract is involved. Within the law of delict three points in which counterfactuals occur stand out:

(a) the 'but-for' test;
(b) the 'reasonable man' criterion; and
(c) the assessment of damages.

All three instances enshrine the use of counterfactual reasoning in our law: even if it were by its nature unacceptable, our courts would still be obliged to indulge in it.[1]

The but-for, or *sine qua non*, test is the test applied in order to determine whether or not the defendant's conduct in fact caused the plaintiff's injury. The test produces a positive answer if the plaintiff would be uninjured *but for* the defendant's behaviour: for example, it might be charged that, had the defendant erected a fence around his pool, then the plaintiff's child would still be alive today.

The reasonable man criterion is used to test whether a person's negligent or harmful conduct is *accountable* in the sense required by law (lawyers say, whether there is *fault*). The test is fairly straightforward: one asks what a reasonable man would have done in the circumstances. Firstly, would he have foreseen the harmful outcome and secondly, what would he have done about it? If he would have foreseen it and would have taken steps to avoid it which the defendant did not take, then the defendant is accountable.

Perhaps the most striking and most contested use of counterfactual reasoning occurs during the assessment of damages. To arrive at the amount of damages which should be paid once someone has been found guilty of delictual harm, the court has to consider what would have happened had the plaintiff not suffered the injury in question, and will then require the defendant to make good the difference between what the plaintiff would have had and what they actually have. For example, if you knock down my fence, you will be required to pay the cost of its replacement. Things will not always be this simple, of course. Often the court is required to make a judgement about how much a person would have earned during the rest of their lives had the accident which robs them of their normal earning power not occurred — and this places far greater demands on counterfactual reasoning skills.

All three procedures are entrenched in our law and even if they were not it is hard to see how our legal institutions could get along without them.

3. Attitudes to counterfactual reasoning

All three of the instances which I have highlighted have given rise to controversy in legal history. Not all the controversy has related directly to the counterfactual reasoning involved, although it is by no means easy to separate other issues from those involving the counterfactual nature of the inquiry. The but-for test has been criticized as relying on a deterministic view of nature (Boberg 1984:380), and as being unable to cope with cases involving more than one sufficient cause. The reasonable man criterion calls out for MacIntyre's question, 'Which rationality?'.

But there are attitudes to these three types of case to be found in our legal system which are far more important to our inquiry since they are directly concerned with counterfactual aspects. These are attitudes at the opposite ends of a spectrum: at one end of the spectrum one finds a court unwilling to tolerate any conclusion resulting from counterfactual reasoning, on the grounds that it is 'purely speculative', and sometimes going to great lengths to avoid reasoning in such a way. At the other end one finds the court willing to believe all sorts of surprising things about how a plaintiff's life would have developed had they not suffered as they have. Strassfield has neatly labelled these attitudes respectively as counterfactual dread and counterfactual bravado (Strassfield 1992:348).

4. How philosophy might help

It is with these extremes of counterfactual bravado and counterfactual dread that philosophy can be of especial help to the law (it can inform the law in many other ways as well, but it may not *help* much there).[2] For in making clear the procedures of counterfactual reasoning, legal worries can be put into perspective and difficulties can be more easily solved once it is seen just where they actually lie.

What does philosophy have to say about counterfactual reasoning? Well, not much is to be found in textbooks on informal logic, but the foundations have been laid in the extensive attention that the semantics of counterfactuals has received. There are two dominant models here, and both of them can be of help.

One model is Mackie's (Mackie, 1974). For Mackie, a counterfactual conditional is neither true nor false, but rather valid or invalid. In other words, a counterfactual is an abbreviated *argument*. The counterfactual's consequent is the argument's conclusion, the antecedent one of the argument's premisses. In between the overt premiss and the conclusion stand one or more assumed premisses which state various relevant laws of nature. As an example, in the but-for test which occurs in the case of Murray vs. Union & South West Africa Insurance Co. Ltd 1979 (2) SA 825 (D), it is contended that the plaintiff's eyes would not have been damaged had the diesel bus not pulled in front of him and belched its exhaust fumes in his face. The conclusion of the disguised argument is that the plaintiff's eyes are not damaged. The overt premiss is that the diesel bus does not belch its fumes in his face. The relevant but implicit laws of nature (presumably) concern the relationships between carbon particles in unburnt fuel and eye damage, sudden acceleration and the emission of such particles, and so on. To assert the counterfactual is to claim that the conclusion follows from these implicit premisses together with the antecedent.

This model is helpful in a number of ways. Most importantly it draws attention to the fact that one must not be blinded by the counterfactual *form* of the inquiry — because at the heart of a counterfactual assertion lie non-counterfactual *categorical* assertions. The relevant questions about causation with which a but-for test deals, then, are about the evidence which we have in support of these categorical generalizations, and not about mysterious counterfactual evidence.[3]

A related point which may be of help also emerges. This is that counterfactuals, like the one just used as illustration, which contain implicit well-attested scientific generalizations are more reliable than those which contain inevitably less well-attested generalizations about human behaviour.

Some commentators, like Strassfield (1992), criticize the greater willingness of courts to accept 'scientific' counterfactuals over those concerning how people would behave in specified circumstances, but this model indicates why such a trend is not unreasonable. It is just that the information we have regarding the connection between engine acceleration and the emission of particles is much more dependable than that regarding the way people (reasonable or not) tend to behave. In Minister of Police and Internal Affairs vs. Van Aswegen 1974 (2) SA 101 (A) the judge asserted that a reasonable person would have foreseen that a handcuffed prisoner would attempt to interfere with the steering of the car transporting him in order to escape. Following Mackie's model, behind this counterfactual lies the general principle that all reasonable people foresee these things, or that a person with the characteristics ascribed to the Reasonable Man foresees such things. But the reliability of that generalization is in a far lower league than that concerning the emission of fuel particles. This is not to say that there are no reliable generalizations concerning human behaviour — simply that the reliability of counterfactuals is relative, relative to the amount of evidence we have in support of their implicit categorical generalizations.

The other dominant model is that of David Lewis (Lewis, 1973). This model accepts the intuition (contra Mackie) that counterfactual conditionals have truth-values, and sets out their truth-conditions in the terms of possible-world semantics. To put the matter very briefly and crudely, on Lewis's account a counterfactual is true if the closest possible worlds in which its antecedent is true are worlds in which its consequent is true. The corresponding procedure for testing a counterfactual's truthfulness would be to imagine a world as near as possible to the actual world, but in which the antecedent is true: one changes as little as one consistently can in order to accommodate this new 'fact'. Then one asks whether the consequent is true in this changed world. If it is, then the counterfactual is true; if not, it is false.

As soon as one starts to implement this model in our context its helpfulness begins to emerge. Take the counterfactual from the case of Murray mentioned above — that the plaintiff's eyes would not have suffered the damage they did had the bus not pulled in front of him and emitted fumes in his face. How does one conjure up the closest possible world in which the bus does not pull in front of him and belch smoke in his face? That task appears rather baffling until it is taken into account that we're attempting to establish whether or not the bus (driver) caused the plaintiff's injury. What one needs to imagine is not a world in which the bus has no exhaust, but one in which the bus has a clean exhaust system, or one in which the driver does not accelerate sharply immediately upon

pulling in front of the plaintiff. In these worlds, the plaintiff does indeed remain unblemished — that is, they are worlds in which the consequent is true. Implementing Lewis's model thus involves imagining a world in which the plaintiff (counterfactually) acts *carefully* and, in these cases at least, the model leads to intuitively correct results. Making the reasoning procedure clear in this way makes the task of the court at least a little easier.[4]

5. Counterfactual dread and bravado

We have yet to discuss cases which overtly involve some counterfactual bravado or dread, and how philosophy might be of help there. Consideration of a particular case will make matters easier; a suitable case is that of Southern Insurance Association Ltd vs. Bailey 1984 (1) SA 98 (A). In this case, Southern Insurance were appealing against the trial judge's award of damages to two-year-old Danderine Bailey who had been knocked down by a car and who would never be able to earn anything in her life as a result. They objected that, amongst other things, the judge should not have relied on an actuary's calculation of the damages Danderine had suffered because in this case it was based on 'assumptions and hypotheses so speculative, so conjectural, that it did not afford any sound guide' (113).[5] Moreover, the amount awarded was excessively large, the main reason being that the actuary had only subtracted 10% from his final figure for 'contingencies' and the 'vicissitudes of life' (116). The insurers felt that a figure of 50% would be more suitable, given that Danderine was very young with her whole life before her.

In this case, there are clear examples of both dread and bravado where counterfactuals are concerned, and in both instances our informal counterfactual logic can help. A type of counterfactual dread is in evidence in the appellant's attitude to the trial judge's reliance on an actuary's evidence. Because we are dealing with a two-year old, the appellant suggests, the actuary's assumptions are too speculative to be acceptable. The alternative to relying on such evidence[6] is for the judge to rely on his intuition as to what would be a reasonable sum of damages. But not only is it obvious that any counterfactual reasoning is speculative,[7] especially so in such a case as this, but it is also clear that a judge's intuitive decision will be far more speculative in the pejorative sense intended than will the actuary's.

Mackie's model underlines this and points the way to alleviating some of the appellant's dread. For the actuary's calculation will at least involve appeal to principles for which there is more or less evidential support, and it is these as we have seen that do the work in counterfactual logic. The appellant's complaints should be directed at these — in this case the appellant offered no contrary evidence at all (116). Nor is it only actuarial principles which are relevant — there is strong empirical evidence to support the claim that the probability is that a child will not earn (relatively) more than did its parents (Heath, 1981), and this indeed played a role in reaching the sum of damages in the case of Danderine.[8]

Counterfactual bravado can be seen in both the attitude of the appellant and the judge as far as the subtraction of a figure for the vicissitudes of life is concerned. The appellant's is extreme: demanding a subtraction of 50% amounts to predicting that Danderine's life will be twice as bad as the rather moderate outlook of the actuary suggests. Such bravado appears wildly unjustified, when one considers Lewis's closest worlds in which Danderine is uninjured. Or to use the terms of Mackie's model, there is no law of nature to the effect that life is twice as bad as one might expect. The appeal judge pointed out the fairly obvious point that not all of the contingencies of life are adverse ones, but nevertheless changed the 10% subtraction to 25%! But imagining the closest and most reasonable world to consider given the task of the court surely requires one to make no subtraction at all. At the least, any subtraction or addition requires the support of a substantial reason.

6. How the law can help philosophy

The few cases and points reviewed above are an indication that informal counterfactual logic can be of significant help to the law. In a smaller way, the law can help philosophy in return. Firstly, legal cases provide a wealth of examples — real examples which matter — to illuminate and aid in the teaching of the theory of counterfactuals and of informal logic. They show that questions here are by no means boringly abstract, and can provide examples of the often extreme intricacy and of the far-reaching consequences of counterfactual reasoning.

Secondly, this area of overlap between philosophy and legal studies provides an important example of an area where philosophers who wish to show the practical usefulness of their subject can turn. Even more importantly, since the philosophical side of the overlap covers a central philosophical concern — the problem of counterfactuals — we have an example of how we can contribute to other disciplines without forsaking mainstream philosophy.

Cases cited

1. Minister of Police vs. Skosana 1977 (1) SA 31 (A).
2. Minister of Police and Internal Affairs vs. Van Aswegen 1974 (2) SA 101 (A).
3. Murray vs. Union & South West Africa Insurance Co. Ltd 1979 (2) SA 825 (D).
4. Southern Insurance Association Ltd vs. Bailey 1984 (1) SA 98 (A).

Acknowledgement

I am grateful to the University of Natal Research Fund for financial assistance towards this research.

Notes

1. For instance, the 'but-for' test which by its nature requires counterfactual reasoning has the authority of Minister of Police vs. Skosana 1977 (1) SA 31 (A).
2. For instance, much has been said in the philosophical literature about the problem of causal overdetermination. But while this may illuminate the problem, it is unlikely to be of much practical help to a court.
3. This point emerges also in Rom Harre's discussion of counterfactuals in science (Harre, 1976).
4. This imagining of a careful act when one is considering the omission of an act is suggested by Van Rensburg (1977), but without any of the theoretical support which Lewis's account now provides. Boberg suggests (1984:382) that Van Rensburg's version of the test also solves the problem of overdetermination, but how it could do so is totally mysterious to me.

5. These page references are to the court reports.
6. As the appeal judge pointed out (113).
7. South African law demands a great degree of speculation. One may not wait for a long period in order to assess what actual damages (such as loss of earnings) have occurred, because any delictual action must be brought about within three years of the date of the act which caused the damage.
8. Danderine's mother earned R36 a month in 1981, and this is the figure on which the actuary's calculations were based.

References

Boberg, PQR. 1984. *The law of delict Vol. 1.* Cape Town: Juta.

Harre, R. 1983. *An introduction to the logic of the sciences, 2nd ed.* London: Macmillan.

Heath, A. 1981. *Social mobility.* Glasgow: Fontana.

Lewis, D. 1973. *Counterfactuals.* Oxford: Blackwell.

Mackie, J.L. 1974. *The cement of the universe.* Oxford: Clarendon Pr.

Strassfield, R. 1992. 'If ...' *George Washington Law Review,* **60**.

Van Rensburg, A. 1977. Nog eens die *conditio sine qua non. Tydskrif vir Suid-Afrikaanse Reg,* **101**.