Liability and Risk
Author(s): David McCarthy
Source: Philosophy & Public Affairs, Vol. 25, No. 3 (Summer, 1996), pp. 238-262
Published by: Wiley
Stable URL: http://www.jstor.org/stable/2961926
Accessed: 02/12/2013 21:40

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at http://www.jstor.org/page/info/about/policies/terms.jsp

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.
Let us say that X is liable to Y just in case X is under a duty to compensate Y. In discussions of liability, two claims are generally accepted. The first is that harm is necessary for liability: X is liable to Y only if Y has been harmed. The second is that causation is necessary for liability: X is liable to Y only if X caused Y to be harmed. A third claim is more controversial, the claim that fault is necessary for liability: X is liable to Y only if X was at fault. But it is fair to say that the claim that fault is necessary for liability is much more widely accepted than its denial. I shall be arguing, however, that we should reject each of these claims: neither fault, nor causation, nor harm is necessary for liability.

Many of these arguments will start with counterexamples to those claims, and one always has to be suspicious of counterexamples. But I will try to show that each counterexample is an instance of a liability rule which has independent plausibility in certain circumstances. The result will be a theory of liability according to which liability in particular cases is governed by different principles according to the kind of case. I will then argue that each of these principles, together with its scope of application, can be seen as flowing from a more general theory of liability, what I shall call the risk liability theory. According to this theory, what lies at the heart of liability is the nature of the initial action which imposed a risk of harm on someone, and which may or may not have caused that person to be harmed. This theory, I believe, provides a unifying explanation and justification of a wide range of what I hope are

In writing and being able to write this I have benefitted enormously from comments, advice, and support from Frank Arntzenius, Marshall Cohen, Barbara Herman, Gregory Keating, and Judith Thomson. I also received very helpful suggestions from the editors of Philosophy & Public Affairs. I wrote the final draft while receiving funding from the Greenwall Foundation, for which I am grateful.
uncontroversial judgments about liability, something which has eluded standard theories of liability.

Excuses are another puzzling issue for liability theory. A common view, for example, is that the claims that Y has been harmed, that X caused Y that harm, and, if you like, that X was at fault in causing Y that harm, are jointly sufficient for X to be liable to Y unless X has an excuse, in which case she is not liable. X may have an excuse if she was coerced or compelled, but the kind of excuse that is of particular importance for liability theory is based on ignorance. So we need to ask when one or another form of ignorance of the consequences of her actions provides an agent with an excuse against being held liable for those consequences. Standard theories of liability do not very well capture or explain facts about ignorance as the basis for excuses. The risk liability theory promises to provide a better account, and this is a further reason to accept it.

I will be discussing a number of legal cases in which questions of legal liability arose before the courts. But this is always with a view to answering the moral question: independently of any particular legal system, when is one person under a duty to compensate another? The legal cases provide fertile ground, however, for developing our judgments about the moral question.

I

It is difficult to give an analysis of when an agent is at fault in performing an action in part because the term ‘fault’ has a place in both ordinary moral discourse and the law, and its usage is not settled. But it will be good enough for our purposes if we understand an agent to be at fault in performing a particular action just in case that action was impermissible.

Two cases widely discussed in moral and legal theory show that X can be liable to Y without her having been at fault. In Log Cabin you are trekking through the backcountry when a violent storm breaks out. The

only way you can save your life is by entering the nearby log cabin and eating some of the food you find inside. It is surely permissible for you to do this, hence you would not be at fault in doing it, and yet having done it you are now under a duty to compensate the owner.

In Vincent v. Lake Eerie Transportation Company a dockowner would not agree to allow a ship to remain docked beyond the time agreed to in the contract, despite the fact that had the ship left, it and the crew would certainly have been lost at sea in the impending storm. The shipowner refused to take his ship out of dock, knowing that keeping it docked would result in the dock being damaged. When the storm came, the ship repeatedly smashed against the dock, resulting in $500 worth of damage to the dock. The court decided that although the shipowner acted properly in keeping his ship moored, the dockowner was legally entitled to compensation from the shipowner for the damage to the dock. That was a legal decision. But I am sure most of us feel that the decision was morally sound: although the shipowner acted permissibly, he is under a duty to compensate the dockowner.

Log Cabin and Vincent suggest that excuses aside,

(1) If X performs an action that she knows will harm Y, then she is under a duty to compensate Y for the harm.

The antecedent of this rule is true whenever X performs an action that she knows will harm Y; in particular, it is true when X permissibly performs an action that she knows will harm Y.

Log Cabin and Vincent provide clear counterexamples to fault liability theories. But the fault liability theorist may be unimpressed. She may say: “Of course you are under a duty to pay for the costs when you knowingly inflict a harm on someone, even if you were not at fault. But this is an unusual kind of case. The great majority of cases where we are interested in liability are where someone is harmed as a result of an accident, where it was not known that a harm would result. That was the kind of case I was trying to address when I said that fault is necessary for liability.”

Fair enough. But Log Cabin and Vincent are only the top of a slippery slope. Consider Vincent 2, which is like Vincent except that when it came time for the ship to leave, the weather forecast said: “Chance of ship-

2. 10 Minn. 456 NW 221 (1910). I have altered some of the details.
sinking-and-crew-drowning and dock-with-ship-moored-damaging storm: 95 percent.” I am sure almost everyone will agree that it was permissible for the shipowner to refuse to leave dock. Sadly, but not unexpectedly, the storm struck, and the ship smashed against the dock, causing $500 worth of damage. Even though the shipowner did not know for certain that the dock would be damaged, I am sure most people would still think that he is under a duty to pay for the costs of the damage.

This suggests that in cases relevantly similar to Vincent and Vincent 2, excuses aside,

(2) If X performs an action that she knows will impose a risk of harm on Y, then she is under a duty to compensate Y for the harm if her action causes Y to be harmed.

The antecedent of this rule is true whenever X performs an action that she knows will impose a risk of harm on Y; in particular, it is true when X permissibly performs an action that she knows will impose a risk of harm on Y. Let us include among actions that impose a risk of harm on another those actions which make it the case that that person will suffer a harm with probability one. Then (1) is a special case of (2): if you perform an action which you know will harm someone then you know that action will impose a risk of harm on that person.

But what cases are relevantly similar to Vincent and Vincent 2? Many people will be nervous about including within the scope of (2) cases in which the harm is a quite unexpected consequence of the risk imposition. Consider Vincent 3, which is like Vincent, except that when it came time for the ship to leave, the weather forecast said: “Chance of a ship-sinking-and-crew-drowning and dock-with-ship-moored-damaging storm: 5 percent.” This case is perhaps hard to imagine, but suppose that there is a highly localized hurricane that stands a 5 percent chance of crossing the ship’s path if it leaves the dock and smashing it to pieces against the rocky shoreline. Now I think it is still clearly permissible for the shipowner to refuse to leave the dock to avoid a 5 percent chance of the loss of the ship and many lives, despite the dockowner’s wishes. As it happens, quite unexpectedly, the storm struck, and the ship smashed against the dock, causing $500 worth of damage.

It is here that many people’s intuitions about fault will emerge. They will feel it unfair to hold the shipowner liable when he was not at fault
and the harm was so unexpected, hence they will be unwilling to allow the scope of (2) to cover cases like Vincent 3.

But I think this view is mistaken. In a world in which we always knew what the consequences of our actions would be, there would be strong moral constraints on our performing actions that would cause other people to be harmed. But in some cases, like Log Cabin and Vincent, it would be permissible to knowingly cause others to be harmed. But having knowingly caused such a harm, an agent would be under a duty to compensate the person harmed.

We are a long way from living in such a world, and we often have to choose which actions to perform in circumstances in which we only have an idea of the probabilities of the various possible outcomes. There are moral constraints on performing actions that impose risks of harm on others, and the magnitude of the risks that would be imposed plays the analogue of the magnitude of the harm that would be caused in the first world. But it will often be permissible for agents to knowingly impose risks of harm on others. But having done so, there is no more reason why the risk bearer should bear the prospective costs of the risk than the person harmed in the first world should bear the costs of the harm. In the latter case, the duty for the harm causer to compensate her victim essentially transfers the cost of the harm from the victim back to the harm causer. In the former case, the duty given by (2) essentially transfers the cost of the risk of harm from the risk bearer back to the risk imposer. But the size of the risk has no bearing: there is no less reason why the dockowner should bear the prospective costs of the risk just because it is small, as in Vincent 3, than there is why he should bear the prospective costs of the risk when it is large, as in Vincent 2. So mere considerations of the size of the probability of the harm, or the size of the harm, have no bearing on the scope of (2). If the only relevant difference between two cases lies in the size of the probability of the harm, or the size of the harm, then if one falls within the scope of (2), so does the other. This means that Vincent 3 falls within the scope of (2), and that means we really must reject the claim that fault is necessary for liability.

The importance of fault is so ingrained in commonsense views about liability, however, that it is hard to be comfortable with the conclusion

3. The magnitude of a risk of one harm is given by an appropriate measure of the harm discounted by its probability; the magnitude of a risk of multiple distinct harms is given by the sum of the magnitudes of the risk of each of the distinct harms risked.
that fault is not necessary for liability without a diagnosis of where commonsense morality goes wrong. Fairly typical is the view that if an agent knowingly engages in an activity that produces substantial benefits but imposes as a side effect a minor risk of harm upon others, and if she takes care to keep that risk as low as possible, given that she engages in the activity, then if she thereby causes another to be harmed, then she is not liable. Furthermore, defenders of the importance of fault might even insist, not only is this the commonsense view, but it is also defensible. Because the risk she imposed was so small, she is hardly any more responsible for the harm than anyone else, so it would be unfair to single her out for full liability for what will often be a large amount.

Now what follows from the substantial benefits of her engaging in that activity, and from her making efforts to keep the risk low, is that it was permissible for our agent to engage in the activity; in other words, she was not at fault. This shields our agent from a number of things. It would not have been right for others to have prevented her from engaging in the activity, nor would it be right to punish her now because of its consequences. But this does not mean that her hands are morally spotless: for her own purposes, she knowingly imposed a risk of harm upon another. Lurking beneath the surface here is the very important phenomenon of moral traces. These typically occur when there is a moral reason not to perform an action which is outweighed by other reasons, so that on balance the action is permissible. But although the reason may be outweighed, it is not canceled out, and if the action is performed this reason may give rise to a later duty. A standard example is where I have made two promises, but as things turn out, I cannot keep both. It is then permissible for me to break one of them, but my breaking it will leave a moral trace. That trace will typically give rise to a duty to make it up one way or another to the person to whom I made the promise I broke. Thus the first mistake commonsense morality may be making about fault is to forget about moral traces. Although our agent acted permissibly, for her own purposes she knowingly imposed a risk of harm on someone else, and that leaves a moral trace, just as in the more obvious cases of when agents permissibly and knowingly cause another to be harmed, as in Log Cabin and Vincent.

A defender of the commonsense position may think that trace is too

4. For a discussion, see, for example, Thomson, The Realm of Rights (Cambridge, Mass.: Harvard University Press, 1990), pp. 83–86.
slight to give rise to a strenuous duty to compensate. Here the mistake is to focus too much on the actual consequence of our agent’s action while ignoring the consequences that might have resulted but, as it happens, did not. When an agent imposes a small risk of harm upon another, if a rule like (2) applies, then most of the time the moral trace vanishes. Only on rare occasions does it result in the agent becoming liable for a harm. From the point of view of the agent when she imposes the risk, rule (2) is not at all strenuous. All it really does is turn the risk she knowingly imposes on someone else into a risk she imposes on herself, so she has nothing to complain about (2) applying at the time she imposes the risk. And I think that means that she has nothing to complain about, except bad luck, if the person she imposes the risk on is harmed as a result and she becomes liable. There is something suspiciously disingenuous about someone who appeals to how things looked at the time of the risk imposition to argue that she was not at fault, but refuses to assess the fairness of liability rules from that point of view as well. It is like someone refusing to make good on what she owes for a lottery ticket on the grounds that it turned out to lose.

I believe that arguments such as these show there is no theoretical motivation for making fault relevant to liability, at least when fault is understood, as it generally is, in terms of impermissibility. But I am not entirely comfortable with that conclusion without more explanation of why there are such strongly held intuitions about the importance of fault. I can see no hope for making fault relevant when understood in terms of impermissibility, but perhaps there is a notion similar to fault, at least in extension, that is relevant. To some extent I think that is correct, but I will not take it up until later.

II

There are two reasons for denying that causation is necessary for liability. First, consider a slight variation on *Summers v. Tice*. Summers, Tice 1, Tice 2, and Tice 3 were out hunting together. A quail was flushed and

5. 33 Cal. 2d 80, 199 P.2d I (1948). I have slightly altered some of the details. This and similar cases are discussed extensively in Thomson, “Remarks on Causation and Liability,” *Philosophy & Public Affairs* 13, no. 2 (Spring 1984): 101–33.
the three Tices fired in Summers's direction, thereby knowingly imposing a risk of harm on him. Sadly, Summers was struck in the eye by a pellet. The Tices were all the same distance from Summers and had an equally clear view of him. They were all using the same kind of gun and the same kind of birdshot. It was not possible to determine from which gun the pellet in Summer's eye had come.

My reaction to this case, and I think a common reaction, is that Tice 1, Tice 2, and Tice 3 are each liable to Summers for a third of the total amount needed to fully compensate him, despite the fact that relative to the available evidence it was true of each Tice that he was more likely not to have caused Summers's injury than to have caused it. It is natural to explain this by saying that, given the circumstances and available evidence, it would have been grossly unfair to require Summers to demonstrate that a particular Tice had probably caused the harm to be entitled to recover compensation from him, and thus grossly unfair to require that liability in this case be governed by (2).

The second kind of reason for denying that causation is necessary for liability comes from cases involving background risks rather than multiple risk imposers. In Curable Cancer you release some radiation into the water system of the nearby village. You thereby knowingly increase the chance of each of the villagers getting curable cancer from 2 percent to 3 percent, the original 2 percent risk being due to background radiation. Curable cancer costs $600 to cure, and science being what it is, there is no way to tell whether you caused any given case of curable cancer. My intuition is that it would be unfair to hold you liable for the full costs of treating every case of curable cancer. On the other hand, it would be unfair to the cancer victims not to hold you liable for any of the costs. The obvious solution is to hold you liable to each victim for a third of the costs of a case of curable cancer, or $200.

Summers and Curable Cancer suggest that when someone has suffered a harm, a risk of which others imposed on him, but it is hard to find out who or what the cause of the harm was, then each risk imposer is under a duty to pay a share of what is required for full compensation in proportion to her contribution to the total level of the risk of the harm suffered that the risk bearer bore. It is easy to construct other cases that support this intuition. Thus in cases relevantly similar to Summers and Curable Cancer, presumably cases in which the causal information nec-
essary to know what (2) requires is hard to come by, then, excuses aside,

(3) If X performs an action that she knows will impose a risk of harm on Y, then if Y suffers that harm, X is under a duty to pay Y a share of what is required for full compensation for the harm in proportion to her contribution to the total risk of that harm that Y bore.

As it stands, however, this rule is ambiguous. Summers was shot in the eye by a shotgun, so he was harmed. But Smith, who happened to be practicing archery nearby, imposed a risk of being shot with an arrow on Summers. On one reading of (3), Smith is also liable to Summers since, like the Tices, she imposed a risk of harm on Summers. But I take it that most people’s intuitions will be that Smith is not liable. This shows that we need to say how ‘harm’ in (3) is to be individuated. I suggest that we say that ‘harm’ is to be individuated as narrowly as possible relative to the available evidence. Thus when it is clear that Summers was shot in the eye by a shotgun pellet of such and such a kind, that is how ‘harm’ should be individuated in applying (3). Smith did not impose a risk of that harm on Summers, hence, on this understanding of (3), she is not liable, giving us the result we want. Or to put it another way: a risk of harm imposition falls within the scope of (3) if relative to the available evidence it cannot be ruled out that it was that risk imposition that caused the harm.

Some terminology will be useful. Suppose that a rule R holds of the form: if p happens, then X is under a duty to do F; if q happens, then X is under a duty to do G; and so on. Then say that X is guaranteed to comply with R if it is the case that: if p were to happen, then X would do F; if q were to happen, then X would do G; and so on. With this terminology, we can bring out an important feature that liability rules (2) and (3) have in common.

For simplicity, compare Vincent 3 with Summers. In Vincent 3, the shipowner imposed a risk of harm on the dockowner. Suppose that the shipowner was guaranteed at the time of imposing the risk to comply with (2). At that time there were two possibilities. Either the storm would not strike, in which case the dockowner would not be harmed, or it would strike and the dockowner would be fully compensated for the harm. In either case, the dockowner is no worse off than he would have been had the shipowner taken his ship out of dock and not imposed the risk. Hence if the shipowner were guaranteed at the time of imposing
the risk to comply with (2), then the dockowner would have been prospectively no worse off for bearing the risk. In other words, he would have been fully compensated for bearing the risk. Similar remarks apply to Summers. If at the time of imposing the risks each Tice were guaranteed to comply with (3), then Summers would have been fully compensated for bearing the risks in the sense that he would have been prospectively as well off for bearing the risks as he would have been for not bearing them. More generally, if X performs an action that she knows will impose a risk of harm on Y, then if either of (2) or (3) applies, and if X is guaranteed to comply with whatever rule applies, then Y is fully compensated for bearing the risk X imposes on him, and it is X who bears the cost of that compensation.

III

Still weaker than the claim that causation is necessary for liability is the claim that harm is necessary for liability. But even that claim must be rejected.

Consider first Incurable Cancer 1. A group of physicians wish to carry out a clinical trial that involves exposing subjects to a small dose of radiation. This will impose a small risk of getting an incurable and fatal form of cancer on the subjects, and because of this the physicians offer each potential subject a payment of $1000 for participating, with the understanding that the subject will receive nothing more should she be unlucky enough to get the cancer.

The physicians approach Smith and ask her to participate. Let us ask how she might react. She does not need $1000, so there is no question of her being coerced into participating, but still, $1000 would enable her to take the trip to Indonesia she has been dreaming of. But is it worth the risk? To investigate this, Smith examines her attitudes toward various other risks of serious harm or death, such as those involved in horse-riding, eating fatty food, driving a car without an airbag, and so on. She asks herself which risks she accepts in order to pursue various things she values, and which she forgoes opportunities or pays money in order to avoid. To be somewhat pedantic, we can even imagine that to make sure there is no distortion in her attitudes she compares them to those of other people and reads up on what psychologists say about the way people form attitudes toward risks and what philosophers say about
how they should form such attitudes. She discovers that she is fairly consistent about the way she integrates risks of serious harm or death into her life and, judging that the small risk of getting the cancer is easily outweighed by the value of what she could do with $1000, she therefore decides to participate.

In the trial, however, the physicians make a mistake and expose her to the dose of radiation twice. The consequence of this for Smith is that two doses impose twice the risk of getting incurable cancer on her as one dose would have exposed her to. My view is that the physicians are now under a duty to pay her an extra $1000 as compensation for the extra risk, but having complied with this duty, they are not under a duty to pay her any more should she be unlucky enough to get the cancer. Perhaps they are under a duty to pay her a little more because of her lack of control over the second exposure or because, like most of us, she is risk-averse with respect to money; but for simplicity I will ignore these kinds of considerations.

Why? Why are the physicians not merely under a duty to compensate her for getting incurable cancer if she gets it as a result of the second exposure? For simplicity, we may assume that it would be easy to tell whether a case of incurable cancer was caused by the second exposure. Then the answer is that it would not be possible to compensate her for getting incurable cancer: incurable cancer is for most people, most of the time, and certainly for Smith, with a long happy life before her, a noncompensable harm. So governing liability by (2) in this case would be unfair to Smith: either she does not get the cancer from the second exposure, and she is no better off for having been exposed, or she does, and she is strictly worse off for having been exposed. But it is possible to compensate her for bearing the risk of the noncompensable harm, incurable cancer. That is why she accepted a payment of $1000 to bear the first risk. So fairness requires the physicians to be under a duty to pay her $1000, that is, a duty to compensate her directly for the risk. But why should the physicians not in addition to this duty also be under a duty to pay her some amount in damages if she later gets incurable cancer as a result of the second exposure? The answer is that it would be unfair to the physicians: in paying her $1000, they have already fully compensated her for bearing the risk; that is why she accepted payment of $1000 for the first risk.

Consider now Incurable Cancer 2. Jones, who happens to be in the
hospital for some unrelated reason, is by mistake included in the experiment and exposed to the small dose of radiation. Jones had never thought about this possibility for one moment, but it turns out that he has very similar attitudes toward risks as Smith. My view, again, is that the physicians are now under a duty to pay Jones $1000 as compensation for the risk, with nothing more should he later get incurable cancer as a result.

Why? The answer is exactly the same as in Incurable Cancer 1. It is not Smith's consent to exposure to the first dose of radiation provided she was paid $1000 that is directly relevant to why the physicians were under a duty to compensate her for the second exposure. It is the reasons that lay behind her consent, which were that $1000 would fully compensate her for the risk. Jones's attitudes toward risks are very similar to Smith's, so $1000 would also fully compensate him for bearing the risk; hence the physicians are now under a duty to pay Jones $1000 as direct compensation for the risk.

This suggests that in cases relevantly similar to Incurable Cancer 1 and 2, such as cases in which there is a relatively high risk of a noncompensable harm, then, excuses aside,

(4) If X performs an action that she knows will impose a risk of harm on Y, then X is under a duty to compensate Y directly for bearing the risk of harm.

Liability rule (4) looks very different from liability rules (2) and (3), but it shares an important feature. We noted that under each of (2) and (3), if X performs an action that she knows will impose a risk of harm on Y, and if X is guaranteed to comply with whichever rule applies, then Y is fully compensated for bearing the risk X imposes on him, and it is X who bears the cost of that compensation. Exactly the same is true of (4).

IV

So far we have only considered cases in which one person knowingly imposes a risk of harm on another. But suppose I buy a bottle of chemicals with big red letters on the side: "WARNING. Before storing, read instructions." I do not bother reading the instructions, and store the bottle behind the water heater. Had I read the instructions, I would have discovered that storage at high temperatures creates a serious risk of
explosion. Sadly, there is an explosion, which destroys the water heater. Although I did not know I was imposing a risk of property damage on my landlord, I am nevertheless liable to him for the costs of repairing or replacing the water heater. This suggests that if you are in one way or another liable in cases in which you knowingly impose a risk, then you are also liable in cases where the only difference is that although you did not know your action would impose a risk of harm on another, you ought to have known. Thus I shall take the considerations that support (2), (3), and (4) to support, respectively, the following more general liability rules:

In cases relevantly similar to the *Vincent* variations, excuses aside,

*Natural Lottery Rule:* If X performs an action that she knows or ought to know will impose a risk of harm on Y, then if her action causes Y to be harmed, she is under a duty to compensate Y for the harm.

In cases relevantly similar to *Summers* and Curable Cancer, excuses aside,

*Risk Proportionality Rule:* If X performs an action that she knows or ought to know will impose a risk of harm on Y, then if Y suffers that harm, X is under a duty to pay Y a share of what is required for full compensation for the harm in proportion to her contribution to the total risk of the harm suffered that Y bore.

In cases relevantly similar to the Incurable Cancer variations, excuses aside,

*Direct Payment Rule:* If X performs an action that she knows or ought to know will impose a risk of harm on Y, then she is under a duty to compensate Y directly for bearing the risk.

When ought agents to know their actions will impose a risk of harm on others? I leave it to intuition.

Let us review some features of these more general liability rules. Suppose X performs an action that she knows or ought to know will impose a risk of harm on Y. Then whichever of the three rules holds, if X is guaranteed to comply with that rule, then Y is compensated for bearing the risk, in the sense that he is as prospectively well off as he would have been had he not borne the risk, and it is X who bears the costs of that compensation. In addition, the Natural Lottery Rule appears to be the
rule with broadest scope. The other two rules apply when the Natural Lottery Rule is in one way or another hard to comply with in a way that would not be fair. For example, the Risk Proportionality Rule applies in cases in which someone has suffered a harm the risk of which one or more people imposed on him, but it is so hard to determine who or what probably caused the harm that the Natural Lottery Rule would place an unfair burden of proof on the person harmed. Similarly, the Direct Payment Rule applies, roughly, to cases in which the difficulties involved in recovering full compensation under the Natural Lottery Rule would be so great, as they would be, for example, in cases in which the harm risked is noncompensable and the risk is relatively high, that the Natural Lottery Rule would make the risk bearer assume an unfair burden.

There are many more possible liability rules, but these remarks suggest the following more general conjecture. If X performs an action that she knows or ought to know will impose a risk of harm on Y, then excuses aside, the liability rule applies that meets both the Risk Compensation Condition and the Compliance Condition. This is the central claim of what I call the risk liability theory. A liability rule meets the Risk Compensation Condition if whenever that rule applies and X performs an action that she knows or ought to know will impose a risk of harm on Y, and X is guaranteed to comply with that rule, then Y is compensated for bearing the risk, and it is X who bears the cost of the compensation. A liability rule meets the Compliance Condition for a particular risk imposition when of all liability rules that satisfy the Risk Compensation Condition, it is the one that gives rise to the fairest distribution of the burdens created by difficulties of compliance for that risk imposition. Very roughly, the risk liability theory says that whenever X performs an action which he knows or ought to know will impose a risk of harm on Y, then X is under a duty to compensate Y for the risk in the easiest way possible.

It would be pleasing if we could say that the Risk Compensation Condition simply says that if X performs an action that she knows or ought to know will impose a risk of harm on Y, then X is under a duty to compensate Y for bearing the risk. Can we say this? Suppose X knowingly imposes a risk of harm on Y and the Natural Lottery Rule applies, so that: if X's action causes Y to be harmed, then X is under a duty to make it the case that: X compensates Y for the harm. Now if we could say that conditional was equivalent to: X is under a duty to make it the case that: if
X’s action causes Y to be harmed, then X compensates Y for the harm, then there might be a good case for saying that X is under a duty to compensate Y for the risk. It is therefore unfortunate that we probably cannot say that they are equivalent. Nevertheless, because the Risk Compensation Condition is somewhat long-winded, I will often replace it by the more suggestive claim that if X performs an action that she knows or ought to know will impose a risk of harm on Y, then, roughly, X is one way or another under a duty to compensate Y for the risk. But that is just to be understood as the claim that if X performs an action that she knows or ought to know will impose a risk of harm on Y, then some liability rule holds which meets the Risk Compensation Condition.

The discussion so far certainly provides support for the risk liability theory, but it would be reassuring to have an independent defense of it. The Risk Compensation Condition is a straightforward generalization of the intuitive principle that, excuses aside, if an agent knowingly harms someone, then she is under a duty to compensate the person for the harm. It is also very plausible that if an agent performs an action that she ought to know will harm someone, then she is under a duty to compensate the person harmed. Now very often we do not know that our actions will cause other people to be harmed; we know only that some of them will impose risks of harms on other people. But as the discussion of the Vincent variations showed, there is no more reason why those people should be the ultimate bearers of those risks than that the persons we knowingly harm should be the ultimate bearers of the harms. Hence if an agent knowingly imposes a risk of harm on someone, she is, one way or another, under a duty to compensate that person for the risk. And by the same reasoning, if she performs an action that she ought to know will impose a risk of harm on another, she is, one way or another, under a duty to compensate that person for the risk. Collecting all this together gives us the Risk Compensation Condition.

There are different ways in which one can be compensated for bearing a risk, as illustrated by the fact that each of the Natural Lottery Rule, the Risk Proportionality Rule, and the Direct Payment Rule meets the Risk Compensation Condition. This means we need a way of determining which rule holds in any given circumstance. Now the fact that two liability rules both satisfy the Risk Compensation Condition does not

mean that it is a matter of indifference to those affected which rule applies in a particular case of risk imposition. First, the mere fact that a particular rule applies does not mean that risk imposers are guaranteed to comply with it; it may be difficult to establish, for example, who caused a harm, or the risk imposer may be unable to comply with the requirements of a particular rule. It is therefore in the interests of risk bearers that the rule under which they are most likely to recover compensation holds. Second, even if risk imposers were guaranteed to comply with whatever rule holds, it would still not be a matter of indifference which rule holds. Some rules give rise to greater burdens associated with compliance for risk imposers than others. Now if all risk impositions were impermissible, this point might have little weight. But a great many risk impositions are side effects of valued productive and leisure activities that are clearly permissible. If there were some mechanism that guaranteed compliance with whichever rule applied to these activities, we would have good reason to prefer the rule that was easiest to comply with, since the more difficult the compliance, the more costly, in effect, engaging in those activities would be. It is this point and the first that largely lie behind the Compliance Condition. Now there may be tension between the points of view of risk imposers and risk bearers (although this may be somewhat lessened by that fact that most of us occupy both these points of view): of all the rules that satisfy the Risk Compensation Condition, the rule under which risk bearers are most likely to be able to recover full compensation for the risk may not be the rule that gives rise to the least burdens of compliance for risk imposers. This is why the Compliance Condition selects the rule under which the burdens associated with compliance are the most fairly distributed.

V

I have made a reasonable case, I hope, for the claim that each of the Natural Lottery Rule, the Risk Proportionality Rule, and the Direct Payment Rule, together with its scope of application, unifies, explains, and is supported by what I hope are uncontroversial judgments about liability in particular kinds of cases, and that the plausibility of these rules supports the risk liability theory. Now that we have seen an independent defense of the risk liability theory, I would like to work back from it to explain why each of those rules is appropriate in particular circum-
stances, and, more important, to characterize more precisely its scope of application. Since each rule satisfies the Risk Compensation Condition, we must look to the Compliance Condition.

Rather than produce a laundry list of differences in the burdens of compliance these rules give rise to, let me describe the three most important. These involve the number of times each rule requires compliance, the difficulties in determining what a rule requires when it holds, and the difficulties in complying with a rule once one determines what it requires.

Many risks of harm involve only low probabilities. For such risks, the Direct Payment Rule would give rise to a duty to depart from the status quo many more times than either the Risk Proportionality Rule or, especially, the Natural Lottery Rule. For example, when applied to actions imposing a one-in-ten-thousand chance on someone of his suffering a certain harm, the Direct Payment Rule will in the long run give rise to ten thousand times as many duties to depart from the status quo than the Natural Lottery Rule. Making someone any kind of payment, no matter how small, is a nuisance, and it takes up valuable resources. If we had to pay someone each time we engaged in a risk-imposing activity, we would be able to engage in almost no risk-imposing activities. Since many risk-imposing activities are permissible and form valuable parts of our lives, the Direct Payment Rule would put a huge burden of compliance on risk imposers. It would also put a burden on risk bearers, since they would have to spend a lot of time and effort to recover compensation for all the risks they bear. This strongly suggests that, other things being equal, the lower the probability of harm, the less reason there is for the Direct Payment Rule to apply.

It is far from always easy to know what is required for complying with any of the three rules in a particular case. Again, the Direct Payment Rule suffers from several difficulties. First, it is clearly much easier to determine whether someone has been harmed rather than merely borne a risk of harm. Second, knowing the amount needed to compensate someone directly for bearing a risk of harm requires knowing the magnitude of the risk, which means knowing what the harm risked is, and, roughly, the contribution of the risk-imposing action to the probability of his suffering that harm. It is often difficult to know what harms are risked, but determining the relevant probabilities is notoriously difficult. In general, then, the Direct Payment Rule gives rise to severe epis-
temic burdens. By contrast, a delightful feature of the Natural Lottery Rule is that if the risk imposer is guaranteed to comply with it, then the risk bearer is compensated for bearing the risk. But knowing how to comply with the Natural Lottery Rule only requires knowing whether a risk imposer caused someone a harm, and what is required to compensate that person for the harm. It requires knowledge neither of the probabilities of the harms risked, nor of the magnitudes of those harms. Since risk bearers will usually not be able to recover compensation unless it can be shown—or perhaps more importantly, unless they can show—what the liability rule which covers the case requires, we should take these kinds of epistemic burdens extremely seriously. In my view, the relative ease of the epistemic burdens associated with the Natural Lottery Rule, together with the fact that it relatively seldom requires departures from the status quo, explain why it is the most important liability rule. Not that the epistemic burdens are always small, however. Sometimes, as in Summers and Curable Cancer, it is very hard to tell who or what caused someone to be harmed. In such cases, the Risk Proportionality Rule will probably create fewer epistemic burdens, particularly when it is fairly easy to determine the relative magnitudes of the different impositions of risks of that harm, as it was in Summers and Curable Cancer.

The only way in which the Natural Lottery Rule and the Risk Proportionality Rule are both difficult to comply with is when the harm in question is so severe that it would be difficult to compensate anyone who suffers it. The limiting case is where the harm is noncompensable, in which case it is impossible to compensate someone who suffers it. But an important fact about noncompensable harms is that it is often possible to be compensated for bearing a risk of a noncompensable harm. Recall Smith’s decision that receiving $1000 would fully compensate her for bearing the risk of the noncompensable—for her—harm of incurable cancer. As we noted earlier, this fact explains why the Direct Payment Rule holds in the Incurable Cancer cases. The difficulties in compensating someone for a noncompensable harm meant that at least in those

7. Compare David Lewis, “The Punishment that Leaves Something to Chance,” Philosophy & Public Affairs 18, no. 1 (Winter 1989): 53–67, in which similar considerations are used to defend the practice of punishing someone for attempting a crime by imposing a lottery on him of the form: Mild Punishment if the attempt fails; Severe Punishment if it succeeds.
cases, the difficulties in complying with the Natural Lottery Rule would impose an unfair burden on Smith and Jones in comparison with the burdens that would arise from the Direct Payment Rule. More generally, the phenomenon of harms that are difficult or impossible to compensate people for is the main reason why the Direct Payment Rule sometimes holds.

I do not, however, say that the Direct Payment Rule holds for all impositions of risks of noncompensable harms, or even holds for a large proportion of such cases. Many of the activities we engage in daily, which we value and which are clearly permissible, impose risks of noncompensable harms on others, such as death. If the Direct Payment Rule applied to these cases, compliance difficulties would mean that in practice it would be impossible both for risk imposers to engage in those activities and for the risk bearers to receive the compensation the risk imposers would be under a duty to pay them. This would mean either that risk imposers would be prohibited from engaging in such activities, or that risk bearers would go without the compensation to which they had a claim. Neither possibility is attractive, so while it is plausible that the Direct Payment Rule applies to impositions of relatively high risks of noncompensable harms, as in Incurable Cancer 1 and 2, it is worth asking whether there is a way around this problem.

Say that two people impose reciprocal risks on each other when they are engaging in activities that impose the same magnitude of risk on each other.8 If the Direct Payment Rule applied, each would be under a duty to compensate the other directly for the risks. But since the magnitudes of the risks they impose on each other are the same, we could regard these duties as canceling out. In short: no liability for reciprocal risks. Thus for reciprocal risk impositions, even for risks of noncompensable harms that make difficulties for the Natural Lottery Rule and the Risk Proportionality Rule, the Direct Payment Rule is extremely easy to comply with, since it never requires a departure from the status quo. This means that the problem with the Direct Payment Rule is not as large as it seems. It is possible to extend the idea of reciprocal risk imposition to risks imposed at different times, and to extend the idea of reciprocity within pairs of individuals to reciprocity within groups of individuals. Despite the fact that this creates a greater epistemic burden in

determining when reciprocity holds, the scope of the Direct Payment Rule can thereby be greatly expanded in combination with the cancellation idea without generating significant compliance burdens. There will still be risk impositions of noncompensable harms that are in no sense reciprocal, and for those we will have to balance the burdens of compliance associated with each of our three rules, taking into account that receiving, say, damages to cover hospital bills and loss of earnings for a noncompensable harm is a lot better than receiving nothing at all.

I now want to mention a way in which reciprocity connects with fault. To recall: I have argued that when we understand an agent to be at fault in terms of her having acted impermissibly, fault has no direct relevance to liability. If an agent performs an action that she knows or ought to know will impose a risk of harm on another, then one way or another, she is under a duty to compensate the risk bearer for the risk, regardless of whether the action was permissible or not. Now suppose that we each engage in the same activity in the same way, with the result that there are a large number of reciprocal risk impositions. For example, we might all drive cars that are kept in the same condition, each of us driving cautiously. We all accept that the Direct Payment Rule applies, and we accept that the duties that it generates cancel out. Thus even when someone is harmed in an automobile accident, he has no claim to be compensated. But one day a young man decides to impress his friends by driving a lot more quickly than the rest of us, thereby imposing greater, and hence nonreciprocal, risks on us than we impose on him. While turning a corner, the young man loses control of his car and crashes into another car driver, damaging that vehicle and injuring its driver.

Now I think most of us are inclined to say that the young man is liable. We can explain this by saying that while the Direct Payment Rule applies to reciprocal risk impositions, with the duties to compensate generated canceling out, the burdens associated with the young man's complying with the Direct Payment Rule would be great, so for the kinds of reasons I have sketched, the Natural Lottery Rule should apply. That explains why the young man is liable. Thus we can appeal to difficulties of compliance to explain why there is a wide range of cases in which there is no liability for reciprocal risk imposition, but liability for harms caused for nonreciprocal risk imposition. Now very often it will be natural to say that someone who imposes a nonreciprocal risk on others is at fault: in
the ordinary use of the term, the young man was certainly at fault. This goes some way toward explaining our intuitions that fault matters for liability despite the claims I made earlier. But it does not go all the way: it would be a gross distortion of any sense of the term ‘fault’ to say that the shipowner was at fault in any of the Vincent variations. But he is still liable for the harm he caused.

Our discussion of Summers and Curable Cancer showed that which liability rule applies in a particular case can be a function of the kind of evidence that is available in that case. But questions of evidence enter in another way. Suppose a liability rule applies of the form: X is under a duty to compensate Y if and only if p. Suppose that p obtains, so that according to the rule, X is under a duty to compensate Y. But that p obtains does not entail that anyone knows that p obtains, or that it is reasonable for anyone to believe that p obtains. But until there is sufficiently good evidence that p obtains, there is a sense in which X’s being under a duty to compensate Y is, from Y’s point of view, for nothing. In terminology that I hope is self-explanatory, we therefore need to ask: what kind evidence is needed to establish that X is under a duty to compensate Y?

I believe that by directing our attention to the prospective value to risk imposers and risk bearers of different liability rules, the risk liability theory already contains the resources to answer this. The higher the standard of proof, the harder it will be for Y to establish a claim to compensation when p obtains. The lower the standard of proof, the easier it will be for Y to establish a claim to compensation when p does not obtain. Erring too far in one direction will put an unfair burden of proof on Y; erring too far in the other will put an unfair burden on X. So where should we stop? A common suggestion is: X’s duty is established when relative to the available evidence it is more likely than not that p. No doubt this has practical merits, but from a theoretical point of view, a better suggestion is: vary the standard of proof with the kind of evidence that can be expected. To illustrate, suppose that in our society there are Cunning Criminals. They are very good at stealing things and leaving no evidence behind them, with the result that in such thefts there is never enough evidence to be more than 40 percent certain that any particular individual committed the theft. If the burden of proof is put at 50 percent, no one will ever be liable for such thefts. So we might consider lowering the standard of proof to, say, 30 percent, reasoning as follows.
Under this rule, those who are the victims of theft will go uncompensated some of the time, and compensated at other times. When they are compensated, there is about a 70 percent chance that the wrong person will pay compensation, which is perhaps a little less fair than the original owner going uncompensated. (Note that when the burden of proof is set at 50 percent, we tolerate a large number of cases in which the wrong person will pay compensation.) But about 30 percent of the time, the right person will pay compensation, which is much more fair than the original owner going uncompensated. On balance, the lower standard of proof is fairer.

I will not try to work out the details of this view. Some will reject it as counterintuitive, but then I think they should accept the following kind of liability rule. Suppose the standard of proof is set at 50 percent, and that Cunning Criminals sometimes, but not often, fail to destroy enough evidence. One day a Cunning Criminal steals $100 and fails to destroy enough evidence. Then we might look favorably on a liability rule that puts him under a duty to pay the owner $200, or $1000, justifying this to him as follows. “You tried to destroy the evidence. Quite often that succeeds, and on those occasions you ensure that a claim for compensation cannot be established against you. To make sure that when you commit such a theft your victims are ensured full prospective compensation for the harm you inflict, on those rare occasions in which a claim for liability can be established against you, you are under a duty to pay significantly more than full compensation.”

VI

The risk liability theory tells us that excuses aside, if X performs an action that she knows or ought to know will impose a risk of harm on Y, then, roughly speaking, one way or another, X is liable to Y for the risk. But this does not tell us when X is not liable to Y, so the risk liability theory remains incomplete. In this section I try to remedy this gap. For simplicity, I will restrict this discussion of ignorance to cases in which Y has been harmed, and in which after the event we have full knowledge of the causal route to the harm. I will also ignore considerations of risk reciprocity. The risk liability then says that in such cases, if X is to be liable at all, then she is under a duty to compensate Y for the harm. This restriction does not affect the generality of the arguments that follow.
Treatments of ignorance are usually couched in terms of unforeseeability. Typical is:

(5) If \( X \) causes \( Y \) to be harmed by doing something that she neither foresaw nor ought to have foreseen would lead to \( Y \)'s being harmed, then \( X \) is not liable to \( Y \).

On one proposal, a harm is a foreseeable consequence of an action just in case the risk of that harm is sufficient reason for it to be impermissible to perform that action. But then (5) just tells us that fault is necessary for liability, and we have already seen that should be rejected. So let us look at the more natural proposal, which says that a harm is a foreseeable consequence of an action just in case the harm is not too improbable given the action.

It is far from obvious what the probability threshold for this kind of theory is, or why such a threshold would be crucial to liability, but let us suppose defenders of (5) have told us that the threshold is some non-zero probability \( p \). Adams owns a tract of land in a remote area and wishes to quarry the marble there. The only feasible way of doing this is by using explosives. The only person who lives near enough to be affected by this is Bloggs, but extensive experience with explosives tells Adams that properly used, the probability that Bloggs will be harmed by a stray projectile, although non-zero, is very small, certainly less than \( p \). One day, to everyone's surprise, a piece of marble comes crashing through Bloggs's window and smashes his television screen. But since the probability of this was less than \( p \), the harm was unforeseeable, and so (5) tells us that Adams is not liable.

But this seems quite clearly inconsistent with the reasoning that led us to hold the shipowner liable in all the *Vincent* variations. Adams knowingly imposed a risk of harm on Bloggs, and the mere fact that the risk of harm was small does not by itself give us any reason not to make Adams the ultimate bearer of the risk. I conclude that Adams is under a duty to compensate Bloggs, so I believe we should reject (5). More generally, whenever \( X \) knowingly imposes a risk of harm upon \( Y \), then she is, roughly speaking, one way or another under a duty to compensate \( Y \) for bearing the risk. Hence standard accounts of the relation between ignorance and liability should be rejected.

To develop an alternative, consider Sidewalk.9 You are returning

home from your office by foot when you discover that for some reason I have fenced off a long portion of the sidewalk. No matter. You cross the road and walk on the other side. Tall trees line both sidewalks. There is a strong breeze, and a branch breaks off and lands on you, breaking your arm. My intuition is that I am not liable to you. Now someone might say that I caused you to be harmed, but that is obscure. But we can say that I significantly altered the causal structure of the world, and that is part of the explanation of why you came to be harmed. But I did not impose a risk of that harm on you: you would have been just as likely to have been hit by a falling branch had I not blocked your original route. So we can explain why I am not liable to you for the harm by saying that I did not impose a risk of that harm on you. More generally, when an agent performs an action which alters the causal route through which someone might suffer a harm, but does not increase the likelihood of his suffering that harm, then the agent is not liable if he suffers the harm through that route.

We can even give an argument for this intuition. Suppose we were liable for the harms that happen in part because we changed the causal structure of the world even though we did not increase the risk of anyone's suffering that kind of harm. This gives each of us an incentive not to perform such actions. With reasonable symmetry assumptions, the net result will be that we would each bear the same expected costs as we would if we were not liable (where the expected costs are the sum of the expected uncompensated-for losses we would end up bearing plus the expected amount we would end up paying to others as compensation). But the incentive not to perform actions that change the causal structure of the world would mean that we would tend to engage in fewer of the activities we value than if we were not liable. Hence we would all be prospectively better off not being liable for such harms rather than being liable.

The remaining and more difficult case is where one person performs an action that imposes a risk of harm on another but neither knows nor ought to have known that. Suppose that the risk bearer is harmed. Is the risk imposer liable? I think our intuitions cut both ways here. Consider first Smith v. Lampe.10 The defendant honked his horn in order to warn a tug that seemed to be heading toward the shore in dense fog. Unfortunately, the honking coincided with a signal that the tug captain expected

10. 64 F. 2d 201 (6th Cir.), cert. denied, 289 U.S. 751 (1933).
would guide him into port. The captain therefore steered his tug toward the shore rather than away from it, resulting in serious damage to the vessel. There is certainly a strong sense in which the defendant created a significant risk of damage to the tug, but despite that it seems clear that he is not liable.

But now consider this case. The water company has discovered a new chemical which, when added to the water supply, keeps the pipes clean and maintenance free. After extensive investigation, the company quite reasonably concludes that adding the chemical does not impose a health risk on anyone, so they add the chemical to the water supply. But it eventually becomes apparent that due to an unusual chemical in the water supply of a certain town, adding the chemical has imposed significant health risks on the members of that town, and some of them have been harmed as a result. My intuition is that the water company is liable despite the fact that they neither knew nor ought to have known that their adding the chemical would impose a risk of harm on the town members.

How should we react? One possibility is that we should reject both the claim that the kind of ignorance involved in performing an action which imposes a risk of harm on someone that one neither knows nor ought to know about is always a defense against being liable, and also the claim that it is never a defense. There may be kinds of risk impositions for which it is an defense, and kinds for which it is not. And it seems to me plausible that incentive effects lie behind this distinction, incentives to gather information, incentives to avoid engaging in certain activities, and so on. But I regret having to leave this as a conjecture.

There are many other questions about liability I have not addressed. For example, in the cases I have discussed the behavior of the risk bearer largely had no effect on the kind of risk he bore. But that is not true in general, and we would like to know what difference this makes to liability. And I have not even begun to address the very difficult question of what it means to say that one person imposed a risk of harm on another. But I have tried to argue that if we see risk imposition as what lies at the heart of judgments about liability, then we can better understand some broad contours in the theory of liability. If that is right, then I hope that understanding liability in terms of risk imposition will be useful in understanding other contours.

11. For an initial attempt to address some of the questions here, see my "Actions, Beliefs, and Consequences," Philosophical Studies, forthcoming.