Torts as (Only) Wrongs? An Empirical Perspective

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Abstract

In this article, we report on several studies that explore peoples’ preferences for strict liability or negligence in assigning responsibility for accidents. Depending on the situation, a substantial percentage of individuals stand prepared to assign liability to actors who are not negligent. We relate these findings to current debate over whether the essence of tort law is compensation to victims for wrongs committed by defendants.

We begin with a brief discussion of the relative roles that strict liability and negligence play in the tort system, both historically and in current doctrine. In essence, both the scholarly literature and the law have, in recent decades, moved away from liability without fault, except in a limited number of circumstances. We then report four experimental studies that presented participants with scenarios in which one person caused another to be injured, but varied whether the injury was negligently or innocently caused, and varied the circumstances in which it occurred. In brief, we found that many of the factors considered relevant by courts and legal scholars – e.g., whether the activity was unusual, whether it was being conducted in a seemingly inappropriate locale, whether the actors imposed reciprocal risks on each other – affected the extent to which participants imposed liability absent negligent conduct. However, other factors, such as whether the defendant was acting for business or for pleasure, also played a role.

Perhaps most significantly, we further found a baseline of strict liability well beyond what the law would impose, even when we degraded the conditions for strict liability as far as we could – an accident in which one cyclist bumps into another through no fault of either while both are out for a pleasure ride. Finally, when asked to put themselves in the role of jurors and instructed on the negligence standard, participants routinely applied that standard in many instances – but not when injury occurred by virtue of an innocent accident involving a chemical spill. We attempt to explain these results in light of current competing theories about the nature of tort law.

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“The business of the law of torts is to fix the dividing lines between those cases in which a man is liable for harm which he has done, and those in which he is not.”

I. Introduction

In this article, we report on several studies that explore peoples’ preferences for strict liability or negligence in assigning responsibility for accidents. Depending on the situation, a substantial percentage of individuals stand prepared to assign liability to actors who are not negligent. We relate these findings to current debate over whether the essence of tort law is compensation to victims for wrongs committed by defendants.

Part II reflects on the fact that early in their legal careers many law students are sympathetic with the idea of a tort system based on strict liability. We then turn to a brief discussion of the relative roles that strict liability and negligence play in the tort system, both historically and in current doctrine. In essence, both the scholarly literature and the law have, in recent decades, moved away from liability without fault, except in a limited number of circumstances.

Part III reports four experimental studies that presented participants with scenarios in which one person caused another to be injured, but varied whether the injury was negligently or innocently caused, and varied the circumstances in which it occurred. In brief, we found that many of the factors considered relevant by courts and legal scholars – e.g., whether the activity was unusual, whether it was being conducted in a seemingly inappropriate locale, whether the actors imposed reciprocal risks on each other – affected the extent to which participants imposed liability absent negligent conduct. However, other factors, such as whether the defendant was acting for business or for pleasure, also played a role.

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1 OLIVER WENDALL HOLMES JR., THE COMMON LAW 64 (1881).
II. Brown v. Kendall and the Dominance of Fault

Early in their law school career, most American law students read Brown v. Kendall, and for good reason. It is a fulcrum about which courts in the United States turned from the old regime dominated by the forms of action (trespass and trespass on the case) and toward the “modern” categories of intentional torts, negligence, and strict liability that continue to define the tort landscape today.

Recall that in Brown two dogs, owned by the plaintiff and defendant, got into a fight. The defendant took a four foot long stick and began beating on the dogs in an attempt to separate them. The plaintiff was standing behind the defendant, who was retreating “backward from before the dogs, striking them as he retreated; and as he approached the plaintiff, with his back toward him, in raising his stick over his shoulder, in order to strike the dogs, he accidently hit the plaintiff in the eye, inflicting upon him a severe injury.”

The suit was brought as a trespass action. The question presented to the court was this: What must the plaintiff prove in order to prevail? Specifically, could the plaintiff prevail merely by showing that the defendant directly struck him or must he prove that the defendant was negligent, i.e. failed to act with “ordinary care”? At the time Brown was decided, many argued that, at least in medieval times, trespass vi et armis was a strict liability tort. In the case of a “direct” injury, a plaintiff could prevail without showing either intention or negligence on the part of the defendant. The trial judge seems to have been confused on this point and instructed the jury they could find for the plaintiff if the defendant failed to “exercise extraordinary care.” On this instruction, the plaintiff prevailed and the defendant appealed. The Supreme Court, per Justice Shaw, reversed and ordered a new trial. On the key issue he made the following pronouncement.

[T]he plaintiff must come prepared with evidence to show either that the intention was unlawful, or that the defendant was in fault for if the injury was unavoidable, and the conduct of the defendant was free from blame, he was not liable.

With this pronouncement, Judge Shaw helped to insure the dominance of negligence in American Tort law.

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2 60 Mass (6 Cush. ) 292 (1850).
3 Id. at 292-93.
4 At common law, the writ of trespass (trespass vi et armis) was appropriate when the plaintiff could prove that his injury was “direct,” as when the defendant struck him. The writ of trespass on the case was appropriate when the injury was “indirect” or, as it was sometimes described, “mediate,” as when the plaintiff ran into an obstruction on the road negligently placed there by the defendant.
5 All agreed that Kendall did not intend to strike Brown. If he were to be held responsible it would have to be on some other grounds.
6 It is now generally agreed that the old writ of trespass never imposed strict liability on those who caused direct injury. See Fowler v. Lanning, [1959] 1 Q.B. 426, 1 All E.R. 290. However, in the middle of the Nineteenth Century, this was much more of an open question. See Oliver Wendall Holmes, Jr., The Common Law (1881).
7 Id. at 295-96.
In short order, the fault based system was praised as the morally correct approach. Here is the well-known passage from Oliver Wendell Holmes Jr’s essays on The Common Law.

The general principle of our law is that loss from accident must lie where it falls, and this principle is not affected by the fact that a human being is the instrument of misfortune. But relatively to a given human being anything is accident which he could not fairly have been expected to contemplate as possible, and therefore to avoid. In the language of the late Chief Justice Nelson of New York: "No case or principle can be found, or if found can be maintained, subjecting an individual to liability for an act done without fault on his part …. All the cases concede that an injury arising from inevitable accident, or, which in law or reason is the same thing, from an act that ordinary human care and foresight are unable to guard against, is but the misfortune of the sufferer, and lays no foundation for legal responsibility."

... .

The undertaking to redistribute losses simply on the ground that they resulted from the defendant’s act would [be open to the grave objection] of offending the sense of justice. Unless my act is of a nature to threaten others, unless under the circumstances a prudent man would have foreseen the possibility of harm, it is no more justifiable to make me indemnify my neighbor against the consequences, than to make me do the same thing if I had fallen upon him in a fit, or to compel me to insure him against lightning.8

The alleged superiority of a fault based system over non-fault based liability relegated strict liability to a very small domain that included liability for those who kept wild animals, those whose cattle strayed on a neighbor’s property and, most importantly, liability for those who carried on abnormally dangerous activities. This last category of liability was first developed in the English case, Rylands v. Fletcher9 and slowly found its way into the jurisprudence of most American jurisdictions. With a few exceptions,10 strict liability applied to competing land uses and occupied a very small corner of tort law.

This state of affairs remained in place until the dominance of negligence came under attack in the middle of the 20th century in what Professor Owen has labeled the Great Strict Liability Experiment, most frequently associated with Supreme Court of California’s seminal opinion in Greenman v. Yuba Power Products, Inc.11 and Section 402A of the Second Restatement of Torts, which established strict liability for injuries caused by defective

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9 L.R. 3 E. & I. App. 330 (1868)
10 See e.g. Klein v. Pyrodyne Corp., 117 Wn2d 1, 810 P.2d 917 (1991) (injury to a patron at a fireworks show.)
products. As Goldberg and Zipursky note, this movement was justified by an academic approach that conceived of the law of torts as a body of rules for the allocation of the costs of accidents. This view decouples tort liability from notions of wrongdoing. Sometimes the decoupling was justified by a desire to focus on the goal of compensating the injured individual. More frequently, it was tied to a desire to have the tort system send the correct (i.e. efficient) signal concerning the allocation of the costs of accidents.

Now, a half a century after the great experiment, it is fair to say that its impact has been quite limited. By the middle of the 1980's, fault principles had once again come to play a dominant role in products liability cases. The promulgation of the Third Restatement of Torts: Products Liability, at the end of the Century, formalized the reimposition of fault principles in all but manufacturing defects, a category which itself had shrunk over time.

Moreover, the law and economics turn in tort law that helped to create the intellectual justification for strict liability has itself come under repeated attack in the last 20 years. Perspectives that view law simply as a means of inducing cost-effective precaution taking have been countered by a variety of corrective justice approaches. These approaches do not agree on every point, but they often share two attributes that are particularly relevant for this paper.

First, corrective justice theories find at least part of their justification in their reflection of social norms. Second, and even more centrally, corrective justice approaches view torts as wrongs. The law of torts is designed to recognize and repair harms caused by wrongs. Torts are wrongs. In this tradition, John Goldberg and Benjamin Zipursky’s Civil Recourse Theory agrees that we should view torts as wrongs and they define wrongs in terms of the act of the

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13 John Goldberg and Benjamin Zipursky, Torts as Wrongs, 88 Tex. L. Rev. 917, 918 (2010)
15 JOHN G. FLEMING, AN INTRODUCTION TO THE LAW OF TORTS 1 (1967); Guido Calabresi, The Costs of Accidents: A Legal and Economic Analysis (1970). (The tort system should be assessed in terms of its ability to minimize the costs of accidents).
17 See generally WILLIAM M. LANDES & RICHARD A. POSNER, THE ECONOMIC STRUCTURE OF TORT LAW (1987); Steven Shavell, Strict Liability Versus Negligence, 9 J. Legal Studies 1 (1980). One should note that Posner and many other law and economics scholars generally support a fault-based liability system. As the influential Shavell article argues, a negligence rule is the correct rule when exercising due care produces the efficient mix of accident costs and accident avoidance costs. In those situations where due care is insufficient because a substantial number of accidents occur in the absence of due care, however, a strict liability rule may be justified because it encourages actors to reduce their level of activity.
18 “[W]e have made an effort to put forward a tort theory that explains the sense in which the common law of torts and a variety of socially and institutionally embedded norms of conduct are synergistically related to one another.” John C.P. Goldberg, Civil Recourse Revisited, 39 Fla. St. L. Rev. 341 366 (2011).
defendant. An injurer who has not acted wrongfully should not be considered a tortfeasor and wrongfulness is inextricably tied to intention and fault.

Goldberg and Zipursky structure their argument as an empirical statement as well as a normative position. The core of products liability law has been brought back within the fault fold. Even the venerable strict liability for abnormally dangerous activities has such a limited scope that Goldberg and Zipursky can be dismissive of this doctrine as a body of law “that sits at the margin of tort law.” Whether or not this is a fair assessment, it does appear to be the case that the domain of abnormally dangerous activity law is not expanding and perhaps is even contracting. In the widely cited case of Indiana Harbor Belt Railroad Co v. American Cyanamid Co, for example, Judge Richard Posner ruled that the transportation of acrylonitrile - a flammable, highly toxic, and possibly carcinogenic chemical - by rail through a major city is not an abnormally dangerous activity. Though acknowledging the danger of the substance, Posner concluded that proper precautions could sufficiently minimize the risk of the activity and that a rail yard was an appropriate place through which to transport such chemicals. This case illustrates reluctance on the part of the courts to deem activities abnormally dangerous and, therefore, to impose strict liability when a negligence rule will suffice. Certainly, this is the

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20 John Goldberg and Benjamin Zipursky, Torts as Wrongs, 88 Tex. L. Rev. 917 (2010). In this paper, we do not engage in a serious discussion of the differences among those who reject an accident approach to tort law. See generally Benjamin C. Zipursky, Civil Recourse, Not Corrective Justice, 91 Geo. L.J. 695 (2003). We do, however, recognize that Civil Recourse Theory has its critics. See, e.g., Emily Sherwin, Interpreting Tort Law, 39 Fla. State Univ. L. Rev. 227 (2011).

21 Questions of intentional wrongdoing are beyond the scope of this paper.

22 Goldberg and Zipursky are not alone in this view. Stephen Perry views corrective justice as the correction of harms for which the tortfeasor is responsible, where that responsibility, in turn, is to be analyzed in terms of having had an adequate capacity and opportunity to avoid causing those harms. Stephen R. Perry, Responsibility for Outcomes, Risk, and the Law of Torts, in PHILOSOPHY AND THE LAW OF TORTS 72 (GERALD J. POSTEMA ED., 2001).

23 John Goldberg and Benjamin Zipursky, Torts as Wrongs, 88 Tex. L. Rev. 917, 952 (2010). Not all corrective justice scholars are quite so dismissive. Coleman does acknowledge that some pockets of strict liability may be justified on other considerations. These considerations include factors such as those we consider in the studies reported below; especially risky ventures and non-reciprocal risks. Jules Coleman, Tort Law and the Demands of Corrective Justice, 67 Ind. L. J. 349 (1991).

24 916 F.2d 1174 (7th Cir. 1990).

25 Id. at 1182.

26 Among the most widely cited strict liability cases, Indiana Harbor is also among the most widely critiqued by those who believe the bar for imposing strict liability was set unreasonably high. See David Rosenberg, The Judicial Posner On Negligence Versus Strict Liability: Indiana Harbor Belt Railroad Co v. American Cyanamid Co., 120 Harv. L. Rev. 1210, 1210-22 (2007); Alan O. Sykes, Strict Liability Versus Negligence In Indiana Harbor, 74 U. Chi. L. Rev. 1911, 1911–31 (2007). See Reporter’s notes accompanying Restatement (Third) of Torts: Liab. for Physical & Emotional Harm §20 for a general discussion of the state of strict liability for abnormally dangerous activities.
case in other common law jurisdictions. Conceptually and empirically, fault is at the heart of American tort law.

And yet...

Those of us who teach Brown or some equivalent case to first year students are often struck by the fact that, given a chance, many people in the class resist Justice Shaw’s fundamental rule, what some have called the fundamental law of tort: Absent wrongdoing, injuries lie where they fall. They are prepared to hold Mr. Kendall responsible because he caused Mr. Brown’s injury. While Mr. Kendall may not have acted with fault, he did injure Mr. Brown, who surely did nothing wrong. For them as Keating notes, “strict liability competes with fault liability because it imposes liability on reasonable conduct.” These students appear to adopt the contrarian approach long advanced by Richard Epstein in which the default rule is one of strict liability for one’s acts that cause injury.

Is this reluctance shared by the general population? An earlier study of ours suggests that it is. As part of that project, which focused on inchoate torts, we presented subjects with a vignette describing a toxic tort scenario. A majority of individuals who heard the non-negligent version of the vignette held the actor responsible in a circumstance where United States courts would not impose strict liability.

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27 Burnie Port Authority v. General Jones Pty. Ltd. 179 C.I.R. 520, 556–57 (1994). (“[T]he rule in Rylands v. Fletcher, with all its difficulties, uncertainties, qualifications, and exceptions, should now be seen, for the purposes of the common law of this country, as absorbed by the principles of ordinary negligence. Under those principles, a person who takes advantage of his or her control of premises to introduce a dangerous substance, to carry on a dangerous activity, or to allow another to do one of those things, owes a duty of reasonable care to avoid a reasonably foreseeable risk of injury or damage to the person or property of another.”); Transco plc v. Stockport Metropolitan Borough Council, [2003] UKHL 61, [2004] 2 A.C. 1. In his speech in the Transco case, Lord Hoffman noted, “[C]ounsel could not find a reported case since the second world war in which anyone had succeeded in a claim under the rule [in Rylands v. Fletcher]. It is hard to escape the conclusion that the intellectual effort devoted to the rule by judges and writers over many years has brought forth a mouse.”


31 John M. Darley, et al., Doing Wrong Without Creating Harm, 7 J. Empirical Legal Studies 30, 57 (2010). Not all tort scholars would be surprised by this result. When discussing the extent of strict liability, the proposed Restatement (Third) of Torts asserts “(strict liability) resonates deeply in public attitudes: if the person in the street is asked whether a party should be liable for the injuries the party causes, the person’s answer is likely to be in the affirmative.” Restatement (Third) of Torts: Liability for Physical and Emotional Harm § 20, comment f (2010). Nor is this a recent observation. Consider this passage from Francis Bohlen: “The concept universal among all primitive men, that an injury should be paid for by him who causes it, irrespective of the moral or social quality of his conduct, while it has disappeared from legal thought, still dominates the opinion of the sort of men who form the average jury.” Francis Bohlen, Mixed Questions of Law and Fact, 72 U. Pa. L. Rev. 111, 188 (1924).
Most current scholars writing from a corrective justice perspective are relatively uninfluenced by this sort of empirical research; their arguments are couched at a theoretical and normative level. They certainly would not regard lay opinion to be dispositive of the proper role of strict liability in tort law. Yet moral judgment has always been part of the rationale underlying tort doctrine. Recall that Holmes himself rejected strict liability on the grounds that it “offended the sense of justice,” a rationale sometimes used by courts to justify their adherence to a negligence standard in certain kinds of cases. By the same token, the Supreme Court of New Jersey has characterized strict liability as “liability without moral blame,” showing that at least to some extent the judiciary conceptualizes both sides of the negligence/strict liability debate in terms of moral judgment.

Presumably, moreover, even those scholars who regard corrective justice as tort law’s principal vision would agree that, as in many other areas of law, the legitimacy of tort law is impacted by ordinary individuals’ perceptions of fairness, and by their sense of the obligations that each of us owes to those with whom we come into contact. Part of legal legitimacy is the degree to which legal rules correspond with everyday notions of what the law should be. Recent research on community-code agreement – the degree to which lay attitudes are consistent with legal rules – finds that citizens are more likely to respect legal rules when they are consistent with the citizens’ own views, or when deviations from those views are modest or explicable.

Given that this is so, a number of questions arise. First to come to mind, perhaps, are psychological and sociological questions. Why do some people prefer strict liability and others prefer negligence? Do they differ along recognized psychological dimensions? Do they differ based on demographic or socio/economic dimensions? These are interesting questions but we believe that adequate answers to these questions first require a better understanding of the answers to more legally relevant questions. How do the facts of a case affect preferences for negligence or strict liability? Are there any sets of facts for which everyone prefers a negligence rule?

32 Holmes, supra note 8 at 78.
33 See Boggs v. Plybon, 160 S.E. 77, 81 (Va. 1931) (“To hold that a guest who, for his own pleasure, is driving with his host may recover from him for injuries suffered where there is no culpable negligence, shocks one's sense of justice.”).
37 Janice Nadler, Flouting the Law, 83 TEX. L. REV. 1399, 1399-1441 (2005); Robinson & Darley, supra note 33; Tyler, supra note 33.
In the next section of this paper, we report a series of experiments that explore these latter questions. After we present our results, we return to a discussion of how these results speak to the ongoing resurgence of corrective justice theories that seem to leave very little room for strict liability.

III. Lay Preference for Strict Liability in Different Contexts

Our studies seek to answer two questions about community attitudes toward strict liability. One asks whether, in general, people are more willing to use strict liability standards than is the current tort regime. The other asks whether the factors that the law and legal commentators consider when determining if strict liability is appropriate in a given case – those listed in Section 520 of the Restatement (Second) of Torts, and factors such as the reciprocity of risk – also affect whether the public is more or less inclined to impose strict liability standards. The first three studies demonstrate that a substantial percentage of individuals are comfortable with liability based on the causation of harm. In a final study we examine whether asking individuals to play the role of juror and telling them the appropriate legal rule alters this pattern.

A. Study 1

The factor that historically has played the most significant role in claims that an activity is abnormally dangerous and thus subject to strict liability is that the activity agent is “out of place.” This rationale first appears in Lord Cairns’ opinion in Rylands v. Fletcher. There he established a “non-natural use” test, which stated that whether an activity was inappropriate for

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38 The Third Restatement suggests this possibility see supra note 28.
39 The Restatement (Second) of Torts § 520 lists 6 factors that might be considered when deciding whether to label an activity “abnormally dangerous.” They are:
   (a) existence of a high degree of risk of some harm to the person, land or chattels of others;
   (b) likelihood that the harm that results from it will be great;
   (c) inability to eliminate the risk by the exercise of reasonable care;
   (d) extent to which the activity is not a matter of common usage;
   (e) inappropriateness of the activity to the place where it is carried on; and
   (f) extent to which its value to the community is outweighed by its dangerous attributes.

Section 20 of the Restatement (Third) of Torts: Liability for Physical and Emotional Harm § 20 (2010) abandons the six factor test of the Second Restatement and replaces it with the following language:
§ 20. Abnormally Dangerous Activities
(a) An actor who carries on an abnormally dangerous activity is subject to strict liability for physical harm resulting from the activity.
(b) An activity is abnormally dangerous if:
   (1) the activity creates a foreseeable and highly significant risk of physical harm even when reasonable care is exercised by all actors; and
   (2) the activity is not one of common usage.

For our purposes, however, the list in the Second Restatement is particularly useful because it provides a guideline of factors that might influence judgments about the appropriateness of a strict liability rule. As our data indicate, they in fact do so.

40 1 L.R.-Ex. 265 (1866).
its location was crucial to whether a person should be liable when that activity innocently goes awry. The Second Restatement lists this factor in § 520(e). Arguments about the appropriateness of the location of an industry still play a role in strict liability decisions. They were at the core of the District Court opinion in the previously mentioned Indiana Harbor case, and were discussed, albeit negatively, in Judge Posner’s opinion.

We investigated this factor in our first study using a series of vignettes that varied on two factors. We manipulated across participants whether a dangerous glue-making factory was in an industry-appropriate area, or in a residential area. Within each location, the owner’s state of mind was manipulated; the owner was either said to have negligently allowed a toxic chemical to escape, or to have taken every precaution and to have been the victim of misfortune.

Materials and Procedure

Eighty-four participants were recruited from a paid experiments website run by a university. Most of the participants (58) were undergraduates. Participants saw the following core story:

Gregory Pilling is a chemist. He previously worked for a chemical company but, in the evenings, he developed an improved version of glue that is used for installing wall-to-wall carpeting. Several carpet installing companies contracted to buy his product, so he quit his company job and has set up a small production system to make batches of his glue. He set up a company called Glu-Tight Plastics and Cement Company in a garage near his home, needing no employees.

41 The Restatement (Third) of Torts also considers location as a factor in determining strict liability, though its importance is diminished.

Cyanamid provides an extended list of reasons why it thinks transporting acrylonitrile by rail, if dangerous, is not abnormally so under the Restatement standard. In its opinion, the risk of harm is small and the likelihood of extensive injury is also low because the chemical can be transported safely with the exercise of reasonable care. Indeed, millions of gallons of it are shipped safely every year, which in Cyanamid’s lexicon makes the activity one of common usage. It also points forcefully to the many useful products made from acrylonitrile to contend that the activity of shipping it is valuable.

However, perhaps the single most important factor in determining whether or not an activity is abnormally dangerous is what the Restatement calls the “inappropriateness” of bringing the danger to the particular place where the damage occurred.


43 Judge Posner put the onus of conflicting land usage on the plaintiff and compared building a residential neighborhood near such a busy railroad yard as akin to “building your home between the runways at O’Hare.” Indiana Harbor, 916 F.2d at 1181.

44 The order in which state of mind was presented was counterbalanced.

45 The participants on this site are largely undergraduates, but there are also some graduate students, staff, and members of the community. As compensation, participants were entered into a raffle. Of the eighty-four participants, 27 were male and 57 were female.
to do the production runs. He has been producing for about six months, and making excellent profits.

The manufacturing process takes about 10 days to make a batch, and involves a good many steps. At one point in the process, if the batch does not receive a buffering chemical, it emits a chemical that could be harmful to humans who are taking a certain medication. Essentially, it increased their risk of having a stroke. Pilling understood the need for this buffering treatment and regularly provided it during his production runs.

Kyle Jackson lives a few hundred feet from the Glu-Tight factory. He is part of the at risk population. Due to an error at the plant, the toxic chemical was released and he came into contact with it. Quickly thereafter, Kyle had a stroke. He remains partly paralyzed, his speech is slurred, and little or no additional improvement is expected. His medical costs have been high, and his wife has had to take time off from work to care for him. Their finances are strained. Doctor’s tests conclude that his stroke was the result of contact with the chemical. He is suing Pilling.

Some people have asked where the production facility is located. When Pilling was looking for a place to set up the production system, he found one in an un-zoned area near where he lives. The area is entirely homes. It is a residential community; Pilling’s factory is the only one. Pilling was able to rent a two-car garage that had enough room for him to do his production.

In this version, Pilling’s factory is standing among homes. Another version put it among other similar factories. This was the between-subjects location manipulation.

Following the core scenario were two variants. One variant described the accident that caused the chemical to be released as a result of Pilling’s negligence. Had he been more careful then Kyle would never have been injured. The other variant said that a part had failed during the production process. This part was not rated for high temperatures and failed through no fault of Pilling; he did not receive a notification to that effect from the supplier. These were respectively the negligent and innocent conditions.46

This mixed between-subject and within-subject design enabled us to investigate the following question: Given that a factory is located in an industrial/residential area, does it matter to you whether the owner acted negligently or innocently in causing injury? The place of the factory is taken as a given, since we did not make the subject aware of another possibility. Being presented with both states of mind, however, permits the subject to make a comparison and to

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46 The order in which subjects saw these two conditions was counter balanced. Half the time subjects saw the negligence version first and half the time they heard the innocent version first.
decide how much to increase or decrease the consequences of the harm depending on whether the factory owner did not meet a normal standard of care. This is more of a policy judgment based on choice than a bare intuition.

For each version of the scenario three questions were asked. First, participants were told to check the appropriate description of Pilling’s conduct from the following list of five options:

1. A. Pilling was innocent of misconduct. A reasonable person in the same situation would have not have taken more precautions.
2. Between A and B
3. B. Pilling was negligent. A reasonable person would have been more careful in his situation. He did not sufficiently consider the risks of the glue making process.
4. Between B and C
5. C. Pilling was reckless. He knew there were risks in the glue making process, but actively disregarded these possibilities.

Results and Discussion

This last question measures the perceived state of mind of Mr. Piling. Perceived state of mind was significantly affected by the state of mind manipulation in the experiment.\(^\text{47}\) In the innocent conditions, Pilling’s state of mind score fell midway between the Innocent and Negligent choices (Mean = 2.01 on the 1-5 scale). In the Negligent condition Mr. Pilling’s state of mind score fell midway between the Negligent and Reckless Choices (Mean = 3.85).

Second, participants were asked to decide whether Pilling should be liable for Kyle’s medical costs. There were two options: compensation and no compensation. In the negligent condition, nearly all participants assigned liability regardless of location (residential area = 100% full liability; industrial area = 95%). In the innocent condition, however, participants were significantly less likely to assign liability if Pilling was working in an industrial area (61% full liability) than if he was working in a residential area (88%).\(^\text{48}\) These results are shown in Table 1.

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<tr>
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<th>Residential</th>
<th>Industrial</th>
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\(^\text{47}\) \(F(1, 76) = 230.14, \ p < .001, \eta^2 = .75.\)
\(^\text{48}\) \(\chi^2 (1, N = 76) = 7.04, p < .01.\)
<table>
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<th>Area</th>
<th>100%</th>
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<tr>
<td>Negligent</td>
<td>88%</td>
<td>61%</td>
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Effects of state of mind and location of factory on judgments of liability

Third, participants were asked how much, if any, punitive damages Pilling should be made to pay on a scale ranging from 1 (No damages) to 7 (Maximal damages). Punitive damages were described as being intended to punish an offender whose conduct was especially egregious or morally unacceptable. The magnitude of punitive damages assigned was significantly affected only by the state of mind manipulation.\(^{49}\) Punitive damages were much higher in the Negligent condition \((M = 3.90, SD = 1.62)\) than in the Innocent condition \((M = 2.15, SD = 1.44)\).\(^{50}\)

These results lend some support to the proposition that Lord Cairn’s distinction resonates with lay people. When Pilling’s factory is in a location appropriate for its activity and Pilling takes proper precautions, he is assigned liability by a substantially smaller proportion of people than when the factory was in an inappropriate location and those same precautions are taken. Consistent with Section 520 of the Second Restatement, participants seem to be indicating that they believe a higher standard of care is required when Pilling is working in a residential area.

However, the rate at which subjects hold Mr. Pilling responsible for the plaintiff’s damages in the Industrial area–Innocent condition is still quite high. A majority (61%) of participants believed that Mr. Pilling should be held responsible for damages even when he was not negligent and even when his activity was not conducted in an inappropriate locale. People are sensitive to the location of a dangerous activity, but this substantial residual liability implies that location is only part of the story.

Before we make too much of this very high rate of liability in the Innocent condition, however, we must return to the results of the perceived state of mind question. Recall that in the innocent condition Mr. Pilling’s state of mind is perceived as falling midway between the innocent and negligent options. This tells us that we did not produce a story in which people uniformly felt the defendant acted reasonably. In part this may reflect a general tendency to read an outcome or behavior that had negative consequences to be less innocent than it is in fact. It may also be the case that there is a degree of negligence lurking in the Pilling story. This interpretation is supported by the presence of punitive damages assigned in the innocent condition (approximately 2 on a 7 point scale where 1 represents no damages).\(^{51}\) In Study 2 we attempt to achieve a cleaner state of mind manipulation and we explore whether the fact that the

\(^{49}\) \(F(1, 76) = 111.90, p < .001, \eta^2 = .60.\)

\(^{50}\) Both perceived state of mind and punitive damages were analyzed using a 2 (state of mind) by 2 (location) mixed ANOVA. There were no effects of order on any measure so that variable was dropped from the final analyses.

\(^{51}\) We return to this issue in Study 2.
harm was caused by a chemical release, as opposed to by some mundane means, is contributing to the strict liability finding in Study 1.

**B. Study 2**

Although the innocent condition description in Study 1 explicitly absolves Pilling of misconduct for the mechanical failure that caused the chemical release, there may still be a feeling that the failure is someone’s fault (one participant suggested that the equipment manufacturer was to blame). If Pilling is seen as vicariously responsible for someone else’s negligence, then assigning him liability might be justified based solely on that perception and not be the result of a strict liability decision rule. It is also possible that some subjects felt that Pilling was at fault for not detecting the flaw in the equipment, notwithstanding our saying that he was not. This problem is hard to eliminate within the confines of the Pilling facts so a new scenario that allows for harm to come from a more plainly innocent cause would be helpful in determining what to make of the high number of strict liability responses across all the conditions.

It also may be the case that the percentage of participants assigning liability in Study 1 is high because the scenario involves chemical contamination. Though it seems unlikely that a court would rule Pilling’s conduct to be “abnormally dangerous,” lay participants may have felt that the use of chemicals in this way may be perceived to be uncommon and therefore, in the language of Second Restatement § 520(d) “not a matter of common usage.” This idea is picked up in the Third Restatement, which notes that “public attitudes tend to be accepting of familiar and traditional risks, even while apprehensive of risks that are uncommon and novel.”

By this criterion, working with toxic chemicals may be seen as an abnormally dangerous activity in lay eyes. If that is the case, then using strict liability standards in Study 1 would be consistent with a broad or liberal reading of strict liability law; participants would have used the appropriate decision rule but applied the label “abnormally dangerous” to a more expansive set of cases than does the law.

Therefore, in Study 2 we attempt to eliminate §520(e) (inappropriateness to location) from the scenario and to manipulate § 520(d) (uncommon usage). The new vignette describes a traffic accident in which the driver of a pickup truck injures a bicyclist. As in the first study, we used a mixed between-subject and within-subject design.

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52 Restatement (Third) of Torts § 520, comment j (2010).
Materials and Procedure

Each subject was presented two scenarios. The scenarios described the owner of a construction company, Mr. Philip Blair, harming a bicyclist in an automobile accident. There were four versions of this story, varying on two factors. For the first factor, each story described the driving conduct of Mr. Blair. For some participants, both stories described him as being a safe driver who kept his vehicle in good repair. Mr. Blair in this case loses control of his vehicle when an unseen spike in the road blows out his tire. This is the innocent state of mind condition. For other participants, Mr. Blair was described as a careless driver who was irresponsible in his maintenance habits. In this case, Mr. Blair’s tire blows out due to shoddy maintenance. This is the negligent condition.

The second factor concerned the manner in which this accident harmed the bicyclist. Two possibilities were presented. In one, Mr. Blair is driving a truck full of traditional construction supplies and he hits the bicyclist directly. The image here is of a classic accident; this is the “impact condition” and is meant to reflect a “common usage” situation. In the other version, Mr. Blair’s cargo consists of toxic solvents and the force of the accident causes these to breach their containers, spilling on the bicyclist. This “chemical condition” is meant to reflect an uncommon usage. Each participant saw both impact possibilities, one after the other (order counterbalanced).

Regardless of the state of mind and harm agent presented, all stories ended with the bicyclist being hospitalized temporarily (at a cost of $15,000) and making a full recovery. The innocent-impact version is printed below:

Mr. Philip Blair is the owner of State Home Improvements: a midsized construction company that has been doing rather well in recent months. Mr. Blair was driving his company’s pickup truck along the highway at 4pm on a Saturday afternoon. In the back of the truck was a large order of lumber and other home improvement supplies that he was taking to his company’s jobsite. Mr. Blair is a conscientious driver, obeying all traffic laws and keeping the truck, which he often drives, in good repair. As he is going along, one of his tires blows out. Mr. Blair is taken by surprise. He struggles to regain control of his vehicle, but is unable to prevent it from running off the road and hitting a bicyclist.

Later investigation reveals that the tire blowout was due to a small spike that had been in the road; the tires had been in good condition. The bicyclist sustains moderate injuries and is hospitalized. He ultimately makes a full recovery. The bicyclist has asked Mr. Blair’s company to pay for his medical

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53 Seventy six participants (23 male, 53 female) were recruited from the same paid experiments site as in Study 1. The sample consisted primarily of undergraduates (44).
costs; his bills totaled approximately $15,000. The court will decide whether this should happen.

Beneath the scenario were four questions. The first question was a check on the state of mind manipulation. Participants were asked to check the description that best describes Mr. Blair’s conduct. Their choices were slightly modified from those used in Study 1.\textsuperscript{54}

Results and Discussion

Perceived state of mind was significantly affected by the state of mind manipulation.\textsuperscript{55} In the innocent conditions, Mr. Blair was seen falling between the Innocent and Innocent-Negligent choices, but closer to the Innocent choice (Mean = 1.41). In the Negligent conditions, Mr. Blair was seen falling midway between the Negligent and Negligent-Reckless choices (Mean = 3.69). Interestingly, Mr. Blair was also seen as having a more culpable state of mind when the cargo was the toxic chemical (Mean = 2.85) than when it was other construction supplies (Mean = 2.30).\textsuperscript{56} Table 2 reports the means for all four conditions.

\begin{table}[h]
\centering
\begin{tabular}{|c|c|c|}
\hline
 & Chemicals & Impact \\
\hline
Innocent & 1.71 & 1.11 \\
\hline
Negligent & 3.94 & 3.44 \\
\hline
\end{tabular}
\caption{Mean perceived state of mind for innocent and negligent actors who inflicted harm via a chemical spill or a truck accident.}
\end{table}

\textsuperscript{54} The choices were as follows:
1. A. Mr. Blair was innocent of misconduct. A reasonable person in the same situation would have not have taken more precautions.
2. Between A and B
3. B. Mr. Blair was negligent. A reasonable person would have been more careful in his situation.
4. Between B and C
5. C. Mr. Blair was reckless. He knew there were risks of dangerous outcomes, but recklessly ignored these possibilities.

\textsuperscript{55} F(1, 67) = 182.43, \(p < .001\), \(\eta^2 = .73\).

\textsuperscript{56} F(1, 67) = 37.43, \(p < .001\), \(\eta^2 = .36\). A 3-way interaction between state of mind condition, harm agent, and order of presentation revealed that, when the chemical story came first in the innocent state of mind condition, the difference between perceived culpability in the chemical and in impact stories was non-significant (interaction \(p < .05\)). This suggests that subjects were less willing to discount for a mundane accident when they had already reacted to a chemical accident than they were to increase the consequences when confronted with the chemical accident after already having reacted to a mundane accident.
Note again that some of the respondents in the innocent condition perceived the actor to be less than purely “innocent” and thus perhaps somewhat culpable. This suggests the utility of an internal analysis of the respondents’ thinking about strict liability—whether those perceiving that the actor *innocently* caused damage still require compensation for that damage. We have conducted such an analysis on each of our four studies but we defer this discussion until later in the paper.

The second question asked participants whether they personally thought that Mr. Blair and his company should be liable for the bicyclist’s medical bills. Participants could assign either full liability, liability for some proportion of the bill (indicated as a percentage), or no liability.

In the innocent conditions, approximately two-fifths of the sample chose the partial liability option - which required them to indicate the percent of the medical bills they wished to cover on a 0-100 scale. Thus the liability data can be expressed as either a percentage of medical bills covered (effectively an expected value as it averages the percentage of damages awarded by each participant in a condition) or as a score on 1-3 scale with total liability coded as a 3, partial as a 2, and none as a 1. The distribution of responses better fits a normal curve when the latter option is used, so we employ that approach in the main analysis. As the expected value is more meaningful from a practical standpoint, we also report it for significant contrasts. There were no effects of order on this measure.

The amount of liability assigned by the subjects varied as a function of state of mind (Negligent Mean = 2.96; Innocent Mean = 2.13).\(^{57}\) In percentage terms, the plaintiff was awarded 98.3% of the damages in the negligent condition and 53.9% in the innocent condition. The amount of damages assigned was also affected by whether the agent of harm was the chemical spill or impact (Chemical Mean = 2.61; Impact Mean = 2.49).\(^{58}\) This translates to a difference between 80.2% of total damages in the chemical harm condition and 72.7% in the impact harm condition. There was also an interaction between state of mind and harm condition.\(^{59}\) Whether the agent was chemical or simple impact mattered only in the innocent condition; Chemical Mean = 2.23; Impact Mean = 2.03).\(^{60}\) The expected value for the plaintiff who was innocently harmed by a chemical spill was 61.3% but for one who was innocently hurt by the impact of the truck it was 46.7%. In contrast, participants who reacted to vignettes about negligent actors assigned close to total liability regardless of whether the injury resulted from direct impact or a chemical spill. Because liability in both scenarios was at ceiling, there was no distinction between them.

\(^{57}\) \(F(1, 67) = 44.71, p < .001, \eta^2 = .39.\)  
\(^{58}\) \(F(1, 69) = 7.41, p < .01, \eta^2 = .10.\)  
\(^{59}\) \(F(1, 69) = 4.24, p < .05, \eta^2 = .06.\)  
\(^{60}\) \(p < .05.\)
Both the expected value and proportion of participants assigning some liability may be important forming policy. They are reported for all conditions in Table 3.

<table>
<thead>
<tr>
<th></th>
<th>Chemicals</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negligent</td>
<td>100% (99%)</td>
<td>100% (98%)</td>
</tr>
<tr>
<td>Innocent</td>
<td>83% (61%)</td>
<td>71% (47%)</td>
</tr>
</tbody>
</table>

Percentage of subjects assigning full or partial damages (Expected value in parentheses)

The third question following the vignette asked participants to indicate on a scale ranging from 1 (No damages) to 7 (Maximal damages) the amount of punitive damages that was appropriate. Punitive damages were described as “intended to punish an offender if their conduct is especially egregious or morally unacceptable.” The magnitude of punitive damages varied as a function of state of mind (Negligent Mean = 2.72; Innocent Mean = 1.40). It was also affected by whether the agent was chemical or impact (Chemical Mean = 2.37; Impact Mean = 1.80).

Our state of mind manipulation was more successful in Study 2. Fewer subjects responding to the innocent condition perceived the defendant to be negligent. Similarly, although the negligence condition overshot the mark by a bit – subjects perceived the defendant in the negligence condition as slightly more than simply negligent – these perceptions better tracked the manipulations than did those in Study 1. The success of the manipulation is reflected in the results of the punitive damages question. Respondents are not inclined to be punitive towards those who cause harm while acting innocently.

An unexpected finding is that the presence of the chemical implied a more culpable state of mind. One interpretation of this interesting result is that subjects believe the standard of care should be higher when transporting toxic chemicals. This suggests that they believe transporting chemicals is a particularly dangerous activity in the sense that it poses a high degree of risk of harm and/or the harm it causes will be great. These, of course are the factors listed in the Second Restatement § 520(a) and (b). If this is the correct interpretation, it helps to explain the greater

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61 We also asked subjects the amount of pain and suffering they would award. We have excluded the analysis of that variable from this paper.
62 $F(1, 67) = 19.00, p < .001, \eta^2 = .22$.
63 $F(1, 67) = 23.49, p < .001, \eta^2 = .26$.
There was also an interaction between the agent of harm and scenario order $F(1, 67) = 17.85, p < .001, \eta^2 = .21$ such that whether the agent was chemical or impact only mattered with respect to the assignment of punitive damages when the chemical story followed the impact story ($p < .05$; Chemical Mean = 2.57; Impact Mean = 1.51) but there was no effect when the chemical story came first.
willingness to assign damages even in the “innocent” condition. Moreover, it suggests that a similar perception may have been present in Study 1.\textsuperscript{64}

The impact of the type of injury is also reflected in the subject’s liability decision. Not surprisingly, negligent drivers are almost always assigned total liability. In the innocent conditions, the driver was assigned a greater proportion of liability if the cargo was a toxic chemical and the injury was caused by a chemical spill than if it was caused by something mundane, consistent with the idea that subjects, like the courts, are more willing to impose strict liability in situations where an activity has the attributes of being abnormally dangerous. Yet under precedents such as \textit{Indiana Harbor}, it seems unlikely that transporting an unspecified dangerous chemical establishes a sufficient basis for strict liability. Again, our subjects appear to adhere to a more liberal conception of what is sufficiently dangerous to justify strict liability than do the courts.

Importantly, however, even in the situation of an innocent driver carrying mundane cargo such as building supplies our subjects still assigned liability for 47% of the damages. Driving a truck is presumably not an abnormally dangerous activity, yet substantial liability is being assigned in the absence of negligence. Put another way, only 29% of respondents assigned no liability to the driver who has a mundane accident and takes every reasonable precaution. This study therefore both supports the distinction between abnormally dangerous and routine activities and at the same time reveals what appears to be a generalized preference for strict liability among some of our participants.

\textbf{C. Study 3}

In both of the first two studies, a considerable proportion of participants assigned liability in a manner consistent with a strict liability approach. There are, however, two questions that should be examined before firmly interpreting the results as a repudiation of the “wrongs” approach of corrective justice theories. First, would participants assign liability in a strict liability fashion were the agent in question not engaged in a profit-making endeavor? All of the previous scenarios have involved wrongdoing by corporate actors in one form or another. Although various efforts to establish enterprise liability in American tort law have made little headway over the years\textsuperscript{65} a number of studies have found that individuals hold corporate actors to a higher

\textsuperscript{64} Such an effect would not be detectable in Study 1 because we did not manipulate the cause of the injury. In all situations it was a chemical.

standard of responsibility than they do natural persons. This suggests that people may be more inclined to assign liability to corporations and would be less ready to target natural persons. Moreover it may be that people believe that all enterprises should internalize the costs of the harm they cause as an offset against profits even if the same conduct would not produce liability if it were not conducted in a business context.

Second, the previous scenarios have involved non-reciprocal risks. The injured party posed no risk to the injurer in all cases and (other than the simple truck/bike accident in Study 2) was harmed in a fairly unusual manner. Perhaps subjects perceive responsibility for harm differently in a David-Goliath situation than when both parties to the accident are engaged in more or less the same activity. Although the absence of risk reciprocity is not one of the six factors listed in Restatement (Second) of Torts, it has been advanced as a reason to impose strict liability since the time of Rylands v. Fletcher. Modern authors have also argued for this position. Professor George Fletcher has suggested the following principle as an explanation for a number of tort doctrines: “[A] victim has a right to recover for injuries caused by a risk greater in degree and different in order from those created by the victim and imposed on the defendant – in short, for injuries resulting from nonreciprocal risks.” We also test the relevance of reciprocity to people’s judgments of liability in this study. Our overarching goal in this study was to create a “pure” case in which all relevant factors pointing toward strict liability were eliminated.

Materials and Procedure

In this study, as in Study 2, the injured party was a bicyclist struck by another vehicle driven by Mr. Blair. Again we use a mixed within subject-between subject design. Each subject saw two vignettes. In one, the vehicle striking the bicyclist was another bicycle and, in the


67 Restatement (Second) of Torts (1977) § 520.

68 See George P. Fletcher, Fairness and Utility in Tort Theory, 85 Harv. L. Rev. 537, 542 (1972). Fletcher’s approach runs into difficulties, which have been pointed out in the literature. For example, a doctor imposes a nonreciprocal risk on a patient, yet the rule in medical malpractice cases is one of negligence. See STEPHEN D. SUGARMAN, DOING AWAY WITH PERSONAL INJURY LAW 58-59 (1989). Such a critique may not be devastating to the reciprocity approach, however, in that patients can be seen to have consented to medical risk up to the point of negligence. We incorporate reciprocity here as a potential value that motivates judgments, and not as a general theory of tort law that can stand alone.

69 Eighty seven participants (37 male, 51 female) were recruited from the same paid experiments site as in Studies 1 and 2. The sample consisted primarily of undergraduates (64). In addition, one hundred and thirteen participants (33 male, 80 female) were recruited from the Amazon Mechanical Turk website (for a description of Mechanical Turk’s use as a data collection tool, see: Buhrmester, M., Kwang, T., & Gosling, S.D. (2011). Amazon’s mechanical turk: A new source of inexpensive, yet high-quality, data? Perspectives on Psychological Science, 6, 3-5). The sample
other, the vehicle was a pickup truck. Both vignettes either described Mr. Blair as working on company time (thus both he and his company were being sued) or on his own time (thus he alone was being sued). In every version of the story Mr. Blair was said to have taken every precaution and to have struck the bicyclist only due to unusual circumstances. Following is the bike on bike story with the business/nonbusiness changes marked by parentheses.

Mr. Philip Blair is the owner of State Home Improvements: a midsized construction company. He is married, lives in a modest house, and has two children.

While (off work; working) one weekday afternoon, Mr. Blair was riding his bike along the street (carrying important business documents to a jobsite from the office). Mr. Blair is a conscientious rider, obeying all traffic laws and keeping the bike, which he often rides, in good condition. As he is going along, one of his tires blows out. He struggles to regain control of his bike, but is unable to prevent it from running off the road and hitting another bicyclist.

Later investigation reveals that the tire blowout was due to a small spike that had been in the road; the tires had been in good condition and Mr. Blair did not see the spike because it was obscured by leaves. Even the very best riders would not have been able to maintain control of their bicycles in this situation. The other bicyclist sustains moderate injuries and is hospitalized. He ultimately makes a full recovery. The bicyclist sues Mr. Blair’s company to pay for his medical costs. The bill totaled approximately $15,000.

By manipulating whether it was Mr. Blair alone or Mr. Blair and his company being sued, we could explicitly test the first concern, that of enterprise liability. By varying vehicle type, we could examine the role of reciprocity; when Mr. Blair was riding a bicycle, he posed no greater inherent risk to the injured party than the injured party did to him.

Following each scenario were the same questions as in Study 2. Again, the state of mind question was on a five point scale ranging from “innocent” to “reckless.” Recall that in every version of this story, Mr. Blair’s behavior was described as “non-negligent.” The overwhelming majority of participants perceived Mr. Blair’s level of culpability to be minimal. Only 13% of participants assigned a non-minimal level of culpability in the bike case and only 20% in the car condition. In both the car (Mean = 1.23) and bike conditions (Mean = 1.14), Mr.

_consisted primarily of adults with a median age of 34. There were no differences between samples on any of the dependent measures, so they are combined for data analysis.

Again, the stories were counter-balanced. Half the time subjects heard the bicycle version first and half the time they heard the pickup truck version first. There were no significant order effects on any of the dependent measures, so they were dropped from the analysis.

The liability measure was analyzed using a 2 (on business or on personal time) by 2 (driving a car or riding a bicycle) mixed ANOVA. The state of mind and punitive damages measures experienced dramatic floor effects and are presented in categorical form.
Blair’s actions were seen, on average, as being closer to innocent than to the midpoint between innocent and negligent. Chi square tests comparing the percentage of those rating the actions as purely innocent versus not revealed no cross condition differences.

The damages question asked whether the defendant should be held liable for the bicyclist’s medical costs. Again, participants were permitted to assign partial liability and the answers were coded on a three point scale with full liability, partial liability, and no liability being represented by 3, 2, and 1 respectively.

**Results and Discussion**

Participants were sensitive both to whether Mr. Blair was said to be on business and whether he was driving a car or riding a bicycle. They assigned more liability when the activity Mr. Blair was engaged in involved his business (on business Mean = 1.84; on personal time Mean = 1.56). This can also be expressed as 39.1% of damages in the business condition and 24.7% of damages in the nonbusiness condition. They also assigned less liability when Mr. Blair and the victim were engaged in the exact same activity (bicycle condition Mean = 1.59; pickup condition Mean = 1.79). This can be expressed as an expected value of 37.1% of the medical costs for the plaintiff struck by the car and 25.6% for the one struck by the bicycle. Both of these factors, along with the appropriateness of the location and the commonness of the activity investigated in Studies 1 and 2, are apparently important to participants’ willingness to impose strict liability standards. The expected value and proportion of participants assigning liability are reported for all conditions in Table 4.

**Table 4**

<table>
<thead>
<tr>
<th></th>
<th>On business</th>
<th>Own time</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pickup Truck</td>
<td>63% (46%)</td>
<td>53% (30%)</td>
<td>58% (37%)</td>
</tr>
<tr>
<td>Bicycle</td>
<td>52% (33%)</td>
<td>39% (20%)</td>
<td>45% (26%)</td>
</tr>
<tr>
<td>Total</td>
<td>58% (39%)</td>
<td>46% (25%)</td>
<td></td>
</tr>
</tbody>
</table>

Percentage of subjects assigning full or partial damages (Expected value in parentheses)

Next, participants were asked the punitive damages question. Very few participants assigned any punitive damages (damages greater than 1, “no damages”); only 9% did so for the bike vignette and only 13% for the car case. Chi square tests comparing the percentage of those assigning damages versus not revealed no cross-condition differences.

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F(1, 196) = 7.98, p < .01, η² = .04.
F(1, 196) = 28.10, p < .001, η² = .13.
There was no interaction (F < 1).
From the preceding measures it is clear that both the car and bike cases were viewed almost universally as being free from negligence. It is also clear that a meaningful amount of liability was assigned in all conditions. Even in the bike-non-business condition, 39% of participants assigned full or partial liability. Thus, strict liability was again present.

In the previous studies, participants did not directly state that they are adopting a strict liability view of the cases presented. It could be that participants are employing other decision rules and that it is only the characteristics of the scenarios that make their judgments appear to be a matter of strict liability. In this study, we added questions that explicitly ask participants to justify their liability decisions.

If participants assigned liability (full or partial) for a given scenario, they were asked on the following page to give the reason(s) for their decisions. They could check any of the below options (multiple allowed) and/or provide their own.

- Mr. Blair was responsible for the accident in the sense that he was negligent or careless, and thus should compensate the injured bicyclist.
- Mr. Blair was responsible for the accident in the sense that he caused it even though he was not negligent or careless, and thus should compensate the injured bicyclist.
- The injured bicyclist did nothing wrong and thus should not be left uncompensated.
- Mr. Blair can better afford to pay the injured bicyclist's medical bills than the bicyclist himself.

If they did not assign liability, participants were instead presented with these options to explain their decision (again they were allowed to give their own answer or select several):

- Though Mr. Blair was technically the cause of the injury, he did not do anything wrong. He is therefore not responsible for the accident and should not be held liable.
- Though Mr. Blair was technically the cause of the injury, he did not do very much wrong. He is therefore not responsible enough for the accident and should not be held liable.
- Though Mr. Blair was the cause of the injury and was not careful enough in his driving, he should not be held liable.
- The injured bicyclist is at fault for not avoiding the accident.
Seventy-four percent of those assigning liability chose an option that was consistent with a strict liability view of the case, saying that mere causation created liability. Forty-eight percent of those assigning liability (including considerable overlap) said that the injured party was blameless and should not be left uncompensated. Very few participants read negligence into the scenario (3%) or explicitly said that the defendant could better afford to pay (2%).

Those who did not assign liability were even more consistent. Nearly everyone (86%) who did not find Mr. Blair liable claimed to be using a negligence standard. Nine percent said that the defendant had not done enough wrong to be responsible, 4% thought the victim was at fault, and 1% said that the defendant should not be held liable despite being negligent.

These results, along with the results on the state of mind and punitive damages measures, indicate that participants are not reading negligence into the vignettes in Study 3 and that many of those who do assign damages to the defendant are not doing so based on a negligence rule. Most interesting in this regard is the bicycle-own-time cell of the study. Even here, nearly 40% of the participants assigned at least some liability and, when pressed, they overwhelmingly endorsed a strict liability rationale; even though he is not at fault, Mr. Blair caused the accident and therefore he should pay.

D. Summary of Studies 1-3

The results from these three studies have several implications. First, they reaffirm the importance of several of the common justifications for the imposition of strict liability. The standards set by lay individuals clearly are influenced by whether an activity is undertaken in an appropriate location, whether the activity exposes people to novel, unusual or heightened risks, whether the risk is reciprocal, and whether the risk is undertaken in relation to a profit-making enterprise. The first three of these factors can be found with varying degrees of precision in the Restatements. This is an important and reassuring case of community-code agreement, though participants do seem more willing than courts to treat activities as if they are abnormally dangerous.

Overshadowing this result, however, is the base-rate of liability. A large proportion of individuals are imposing a strict liability standard to cases that, under current precedents, would not warrant it. In each of our stories we have been concerned that respondents have implied some degree of negligence into scenarios that we describe as innocent. As we discussed earlier, a mechanical malfunction that we describe as being outside the control of the character in the vignette may well be understood as a failure to inspect and ensure the safety of a dangerous operation. In addition, at least in Study 1, the malfunction of the part could be understood to be the result of someone’s negligence, and our protagonist might be seen to be vicariously

75 The reasons given for assigning liability (or not) did not appear to differ across condition. Responses are therefore collapsed across vehicle type and business conditions.
responsible. As indicated in Figure 1, even in the innocent condition there was a marked deviation from innocence in subjects’ assessment of state of mind.

**Figure 1**

![Bar chart showing level of fault attributed to individual causing accident where scenarios identified him as innocent (1 = innocent, 3 = negligent)]

Level of fault attributed to individual causing accident where scenarios identified him as innocent (1 = innocent, 3 = negligent)

In Studies 2 and 3, however, subjects in the "innocent" condition generally rated the actor as without fault and still a substantial percentage assigned him some liability. In an effort to eliminate any doubt that these results might be due to people perceiving a negligent state of mind even in the innocent conditions, we conducted one final analysis that looks at the liability answers only of those participants who heard an innocent condition and who, on the state of mind variable, answered that the individual was innocent, i.e. gave him a 1 on the 5 point scale. Table 5 reports percentage of subjects in this situation who assigned some liability.

**Table 5**

<table>
<thead>
<tr>
<th>Study</th>
<th>Residential Area</th>
<th>Industrial Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study 1</td>
<td>73%</td>
<td>28%</td>
</tr>
<tr>
<td>Study 2</td>
<td>Chemical Spill</td>
<td>Truck Impact</td>
</tr>
<tr>
<td></td>
<td>65%</td>
<td>71%</td>
</tr>
<tr>
<td>Study 3</td>
<td>Truck</td>
<td>Bike</td>
</tr>
<tr>
<td>Business</td>
<td>54%</td>
<td>45%</td>
</tr>
<tr>
<td>Personal Time</td>
<td>46%</td>
<td>34%</td>
</tr>
</tbody>
</table>

Percentage of subjects who judged harm doer innocent and assigned some liability
Even with this select sample, a substantial percentage of respondents impose a strict liability standard to cases that, under current precedents, would not warrant it. This result is clear across all studies and under increasingly controlled circumstances. Again, the most noteworthy example is the "personal time - bicycle" condition in the third study. The action is common, no abnormal or excess risks are involved, and it is even the case that the victim is engaged in the very activity that goes astray for the injurer. This condition was designed to eliminate every typical justification for employing a strict liability standard. Nevertheless 34% of the respondents who recognized the conduct as innocent extracted some compensation from the actor.

We should be somewhat cautious in our interpretation of this result because most of those who recognized the conduct as innocent but nevertheless did extract compensation substantially discounted the amount they were willing to give such that the average award was only 16% of full recovery. Notably, of the 108 participants, only 7 called for full liability, while 35 called for partial liability and 66 for none. Even with this caveat, it is clear that across the three studies, a significant number of participants would hold an individual causing harm strictly liability for at least some injuries. Causation alone is sufficient grounds for liability. Moreover, in Study 2, each participant was given both an innocent and a negligent accident, making the choice salient. All assigned liability to the negligent actor, and most assigned at least some liability to the innocent actor. And in Study 3, almost all participants who assigned liability to the innocent cyclist or driver explained their responses in terms of a preference for strict liability when given a choice of reasons from which to select.

By focusing on the propensity to favor strict liability among our subjects, we do not mean to minimize the differences among them. Many subjects appear to apply a negligence standard consistently, and others prefer strict liability in circumstances that are broader than those accepted by the law, but still narrower than one imposed by those who prefer strict liability even when there are reciprocal risks in a non-business context. Thus far, it is unclear what distinguishes those participants who assign liability in these non-negligent cases from those who do not. There are several possibilities. It may be that some psychological individual differences distinguish these groups of participants. Conservatism, degree of concern for others, risk tolerance or general economic philosophy may play roles. In the future, we plan to explore these possibilities.

A second question highlighted by this research is the following: If participants are willing to assign liability in the absence of negligence in these cases, then why are real world plaintiff

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76 For recent work showing that various core values on which people differ can predict their reactions to various contentious legal questions, see Dan M. Kahan and Donald Braman, Cultural Cognition and Public Policy, 24 Yale L. & Policy Rev. 149 (2006).
success rates not higher? Three possibilities readily present themselves and all are interesting areas of further research. First, judges may keep cases away from the jury by granting motions to dismiss complaints or for summary judgment when it is clear the plaintiff will be unable to prove fault. Second, for those cases that make it to the jury, there is the potential effect of the combination of the “juror role” and judicial instructions. If a judge instructs a juror to impose a negligence rule then that might be sufficient to enforce the legally preferred standard. Previous work has found that instructions can have mixed effects on compliance. Third, and related to the second possibility, it may be that in the process of deliberation the jurors who might be inclined to impose a strict liability rule are persuaded not to do so by fellow jurors. We cannot reasonably test the first and third possibilities with the present design. However, we can assess the effect of asking subjects to play the role of jurors and stating that in cases such as the one they are about to read American courts use a negligence standard.

E. Study 4

In the first three studies we ask subjects to assess liability without asking them to play the role of a juror. In Study Four, we asked half the subjects to answer the responsibility question as the subjects did in the first three studies. The other half of the subjects were assigned to a condition in which they were asked to imagine themselves as jurors, and instructed that negligence is the appropriate legal rule to apply in the case. We assess the effect of asking them to do so across four scenarios.

Three of the scenarios come from Study 3: the private bicycle-bicycle vignette, the private truck-bicycle vignette, and the company truck vignette. The fourth vignette is new to this Study. In part because the Pilling case in Study 1 was perceived by many subjects to contain aspects of negligence and in part because we feared there might be some unique unrecognized

77 A substantial body of work suggests that plaintiff recovery rates rarely exceed 50%. Daniel Kessler, et al., Explaining Deviations From the Fifty-Percent Rule: A Multimodal Approach To The Selection of Cases For Litigation, 25 J. Legal Stud. 233, 238 (Table 1) (1996).


80 Two hundred and forty one participants were recruited from the Amazon Mechanical Turk website. Three participants were excluded from analysis due to abnormally fast completion times, two for failing a reading comprehension check, and one for failing to answer the juror prime question. This left a sample of 235 (133 male, 101 female, 1 unknown). The sample consisted primarily of adults. Approximately 48% of the sample had been called for jury service at some point. Study 4 is a fully crossed 4 (scenarios) x 2 (instructions) between subjects design.
factor in the Pilling fact pattern generating the results we observed, we decided to create a new fact pattern designed to reflect the existence of a corporate actor, the presence of factors cited in Second Restatement of Torts § 520, and the lack of reciprocity of risk between actors. This vignette is loosely based on the facts of the Indiana Harbor Belt Railroad case. Following is the text of the vignette:

The Harbor Belt Railroad was shipping a tank car full of a chemical called acrylonitrile used in making acrylic fibers which are in turn used to make sweaters, hats, rugs and upholstery. Acrylonitrile is flammable and highly toxic. A well-known table of hazardous materials shipped by rail lists 125 dangerous substances. Acrylonitrile is fifty-third on the list.

While the car sat in the Harbor Belt Railroad yard, a valve on the bottom of the car failed and approximately 5,000 gallons spilled onto the railroad yard. Homes near the yard were quickly evacuated but one individual, Kyle Jackson, was down in the cellar of his home working with his power tools and failed to hear the police when they knocked on his door to ask him to evacuate. Unfortunately, he breathed in some of the toxic acrylonitrile fumes and is hospitalized. He ultimately makes a full recovery. Kyle Jackson sues the railroad to pay for his medical costs which totaled approximately $15,000.

Subsequent investigation indicates that the valve on the tank car had been inspected the very day it failed and had been in perfect working order. The cause of the valve failure was ultimately traced to a defect in an internal part of the valve. There was no way anyone working for the railroad could ever have detected the defect before the valve failed.

As one can see, we attempted to construct a story where the actor has taken every reasonable precaution. The findings of fact included in the closing paragraph were intended to convey the impression of diligent care; the valve had been inspected the very day it failed and there was no way anyone could have detected the defect. Note that we set the damages to be consistent with the other three vignettes.

Based on Study 1 and Study 3, we would expect participants in the control condition to assign the most liability in the new chemical case and decreasing liability in the company truck, private truck, and private bicycle cases. The two central questions in this study are: 1) Does the juror manipulation change liability assessment in any of these cases, and 2) If there is an effect is it limited to the cases where the preference for strict liability is weak such as the bicycle case, or does it apply more generally? Below we describe the details and results of this study with respect to these questions.

81 Indiana Harbor Belt Railroad Co v. American Cyanamid Co., 916 F.2d 1174 (7th Cir. 1990).
1. The Effect of the Juror Manipulation.

Consistent with the first three studies, subjects in the control condition were given no information concerning the law and were not asked to play the role of jurors. In the “juror” condition we asked participants to play the role of juror. With respect to these subjects, we began by asking them to imagine either past jury experiences or what it would be like to play the role of juror.\textsuperscript{82} Next, we instructed them as to the appropriate legal rule to be applied to the case.\textsuperscript{83} Note that contrary to a standard judicial instruction we did not tell the subjects that they should use this rule.

In cases like the one you are about to see, American courts use a negligence standard to determine whether a person causing harm should be held liable. People are only made to compensate those they harmed if the accident was the result of negligence, that is, if the person causing the harm failed to exercise reasonable care to protect bystanders. A person is not held liable if he or she took all the precautions we would expect from reasonable people.

To test whether they understood the rule, we provided a pair of examples and asked whether or not the law would hold responsible the person who caused harm.\textsuperscript{84}

Subjects then were presented with one of the four vignettes. Each vignette was followed by the same set of questions that followed the vignettes in Studies 2 and 3. Recall that these included the five point scale asking subjects to rate the actor’s conduct from 1 = innocent to 5 = reckless; a question asking whether should be made to pay full compensation, partial compensation or no compensation; a follow-up question for those who responded “partial

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\textsuperscript{82} Specifically, we asked the following:
Before we ask you to think about specific legal cases, we would like to get a sense of how you feel about the law. If you have served on a jury in the past, think about the last time you were called for jury service. Write, in a sentence or two, how it felt to be in a courtroom and to listen to a judge explain the law and your duty as a juror. If you have never been called for jury service, imagine being in a jury box listening to a judge ask you if you can listen to a case fairly, evaluate the evidence impartially, and apply the law. Write about how you think it would feel.

We did not attempt to analyze these answers. The question was introduced solely to put subjects in the frame of mind of jurors.

\textsuperscript{83} In order to keep the study manageable, we chose not to include a third alternative which would have instructed the subjects about the law but not asked them to play the role of juror.

\textsuperscript{84} The question appeared as follows:
Before turning to the scenario, please answer the following questions to show that you have understood the above description.
Would the law hold someone liable for an injury if the injury was caused by their abnormally poor maintenance, for example a landlord for a collapsed roof? YES NO
Would the law hold someone liable for an accident if the accident was caused by an act of nature, for example a hurricane collapsing a well-maintained roof? YES NO

We excluded two subjects who failed this reading comprehension check.
compensation” asking them to assign the appropriate percentage of compensation; and the questions asking whether punitive damages were in order.

The overwhelming majority of participants hearing the truck and bicycle cases perceived the actors’ level of culpability to be minimal, though this was less true in the chemical case. The liability question was modified from that used in our prior studies to simply read “should [insert actor here] be held liable for Kyle Jackson’s injuries?” This was intended to remove a potential demand characteristic; the previous wording may have suggested to participants that they were supposed to distinguish themselves from the law. Also, in the juror condition, participants were reminded of the law immediately prior to answering the liability question:

In cases like this, American courts use a negligence standard to determine whether the person causing harm should be held liable. People are only made to compensate those they harmed if the accident was the result of negligence, that is, if the person causing the harm failed to exercise reasonable care to protect bystanders. [insert actor here] would not be held liable if he took all the precautions we would expect from reasonable people.

Recall the three point liability question was coded 1 = no liability, 2= partial liability, 3 = full liability. Across all vignettes, significantly less liability was assigned in the juror condition (Mean = 1.28) than in the control condition (Mean = 1.86). There were no significant differences among the first three stories, but liability was significantly more often assigned in the chemical case (Mean = 2.02) than the other three (Company Truck Mean = 1.46, Private Truck Mean = 1.46, Bicycle Mean = 1.33)

The expected value and proportion of participants assigning liability are reported for all conditions in Table 6.

<table>
<thead>
<tr>
<th></th>
<th>Control</th>
<th>Juror</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private Bike</td>
<td>46% (26%)</td>
<td>7% (1%)</td>
<td>28% (14%)</td>
</tr>
<tr>
<td>Private Truck</td>
<td>58% (35%)</td>
<td>13% (4%)</td>
<td>36% (20%)</td>
</tr>
<tr>
<td>Company Truck</td>
<td>43% (37%)</td>
<td>17% (7%)</td>
<td>31% (22%)</td>
</tr>
<tr>
<td>Chemical</td>
<td>83% (71%)</td>
<td>44% (36%)</td>
<td>62% (53%)</td>
</tr>
<tr>
<td>Total</td>
<td>58% (42%)</td>
<td>21% (13%)</td>
<td></td>
</tr>
</tbody>
</table>

Percent of subjects assigning full or partial damages (expected value in parentheses)

85 Chi square tests comparing the percentage of those rating the actions as purely innocent versus not revealed that, in both the juror and control cases, the chemical scenario was rated as less than purely innocent more often (41% of the time) than the other three (Company truck, 5%; Private truck, 5%, Private bike, 7%). $\chi^2 (3, N = 235) = 44.41, p < .001$. Further, within the chemical case, the state of mind was rated as less than purely innocent more often in the control condition (55%) than the juror condition (28%). $\chi^2 (2, N = 61) = 4.60, p < .05$. We discuss this result below.

86 The liability measure was analyzed using a 4(case) by 2(juror) ANOVA. There were main effects for both the juror manipulation $F(1, 227) = 45.85, p < .001, \eta^2 = .17$ and case $F(3, 227) = 13.15, p < .001, \eta^2 = .15$, but no interaction ($F<1$).
Recall that in the bicycle-bicycle vignette in Study Three, 39% of the subjects assigned full or partial responsibility to the actor. In the current study even a higher percentage of subjects in the control condition did so – a full 46% (11% full, 36% partial). On the other hand, in the juror condition no subjects assigned full responsibility and only 7% assigned partial responsibility. Being asked to play the juror role basically erased strict liability responses even though the subjects were not instructed that the law required them to apply this rule. Similar strong effects can be seen in both truck stories. In Study 4 the percentage of respondents assigning some liability in the private truck story fell from 60% to 13% and in the business truck story from 43% to 20%.\(^87\) Finally, in the chemical story there is also a dramatic reduction, from 83% assigning full or partial liability in the control group to 44% doing so in the juror group.

The verdicts of our juror condition respondents come much closer to those that the legal system expects of real jurors.\(^88\) One should keep in mind that this substantial effect is achieved through the use of a very weak manipulation compared to the actual experience of being a juror and being asked by a judge to decide a case based on the judge’s instructions. Moreover, it is achieved without the benefit of a deliberation in which the majority wishing to impose a negligence rule would very likely have persuaded the minority to adopt their position.

Participants were asked the same punitive damage question as in previous studies. Very few participants (13%) assigned any punitive damages (damages greater than 1, “no damages”). Chi square tests comparing the percentage of those assigning punitive damages revealed a case effect but no differences based on the juror manipulation.\(^89\) However, the case effect was dramatic. Participants reading the chemical case were more likely to assign punitive damages (40%) than those reading the company truck (3%), private truck (5%), and private bike (4%) cases.\(^90\)

This result along with the result from Table 6 provides us the opportunity to turn from a discussion of the effect of the juror manipulation in general and turn to a comparison of its effect in the chemical story as compared to the other three vignettes.

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\(^87\) Note that the effect in this vignette is more substantial than suggested by these numbers. If we look only at subjects that assigned full responsibility, 13% did so in the bicycle story, 19% did so in the private truck story and a full 30% did so in the business truck story. However, in all three vignettes no subjects in the juror condition assigned full responsibility to the actor. Obviously, this effect is most dramatic in the business truck scenario.

\(^88\) Of course we do not have any real juror judgments against which to compare our data. However, there is indirect evidence that this is the case. For example, Kalvan and Zeisel’s seminal work on the American jury interviewed judges in civil cases and found that the judge agreed with the jury seventy-eight percent of the time. The disagreements were equally divided between cases where the judge would have found for the plaintiff but the jury found for the defendant and cases where the judge would have found for the defendant but the jury found for the plaintiff. Harry Kalvan Jr. & Hans Zeisel, THE AMERICAN JURY 63 (1966).

\(^89\) Case effect: $\chi^2(3, N = 235) = 49.28, p < .001$. Juror effect: $\chi^2 < 1$.

\(^90\) $p < .001$ for all comparisons with chemical.
2. The limited effect of the Juror Manipulation in the Chemical Case.

After subjects in both the control and the “juror” condition had responded to the previous questions (and were prevented from going back to change them) we asked several more questions designed to explore their understanding of the law and how it applied to the case they had just decided. The first question again defined the negligence rule and asked the subjects if, using this rule, the actor would be held responsible.\(^{91}\) Chi square tests revealed that the juror manipulation had no effect on responses to this question.\(^{92}\) The case presented, however, did matter.\(^{93}\) Participants were more likely to believe the law would hold the actor liable in the chemical case (22%) than in the company truck (3%), private truck (3%), and private bike (2%) cases. This was the case even though only two participants (both in the juror chemical condition) rated the state of mind of the actor as being negligent.

Participants were also asked whether they would be willing to apply the law were they asked to in an actual case. Their answers were again affected by the scenario they had read,\(^{94}\) but not on whether they had been asked to think of themselves as jurors.\(^{95}\) Participants who had read the chemical case were more likely to say they would not follow the law (17%) than participants who had been given the company truck (0%), private truck (7%), and private bike (3%) cases, though the difference between the chemical case and the private truck case did not reach significance.\(^{96}\)

After the other measures had been completed, the distinction between strict liability and the negligence rule was explained to participants and they were asked to rate the relative preference on a scale ranging from 1 = Strict liability to 7 = Negligence.\(^{97}\) In accordance with earlier results concerning the juror manipulations, participants reported preferring the negligence rule more when they were in the juror condition (Mean = 4.88) than in the control (Mean = 4.39). Clearly, being told what the law is and asked to play the juror role moved them in the direction of accepting negligence as the correct standard by which to judge cases such as these.

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91 We asked the following question:

In cases such as these, American courts use a negligence standard to determine whether a person causing harm should be held liable. People are only made to compensate those they harmed if the accident was the result of negligence, that is, if the person causing the harm failed to exercise reasonable care to protect bystanders. A person is not held liable if he or she took all the precautions we would expect from reasonable people.

Under the law - not using your personal judgment - would Mr. Blair be held liable in this case? YES NO

92 \(\chi^2 < 1.\)
93 \(\chi^2 (3, N = 235) = 24.61.\)
94 \(\chi^2 (3, N = 235) = 14.37, p = .002.\)
95 \(\chi^2 < 1.\)
96 \(\chi^2 (1, N = 115) = 2.16, p = .15.\)
97 Preference for strict liability vs. negligence was analyzed using a 4 (case) by 2 (juror condition) ANOVA. Effect of juror condition: \(F(1, 227) = 6.18, p = .01, \eta^2 = .03.\) Effect of case: \(F(1, 227) = 8.10, p < .001, \eta^2 = .10\)
However, participants who heard the chemical story favored the negligence rule less (Mean = 3.79) than participants who heard the company truck (Mean = 5.05), private truck (Mean = 4.95), and private bike (Mean = 4.78) cases. In this Study, preference for strict liability in general is therefore in part a function of the type of case one is imagining.

These findings must be discounted to some extent by the fact that the level of fault assigned to the actor in the chemical case was greater than in the other three vignettes. As was the case in the first toxic release scenario in Study 1, we were unsuccessful in constructing a story that everyone thought evinced non-negligent behavior on the part of the actor (the Harbor Belt Railroad). The level of fault assigned to the railroad (Mean = 1.61) was not as great as assigned to Pilling in Study 1 (Mean = 2.04) and, as noted above, only two participants in Study 4 said that the railroad was negligent. However, this level of fault is substantially greater than in the other three vignettes.

We suspect that it is not entirely our draftsmanship that produced higher fault scores here or in the Pilling case in Study 1. Our inability to draft a purely innocent story is consistent with Ernest Weinrib’s hypothesis that strict liability is not strict at all. Certain activities are inherently dangerous enough so that no reasonable precautions are adequate to relieve the actor of responsibility for causing harm. Moreover, the general willingness to assign more fault in these vignettes is consistent with other research which indicates that higher status individuals and corporate actors are assigned more responsibility for the same behavior than are lower status individuals and natural persons. In Study 4, those individuals who preferred a strict liability rule in the chemical case assigned more liability to the actor.

However, differences in the assignment of liability between the Chemical scenario and other scenarios are not solely due to those individuals who attributed some fault to the actor. A

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98 p < .001 for all comparisons with the chemical story.
99 Company Truck Mean = 1.05; Private Truck Mean = 1.07; Bicycle Mean = 1.05.
100 Ernest. Weinrib, THE IDEA OF PRIVATE LAW (1995). The results of Study 2 lend some support to this position. Subjects presented with innocent conduct (a vehicle struck a hidden spike in the road) were more likely to award damages when the plaintiff was injured by a chemical spill than by a direct collision. Yet as we see in Table 5 and Table 7, those who found the conduct innocent actually awarded damages more frequently in the standard type of accident, although not significantly so. This means that the overall results of the study were affected by people finding the defendant to be less than fully innocent in the chemical spill version, but not in the direct collision version of the story. This is despite identical descriptions of the level of care employed by the actor. What this suggests is that when it comes to hauling dangerous substances, people do not believe that any level of care is sufficient, since the only reason for the accident was the truck’s hitting a hidden spike in the road.
102 The correlation between the three item liability measure and endorsement of the negligence rule was significant both in the chemical case $r(61) = - .51, p < .001$ and overall $r(235) = - .52, p < .001$. The more participants preferred the negligence rule, the less liability they assigned. Interestingly, preference for negligence over strict liability did not correlate with a measure of political orientation $r(229) = .07$. 

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look at the liability responses of only those participants who stated that the railroad was completely innocent indicates that only part of the greater willingness to assign liability to the actor is due to the belief it was not innocent. Table 7 updates Table 5 by including the results from all four studies. Recall that the values in each cell are the percentage participants who said that the actor was innocent but still assigned some liability.

### Table 7

<table>
<thead>
<tr>
<th>Study</th>
<th>Residential Area</th>
<th>Industrial Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study 1</td>
<td>73%</td>
<td>28%</td>
</tr>
<tr>
<td>Study 2</td>
<td>Chemical Spill</td>
<td>Truck Impact</td>
</tr>
<tr>
<td></td>
<td>65%</td>
<td>71%</td>
</tr>
<tr>
<td>Study 3</td>
<td>Truck</td>
<td>Bike</td>
</tr>
<tr>
<td>Business</td>
<td>54%</td>
<td>45%</td>
</tr>
<tr>
<td>Personal Time</td>
<td>46%</td>
<td>34%</td>
</tr>
<tr>
<td>Study 4</td>
<td>Control</td>
<td>Juror</td>
</tr>
<tr>
<td>Chemical</td>
<td>62%</td>
<td>30%</td>
</tr>
<tr>
<td>Company Truck</td>
<td>41%</td>
<td>15%</td>
</tr>
<tr>
<td>Private Truck</td>
<td>59%</td>
<td>10%</td>
</tr>
<tr>
<td>Private Bike</td>
<td>44%</td>
<td>8%</td>
</tr>
</tbody>
</table>

Percentage of subjects who judged harm doer innocent and assigned liability

Undoubtedly, the juror manipulation had a substantial effect in all scenarios. It nearly eliminated the assignment of any liability among those who viewed the actor as innocent in the truck and bicycle stories. However, in the chemical vignette even within the constrained group of individuals who found the actor to be completely innocent 30% continued to assign him some liability.

### IV. General Discussion

All of our studies support the general idea that when people are presented with a "wrong" in the sense of a negligent act they uniformly hold the actor liable for the damages he caused. There is no sub-population of people who refuse to hold someone responsible until her conduct rises to the level of recklessness or intentionality. The basic intuition that torts are generally associated with wrongful acts is confirmed in our studies. In this regard, tort law is consistent with the moral intuitions of our respondents. Moreover, the perceptions of our respondents are consistent with the position taken by those who argue that corrective justice is a subordinate, not primary principle of tort law.
Strict liability is another matter. Over the last fifty-years the American tort system has waffled as to the proper scope of strict liability. It is fair to say that the scope of liability without fault shrunk over that period of time. This shrinkage has been accompanied by the reemergence of corrective justice theories of tort that argue not only that a "wrong" is sufficient for tort liability but also that it is necessary. In such schemes, strict liability is relegated to the background. The most extreme versions relegate strict liability to the backwater; an insignificant puddle in the sea of tort.

But our studies indicate that within the realm of everyday moral intuitions, strict liability is not a backwater. More importantly, it does not appear that a wrong, as that term is commonly understood, is a necessary requirement for liability among a substantial number of people. For many of our participants, legal liability does not flow only from a moral wrong. When assigning liability, some substantial percentage of respondents do not rest their judgment on the distinction between malfeasance and misfortune.

One can attempt to finesse this fact in several ways. One approach, used with some frequency in the corrective justice literature, is to distinguish between first order duties not to injure which are defined by social norms and second order legal duties of repair. One could argue that the latter duties are narrower than the former, but it is hard to see how this move does more than say that law is unwilling to institutionalize certain social norms.

More directly, one can retreat to the position that the wrong involved here is the failure to pay for the injuries one causes. In our opinion, this way of thinking is not particularly helpful. At best, it is useful to explain liability in situations such as those described by Weinrib where engaging in very dangerous activities is itself unreasonable. However, the position loses all purchase if it is meant to describe situations such as our bicycle on bicycle accident. There, no one would say that the actor committed a wrong in any sense other than he caused an injury and if a bicycle wreck is an occasion for such a wrong then so is separating fighting dogs and, indeed, so is everything else. If this is what we choose to have "wrong" mean, we would be better served by saying that corrective justice is not about wrongs, it is about causation. By the same token, we see little benefit in distinguishing between “legal wrongs” and “moral wrongs” in this regard. If the bicycle accident is nothing more than a legal wrong, then the word “wrong” is doing very little work.

In this regard, it is worth observing once again that those respondents, like some of our students who support strict liability in all situations, seem to fit more comfortably into Richard Epstein’s libertarian view of tort law than they do a corrective justice view that limits liability to wrongs. This approach is premised on the idea that I have a choice whether or not to act in the world. When I choose activity versus passivity I am entitled to reap the gains my action

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produces but also should not be permitted to externalize any losses on others. By this view, strictly liability is the default rule in a number of situations such as “A hit B” or “A created a dangerous condition that resulted in harm to B.” These “paradigms” are intended to capture the idea that the harm is unilaterally caused. These participants seem to be relatively insensitive to the idea that most accidents are bilateral in nature and involve the actions of both injurer and victim. Other participants, perhaps a majority, appear to be more Fletcherian in their perspective. That is, they do not necessarily believe that all accidents are unilateral, i.e. cause only by the “actor.” Rather, they seem to be more open to a negligence rule when there is greater reciprocity of risk, which helps to explain why an innocent truck driver hitting a cyclist is more likely to be held liable than an innocent cyclist hitting another cyclist. In this regard, it is noteworthy that most of our participants assigning liability in our innocent bike-on-bike accident assigned only partial liability, dividing the cost of harm between the actors when each imposed similar risk on the other, and one of them was injured through no fault of either.

V. Conclusion

When students express a desire to impose strict liability in Brown v. Kendall, the instinct of some professors – including at least one of us – is to employ the various tricks of the trade to talk them out of this position. We ask them to imagine themselves the innocent defendant, not the plaintiff. Or we note, a la Coase and Shavel that it usually takes two to make an accident and ask them whether it is not the case that by trying to watch the dog fight the plaintiff is also a cause of the accident. Or we appeal to the transaction costs involved in getting the money out of the defendant’s wallet and into the hands of the plaintiff. This set of tactics seems to work on most holdouts, although who knows what percentage are merely saying what they think the professor wants them to say.

Even then, the entire issue frequently resurfaces when the course gets to products liability. Those who believe that some form of strict liability is appropriate in that context are often less willing to surrender their position and less willing to believe the move from Section 402A of the Second Restatement of Torts to Section 2 of the Restatement (Third) of Torts: Products Liability was a step in the right direction.

This paper helps us to better understand these reactions and simultaneously cast a shadow over arguments that torts are only wrongs. Our data suggest that it was relatively easy to talk

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105 Stephen R. Perry, Tort Law (p. 64, 85) in A COMPANION TO PHILOSOPHY OF LAW AND LEGAL THEORY, 2D ED. DENNIS PATTERSON, ED. 2010).
people out of a strict liability approach in Brown v. Kendall both because in that context most of
us do believe negligence is the correct rule and even those of us who prefer strict liability only
weakly support this position. And because this is so most of us are quite willing to acquiesce to
what we are told is the proper legal rule for resolving such controversies. When it comes to
situations such as that described in the toxic gas release in Study 1 or the chemical spill in Study
4, however, the preference for strict liability is stronger and the willingness to acquiesce to the
negligence rule attenuated. Even when they are told that the proper legal rule is negligence, a
majority of individuals (51%) preferred a strict liability rule in the chemical case.\footnote{110} They are not
easily persuaded that the law of torts is only about wrongs.

Whenever community norms conflict with the law it is important to remember that the
community is not inherently “right.” It may be that tort law's broad retreat from strict liability is
a wise course of action. However, the fact that a substantial portion of the community considers
simple causality sufficient for liability in many situations suggests that the scope and centrality
of strict liability is far from being fully resolved.

\footnote{110} Indeed we suspect that were we to conduct a study using the chemical scenario and a juror condition that told
people the proper legal rule was one of strict liability the great majority of our subjects would apply this rule and
would agree that it is the correct rule.