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## **Causation Outside the Law**

Peter Lipton

Department of History and Philosophy of Science  
Cambridge University

### **I Introduction**

In their important book, *Causation in the Law*, H. L. A. Hart and Tony Honore argue that causation in the law is based on causation outside the law, that the causal principles the courts rely on to determine legal responsibility are based on distinctions exercised in ordinary causal judgments. A distinction that particularly concerns them is one that divides factors that are necessary or *sine qua non* for an effect into those that count as causes for purposes of legal responsibility and those that do not. Hart and Honore claim that this distinction is often one of fact rather than of legal policy, and that the factual basis is to be found in the ordinary distinction we draw between causes and 'mere conditions'. If this claim is correct, we may hope to illuminate the legal distinction by articulating the principles behind the ordinary one. This is a challenging task since, as in the case of most cognitive skills, we are far better at making particular judgments than we are at stating the general principles that underlie them. Hart and Honore devote the first part of their book to this difficult task.

We have, then, two large projects. One is to articulate our ordinary notion of causation, especially the distinction between cause and mere condition. This is the project of constructing an 'ordinary model'. The other is to argue for what we may call the 'shared concept claim', the claim that the concept of legal cause is based on the ordinary notion of causation, that 'causal judgments, though the law may have to systematize them, are not specifically legal. They appeal to a notion which is part of everyday life' (1985, p. iv; all references to follow are from this edition).

This essay will focus on Hart and Honore's ordinary model, rather than on their shared concept claim. In my judgment, Hart and Honore's case for some version of the shared concept claim is strong, so they are right to maintain that a better understanding of our ordinary notion of

causation will elucidate the legal situation. On the other hand, while their ordinary model has a number of admirable features, it also has several weaknesses that make it unacceptable as it stands. Hart and Honore's style of presentation also makes it difficult to glean precisely what the content of their model comes to, in part because several of the model's features are not emphasized in their initial analysis of ordinary causal concepts, but only emerge in the subsequent discussion of the roles of causation in the common law. My plan for the following sections of this essay, then, is to present a compact sketch of their model, to canvass some of the difficulties it faces, and then to indicate the form an improved account might take. At the end of this essay, I will also suggest that a better understanding of ordinary causal judgments may have even more to tell us about the nature of causation in the law than Hart and Honore suggest.

Before turning to the details of their ordinary model, however, I want briefly to consider the evidential relationship between that model and the shared concept claim, in the context of Hart and Honore's general programme. It is natural enough to suppose that a model of our ordinary causal judgments should serve as a premise in the argument for the shared concept claim. First we construct a good model of our ordinary notion of causation; then we may embark on the task of showing the extent to which causal judgments in the law fit the model. Hart and Honore's presentation suggests this strategy. In the first part of their book, they construct an ordinary model; in the second, they try to show that many legal decisions show that courts apply the causal criteria their model describes (cf. xxxv).

This way of proceeding is legitimate, but it is an expensive way of justifying the shared concept claim. The main reason for this is the difficulty in constructing an adequate ordinary model, something Hart and Honore emphasize. They go so far as to claim that the great gap between our ability to discriminate in practice between causes and mere conditions and our ability to explain the principles that guide us in these particular judgments reveals a 'pathological aspect' of both ordinary and legal language (xxxiii). As we will see, the battery of distinctions and nuances they find themselves forced to make in order to construct an ordinary model adequate to our actual judgments reveals just how difficult the project is. Our confidence in the correctness of a particular ordinary model should therefore in general be considerably lower than our confidence in the particular judgments the model is supposed to explain.

This suggests that the primary source of evidence for the shared concept claim is not to be found by determining the extent to which particular legal judgments are subsumed by the general principles of an ordinary model, but rather by the more direct route of comparing particular legal judgments with our ordinary causal judgments about the same cases. In other words, the main test of the shared concept claim ought to take the form of asking whether a court's decision to count one factor as a cause and another as mere condition in a particular case coincides with our everyday judgment about these factors. Indeed, I find it difficult to imagine how anyone could read the second part of Hart and Honore's book without constantly performing thought experiments of this kind. This procedure may seem disappointingly subjective, but it is no worse than appealing to an ordinary model, since the main evidence for the model can again only be our considered judgments about particular cases.

One of the prescriptive consequences Hart and Honore draw from the shared concept claim is that the question of whether the harm suffered by a plaintiff was caused by the defendant's act is one that it is suitable to submit to members of a jury to decide by applying their ordinary notion of causation (307). A member of a jury is of course unlikely to be familiar with a philosopher's ordinary model of that notion. What I am suggested is that we too ought to act as a jury with respect to the shared concept claim, relying primarily on our ability to exercise the ordinary concept of causation rather than on the guidance of a philosophical model of that concept.

This in no way shows the project of constructing an adequate ordinary model to be unimportant, only that its primary role is not to support the shared concept claim. Instead, its main jurisprudential interest appears once we have convinced ourselves that the shared concept claim is sound. At this stage, we may apply an ordinary model to causation in the law, confident that the principles that underlie our ordinary causal judgments will elucidate the role of causation in the law. For this application to be fruitful, however, we need to construct a model that represents accurately our ordinary causal notions.

## **II Hart and Honore's Ordinary Model**

What, according to Hart and Honore, are the principles that govern our ordinary causal

judgments? Their full account is complex and nuanced, but it has a clear core. Leaving aside cases of causal over-determination (cf. 122-25), where two or more factors are independently sufficient to produce an effect, a cause is a factor sine qua non, a factor without which the effect would not have occurred. We do not, however, treat every sine qua non as a cause. Some are not part of the causal history of the effect at all. Being coloured, for example, is not a cause of being green. Again, a flash of lightning does not cause the sound of thunder, since both are caused by the electrical discharge (cf. 114-22). The cases that centrally concern Hart and Honore, however, are factors sine qua non that do appear in the causal history of the effect yet are not ordinarily judged to be causes. When a house burns down, the presence of oxygen and the arsonist's lighting of the fire are both factors sine qua non, but only the latter would ordinarily be considered a cause of the destruction. Similarly, when a car is involved in an accident which would not have occurred if the engine was not running or if the breaks had not failed, only the brake-failure is a cause of the accident. The oxygen in the one case, and the operation of the engine in the other, though both causally relevant, are mere conditions, not causes. Hart and Honore are centrally concerned, not with the metaphysics of causation, but with a problem of causal selection. How, in ordinary thought, do we select causes from among those factors that are causally relevant? More specifically, the central question is this: what requirements must a sine qua non meet to be a cause and not a mere condition?

Hart and Honore's answer can be resolved into three requirements that a sine qua non must meet if it is to count as a cause and not a mere condition. The first is that it must be either a voluntary human act or an abnormal condition, where a condition is abnormal if it is not 'present as part of the usual state or mode of operation of the thing under inquiry' (35). In the examples of the fire and the automobile accident, this act or abnormal requirement correctly entails that the arsonist's act and the brake-failure are both causes, while the oxygen and the running engine are not.

This act or abnormal requirement, however, is still too permissive: not every voluntary act or abnormal condition is treated as a cause. The remaining two requirements are supposed to effect the necessary additional restrictions on the class of factors sine qua non. One of these concerns the relativity of causal judgments. When an abnormal situation or event is cited to

explain why something happened, what counts as a cause is a highly contextual matter, relative both to the situation of the effect and to the interests of the inquirer. A condition that is normal in one situation may be abnormal in another. Thus the presence of oxygen may explain a fire if the fire takes place in a laboratory environment that was designed to be oxygen-free (35). In cases such as this, the relativity is due to an objective variation in the local normal conditions: the normal environment of a house is different from the normal environment of a certain type of laboratory.

The requirement that a situation or event cited as a cause be abnormal not simply in general, but abnormal in the circumstances of the effect, is not yet an additional requirement for qualification as a cause; it is only a further specification of what is meant by abnormal. But there are also variations in causal judgments about a single case, variations that are due to interest relativity rather than to situation relativity, and this brings in the second requirement. Hart and Honore illustrate the interest relativity of causal judgments with two examples:

The cause of a great famine in India may be identified by the Indian peasant as the drought, but the World Food authority may identify the Indian government's failure to build up reserves as the cause and the drought as mere condition. A woman married to a man who suffers from an ulcerated condition of the stomach might identify eating parsnips as the cause of his indigestion: a doctor might identify the ulcerated condition of his stomach as the cause and the meal as a mere occasion (35-6).

For the peasant, the government's food policy is part of the normal state of affairs and so a mere condition, whereas the World Food authority treats this as something unusual, since it distinguishes India from most other countries. For the wife, her husband's condition is normal, but eating parsnips is exceptional; for the doctor, the husband's diet is a normal part of most people's lives, while the ulcer is what distinguishes the husband from most people (36-7). The second requirement then, which we may call the relevance requirement, is that the cause, if it is of the abnormal variety, must also count as abnormal relative to the interest or point of view of the inquirer.

The third requirement for a cause is that the causal connection between the act or

abnormal event and the effect not be defeated (Hart and Honore say 'negatived') by an intervening act or abnormality. Although their precise conditions on defeat are complex, Hart and Honore give two examples that clarify the process. In the first, an act's claim to be a cause is defeated by a subsequent act: 'A throws a lighted cigarette into the bracken which catches fire. Just as the flames are about to flicker out, B, who is not acting in concert with A, deliberately pours petrol on them. The fire spreads and burns down the forest. A's act, whether or not he intended the forest fire, was not the cause of the fire: B's was' (74). Had A intended to destroy the forest, an act like his would normally be counted a cause of the devastation, but in this example B's subsequent act defeats the causal attribution. In a second example, the defeater is an abnormal coincidence: 'A hits B who falls to the ground stunned and bruised by the blow; at that moment a tree crashes to the ground and kills B. A has certainly caused B's bruises but not his death' (77). A's act may have been both voluntary and a sine qua non of B's death, but it is still not a cause.

As a first approximation to this third requirement that a cause not be defeated by subsequent events, we might say that an act or abnormal event is only a cause if there is no subsequent sine qua non that is also an act or abnormal event. In other words, we might say that only the act or abnormal event closest to the effect is its cause. As Hart and Honore show in detail, however, this is too simple, because not all intervening acts or abnormal events defeat. For example, if I leave my car unlocked overnight in New York City, the later act of a thief does not prevent my foolish behaviour from counting as a cause of the loss of the car. Again, to take another of Hart and Honore's examples, '[i]f defendant lights a fire knowing, through a reliable weather forecast, that an hour later a hurricane will pass through the district, the hurricane, however abnormal, will not negative causal connection between the defendant's act and the damage resulting from the conjunction of the hurricane and the fire' (170-71).

It is by no means easy to say in general and in detail what differentiates subsequent acts or abnormal events that are defeaters from those that are not. Hart and Honore devote a great deal of care to this task. Their articulated account of defeaters comes close to the following. First, an act is defeated by a subsequent voluntary act intended to exploit the situation created by the initial act, provided that the original act does not provide an opportunity known to be

commonly exploited (cf. 136). Second, an act or abnormal event is defeated by a subsequent sine qua non if the later factor is independent and abnormal or if the conjunction of the earlier and later factors is an unlikely coincidence, so long as the later factor is not foreseen by the agent (cf. 162-3).

### **III Difficulties**

For Hart and Honore, then, a sine qua non of an effect is only a cause if it is either a voluntary act or an abnormal event that is both interest-relevant and undefeated. This model brings out important features of our ordinary notion of causation and marks an advance on various earlier views, such as those that identified causes with factors that are initially unknown or that are susceptible to manipulation or control. In ordinary thought we do distinguish factors sine qua non that are causes from those that are mere conditions, and voluntary acts and abnormal events often qualify as causes. Moreover, our practice of causal selection is clearly highly sensitive to situation and interest, and the claims of an act or abnormal event to be a cause are often defeated by the sorts of subsequent factors Hart and Honore flag. Nevertheless, the model does have its liabilities. In the next section, I will sketch what I believe is a better account of the principles that govern our ordinary causal judgments. First, however, we should consider some of the specific difficulties Hart and Honore's model faces, taking their three requirements in turn.

The obvious weakness of the first requirement is that it rules out normal causes that are not voluntary acts. There are more of these than Hart and Honore admit. As they rightly observe (9-10), in ordinary life we often want to know the causes of particular events that are themselves somehow abnormal, in contrast with scientific inquiry, where what are explained are typically general phenomena, and abnormal effects often require abnormal causes. Nevertheless, science has no monopoly on generalities. Many of our mundane beliefs are general judgments about what causes what, and the causes these judgments cite are seldom abnormal. A model of our ordinary notion of causation must allow for the beliefs that fire burns, sunlight warms, water quenches thirst, and innumerable other causal truisms at the heart of our ordinary conception of

the world. Moreover, these general causal attributions have specific counterparts. We judge not only that rocks are warmed in the sun, but that this rock was so warmed. If we do not cite causal truisms when asked why an effect occurs, this is not because we deny that these ordinary factors are causes, but because we assume that our interlocutor already knows about them and so must be after additional causal information.

There are many other normal causes that are not voluntary acts, in addition to those cited in causal truisms and their instances. We sometimes cite a normal cause to explain a normal effect of a type that can be produced in a variety of ways. For example, people change jobs to make more money, to have more interesting work, to occupy a position with greater prestige, to live in a more attractive location, and so on. If we ask why Jones switched his job, the cause or causes will be whatever influenced him, however normal such influences may be. Again, it is normal for elderly people to die, and many of them die of pneumonia, but pneumonia may of course still be counted as a cause and explanation of Smith's death. Finally, acts may be causes even when they are neither fully voluntary nor abnormal. If I tell my young son that he dropped his food on the floor because he was not paying attention to the task at hand, I do not imply that this is an unusual state of affairs.

Hart and Honore's first requirement is thus considerably too restrictive. I turn now to their second requirement, that the abnormality cited as a cause be relevant to the interests of the inquirer. The interest relativity of causal judgments is of central importance, but Hart and Honore's analysis is not entirely adequate. The cases they discuss under this heading also further undermine the abnormality requirement. In the case of the husband's indigestion, what makes the parsnips or the ulcer explanatory causes is not that these factors are abnormal, since they would be explanatory even if the husband had parsnips with every meal and even if most people had ulcers. Similarly, in the case of the famine in India, both the drought and the failure to build up reserves would explain even if they were both the norm. Interest relativity thus cannot be explained by claiming that different people consider different factors abnormal, so we are left without an adequate account of the mechanism by which a variation in interests yields a variation in causal judgments.

This leaves the third requirement, that the abnormal event or act be undefeated. As we

have seen, the main defeaters are coincidences and exploitations. Two difficulties here are that the coincidence condition is too weak, and the exploitation condition too strict. One sort of abnormal factor we would not count as a cause, although it is not defeated by the conditions of the third requirement, is illustrated by an example of irrelevant speeding that Hart and Honore discuss at some length (xxxviii-ix, 121-2). Suppose that Smith drives for a time at abnormally high speed, but then slows down and is later involved in a collision with a lorry at an intersection. In this case, where Smith's speed was normal at the time of the accident, we would not say that the prior speeding was a cause of the accident, any more than we would say this about the subsequent slowing down. Nevertheless, the speeding was a sine qua non of the accident since, had Smith not speeded, he would not have reached the intersection at just that unfortunate moment and so the accident would not have occurred. Yet, as Hart and Honore themselves observe, this sort of factor is not defeated on the central conditions they give, specifically on the grounds of coincidence, since '[t]he difference between such cases of coincidence and the case of speeding is that in the latter it is irrelevant whether the conjunction of events required to bring about the accident is likely or unlikely (xxxix). Irrelevant speeding is not a cause, yet it is a sine qua non that may satisfy all three of Hart and Honore's requirements.

As Hart and Honore observe (xxxix), what matters in the speeding case is not how common accidents are, or indeed how common are accidents with prior speeding, but rather whether the speeding increased the likelihood of the accident. In the example under discussion it did not, and this is why the prior speeding was not a cause. Conversely, in the more usual case where an accident occurs while a driver is speeding and is therefore unable to stop in time to avoid a collision, the speeding is a cause of the accident, even if the conjunction of events required to bring about the accident is unlikely. What counts is whether the accident was more likely with the speeding than it would have been without it. Only some factors sine qua non increase the likelihood of their effects. I will eventually argue that this is central to the distinction between causes and mere conditions.

The case of irrelevant speeding shows that the third requirement of Hart and Honore's model is too liberal, wrongly counting mere conditions as causes. Some cases of exploitation show that it is also too restrictive, excluding genuine causes. Hart and Honore discuss the

following example: 'Defendant negligently left open an unguarded lift shaft; he was not liable to plaintiff when a lad, impersonating the lift operator and knowing the lift was not there, invited plaintiff to step into it, which he did, suffering injuries' (137). According to their model, the lad's exploitation defeats the claim that the defendant's negligence was a cause of the injuries. This, however, seems the wrong result. Perhaps we would not hold the defendant responsible, from a moral or a legal point of view, for the harm, and we would certainly blame the lad, but we might also say that leaving the shaft open was a cause of the harm. We would be particularly inclined to say this if we knew that the lad was only taking advantage of what was, for him, an irresistible opportunity for mischief, so that he would not have found some other way to harm the defendant had the lift shaft been properly closed off. The general point is that, *pace* Hart and Honore, uncommon exploitation does not always defeat. Even though the neighborhood in which I neglected to lock my car is uncommonly safe, if my car gets stolen, my neglect remains a cause of the loss.

In sum, all three of Hart and Honore's requirements face difficulties. The first, that a cause be an abnormal factor or a voluntary act, wrongly excludes normal causes. The second, that the cause be relevant to the interests of the inquirer, fails to show how interests determine what will count as a cause. The third, that the cause be undefeated, both misclassifies some mere conditions as causes, as in the case of irrelevant speeding, and some causes as mere conditions, as in the case of the lad and liftshaft.

#### **IV The Likely Difference Model**

I will now sketch an alternative model of our ordinary practice of selecting causes from among factors *sine qua non* and argue that it improves on Hart and Honore's account. This model is based on two conditions. The first -- the increased likelihood condition -- is that a cause significantly increases the likelihood of the effect; the second -- the difference condition -- is that a cause marks a difference between the situation where the effect occurs and a contrasting situation where it does not. These are both conditions Hart and Honore themselves occasionally invoke, but in my view Hart and Honore do not sufficiently acknowledge the central role these

conditions play in determining our ordinary causal judgments.

The first condition of the likely difference model is that a cause, though it need not make the effect very likely, must significantly increase its likelihood. This condition is satisfied in ordinary cases where we count a sine qua non as a cause. If a successful arsonist starts a fire in a house, his act significantly increased the likelihood that the house burned down. Similarly, if a house burns down because of faulty wiring, the wiring increased the likelihood of the accident, even if it did not make the fire very likely. Unlike Hart and Honore's abnormality condition on causes, the increased likelihood condition is also satisfied by normal causes. When the warm weather caused the snow to melt, it of course raised the likelihood of the melting.

At the same time, the increased likelihood condition is not satisfied by every sine qua non. The irrelevant speeding case is a particularly clear illustration of the extra restriction that this condition imposes. If the only role of the initial speeding was to ensure that the driver was in the wrong place at the wrong time, we would not ordinarily judge the speeding to be a cause of the accident, even though it is at sine qua non of that accident. The reason, as we have seen, is that the speeding did not here significantly increase the likelihood of the accident. Of course speeding does in general make accidents more likely, but it did not do so in this case where the only role of the speeding was to get the driver to a particular point in the road earlier than he otherwise would have, and where the risk of accident at that point is the same at different times (cf. xxxix).

It is not easy to say precisely which conditions we treat as given when we evaluate whether a factor significantly increased the likelihood of an effect. After all, if every other logically independent detail were held fixed, the irrelevant speeding would presumably raise the probability of the accident from zero to one. This suggests that we need to analyze the notion of increasing likelihood relative to an incomplete specification of the case at hand. We answer the likelihood question against a limited background, and the background we choose varies from context to context. Leaving situations of foreknowledge aside for the moment, what we usually do, I think, is this. We take the history up to the time of the candidate cause as fixed in all its detail, but then evaluate the increase of likelihood only relative to those independent aspects of the course of events between the candidate cause and the effect that we consider normal. We

then ask whether, under these conditions, an effect of the type that occurred was significantly more likely with the candidate cause than without it.

This notion of increasing likelihood asks for further and more precise analysis than I can now provide. In particular, a full account would require a discussion of the way we determine the breadth of the type under which the effect should fall. The irrelevant speeding did not significantly increase the likelihood of an accident of the sort that occurred, yet speeding does increase the likelihood of some sort of accident. Moreover, as we will see in the case of foreknowledge to be discussed below, the parts of the history of an effect that are taken as given relative to judgments of likelihood varies to some extent with the context of inquiry.

Nevertheless, we can already see that the combination of incompleteness and generality in the conditions under which we evaluate likelihood explain how a factor can be a sine qua non yet not significantly increase likelihood. This may happen in two ways. The first, illustrated by the case of irrelevant speeding, occurs when an effect of the same type that occurred was just as likely without the candidate cause as it was with it. The second occurs when an independent abnormality intervenes between the candidate cause and the effect and, without the abnormality, the effect was not more likely with the candidate than without it. This is illustrated by many of the cases of defeat Hart and Honore discuss. If Able knocks Baker to the ground, injuring him only slightly, and then a tree falls on Baker and kills him, Able has not caused Baker's death (77). The falling of the tree was not part of the normal course of events subsequent to the knock and, without the tree, the knock did not significantly increase the likelihood of death, even though it was a sine qua non of Baker's death. A factor may be a sine qua non of an effect yet not substantially increase the likelihood of the effect because, unlike judgments of likelihood, a judgment whether a factor is a sine qua non of an effect prescind neither from the specificity of the effect nor from any intervening abnormality.

To further articulate and defend the increased likelihood condition, consider some of the peculiarities of defeaters that Hart and Honore describe. The first concerns a curious asymmetry in the power of an abnormal condition to defeat causal connection. Whether an abnormality defeats causal connection in ordinary thought depends on whether the abnormality occurs before or after the putative cause. Hart and Honore's illustrate this by considering two cases of falling

trees:

Suppose plaintiff is run over through defendant's negligence. If on the way to the hospital he is hit by a falling tree, that is a coincidence. If, just previously to being run over, he was hit by a tree and severely injured, that is a circumstance existing at the time of the running over and will not negative causal connection between the running over and the victim's death, even if the victim would not have died from the running down but for the previous blow from the tree. (172)

If the tree fell earlier, the driver killed the defendant, but not if the tree fell later (179). In both common sense and the law, it appears that a subsequent abnormal condition defeats causal connection, but a pre-existing one does not. As Hart and Honore remark (172), this is an odd contrast. While the causal independence of the running over and the falling tree is clearly relevant and, one would have thought, their relative contribution to the death, the question of which came first seems besides the point.

The increased likelihood condition does, however, reflect and perhaps help to explain this initially odd contrast. It is only in the case where the tree fell first that we judge that the driver's act significantly increased the likelihood of death. This is so because, as I have suggested, the question of whether a factor increased likelihood is answered in a context that takes the entire history of the factor, abnormalities and all, as given, but prescind from any independent abnormalities in the interval between that factor and the effect. Although we often judge whether an event increased the likelihood of an effect retrospectively, the notion of likelihood that is relevant to judgments of causation is usually an evaluation of how the situation stood at the time the putative cause occurred.

Another important contrast in defeaters that Hart and Honore discuss and which their model reflects concerns foreknowledge. If someone leaves a small fire unattended, but a hurricane subsequently whips it up into a major conflagration, we would not normally say that the negligence caused the harm. But if the fire-starter left the fire because she knew, through a reliable weather report, of the abnormal winds to come, then her act is a cause (170-71). Like the asymmetry between earlier and later abnormalities, this is an odd contrast. It seems counterintuitive to say that knowledge should affect judgments of causation in this way. The

question of whether a fire causes a forest to burn down seems independent of the question of what a person happens to know about the weather. If we imagine that two people independently left fires burning, but only one of them knew about the winds to come, it sounds perverse to say that only the knowledgeable one caused the fire.

Nevertheless, I think Hart and Honore are right about this contrast, and that the increased likelihood condition can be understood to reflect it. As we have seen, the answer to the question of whether a factor *sine qua non* increased the likelihood of an effect depends on what else we hold fixed. The fire substantially increased the likelihood of the destruction given the winds, but not without them. The winds are an abnormality that occurred after the fire was negligently left so, on the analysis I sketched above, we would ordinarily not include them in the background against which we judge likelihood. What I want to suggest now, however, is that we do include an intervening abnormality in the background when it is foreseen by the actor. Considered simply as a physical event, we would not say that a small fire, which would have died out harmlessly without the subsequent abnormal winds, significantly increased the likelihood of the destruction. Considered as the act of a person with foreknowledge of the winds to come, however, we would say that leaving the fire significantly increased the likelihood of the destruction.

An actor's foreknowledge affects our judgment of likelihood rather as if it brought the foreseen state of affairs back to the time of act, by placing the future state into the background against which likelihood is assessed. Thus the relativity of judgments of likelihood to background accounts for the sensitivity of causal judgments to foreknowledge. Moreover, this relativity is, I think, compatible with the confusion we feel when asked to consider the cases of two fires, one left with foreknowledge and the other not. When the two cases are placed side-by-side, we are pushed to find a common background against which the likelihood question is to be answered for both, and this makes us want to say either that both fires were causes or that neither was.

Some readers will find this suggested relativity of judgments of likelihood as unpalatable as the parallel relativity of our causal judgments, but it does seem to be a feature of ordinary thought. The situation is even clearer in cases where foreknowledge is exploited to bring about

an effect. If the fire was not left through negligence, but with the intent of burning down the forest with the help of the abnormal winds that were known to be coming, we are even more strongly inclined to place those winds in the background and to say that the act significantly increased the likelihood of the subsequent destruction. Neither the intention nor the foreknowledge affected the causal story from a physical point of view, but it does affect our judgment of likelihood and so our judgment of whether the left fire was a cause or mere condition. What we say is that the actor himself knew that the fire would significantly increase the likelihood of what ensued even though, had the small fire been undetected and naturally caused, we would not say that the fire itself significantly increased the likelihood of the destruction.

A third contrast concerning defeaters flagged by Hart and Honore concerns the exploitation of previous negligence. They claim that this sort of exploitation normally defeats causal connection between the negligence and the harm. Thus, to take an example mentioned previously, when a lad causes someone harm by inviting him to enter a liftshaft negligently left unguarded, according to Hart and Honore the lad's act defeats the claim that the harm was a consequence of the negligence (137). By contrast, if negligence creates an opportunity known to be commonly exploited, the exploitation does not defeat the causal status of the negligence. If I leave my car unlocked in an area where car theft is known to be rife, my negligence is a cause of my loss. Here again, the increased likelihood condition provides a natural account. The negligence is a cause only if it significantly increases the likelihood of the harm. That is why the causal status of negligent acts is defeated by subsequent exploitation in some cases but not in others.

In the case of exploitation of negligence, the contrast that the increased likelihood condition underwrites is not quite the same as the one Hart and Honore's model describes, but this divergence is to the condition's credit. According to the increased likelihood condition, the exploited negligence can be a cause even if it is not of a type commonly known to be exploited. Negligently leaving the liftshaft unguarded may significantly increase the likelihood of the subsequent harm even if the negligence is not known to lead to harmful exploitation and perhaps even if the risk of such exploitation is not all that great. This seems the right result: if the

negligence significantly increased the likelihood, it was a cause. Conversely, if it did not do so, say because the lad was bent on harming the defendant and would almost certainly have found another way of doing so had the dangerous liftshaft not been to hand, then we would not say that the negligence was a cause of the harm.

I have argued that the increased likelihood condition captures much of what Hart and Honore have to say about the way we ordinarily distinguish causes from mere conditions while avoiding some of the unattractive features of their model. The condition correctly relegates many factors *sine qua non* to the status of mere conditions, while providing a unified treatment of both acts and physical events and allowing for normal causes. It provides a natural account of the distinction between earlier and later abnormalities, and the peculiar influence of foreknowledge and intention on causal attribution. The increased likelihood condition also corrects Hart and Honore's treatment of the situations under which the exploitation of previous negligence defeats causal connection.

The increased likelihood condition does not, however, completely account for the interest relativity of causal judgments. A particular person may treat only one of two factors as a cause, even though both significantly increased the likelihood of the effect. This is illustrated by the cases of the husband with an ulcer who eats parsnips and suffers indigestion and of the famine in India preceded by both a drought and a failure to maintain reserves of food. One reason both factors in cases such as these may increase likelihood is that we include one factor in the background when we evaluate the other. Thus the ulcer may increase the likelihood of indigestion, given the husband's diet, while the parsnips increase the likelihood given the ulcer. To account for the interest relativity of causation, I turn to the second requirement of my model, the difference condition.

This condition requires that a cause mark a difference between the situation where an effect occurs and a contrasting situation where it does not. The application of the difference condition is easiest to see in cases where causes are cited in explanations that are answers to what may be called contrastive why-questions. In many cases, when we ask why some effect occurred, our question does not take the simple form 'Why this?'. Instead, it takes the contrastive form 'Why this rather than that?', where the fact to be explained is contrasted with a specific foil.

The contrastive fact/foil structure of many why-questions helps to show why some factors sine qua non are treated as explanatory causes while others are not. To explain a fact in these cases, it is not enough to cite any causal factor: the cited factor, though it may be normal, must be one that marks a difference because there is no corresponding factor in the history of the foil. To explain why the plants in the front of my house are doing so poorly while the ones in the back are thriving, I cannot cite the fertile soil, if the soil is the same at both places. But the fact that only the plants in the back get steady light will explain this contrast, even though this light is not abnormal. Similarly, if Smith and Jones are both exposed to a disease but only Smith contracts it, the exposure will not explain this contrast. The fact that Smith was not inoculated will explain this, however, so long as Jones was inoculated, no matter how unusual such inoculations are. What counts is that the cause marks a difference between the fact and the foil, not that the cause be abnormal. At the same time, like the abnormality requirement, the difference condition shows why many causally relevant factors sine qua non are not ordinarily counted as causes. When we ask why one event occurred rather than another, we are looking for something that marks a difference between them, and many factors sine qua non of the first event will not do this.

A why-question does not have to carry an explicit or voiced contrast to be contrastive: the foil or foils may be obvious in the context. If I ask you why you were late for our appointment, I obviously want to know why you were late rather than on time, not why you were late rather than not showing up at all. Sometimes the full set of salient contrast only comes out when a proposed explanation is rejected, and the form this rejection takes confirms the importance of the difference condition. If you ask me why I went out to see Candide last night and I reply that I was in the mood for a musical, you may reply: 'Yes, but why did you go to see Candide rather than Anything Goes?' My original reply is rejected because it does not discriminate between what happened and a contrast that reflects the interests of the inquirer.

The difference condition gives a natural account of the types of relativity of causal judgments that Hart and Honore discuss. The presence of oxygen does explain the fire in the laboratory, so long as the intended contrast is the absence of fires in oxygen-free laboratories or in the same laboratory at other times when oxygen is absent. In cases of interest relativity, a

difference in interest corresponds to a difference in contrasts. The drought explains why the famine occurred this year rather than in other years when there was no drought, whereas the failure to build up food reserves explains why the famine occurred in India rather than in countries that did have such reserves. Again, the eating of parsnips explains why the husband suffered indigestion at some times rather than at others, while the ulcer explains why he suffered while other people do not. Hart and Honore's abnormality condition does not handle these cases well, because the relativity in explanatory judgments is not due to a variation in judgments about what is normal. The relativity is due rather to a variation in the contrastive questions asked, specifically a variation in the foil. The difference condition accounts for this, since a factor that marks a difference between a fact and one foil will not in general do so when the foil is changed. The ulcer may seem no more normal for the husband's wife than for her doctor, but it still will not explain to her why her husband is sick at some times and not at others.

The difference condition helps to show why we are often so choosy about which factors sine qua non to count as causes: when we have a specific foil in mind, most causally relevant factors will not count as explanatory causes, even if they raise the likelihood of the effect, since they do not mark a difference between fact and foil. This selectivity is amplified by the fact that we tend to select foils whose histories are similar to those of the fact to be explained, so that most factors sine qua non will be shared and hence not explanatory. For example, we often ask a contrastive why-question precisely because we are puzzled that two apparently similar situations turned out differently. The difference condition also shows why, certain popular theories of explanation notwithstanding, a good explanation need not entail that the effect occurs. A cause that explains does not have to be sufficient for the effect, so long as it is causally relevant and marks a difference between fact and foil.

The second condition of the likely difference model, then, is that a cause must mark a difference between the effect and the contrasting cases. It is interesting to note that Hart and Honore themselves appeal to something like the difference condition in defence of their basic abnormality requirement. They say that 'to cite factors which are present both in the case of disaster and of normal functioning would explain nothing: such factors do not "make the difference" between disaster and normal functioning' (34) whereas, '[w]hat is abnormal..."makes

the difference" between the accident and things going on as usual'(35). Once we introduce the notion of contrastive questions, however, we see that what makes a difference need not be abnormal, and that we can apply the idea of making a difference to provide an analysis of Hart and Honore's insight that ordinary causal judgments are sensitive to the interest or point of view of the inquirer.

## V Conclusion

According to the likely difference model, only those factors sine qua non that both significantly increase the likelihood of the effect and mark a difference between the effect and salient foils will count as causes in ordinary thought. This model certainly needs more development than I have given it here. Further investigation is sure to reveal counterexamples to the simple formulation I have given and will require a more sophisticated account. There are also a number of issues of principle that demand attention. The difference condition shows how what counts as a cause is sensitive to intended contrasts, but this leaves the question, itself contrastive, of why we select one contrast rather than another in a given context. We also clearly need a fuller analysis of the concept of increasing likelihood. Finally, if we want a general account of causal judgment, we must also consider whether the scope of the likely difference model can be extended to cover situations where, as in cases of overdetermination, causes are not factors sine qua non.

Nevertheless, my hope is that this preliminary sketch of the likely difference model is sufficient to show that it improves on Hart and Honore's account. The likely difference model gives a more unified picture of the way we select causes from factors sine qua non, avoiding the unnatural combination of abnormal conditions and voluntary acts, and their complex account of defeaters. The difference condition specifies a mechanism of causal triangulation that explains how variations in interests lead to variation in causes. The increased likelihood condition accounts for the difference that knowledge of a future abnormality makes to its status as a defeater and for the contrast between prior and subsequent abnormalities. Moreover, as we have seen, the model avoids at least three anomalies of Hart and Honore account. It leaves room for normal causes that are not voluntary acts. Pollution may be depressingly normal, but it may

have significantly increased the likelihood that Smith, who lives in a city, contracted lung disease and may explain why he rather than farmer Jones did so. Second, as illustrated by the case of irrelevant speeding, it shows why an abnormal and undefeated *sine qua non* is not always a cause. Finally, it allows for cases, such as the lad and the liftshaft, where an uncommon exploitation does not defeat causal connection.

The likely difference model also explains why Hart and Honore's account of our ordinary causal judgments so often gives the correct result in actual legal cases. When we consider the causes of a harm, we are often considering the causes of an effect which is itself abnormal, and abnormal effects generally do have abnormal causes, as Hart and Honore's account suggests. When we ask why an abnormal event occurred, the natural foil will often be a normal state of affairs, and the factor that marks a difference between these cases will usually itself be a prior abnormality. Again, if the likely difference model is correct, it is hardly surprising that many acts will count as causes. When acts are means to intended results, they typically make the difference between the result occurring and not occurring, and they also substantially increase the likelihood of the result. Many unintended consequences will similarly have been made significantly more likely by the prior act. Finally, Hart and Honore's account of defeaters often gives the right result because these intervening factors prevent the candidate cause from significantly increasing the likelihood of the effect.

Hart and Honore's overarching goal is to use a model of our ordinary causal judgments to elucidate principles of legal responsibility, by means of their shared concept claim that the judgments of causation in the law rest on largely the same basis as ordinary causal judgments. At the start of this essay, I argued that the primary support for the shared concept claim is to be found in the comparison of legal and everyday judgments in particular cases, rather than in the elevated comparison of general models of ordinary and legal causation. Nevertheless, it is worth noting that the likely difference model appears on balance to provide about as much support for the shared concept claim as Hart and Honore's own account. Although we have found that the two models do give divergent answers in certain cases, on balance it seems that the answers given by the likely difference model are as much in line with judgments of legal cause as those given by Hart and Honore's model. The case of the lad and the liftshaft does suggest that there

may be more instances of ordinary causes that do not correspond to legal responsibility than Hart and Honore acknowledge. On the other hand, the room the likely difference model leaves for normal causes and the way it excludes factors such as irrelevant speeding may leave even greater overlap between ordinary and legal judgments than there would be, if Hart and Honore's model were correct.

If the shared concept claim is sound, the distinction made by the courts between causes and mere conditions is neither arbitrary nor simply a product of legal policy. This, however, leaves open the important question of the extent to which the distinction is a matter of fact, a question which a good ordinary model ought to help us to answer. Hart and Honore allow that the distinction between cause and mere condition is less a matter of fact than the distinction between those factors that are a sine qua non of an effect and those that are not (cf. 110-11). The likely difference model supports this contrast and can be used to elucidate the non-factual elements. The distinction between causes and mere conditions is interest relative, in the sense specified by the difference condition. Moreover, our judgments of increased likelihood may vary, as we have seen, depending on the background we take as given and on how widely we characterize the type under which the effect falls. None of these three sources of relativity in the mechanism by which we make the distinction between causes and mere conditions appears to be in operation when we decide whether or not a factor is a sine qua non.

Both Hart and Honore's model and my own are concerned with the practice of distinguishing from among antecedently known causal factors those that are causes from those that are mere conditions. Both models treat the knowledge that a factor is causally relevant as given. This approach leaves to one side the evidential question of how we go about discovering or inferring what the causal factors or conditions sine qua non of an effect are in the first place. I conclude this essay with the suggestion that the features the likely difference model flags as central to the discrimination of causes and mere conditions are also central to the inference of causes from effects.

One account of causal inference that has recently attracted the support of a number of epistemologists and philosophers of science is known as Inference to the Best Explanation (Lipton, 1991). The governing idea of this account is that, while every effect could have had

many possible causes, we are warranted in inferring just those that would, if present, provide the best explanation of our evidence. Faced with tracks in the snow of a peculiar shape, I infer that a person on snowshoes has recently passed this way. There are other possibilities, but I make this inference because it provides the best explanation of what I see. Having observed the motion of Uranus, the scientist infers that there is another hitherto unobserved planet with a particular mass and orbit, since that is the best explanation of Uranus's path. Given the data provided by autopsy, the coroner infers that a tap on the head was a cause of death, since that is part of the best explanation of the forensic evidence.

To develop this account of inference, we need to say what makes one potential explanation better than another. This is a challenging project, but the features of marking a difference and increasing likelihood play a central role. When we ask a contrastive why-question, the contrast we choose often corresponds to a contrast in our evidence. Thus, if we want to uncover the causes of a famine in India, we may look to a country where there is no famine but which is similar to India in other respects. As we have seen, a good explanation of this contrast will cite some prior difference between India and the other country. My suggestion now is that the search for such explanatory differences is also a technique for discovering causes. The contrastive evidence of famine in the one country but not in the other supports the hypothesis that a prior difference was a cause. By contrast, it does not provide evidence for the causal role of any common factors, such as that both countries have large peasant populations, even though these shared factors may in fact be causally relevant to the famine.

The increased likelihood condition has a similar evidential role. In the case of irrelevant speeding, the speeding does not explain why the accident occurred, while factors that do increased the likelihood of the accident, such as brake failure or poor visibility, would help to explain it. Here again, a difference between explanatory cause and mere conditions corresponds to the difference between those prior factors the effect evidentially implicates and those it does not. The scene of the accident provides evidence for the presence of conditions that would have increased the likelihood of the accident, but not for factors such as the prior speeding which, though they might have been factors *sine qua non*, did not increase the likelihood of the accident.

The fact that the conditions the likely difference model employs to account for the

distinction between causes and mere conditions are also in play when we use effects as evidence for their causes provides, I think, additional support for the model, by providing an independent argument that these conditions have a central role in our cognitive economy. The connections between the ordinary distinction between causes and mere conditions and the principles of causal inference also helps to show why the ordinary distinction is neither arbitrary nor unimportant, by showing the role the distinction plays in the objective weighing of evidence. This also suggests a fruitful expansion of the scope of the project of investigating the foundations of our ordinary causal notions in order to cast light on legal matters. The principles of causal inference that the likely difference model reveals are not the exclusive province of ordinary thought. They are also central to scientific inquiry and to causal inquiries in legal contexts. So the model promises to elucidate aspects of legal evidence and inference, as well as of legal responsibility. This strongly supports Hart and Honore's central contention that the careful investigation of everyday principles of causal judgment is a important source of insight into the application of causal notions in the law.

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