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Apportionment of Harm in Tort Law: A Proposed Restatement

Gerald W. Boston Thomas M. Cooley Law School

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ARTICLES

APPORTIONMENT OF HARM IN TORT LAW: A PROPOSED RESTATEMENT

Gerald W. Boston

TABLE OF CONTENTS

					Pac	GE		
I. ;	INTRODUCTION							
	<i>A</i> .	A. Restatements						
		1.	The General Rule and Its Rationale					
		2.	Differing Views on Damages and Exceptions					
			to the General Rule					
		3.	Drawing Distinctions Among					
			Causal Relationships					
			(a)	Neces	ssary Causes	77		
			(b)	Suffic	cient Causes	77		
			(c)	Nonto	ortious Causes 2	79		
			(d)	Partia	al Causes	81		
			(e)	Succe	essive Causes	82		
	В.	The	e Restatement of Torts: The Black Letter Rules and					
		Com	ments			85		
	<i>C</i> .	Developments Between the First and Second Restatements						
	D.	Rest	atement (Second) of Torts on Apportionment 294					
		1.	Secti	on 433.	A and Comments	98		
		2.	Secti	on 433	B and Comments	03		
		3.	Com	mendat	tions and Criticisms of the			
			Restatement (Second) of Torts					
			a.	Comr	mendations	11		
			b.	Critic	cisms and Problems with Section 433A 3	12		
				(i)	The Tension Between Harms and Causes 3	12		
				(ii)	Need for Elaboratiion on			
					Causal Relationships	14		
				(iii)	Inappropriateness of Insolvency Override			
					of Apportionment	14		
				(iv)	Integrating the Role of Fault 3	17		

		c. Criticisms of Section 433B	0						
		(i) Proving the Indivisibility of the Harm 320	0						
		(ii) The Causation Threshold	1						
		(iii) Burden Shifting: Is It Necessary? 32							
II.	PROPOSED RESTATEMENT (THIRD) AND JUDICIAL SUPPORT								
	A.	The Black Letter Rule							
	В.	Cancer and Death	8						
	C.	Multiple Collisions							
		1. General Categories							
		2. Unrelated Collisions	5						
		3. Related Collisions	1						
	D.	Nuisance and CERCLA Cases	4						
		1. Nuisance Cases							
		2. CERCLA Cases	8						
	<i>E</i> .	Products Liability and Enhanced Injury Cases	0						
	F.	Some Concluding Thoughts on Apportionment 36							
III.	RAT	IONALES FOR APPORTIONMENT	59						
	Α.	Causation's Role in Corrective Justice							
	<i>B</i> .	Apportionment Avoids Unsatisfactory All or Nothing Outcomes:							
		The Comparative Fault Analogy	/2						
	<i>C</i> .	The Avoidable Consequence Analogy							
	D.	Multiple Defendant Cases and Fairness Concerns:							
		Thin Skulls and Insolvency	73						
	<i>E</i> .	Fairness Objects to Disproportionate Liability	76						

APPORTIONMENT OF HARM IN TORT LAW: A PROPOSED RESTATEMENT

Gerald W. Boston'

I. Introduction

This Article recommends a reformulation of the rules that govern the apportionment of harms in tort cases. This proposed reformulation eliminates the ambiguities that presently exist in sections 433A and 433B of the Restatement (Second) of Torts by specifying the standards governing the divisibility of harms, by clarifying the causation requirement that precedes the determination of divisibility, and by modifying the burden of proof rules. Precise and descriptive standards by which harms are apportioned between two or more independent tortfeasors will achieve greater fairness in the adjudication of tort cases. Since the American Law Institute (ALI) adopted the first Restatement of Torts² in the 1930s, many courts have demonstrated a considerable preference for non-apportionment. These courts have generally found that harms brought about by multiple causes are indivisible. In cases where two or more tortfeasors are involved, the courts have held each tortfeasor jointly and severally liable for the entire harm. Even after the adoption of sections 433A and 433B of the Restatement (Second) of Torts in 1965, some courts have continued a practice of non-apportionment. In fact, sections 433A and 433B have often been invoked to support the existence of indivisible harms—those that are not distinct, nor reasonably capable of apportionment and therefore to support application of joint and several liability in cases involving multiple tortfeasors. This approach avoids a careful examination of either causation or divisibility standards.

The past sixty years have shown that as the judiciary began to aggressively apply joint tortfeasor liability rules, courts have given only cursory attention to the *Restatement's* black letter rules on apportionment. The judiciary has not critically examined the factual questions of whether the defendant's negligent conduct was a legal cause of the harm or whether the harm was reasonably amenable to some rational division. Rather, the judiciary has applied liberalized collective liability rules, resulting in a presumption in favor of non-apportionment. Moreover, the preference for non-apportionment found support in the language of section 433A of the *Restatement (Second) of Torts*, especially in the comments which state that "certain types of harms" are

^{*} Professor of Law, Thomas M. Cooley Law School. B.A. 1964, Ohio Wesleyan University. J.D. 1967, Harvard University. Member of American Law Institute and Member, Consultative Group, Restatement (Third) of Torts, Apportionment Topics.

^{1.} RESTATEMENT (SECOND) OF TORTS §§ 433A, 433B (1965).

^{2.} RESTATEMENT OF TORTS (1939). See *infra* notes 163-238 and accompanying text for a discussion of sections relevant to apportionment from Volume 4.

indivisible.³ Indeed, some courts even shifted the burden of proof to defendants, forcing the defendants to establish the apportionability of harms memorialized in section 433B of the *Restatement (Second) of Torts*. Recently, however, numerous courts, relying on a thorough review of the black letter rules and underlying rationales, have applied apportionment principles to "single" injuries, such as death by cancer,⁴ contaminated property,⁵ and even injuries from automobile accidents.⁶

This Article briefly traces the judicial history of apportionable harms to the nineteenth century. This history demonstrates that a major impetus for the judicial preference for non-apportionment was the unfairness of prevailing damages jurisprudence. This jurisprudence rendered an injured plaintiff remediless unless the plaintiff could surmount rigorous proofs apportioning the harm and damages among multiple causes or actors. This difficulty facing the plaintiff was especially pronounced in cases where concurrent tortfeasors combined to bring about an arguably single, indivisible injury. The black letter rules found in the first Restatement of Torts incorporated this single, indivisible injury principle, except in nuisance cases.7 In addition to this damages hurdle, plaintiffs have also faced a procedural system in which obtaining the necessary evidence to establish apportioned damages was difficult. Finally, joinder rules, at least in many states, did not facilitate bringing potential defendants into one unitary action. By treating harms as indivisible and allowing the plaintiff to sue only one of multiple tortfeasors, the courts could achieve what they perceived as greater fairness. This notion of increased fairness inhered in cases in which the plaintiff would have received no recovery due to the proof of damages problem, the discovery burdens, and the joinder practices. An examination of some authorities, however, suggests that these problems were not so serious and that by the early 1900s courts did not demand an impossible burden of proof for damages.

Generally, the evolution of apportionment began with meritorious plaintiffs who could not clear an insurmountable damages hurdle by quantifying the damages caused by each defendant. Dean Wigmore passionately advocated the practice of burden shifting to ameliorate these harsh

^{3.} Examples of indivisible harms include death, a sunken barge, and fire-damaged property. RESTATEMENT (SECOND) OF TORTS § 433A cmt. i.

See, e.g., Dafler v. Raymark Industries, 611 A.2d 136, 147 (N.J. Super. Ct. App. Div. 1992), aff d, 622 A.2d 1305 (N.J. 1993).

^{5.} See, e.g., In re Bell Petroleum, 3 F.3d 889, 901 (5th Cir. 1993).

^{6.} See, e.g., Montalvo v. Lapez, 884 P.2d 345, 356 (Haw. 1991).

^{7.} The first Restatement of Torts dictates that each of two or more actors who are the legal cause of a harm or a substantial factor in creating the harm is wholly liable to the injured party. When two or more persons contribute to a situation that interferes with the owners' use and enjoyment of the land, however, each actor is liable for only the portion of the nuisance he or she created. See RESTATEMENT OF TORTS §§ 875, 879, 881 (1939); see also infra notes 83-104 and accompanying text.

effects. The indivisible harm model was popularized by the abolition of the contribution bar, the trend toward collective liability, the omissions in the first *Restatement*, and the ambiguities in the *Restatement (Second) of Torts*. As a result of joint and several liability rules, plaintiffs' strategies focused on finding the "deep pocket" instead of suing all potentially liable parties. Such a litigation strategy, however, has engendered less, not more, judicial efficiency.

Regardless of how the historical picture is drawn, whatever justification may have existed for aggressive application of the indivisible harm theory no longer exists today. Apportionment rules are more practical in the modern legal environment where: damages jurisprudence places only reasonable burdens on plaintiffs to show the extent of the harm caused by each tortfeasor; joinder procedures have been universally liberalized; and discovery rules have revolutionized access to information.⁹

The objective here is not to discuss the complete history of the joint tortfeasor doctrine or even of apportionment. The central objectives of this Article are to critically examine how the first *Restatement of Torts* and sections 433A and 433B of the *Restatement (Second) of Torts* dealt with apportionment, and to identify the omissions, ambiguities and tensions in the black letter rules and the official comments to those sections. The ultimate objective of this Article is to recommend new black letter rules governing apportionment. Part I of this Article concentrates on that task. Part II of this Article reviews a handful of cases, some old and familiar, others more recent, to illustrate how existing rules have been inconsistently applied and to demonstrate the functioning of the proposed black letter rules. Part III of this Article offers some rationales for the proposed rules, primarily emphasizing fairness and judicial efficiency.

^{8.} American courts followed English Common Law in denying joint tortfeasers a right to seek contribution. See Edward D. Cavanagh, Contribution, Claim Reduction, and Individual Treble Damages Responsibility: Which Path to Reform of Antitrust Remedies?, 40 VAND. L. REV.1277, 1285-86 (1987). As courts and scholars began criticizing the rule as unduly harsh in the 1930s, states began passing legislation to eliminate the bar on contribution. See id.

^{9.} As the doctrinal preference for joint liability rules emerged, an increasing need for new rules to govern contribution among joint tortfeasors arose. If one of two or more tortfeasors paid more than its share of the plaintiff's damages, fairness demanded that this tortfeasor should be able to recover the excessive payment from the other tortfeasors. The need for fair distribution of liability among tortfeasors, not surprisingly, may have accelerated the abolition of the common law rule barring contribution rights with the adoption of the Uniform Contribution Among Tortfeasors Act by 10 states by the early 1950s and by about 10 more by the early 1960s. The justifications that existed at common law for barring contribution among intentional tortfeasors or those engaging in a common design or concerted action have little relevance today. By the late 1960s, virtually all states had eliminated the contribution bar, which may have caused the further acceleration of the trend toward finding harms indivisible and thereby laying the predicate for joint liability for the entire harm.

A. The Restatements

1. The General Rule and Its Rationale

By the 1930s when the ALI published the *Restatement of Torts*,¹⁰ the "single indivisible injury" rule was well entrenched among the vast majority of American states¹¹ and had been the rule in England for well over a century.¹² The rule holds that when two or more actors have caused a single indivisible harm through independent, tortious acts and indivisible actions, the injured party may recover all damages from each of the actors. Considerable confusion attached to the terms "joint torts" or "joint tortfeasors," and it was unclear whether that nomenclature even should attach to the single indivisible injury rule.¹³ It is clear, however, that many courts were willing to hold each

11. See FOWLER V. HARPER, LAW OF TORTS § 302, at 677-678 (1st ed. 1933) stating that: When the injury is caused by the concurrence of acts of several parties, each acting independently of and without knowledge of the conduct of the other, it is necessary to determine whether or not the acts of each alone were capable of and would probably have produced the entire damage or whether the acts of each were such that they would not alone have produced the entire damage but merely contributed to the whole. In the first type of case, all are jointly and severally liable for the entire damage. Neither can plead that the injury would have happened irrespective of his acts, for by the same argument all could escape liability. Better that all should be liable, and such is the result of the cases. So, too, where but one party actually caused the entire harm, but it is impossible to determine which of several parties whose conduct may have caused it, was the one responsible, all may be held, as it would be unfair to deprive the plaintiff of any redress in such a case.

Id. Other commentators stated:

Concurrent, as distinguished from joint negligence, arises where the injury is proximately caused by the concurrent wrongful acts or omissions of two or more persons acting independently. That the negligence of another person than the defendant contributes, concurs or co-operates to produce the injury is of no consequence. Both are ordinarily liable. And unless the damage caused by each is clearly separable, permitting the distinct assignment of responsibility to each, each is liable for the entire damage.

THOMAS G. SHEARMAN & AMASA A. REDFIELD, NEGLIGENCE §122 (6th ed. 1913); see also Mosby v. Manhattan Oil Co., 52 F.2d 364, 366 (8th Cir.), cert. denied, 284 U.S. 677 (1931); Gulf Cal. & S.F. Ry. Co. v. Cities Serv. Co., 273 F. 946, 950-51 (D. Del. 1921) ("Where, however, the tortious acts of several supplement one another and directly contribute in producing a single indivisible injury, such persons are in legal contemplation joint tort-feasors by reason of the resulting injury to which each contributed, although there was no concerted action."); Brown v. Coxe Bros. & Co., 75 F. 689, 690 (E.D. Wis. 1896); Sparkman v. Swift, 8 So. 160 (Ala. 1886); Southwestern Gas & Elec. Co. v. Godfrey, 10 S.W.2d 894, 896 (Ark. 1928); Willard v. Red Bank Oil Co., 151 Ill. App. 433 (Ill. Ct. App. 1909); West Muncie Strawboard Co. v. Slack, 72 N.E. 879, 880 (Ind. 1904); Paraiso v. Moffit, 39 N.E. 909, 910-11 (Ind. App. 1895); Baylor University v. Bradshaw, 84 S.W.2d 703, 704 (Tex. 1935); WILLIAM L. PROSSER, LAW OF TORTS § 47, at 327-28 & 330-31 (1st ed. 1941); J.G. SUTHERLAND, LAW OF DAMAGES § 140 (4th ed. 1916); Roy D. Jackson, Jr., Joint Torts and Several Liability, 17 Tex. L. Rev. 399, 401-02 (1939); James A. McLaughlin, Proximate Cause, 39 HARV. L. Rev. 149 (1925).

^{10.} The Restatement of Torts was published over a five-year period. Volume 1 was published in 1934, Volume 2 in 1934, Volume 3 in 1938, and Volume 4 in 1939. Volume 4 contains the sections discussing apportionment.

^{12.} While no joinder of multiple tortfeasors who acted independently was possible, each one could be sued and held liable for the entire loss. Sadler v. Great W. Ry. Co., [1896] App. Cas. 450 (P.C. 1895) (appeal taken from Q.B.); Thompson v. London County Council, 1899 Q.B. 840 (Eng. C. A.).

^{13.} William L. Prosser, Joint Torts and Several Liability, 25 CAL. L. REV. 413, 414 (1937) [hereinafter Joint Torts]; see 3 FOWLER V. HARPER ET AL., LAW OF TORTS § 10.1, at 1-6 (2d ed. 1986).

defendant liable for the entire harm, in effect making each of them jointly and severally liable.

One legal commentator of the 1930s observed that the rule, at least in cases of multiple tortfeasors, was "so thoroughly orthodox that it would be idle to discuss [its] soundness." Professor Prosser, in a 1937 article, declared that in cases of concurrent actors "where the acts of two defendants combine to produce a single result, which is incapable of being divided or apportioned such as death of the plaintiff, each may be the proximate cause of the loss, and each may be held liable for the entire damage." 15

Professor Wigmore was even more aggressive in this 1922 declaration of what he thought the rule *ought* to be:

Whenever two or more persons by culpable acts, whether concerted or not, cause a single general harm not obviously assignable in parts to the respective wrongdoers, the injured party may recover from each for the whole. In short, wherever there is any doubt at all as to how much each caused, take the burden of proof off the innocent sufferer; make any one of them pay for the whole, and then let them do their own figuring among themselves as to what is the share of blame for each. ¹⁶

The rationales for the rule rested on two factual premises: (1) that each defendant had caused the loss; and (2) the absence of any basis for dividing the harm among the defendants.¹⁷ Moreover, these factual bases were reinforced by two fairness principles: first, a wrongdoer should not escape liability for the consequences of his wrongful conduct; and second, an innocent plaintiff should not go without a remedy for an injury sustained at the hands of those wrongdoers. These two closely related principles rested on a third principle: a plaintiff who suffers injury as a result of the combined consequences of tortious acts of more than one defendant should not be denied recovery simply because the amount of damages contributed to by each is incapable of precise measurement.

Typical of cases in the early twentieth century, the Massachusetts Supreme Judicial Court held that two defendants, who simultaneously drove noisy motorcycles that passed the plaintiff's wagon, frightening the horses drawing the wagon and causing them to injure the plaintiff, could be liable for the plaintiff's entire damages. ¹⁸ The court commented:

^{14.} Robert J. Peaslee, Multiple Causation and Damage, 47 HARV. L. REV. 1127, 1130 (1934).

^{15.} Joint Torts, supra note 13, at 432.

^{16.} John H. Wigmore, *Joint-Tortfeasors and Severance of Damages*, 17 ILL. L. REV. 458, 459 (1923) (emphasis added). As developed in Part I of this Article, Wigmore's article criticized cases in which the rule was not applied and plaintiffs were unable to recover any damages because they were unable to prove with requisite certainty the amount of damages caused by each individual tortfeasor.

^{17.} Joint Torts, supra note 13, at 432.

^{18.} Corey v. Havener, 65 N.E. 69 (Mass. 1902).

It makes no difference that there was no concert between them, or that it is impossible to determine what portion of the injury was caused by each. If each contributed to the injury, that is enough to bind both. Whether each contributed was a question for the jury. . . . If both defendants contributed to the accident, the jury could not single out one as the person to blame. ¹⁹

2. Differing Views on Damages and Exceptions to the General Rule

Despite the broad support for the general rule, disagreement existed as to the scope of the single indivisible injury rule. For example, Wigmore possessed considerably greater comfort with the idea of holding each defendant liable for all of a plaintiff's damage than Prosser. Except in cases of "obviously assignable" distinct harms, or when there was "any doubt" as to divisibility, Wigmore thought the rule should be applied and strenuously argued that plaintiffs should be armed with a presumption in favor of the defendants' liability for the entire harm. Prosser, however, thought that "entire liability is imposed *only* where there is no reasonable alternative." Prosser addressed Wigmore's concerns that plaintiffs faced too difficult a burden in proving damages, by pointing out:

The difficulty of assessing separate damages has received frequent mention in these cases, but is not regarded as sufficient justification for entire liability. The emphasis is placed upon the theoretical possibility of apportionment, and the fact that each defendant has caused a separate invasion of the plaintiff's interests. There has been some criticism of this result, and it has been urged [citing Wigmore] that each tortfeasor be held liable for the entire loss, or at least that the burden of proof be placed upon the defendants as to their separate responsibility It seems reasonable to say that this difficulty of proof has been overstated. The courts necessarily have been very liberal in awarding damages where the uncertainty as to their extent results from the nature of the wrong itself.²³

In addition to disagreements about the description of the general rule, courts also drew distinctions among the factual circumstances that could give rise to its application. First, the courts distinguished between cases of concurrently caused harm²⁴ and successive injuries, with the latter category being more apportionable by applying a temporal standard.²⁵

^{19.} Id. at 69.

^{20.} Wigmore, supra note 16, at 459.

^{21.} *Id*

^{22.} Joint Torts, supra note 13, at 433 (emphasis added).

Id. at 438-39; see Charles E. Carpenter, Concurrent Causation, 83 U. PA. L. REV. 941, 951 (1935);
 Jackson, supra note 11, at 401-02.

^{24. &}quot;Concurrent" was not taken to mean simultaneous, but implied a close temporal relationship and a "concurring" (a combining) of the causes. *See, e.g.*, Carpenter, *supra* note 23, at 941-44 (giving examples of concurrent causation that include non-simultaneous but closely related causes).

^{25.} Joint Torts, supra note 13, at 434-35.

While not explicitly labeling them as such, Prosser identifies a number of nuisance cases where entire liability was not the rule but the exception. Prosser points to cases in which two defendants independently pollute a stream, or the air, or flood the plaintiff's land from separate sources, and who are subject to several and proportionate liability for the portion of plaintiff's damages attributable to them. 26 Similarly, Professor Sutherland flatly declared in 1916 that in cases of private nuisance the governing rule was to hold each defendant proportionately liable only "[i]f several, independently and without concert, create a private nuisance they are not jointly liable; but each is liable in respect to his own wrongful act and for the damages which resulted therefrom."27

For example, in Eckman v. Lehigh & Wilkes-Barre Coal Co., 28 several defendants who operated coal mines and others filled a dam with deposits of coal dirt. The court found that the defendants were not liable for the combined results of all the deposits to the plaintiff's property.²⁹ In reaching its decision the court noted that it may be difficult to determine how much dirt came from each colliery, but the relative proportion thrown in by each may form some guide. In a case of such difficulty caused by the defendants themselves, the court reasoned that a jury would measure the injury with a liberal hand.³⁰ According to the court, the difficulty of separating the injuries caused by each defendant would not be reason to hold one man liable for the torts of others who acted without concert.³¹ It would be simple to say because the plaintiff fails to prove the injury one man does him the plaintiff may therefore recover from that one all the injury that the others do. 32

The court's comment respecting the right of the jury to determine proportionate damages with a "liberal hand" supports Prosser's observation that

^{26.} PROSSER, supra note 11, § 42, at 333 (noting the nuisance cases and their treatment in the Restatement of Torts); see also 3 HARPER ET AL., supra note 13, § 303, at 26 (discussing contribution).

^{27.} SUTHERLAND, supra note 11, § 1059, at 3937. Apparently a different rule governed in cases of public nuisances where joint liability was applied against each tortfeasor because of the public nature of the wrong. Sutherland states: "Joint and several liability may attach to persons who are not joint tort-feasors, as where their acts are separate and distinct as to place and time, but culminate in producing a public nuisance which injures the person or property of another." Id. at 3939.

^{28. 50} Pa. Super. 427 (1912). 29. *Id.* at 428, 432.

^{30.} Id. at 432.

^{31.} Id. at 429.

^{32.} Id. at 432-34. Similarly in Miller v. Highland Ditch Co., the court stated:

It is clear that the rule, as established by the general authorities, is that an action at law for damages cannot be maintained against several defendants jointly when each acted independently of the others, and there was no concert, or unity of design, between them. It is held that, in such a case, the tort of each defendant was several when committed; and that it does not become joint because afterwards its consequences united with the consequences of several other torts committed by other persons. If it were otherwise, say the authorities, one defendant, however little he might have contributed to the injury, would be liable for all the damage caused by the wrongful acts of all the other defendants; and he would have no remedy against the latter, because no contribution can be enforced between tortfeasors.

²⁵ P. 550, 551 (Cal. 1891); see also California Orange Co. v. Riverside Porthard Cement Co., 195 P. 694 (Cal. Ct. App. 1920).

the damages difficulty alluded to by Wigmore "has been overstated."³³ The judiciary reasoned that because the defendant's wrongdoing created the difficulty in apportionment, and because the defendant could have avoided this difficulty by exercising care, the defendant was in no position to demand precision in ascertainment of his share of the damage.³⁴

Nevertheless, some courts were amenable to applying the rule of liability for entire damages even to nuisance cases.³⁵ For example, in a Missouri case where the plaintiff's property was damaged by fumes from adjacent factories the court flatly declared:

If there was enough of smoke and fumes definitely found to have come from defendant's plant to cause perceptible injury to plaintiffs, then the fact that another person or persons also joined in causing the injury would be no defense; and it was not necessary for the jury to find how much smoke and fumes came from each place.³⁶

33. For example, in *California Orange Co*. the court described the workings of proportionate liability and the judicial attitude toward the measurement of damages:

Defendant is liable for only such proportion of the total damage resulting from the commingled dust emitted into the atmosphere from the plants of the two cement companies as was caused by its own plant. . . . In determining the amount of damage that should be assessed against this defendant, the trial court was at liberty to estimate as best it could, from the evidence before it, how much of the total damage caused by the operations of the two cement companies was occasioned by defendant's plant, and in doing so might measure with a liberal hand the amount of damage caused by defendant's mill.

195 P. at 695; see also Learned v. Castle, 18 P. 872 (Cal. 1888), on reh'g, 21 P. 11 (Cal. 1889); Jenkins v. Pennsylvania R.R., 51 A. 704 (N.J. 1902); City of Mansfield v. Brister, 81 N.E. 631 (Ohio 1907).

34. See Ogden v. Lucas, 48 Ill. 492 (1868); Harrison v. Adamson, 53 N.W. 334 (Iowa 1892); Washburn v. Gilman, 64 Me. 163 (1873); City of Mansfield, 81 N.E. 631. A few courts stated the rule more harshly, suggesting that if the plaintiff could not carry his burden of proving damages with reasonable certainty he takes nothing. See, Sun Oil Co. v. Robicheaux, 23 S.W.2d 713 (Tex. Ct. App. 1930). In Robicheaux independent sources polluted water used by plaintiff for irrigation, causing damage to his crops. The Texas appellate court stated:

[I]f he acts independently, and not in concert of action with other persons in causing such injury, he is liable only for the damages which directly and proximately result from his own act, and the fact that it may be difficult to define the damages caused by the wrongful act of each person who independently contributed to the final result does not affect the rule.

Id. at 715, see also Tucker Oil Co. v. Matthews, 119 S.W.2d 606 (Tex. Ct. App. 1938) (reversing a judgment for plaintiff where plaintiff's cattle died from drinking water polluted by defendant's oil because plaintiff offered no evidence to show how much of the damage was caused by the defendant's pollution and how much was caused by pollution from others).

35. See Orton v. Virginia Carolina Chem. Co., 77 So. 632 (La. 1918). In Orton several companies discharged acid into a stream, killing plaintiff's cattle. The court stated:

The mere fact that other nuisances existed in the same locality which produce similar results is no defense, if the nuisance complained of adds to the nuisance already existing to such an extent that the injury complained of was measurably traceable thereto. It is not necessary that all the injury should be the result of the nuisance charged, if it be of such a character and produces such results as, standing alone, it would be a nuisance to plaintiff. The fact that it is the principal, though not the sole, agent producing the injury is sufficient.

Id. at 634, see also Tidal Oil Co. v. Pease, 5 P.2d 389, 391 (Okla. 1931) ("While the defendants were acting independently of each other, if their acts combined to produce the alleged injury to plaintiffs' live stock, . . each so acting is responsible for the entire result even though the act of any one defendant might not have caused it.").

36. Bollinger v. American Asphalt Roof Corp., 19 S.W.2d 544, 552 (Mo. Ct. App. 1929).

3. Drawing Distinctions Among Causal Relationships

The nature of the causal relationship between the tortious acts and the harm was another factor that bore on the issue of apportionment which many courts and legal commentators discussed. Many authorities, especially in the 1930s, argued that different rules respecting joint liability for potentially single harms might apply depending on whether a particular defendant's causal relationship involved: (1) necessary causes, (2) sufficient causes, (3) nontortious standing alone causes, (4) partial causes, or (5) successive causes.

a. Necessary Causes

A necessary, or "but-for," cause is one that, if it did not occur, the plaintiff would not have suffered damages. For example, when two vehicles collide and both vehicles are essential in producing the plaintiff's injury, courts have been willing to apply the single indivisible injury rule and hold each tortious participant liable for the plaintiff's entire harm. This factual structure was the subject of Illustration 1 to section 879 of the *Restatement of Torts*, which states that the injured party "is entitled to a judgment for the full amount of the damages against either A or B or against both of them." Many decisions, some dating back to the 1800s, support this illustration. Thus, in single injury and necessary cause cases, courts often held a single defendant liable for all of the injuries resulting from the tortious conduct of multiple actors. In these cases, it was not feasible to quantify or compare the causes themselves, and thus courts found that no obvious means existed for applying apportionment principles.

b. Sufficient Causes

Like necessary cause cases, by the 1920s courts appear to have settled into a rule of entire liability when dealing with sufficient cause cases. If multiple causes produced plaintiff's damages and one of the causes, standing alone, is sufficient to cause the damages, the cause is a sufficient cause. The "twin fire" cases illustrate the courts' handling of sufficient cause cases.³⁹ An

^{37.} RESTATEMENT OF TORTS § 879 cmt. a, illus. 1 (1934). This same illustration appears at RESTATEMENT (SECOND) OF TORTS § 433A cmt. i, illus. 12 (1965).

^{38.} See, e.g., Tompkins v. Clay-Street Hill R.R., 4 P. 1165 (Cal. Ct. App. 1884); Kinley v. Hines, 137 A. 9 (Conn. 1927); McDonald v. Robinson, 224 N.W. 820 (Iowa 1929); Miller v. Weck, 217 S.W. 904 (Ky. 1920); Flaherty v. Northern Pac. Ry., 40 N.W. 160 (Minn. 1888); Colegrove v. New York & New Haven R.R., 20 N.Y. 492 (1859); Glazener v. Safety Transit Lines, 146 S.E. 134 (N.C. 1929); Peters v. Johnson, 264 P. 459 (Or. 1928).

^{39.} Anderson v. Minneapolis St. P. & S. Ste. M. Ry., 179 N.W. 45 (Minn. 1920); Kingston v. Chicago & Northwestern Ry., 211 N.W. 913 (Wis. 1927).

early Wisconsin case, Cook v. Minneapolis, St. P. & S. Ste. M. Ry., ⁴⁰ the court expressed reservations about a rule of entire liability. While the Cook court held that liability for entire damages would not result if the second fire was of innocent origins, later cases eliminated even that qualification. In Cook, a defendant, whose negligently set fire combined with another fire of unknown or innocent origin, was not liable. If that defendant's fire had combined with one of "responsible" (negligent) origin, however, total liability would have attached.⁴¹

Similarly, in *Anderson v. Minneapolis, St. Paul & S. Ste. M. Ry.*, ⁴² the Minnesota Supreme Court sustained a jury instruction that provided:

If you find that other fire or fires not set by one of the defendant's engines mingled with one that was set by one of the defendant's engines, there may be difficulty in determining whether you should find that the fire set by the engine was a material or substantial element in causing plaintiff's damage. If it was, the defendant is liable, otherwise it is not.⁴³

Thus, in sufficient cause cases, if each defendant was negligent respecting its fire, and each fire would have been sufficient standing alone to cause the destruction, then each defendant would be liable for the plaintiff's entire loss.⁴⁴

The support for this outcome was not limited to the twin fire cases, but included the case where each defendants' motorcycle frightened the plaintiff's horses who were drawing a wagon, causing the horses to run and injure the plaintiff.⁴⁵ Because each of the motorcycles alone would have been sufficient to scare the horses, the court held that each defendant could be liable for the plaintiff's entire damages.⁴⁶ Further, section 879 of the first *Restatement of Torts* provided for a "substantial factor" test that would trigger liability for the entire harm, thus explicitly adopting the principle of these cases.

RESTATEMENT OF TORTS § 432. For a spirited criticism and a rejoinder of liability for entire damages, compare Peaslee, *supra* note 14, at 1127, who criticizes the rule of liability where one fire was of innocent origin with Carpenter, *supra* note 23, at 941, who disagrees with Peaslee, instead supporting the rule of the *Anderson* and *Kingston* cases.

^{40. 74} N.W. 561 (Wis. 1898).

^{41.} Id.

^{42. 179} N.W. 45.

^{43.} Id. at 46.

^{44.} The principle of these cases was captured in the substantial factor test of causation in the RESTATEMENT OF TORTS § 432 (1934):

Except as stated in Subsection (2), the actor's negligent conduct is not a substantial factor in bringing about harm to another if it would have been sustained even if the actor had not been negligent.

⁽²⁾ If two forces are actively operating, one because of the actor's negligence, the other not because of any misconduct on his part, and each of itself is sufficient to bring about harm to another, the actor's negligence may be held by the jury to be a substantial factor in bringing it about. The rationale for the substantial factor test of causation was that neither fire was a but-for cause of the plaintiff's harm, and if each cause was essential for liability, both tortfeasors would escape liability.

^{45.} Corey v. Havener, 65 N.E. 69 (Mass. 1902).

^{46.} Id.

Therefore, like necessary cause cases, courts became amenable to holding each defendant liable for the entire harm, in sufficient cause cases, even when only a single injury resulted. This reasoning developed despite arguments that if one cause was of innocent origin the defendant should be entitled to have the value of plaintiff's property discounted by the destruction that the innocent cause would have caused by itself.⁴⁷ Prosser acknowledged such an argument as "extremely interesting," but noted that for the principle of reduction in value for potential harm to be fairly applied required that the non-tortious force "be in operation when the defendant causes harm, and so imminent that reasonable men would take them into account." Moreover, Prosser even acknowledged the theoretical possibility of apportionment where both causes were tortious, as in the case of one defendant shooting a plaintiff who dies instantly after another had already poisoned him. Prosser concludes that the shooter in this example has deprived the plaintiff of something: a cause of action against the poisoner and hence rejects apportionment.⁴⁹

c. Nontortious Causes

The third causal situation involves tortfeasors whose conduct would not be sufficient standing alone to produce *any* harm, let alone the entire harm, but when combined with the tortious conduct of others, the combined effects cause harm to a plaintiff. Professor Carpenter, in a 1935 article, offers this example of such a situation:

For example, A, B and C each push, independently of each other and with approximately equal force, on the plaintiff's automobile, and by their combined pushing they push the car over a precipice. Let us assume that the pushing of any two would have moved the car and would have been sufficient to push the car over the precipice. . . . The pushing of A, B or C was not a necessary factor in causing the car to go over the precipice. But is it not perfectly clear that each, A, B and C, were causes of the car going over the precipice? The question of causation is not whether it would be unfair to the plaintiff to refuse to hold the defendant liable, but did the defendant push substantially on the car, and that is a question properly left to the jury, as provided in the [first] Restatement. ⁵⁰

The early cases split on how to treat this situation where each tortfeasor alone would have caused no harm.⁵¹ In an 1865 Wisconsin decision,⁵² each of two

^{47.} Peaslee, *supra*, note 14, at 1133; *see also* Dillon v. Twin State Gas & Elec. Co., 163 A. 111 (N.H. 1932) (holding that a boy who fell from a bridge and was electrocuted by hitting defendant's wire on the way to the ground could only recover for what remained of his life before he came in contact with the wire). Prosser, as Reporter for the *Restatement (Second) of Torts* proposed a black letter rule that would have reflected the principle of the *Dillon* case, but it was not included in the final version.

^{48.} PROSSER, supra note 11, § 47, at 337-38.

^{49.} Id.

^{50.} Carpenter, supra note 23, at 948.

^{51.} See 3 HARPER ET AL., supra note 13, § 10.1, at 23-24.

^{52.} Lull v. Fox & Wis. Improvement Co., 19 Wis. 112 (1865).

defendants erected dams along a river, which together caused an overflow that damaged plaintiff's land. While the facts are not entirely clear, it appeared that each dam alone would not have produced a destructive overflow. The court dismissed the case because joinder was not proper, finding that as a matter of substantive tort law neither defendant could be held liable for the entire damage, thus leaving the plaintiff without a remedy.

In contrast, an even earlier Vermont case,⁵³ dating to 1802, permitted joinder on similar facts and imposed joint and several liability. The court stated:

If the plaintiff had brought his action against one of the owners, his counsel would have argued, that his dam alone did not cause the injury. . . . If he had brought action against him who erected the second dam . . . he would say, If the other dam had not been erected, mine would have occasioned no damage [This] Court therefore consider[s], that the action will lie against both. . . . ⁵⁴

Professor Harper, in his 1933 tort treatise, declares what the rule is and should be in this genre of cases:

[T]he sound rule to be deduced from the authorities and the one representing the most desirable social policy seems to be as follows: if no damage at all would have resulted without the concurrence of the conduct of any particular defendant, such party is jointly and severally liable for the entire damage even though no damage would have occurred had not the other wrongdoers likewise been negligent.⁵⁵

Prosser, noting the "paradox" of non-tortious⁵⁶ independent conduct combining to produce injury, also concluded that liability is appropriate in these cases because "the standard of reasonable conduct applicable to each defendant is governed by the surrounding circumstances, including the activities of the other defendants. . . . The simple act itself becomes wrongful because of what others are doing."⁵⁷

Many courts applied the indivisible injury rule and held each defendant liable for the entire harm despite the fact that each defendant, alone, would have caused no harm. The possibility of apportionment, however, might exist because the harm is often cumulative and a comparison of the amount contributed by each may be feasible. Nevertheless, as of the 1930s, little

^{53.} Wright v. Cooper, 1 Tyl. 425 (Vt. 1802).

^{54.} *Id.* at 432; *accord* Town of Sharon v. Anahama Realty Corp., 123 A. 192 (Vt. 1924) (concluding where an ice jam caused by a pier of one defendant and the dam of another that each defendant is jointly and severally liable for the entire damage).

^{55.} HARPER, supra note 11, § 302, at 678; see also PROSSER, supra note 11, § 47, at 338-40.

^{56.} The conduct is non-tortious because by itself the conduct invaded no compensable interest.

^{57.} PROSSER, *supra* note 11, § 47, at 339. Prosser cites considerable authority for his conclusion, including cases of pollution, flooding of land, diversion of water, obstruction of a highway, or even a noise nuisance. *Id.* at 339 n.46-50. Prosser notes, however, that a defendant's conduct would not be tortious unless it knew, or should have known, that its conduct would concur with that of others to cause damage. *Id.* at 340.

authority could be found to support such an approach, even as to nuisance cases, which, as a class, were most compatible to apportionment.

d. Partial Causes

In the fourth group of cases, the partial cause cases, apportionment is usually feasible, which led to the first *Restatement of Tort's* rule for nuisances. Each defendant's activity in a partial cause case may have caused some damage, but not the entire harm, and the question is whether that harm can be divided along some rational lines. On this point Professor Harper's 1933 treatise would hold "each wrongdoer . . . responsible only in proportion to the damage which his misconduct legally caused" if the plaintiff would have suffered some damage even if one of the defendants was not negligent, and the plaintiff actually sustained less harm. ⁵⁸ Undoubtedly, as a theoretical matter, the harm produced is divisible; the only questions are whether some practical means exist for undertaking that division and who bears the burden of quantifying the extent of the contribution from each source.

Courts have demonstrated considerable leniency in not holding plaintiffs to an impossible burden of proof by declaring that juries and trial courts be given a "liberal hand" in assigning damages to the respective defendants. ⁵⁹ In this genre of cases, Prosser also argued for apportionment and urged that the difficult proof problems not be "regarded as sufficient justification for entire liability," rejecting Wigmore's call for burden shifting. ⁶⁰ Partial cause cases are not limited, however, to nuisance cases; partial causes exist in any case where the harm was cumulative rather than a single, distinct harm occurring at a precise moment in time.

There is a paradox between nontortious causes and partial causes. In the nontortious cause cases, the defendant's solitary conduct causes no compensable harm, and yet the defendant ends up bearing liability for the entire harm; in the partial cause cases, the defendant's conduct causes some compensable harm, but the defendant avoids liability for the entire harm. Why should a defendant end up worse off in the former case? The answer lies in the fact that in nontortious cause cases, the multiple causes must each be potentially tortious; one doubts whether a court would impose liability for damages if a non-tortious contributor combined with an innocent source, the two together causing harm. Professor Carpenter's example of the three people pushing a car over the precipice illustrates the paradigm of multiple culpable actors that seems to justify the outcome in these cases.⁶¹ In contrast, in partial cause cases,

^{58.} HARPER, supra note 11, § 302, at 678.

^{59.} See supra notes 28-32 and accompanying text.

^{60.} See PROSSER, supra note 11, § 47, at 334.

See supra note 50 and accompanying text.

liability was deemed proportionate because of the theoretical and practical divisibility of the harm. It would make no difference that one of the causes was a force of nature or other innocent cause, since the defendant, by definition, caused only a portion of the harm.

e. Successive Causes

The fifth class of cases involves successive injuries that are either sufficiently similar in kind or sufficiently close in time that separation of the injuries is difficult. The classic cases involve separate batteries inflicted on a plaintiff or impairment of an employee's health by toxic exposure from successive employers. Here the courts, by the 1930s, were cognizant of the fact that time provides a convenient mechanism for dividing damages. In 1937, Prosser argued strenuously for apportionment in such situations:

In such cases there is available a logical basis for apportionment of the loss, which is lacking in the cases hitherto considered. It is possible to say, in theory at least, where one defendant's wrong left off and the other's began. As a practical matter, it may be difficult or impossible to produce satisfactory evidence as to the extent of the damages caused by each; but this is not sufficient reason for holding a defendant liable for damages with which he had no connection. The basis for division is there; it is only the evidence which is lacking. The difficulty is no greater than in cases where the plaintiff's own conduct has aggravated an injury caused by another. Each is held liable for his several share of the damages; but the difficulty of apportionment offers a strong argument in favor of joinder in one action. 62

Prosser also pointed out that under rules of legal cause, the earlier tortfeasor might be liable for the second injury, and the latter tortfeasor could be liable for the earlier injury. One thing is certainly manifest in cases of successive tortfeasors: neither actor alone could have caused the entire harm. This fact, however, does not preclude liability for entire damages on the first tortfeasor if it was foreseeable that a subsequent injury might occur as a result of the initial harm, such as in the case of subsequent negligent medical treatment. If the second injury is regarded as a superseding event, however, then neither

^{62.} Joint Torts, supra note 13, at 434-35. Professor Carpenter also seemed to recognize that the successive injury cases presented a special situation but was not as categorical as Prosser and would permit entire liability:

No one can question the soundness of the successive cause cases which refuse to hold a defendant liable for losses which had accrued when his cause became operative. Wherever such appraisal of accrued loss is possible, the defendant should to that extent be relieved of liability, and no difference is made whether one of the causes is innocent or whether they are all wrongful. But such successive cause cases have no bearing on either the successive or concurrent cause cases in which such segregation of loss is impossible. To argue in either the successive or concurrent cause cases that where it is impossible to segregate or apportion the damages caused by each actor a defendant should not be held liable for the damage caused by another would practically preclude all liability in tort.

Carpenter, supra note 23, at 951.

^{63.} PROSSER, supra note 11, § 47, at 336.

tortfeasor is liable for the entire damages and apportionment among the injuries should be mandatory.

Two cases illustrate this problem. In Wallace v. Jones, 64 the defendant drove down the wrong side of a road and collided with the car in which the plaintiff was a passenger. The plaintiff testified that his back was injured in the collision. Between five to fifteen minutes after the original collision, a third driver came upon the scene, struck a stopped vehicle, bounced off and struck the plaintiff, breaking the plaintiff's right leg in two places and fracturing the plaintiff's left knee and pelvic bone. This fact situation illustrates the problems arising under the various theories that courts have developed to deal with the problems of apportioning damages in multiple accident cases. From the standpoint of time, it is logically difficult to call the various acts of negligence concurrent. As the court found, difficulty exists in asserting that it was impossible to segregate the damages resulting from the various acts of negligence. In Wallace, the court concluded that an interval of five to fifteen minutes between the collisions made the first collision more than a remote cause of the injuries from the second collision. 65 The court declared that the negligence of the original actor and the plaintiff's injuries were "entirely separated and the chain of causation interrupted by . . . several intervening events" which "constituted new, efficient, and independent causes which superseded the original act of negligence of the defendant."66 Thus, the court found no concurrent negligence.67

In *Hill v. Peres*, ⁶⁸ however, one defendant negligently collided with the car in which the victim was riding. A second defendant, some fifteen minutes later, ran over the decedent's unconscious body. ⁶⁹ The court held both defendants jointly liable for the plaintiff-decedent's death. ⁷⁰ The court concluded that the first defendant's negligence could be found a "proximate cause" under the theory that the first defendant "in the ordinary and natural course of events . . . should have known [that] the intervening act was likely to happen." The court further concluded that the negligence of the second defendant would "in law be regarded not as independent, but as a conjoining with the original act to create the disastrous result."

The actual distinction between the two cases is that in the *Wallace* case there were two distinct injuries that the court felt could be evaluated separately, while in the *Peres* case, the injury, death, was deemed to be an indivisible injury. Differing results based on this factual distinction would appear to have

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64. 190 S.E. 82 (Va. 1937).
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^{65.} Id. at 85.

^{66.} Id.

^{67.} Id.

^{68. 28} P.2d 946 (Cal. Ct. App. 1934).

^{69.} Id. at 948.

^{70.} Id. at 950.

^{71.} Id. at 949.

^{72.} Id.

more logical consistency than differing results based upon unnecessary excursions into the complicated field of "legal causation."

The problem with the focus on divisibility, however, is that it clouds the causation analysis. A necessary condition precedent to apportionment analysis is a determination that the defendant is in fact the cause of those injuries. As will be developed below in some detail, the multiple accident cases demand at the outset a rigorous analysis of the causation questions, both cause in fact and legal or proximate cause, before any venture into apportionment is appropriate.

As illustrated, the rules respecting apportionment and the application of joint and several liability were shaped by the nature of the causal relationship. When the *Restatement of Torts* was published, these distinctions were well recognized, but the black letter rules made no reference to these distinctions, and the comments to section 879 did not consider them.⁷³

A necessary corollary to the general rule requiring that each defendant be held responsible for the entire harm is that when the harm can be apportioned on some rational basis, then liability should be proportionate only. Prosser, as well as other commentators, have made it abundantly clear that "the true distinction to be made is between injuries which are divisible and those which are indivisible." Prosser notes that liability for entire damages "rests upon the obvious fact that each actor has contributed to the single result, and that no rational division can be made," and that certain harms "are more capable of apportionment." Prosser identifies the question as "primarily not one of the fact of causation, but of the feasibility and practical convenience of splitting up the total harm into separate parts which may be attributed to each of two or more causes." Where "some rough practical apportionment" is possible "it may be expected that the division will be made." A plethora of cases support these conclusions.

^{73.} See infra notes 83-105 and accompanying text.

^{74.} See Jackson, supra note 11, at 406 (citations omitted).

^{75.} PROSSER, supra note 11, § 47, at 330.

^{76.} Id. at 332.

^{77.} Id. at 334.

^{78.} Id. at 327.

^{79.} McAllister v. Pennsylvania R.R., 187 A. 415 (Pa. 1936) (apportioning loss where two tortfeasors negligently injured the plaintiff); LeLaurin v. Murray, 87 S.W. 131 (Ark. 1905) (apportioning loss where several tortfeasors, not acting in concert, intentionally assaulted the plaintiff); Albrecht v. St. Hedwig's Roman Catholic Benevolent Soc'y, 171 N.W. 461 (Mich. 1919) (same); Schafer v. Ostmann, 129 S.W. 63 (Mo. Ct. App. 1910) (same); Meier v. Holt, 80 N.W.2d 207 (Mich. 1956) (allowing apportionment where the plaintiff's car was struck almost simultaneously by two vehicles); Hill v. Chappel Bros. of Mont., 18 P.2d 1106 (Mont. 1932) (finding that where the plaintiff's grazing land was damaged by the livestock of several neighbors, each neighbor was liable only for the loss caused by his own livestock); Anderson v. Halverson, 101 N.W. 781 (Iowa 1904) (apportioning loss where two dogs killed several sheep); Nohre v. Wright, 108 N.W. 865 (Minn. 1906) (same); Harley v. Merrill Brick Co., 48 N.W. 1000 (Iowa 1891) (apportioning loss among tortfeasors who polluted the plaintiff's air); Woodland v. Portneuf-Marsh Valley Irrigation Co., 146 P. 1106 (Idaho 1915) (allowing apportionment among tortfeasors who flooded the plaintiff's land); Lull v. Fox & Wis. Improvement Co., 19 Wis. 112 (1865)(same); see also Gates v. Fleischer, 30 N.W. 674 (Wis. 1886) (finding where the plaintiff was treated by several doctors; in an action against one of them for

Moreover, by the 1930s, apportionment principles were applied when the plaintiff and the defendant caused similar harm, ⁸⁰ when the harm was aggravated by acts of nature, ⁸¹ and when the defendant aggravated the plaintiff's pre-existing harm. ⁸² With this background established, this Article now examines the *Restatement of Torts* and its coverage of the single indivisible injury rule and apportionment.

B. The Restatement of Torts: The Black Letter Rules and Comments

In view of these well developed legal principles, it is surprising that the *Restatement of Torts* contained no sections explicitly addressing the issue of apportionment, except in nuisance cases.⁸³ Instead, the final versions of what became chapter 44, governing "Contributing Tortfeasors," contained three sections that touched on the issue of apportionment. Section 875 became the "general" rule and provided: "Except as stated in § 881 [the nuisance section],

malpractice, the court held that the jury should separate the harm caused by the defendant from the prior or subsequent harm caused by other doctors and by any other cause).

80. For example, loss could be apportioned where the plaintiff and the defendant polluted the plaintiff's water. See Bowman v. Humphrey, 109 N.W. 714 (lowa 1906); Walters v. Prairie Oil & Gas Co., 204 P. 906 (Okla. 1922). Likewise apportionment was made where the plaintiff and the defendant polluted the plaintiff's air. See City of New Albany v. Slider, 52 N.E. 626 (Ind. Ct. App. 1899); Cornell v. City of Cedar Rapids, 81 N.W. 724 (lowa 1900).

81. For example, where the extent to which the plaintiff's property was flooded was increased by the defendant's negligence, the plaintiff bore the loss that he would have suffered even if the defendant had not been negligent. McAdams v. Chicago, R.I. & Pa. Ry., 205 N.W. 310 (Iowa 1925); Sherwood v. St. Louis S.W. Ry., 187 S.W. 260 (Mo. Ct. App. 1916); Rix v. Town of Alamogordo, 77 P.2d 765 (N.M. 1938); Wilson v. Hagins, 295 S.W. 922 (Tex. 1927); Radburn v. Fir Tree Lumber Co., 145 P. 632 (Wash. 1915). For a recent example see *Hahn v. Weber & Sons, Co.*, where the lowered yield of plaintiff's crops was caused by both defendant's negligent spraying and lack of irrigation and drought, 390 N.W.2d 503 (Neb. 1986). The *Hahn* court held:

There were two possible, though independent, causes for the crop damage, both of which might have caused a part of the damage. The burden was on the plaintiff to prove that some or all of his damage was proximately caused by the defendant's negligent spraying. Where the injury is the result of two separate, independent causes, and the defendant is responsible for only one of the causes, the plaintiff must establish that the entire damage would have occurred from the cause for which the defendant is liable or establish the amount of damage directly caused by the defendant's negligence. In this case there was no evidence as to what part of the reduced yield, if any, was due to Banvel if drought also reduced the yield. As the county court stated, any attempt to determine what damage was attributable to vapor drift would be conjectural and speculative.

Id. at 505-06 (citations omitted).

82. Louisville, N.A. & C. Ry. v. Jones, 9 N.E. 476 (Ind. 1886) (apportioning loss where plaintiff's pre-existing disease was aggravated by a derailment of the defendant's train); Nelson v. Twin City Motor Bus Co., 58 N.W.2d 561 (Minn. 1953) (apportioning loss where plaintiff's osteoporosis was aggravated when the plaintiff was caught in the doors of the defendant's bus and was dragged for several feet); Dallas Ry. & Terminal Co. v. Ector, 116 S.W.2d 683 (Tex. Ct. App. 1938) (apportioning loss where plaintiff's kidney condition was aggravated by a collision of the defendant's street cars); Texas Coca-Cola Bottling Co. v. Lovejoy, 138 S.W.2d 254 (Tex. Civ. App. 1940) (apportioning loss where plaintiff's pre-existing condition, including effects of three prior abdominal operations, was aggravated when the plaintiff drank some broken glass from the defendant's bottle).

83. See *infra* notes 94-105 and accompanying text for a discussion of the *Restatements of Torts'* coverage of apportionment in nuisance cases.

each of two or more persons whose tortious conduct is a legal cause of a harm to another is liable to the other for the entire harm."⁸⁴ The only change of substance from the preliminary draft was the removal of the "substantial factor" test of causation in favor of the phrase "legal cause," presumably to conform to the organization of the causation sections in the *Restatement*.⁸⁵ The comments to section 875 clarify that the general rule applies only to situations where the defendant personally committed tortious conduct, thereby excluding cases of vicarious liability.⁸⁶ The comment states that the general rule is "consistent with and an application of" the causation rules set forth in sections 430 to 453, and that those rules imply "that any one of a number of persons whose tortious conduct is a substantial factor in causing a harm is liable therefor in the absence of a superseding cause." Finally, the comment concludes by stating that section 875 also applies to cases involving harm "caused in part by the tortious conduct of another and in part by a natural force." and the property of the causal o

Section 879, entitled "Concurring or Consecutive Independent Acts," explicitly recognizes the single indivisible injury rule: "Except as stated in § 881 [the nuisance section], each of two persons who is independently guilty of tortious conduct which is a substantial factor in causing a harm to another is liable for the entire harm, in the absence of a superseding cause." The comment to this section declares that so long as the tortious act of one party is the legal cause of the injury, it is immaterial that the tortious act of another

^{84.} RESTATEMENT OF TORTS § 875 (1934). The reference to § 881 is the nuisance section discussed *infra* notes 93-104.

^{85.} Section 179, entitled "Contributing Tortfeasors. In General," was added to the preliminary drafts in August of 1938 and provided: "Except as stated in § 182, each of two or more persons whose tortious conduct is a substantial factor in causing a harm is liable for the entire harm." RESTATEMENT OF TORTS § 179 (Preliminary Draft No. 5, 1938) (Final Chapters and Explanatory Notes) [hereinafter *Preliminary Draft No.* 5]. Comment "a" to § 179 provided a brief rationale for this new general rule:

[[]The rule stated in this Section is based upon the impracticability of attempting to apportion a percentage of responsibility to one of several persons whose tortious conduct has united to cause a single harm and upon the unfairness which would result if the injured person were denied the right of suit against each of them for the entire harm.] The same principle operates to allow complete recovery of damages for a harm caused in part by the negligence of another and in part by a natural force.

Id. The role of this new section was to introduce sections 180, 180A, 180B and 180C governing concert of action, vicarious liability, and common duty cases as well as the concurring tortfeasor sections. Because the bracketed material only applies to the latter situation, the drafters presumably deleted the material from the introductory section's comments. For the first time, however, the Restatement began to address the core issues of apportionment and attempted to provide at least some rationale for the rule of liability for single indivisible injury. Additionally, § 179 reveals some appreciation of the nature of the problems in the concurring tortfeasor cases and identifies two of the principal concerns: (1) impracticability of apportionment in some situations, and (2) the problem that plaintiffs face in proving the extent of damages attributable to each of the tortfeasors. The comment also stated that the general rule "applies to a great variety of situations, too numerous to indicate in detail." Id.

^{86.} RESTATEMENT OF TORTS § 875 cmt. a.

^{87.} Id.

^{88.} Id.

^{89.} RESTATEMENT OF TORTS § 879 (1934). Section 879 was § 181 in the preliminary drafts.

contributes to the injury, or if two or more tortfeasors act simultaneously or sequentially, and regardless of the degree of blameworthiness among the tortfeasors. 90 Most importantly, the comment contains this qualification that was included subsequent to the preliminary drafts: 91 "The rule stated in this

90. Id. cmt. a. Despite the importance of the rule, the comment covers only two pages.

91. Section 181 of Preliminary Draft No. 1, entitled "Contributing Tortfeasors," provided that: "Except (as stated in § 182), each of two or more persons whose tortious conduct contributes appreciably to the production of a harm is liable for the entire harm." RESTATEMENT OF TORTS § 181 (Preliminary Draft No. 1, 1938) [hereinafter *Preliminary Draft No. 1*]. The draft reveals that the reference to nuisances was edited out because the statement was redundant given the cross reference to § 182, which was the nuisance section. The proposed comment to § 181 was very brief:

A person whose tortious conduct is otherwise one of the legal causes of an injurious result is not relieved from liability for any portion of the harm by the fact that the tortious act of another responsible person contributes to the result. This is true where both are simultaneously negligent and also where the act of one either occurs or takes harmful effect after that of the other.

Id. § 181 cmt. a. The first illustration included a plaintiff injured by the negligent collision of two vehicles; in the second illustration that same plaintiff is further injured by the negligent medical treatment of his injuries. Id. The plaintiff, it is stated, can recover for all injuries resulting from the collision from either driver and from all three tortfeasors, two drivers and the hospital, for the enhanced injury caused by the hospital. The draft is silent about the possibility of dividing the injuries that resulted from the combined negligence of the drivers and the hospital. In the last illustration the plaintiff is knocked into the street by one negligent driver and run over by a second driver who is the employee of a third person. Id. Here recovery can be had for the damage done by the second driver from any of the three possible defendants. This illustration involves no question of indivisible injuries and is simply an illustration of the rules of proximate causation; because the first driver "caused" no injuries he is liable for placing the plaintiff in a position to be run over by another. Accordingly, the first draft of section 181 was unenlightening as to the difficult issue courts already confronted in cases where conduct of two or more defendants combined to produce an indivisible injury.

By August of 1938, the structure and content of the preliminary draft sections included within the chapter on contributing tortfeasors were expanded. What began as sections 180 to 184 was enlarged to incorporate six new sections, 179 to 189. Section 181 was entitled "Concurring and Consecutive Independent Acts" and set forth the following rule:

Except as stated in § 182, each of two persons who independently is guilty of tortious conduct towards another which is a substantial factor in causing a harm to the other is liable for the entire harm.

Preliminary Draft No. 5, supra note 85, § 181. This represented a change in the black letter rule set forth in the Preliminary Draft No. 1, which required that each tortfeasor's conduct "contribute appreciably" to the harm. The new section 181 emphasized a "substantial factor" test of causation. The comment to this section tracked almost verbatim the comment to the predecessor version section 181. The comment to section 181 in Preliminary Draft No. 5 read:

A person whose tortious conduct is otherwise one of the legal causes of an injurious result is not relieved from liability for the full amount of the harm by the fact that the tortious act of another responsible person contributes to the result nor are the damages against him thereby diminished. This is true where both are simultaneously negligent (see Illustration 1) and also where the act of one either occurs or takes harmful effect after that of the other (see Illustration 2).

Id. § 181 cmt. a. The comment made no mention of the language that had been stricken from the comment to the new general § 179 that referred to the "impracticability" of apportioning damages or the unfairness to plaintiffs of having to prove such an apportionment. See supra note 85. The illustrations to the revised § 181 are essentially those that accompanied the predecessor § 181.

Preliminary Draft No. 9, which was issued on January 17, 1939, made only one change to the black letter rule of "liab[ility] for the entire harm" in previous draft of § 181 by adding the phrase "in the absence of a superseding cause." This addition clarified that negligent conduct subsequent to the initial negligence may not result in liability for the entire harm resulting from both causes if the later negligence (or cause) is superseding. See RESTATEMENT OF TORTS § 5 (Preliminary Draft No. 9, 1939) [hereinafter Preliminary Draft No. 9]. The illustrations and comment were unchanged except for a reference in the comment to the superseding cause proviso included in the black letter; comment "a" added the sentence:

Section does not apply where one of the tortfeasors causes one harm and the other causes another and distinct harm." Thus, according to the comment, the *only* apportionment called for is that based on "distinct" harms. The comments make no reference to when or how such a rule of entire liability is to be applied. The comments only mention "distinct harm" and contain no discussion explaining the application or rationale of the rule. Despite the considerable body of case law authorizing apportionment of similar or single harms where some reasonable basis existed for doing so, the *Restatement* essentially ignores these cases in favor of a flat rule of non-apportionment. Section 879 and the comment mirror more the views of Wigmore and Carpenter than those of Prosser.

Finally, section 881, entitled "Persons Contributing to a Nuisance," covers nuisances and provides:

Where two or more persons, each acting independently, create or maintain a situation which is a tortious invasion of a landowner's interest in the use and enjoyment of land by interfering with his quiet, light, air or flowing water, each is liable only for such proportion of the harm caused to the land or of the loss of enjoyment of it by the owner as his contribution to the harm bears to the total harm.

Thus, section 881 adopts proportionate liability rather than entire liability, as in section 879, for nuisance cases only. The comments also make it clear that the nuisance rule does not depend on whether the fumes, chemicals or other source of invasion commingle or combine with similar sources coming from other actors. Further, the comment carves out an exception for distinct harms, consistent with the comment to section 879. The real objective of section 881 may have been to prevent a tortfeasor from relying on the plaintiff's inability to clearly ascertain the extent of the harm caused by the tortfeasor and thus avoid liability. Therefore, the choice made by Seavey and the advisors may not have been between liability for the entire harm or proportionate liability, but rather between proportionate liability or none at all. By the 1930s, however, few decisions left the plaintiff empty-handed. Most courts followed the rule

As to the liability of a negligent person for harm which results to another from his conduct, where subsequent to this act there is an intervening tortious act of a third person which is also a legal cause of the harm and which may or may not be a superseding cause, see §§ 430, 447, 552, Vol. II.

Id. § 5 cmt. a.

^{92.} RESTATEMENT OF TORTS § 879 cmt. a.

^{93.} The comment also limits its application in the cases of aggravation, where a person causes a harm which is aggravated by another. While each of the two tortfeasors is liable for the harm each causes, joint liability is limited to the aggravation. In such cases, both may be liable for the harm caused by the aggravation, but the second tortfeasor is not liable for the original harm. *Id.*; see also id. § 879 cmt. a, illus.

^{94.} RESTATEMENT OF TORTS § 881.

^{95.} Id. § 881 cmt. a.

^{96.} Id.

^{97.} See, e.g., Slater v. Pacific Am. Oil Co., 300 P. 31 (Cal. 1931); Tucker Oil Co. v. Matthews, 119 S.W.2d 606 (Tex. Ct. App. 1938); see also supra notes 10-19 and accompanying text.

that a plaintiff could recover damages regardless of the difficulty in undertaking the precise calculation of damages. Moreover, a significant body of authority already applied the single indivisible injury rule to nuisance cases. 99

Section 881 created a doctrinal preference for apportionment. By providing for proportionate liability in nuisance cases, the *Restatement*, in essence, *mandated* apportionment of damages despite whatever difficulty courts encountered in making the allocation. The evil the drafters sought to avoid was allowing a tortfeasor to escape liability. This concern explains why Seavey deleted the reference in the comment to the first draft, which stated that plaintiffs must apportion or face a possibility of no recovery. The Reporter

- 98. See generally PROSSER, supra note 11, § 47.
- 99. See cases cited in supra note 11.
- 100. Section 182 of *Preliminary Draft No. 1* entitled "Persons Contributing to a Nuisance," provided for proportionate liability in some situations and entire liability in others:
 - (1) Where two or more persons acting independently create or maintain a situation by which a landowner is tortiously injured in his right to quiet, light, air or flowing water, each is liable only for the proportion of harm thereby caused to the land or to the loss of enjoyment of it by the owner.
 - (2) Except as stated in Subsection (1), each of two persons who, although acting independently, appreciably contribute to the creation of a nuisance thereby causing harm to another is liable for the entire amount of harm as if his act were the sole cause.

Preliminary Draft No. 1, supra note 91, § 182. The proposed comment to subsection (1) clarified that "a physical or chemical union" did not preclude the rule of proportionate liability. This was true even though the union left the plaintiff remediless because of the plaintiff's inability "to satisfy the rule as to certainty with reference to the amount of harm." Additionally, the comment pointed out that the actions of others can increase a particular defendant's liability "as where the pollution of water by one would render the water distasteful but not undrinkable, whereas united with the pollution by another, it makes the water poisonous and thus prevents the profitable use of land through which the stream runs." Id. § 182 cmt. a. The comment comes close to implying that nontortious conduct, when combined with similar conduct of others, results in proportionate liability, contrary to what Professor Harper's 1933 treatise described as entire liability. The two illustrations offered in § 182 involve three defendants who were each held proportionately liable for the plaintiff's injuries. In one illustration, each defendant allows debris from a mine to enter a stream, and, in the other illustration, each defendant causes fumes from a smelter to unite and damage plaintiff's property. In both, proportionate liability is said to apply.

By Preliminary Draft No. 5, Seavey offered three alternatives to the black letter rule in subsection (1) and dropped what had been subsection (2). See Preliminary Draft No. 5, supra note 85, § 179. The three alternatives did not differ substantively from subsection (1) of § 182 in Preliminary Draft No. 1. However, the proposed comment "a" to § 182 changed. First, Seavey stated that § 182 was to be distinguished from cases where two tortfeasors, each of whom commits a different nuisance, produce totally distinct harms, such as one causing cattle to die from polluted water and the other rendering a house untenantable as a result of fumes. Second, Seavey distinguished cases where the effect of the actions of two defendants combine to cause a single event, such as a bridge collapsing into a stream with consequent flooding of plaintiff's land, where each defendant contributing to the collapse would be liable for the entire damage to the land. Third, the comment offered as support for proportionate liability that in the situations to which the rule applied "it is reasonably possible, though frequently difficult, roughly to ascertain the percentage of the total harmful conduct ascribable to each wrongdoer." Id. § 179 cmt. a. Seavey, however, presumably crossed out this last material. Fourth, Seavey deleted the statement respecting the fact that the union of chemicals might make it impossible for a plaintiff to prove his damages. Instead, Seavey offered a statement that the fact that chemicals from different sources united did not render the rule inapplicable because "unity of harm does not prevent recovery." Id. (emphasis added) Finally, Seavey retained the comment that defendant's total liability may be increased by the actions of others.

Preliminary Draft No. 6, of October 22, 1938, adopted one of the alternatives to subsection (1) offered in Draft No. 5. RESTATEMENT OF TORTS § 182 (Preliminary Draft No. 6, 1938) [hereinafter Preliminary Draft No. 6]. The comment retained the language respecting the section's inapplicability to situations of separate

and the ALI wanted to remove that possibility as an option; thus, courts must apportion in nuisance cases. This interpretation also explains the importance of the comment's declaration that the union of the chemicals or materials producing the invasion is of no consequence because proportionate recovery still obtains even if the harm or causes become indivisible at some point. Moreover, the comment which provides that proportionate liability attaches even if one tortfeasor's actions, standing alone, would not produce an actionable invasion, was an important point. Seavey anticipated arguments that defendants might assert to avoid all liability and rejected them.

Further, the illustrations to section 881 provided examples of proportionate liability even in cases as intractable as one involving the combining of fumes. The comments provided *no examples* of zero liability because no such cases were even contemplated. Thus, section 881 flatly rejects any prior decisional law that would have supported no recovery for a plaintiff who could not prove damages caused by each tortfeasor with sufficient exactitude. Section 881 also rejected those few cases that afforded plaintiffs recovery of entire damages from each tortfeasor. No other sections of the *Restatement* considered the problem of apportionment or the limitations or difficulties that the single indivisible injury rule engendered. Not surprisingly, between 1939 and 1965, when the *Restatement (Second) of Torts* was published, the courts continued to expand the occasions for applying the single indivisible injury rule.

Nevertheless, the fact that the illustrations to section 433A of the Restatement (Second) of Torts rely primarily on pre-1938 decisions, not decisions between 1938 and 1964, demonstrates that considerable authority already existed for apportionment in nuisance cases by 1938. 102 More importantly, the majority of non-nuisance cases that were used to support illustrations of apportionment in section 433A were also pre-1938. 103 Therefore, it seems reasonable to infer that by 1938 a considerable body of authority existed supporting apportionment rather than applying the rule of liability for entire damages in both nuisance and non-nuisance cases. Yet, Professor Seavey and the advisors of the first Restatement, for whatever reasons, were reluctant to explicitly provide a black letter rule to account for these cases or to provide any elaboration on the workings of sections 875, 879 and 881, or to offer any rationale for the rules. This reluctance is all the more curious given the bar against contribution among tortfeasors that would

or distinct harms and by two actions causing single events that produce a nuisance. The rationale was not included, but the statements in *Preliminary Draft No. 5* that the unity of sources did not preclude applicability of the rule nor that such a combination might increase a defendant's liability were retained. The illustrations also remained the same. The later drafts contained no surprises. *See Restatement of Torts § 182* (Preliminary Draft No. 7, 1938) [hereinafter *Preliminary Draft No. 7*]; *Preliminary Draft No. 9*, *supra* note 91, § 182.

^{101.} RESTATEMENT OF TORTS § 881 cmt. a, illus. 1-2 (1939).

^{102.} RESTATEMENT (SECOND) OF TORTS § 433A app. IX Reporter's Notes (1965).

^{103.} Id.

preclude defendants who fully compensate plaintiffs from recouping a portion from other responsible tortfeasors. By 1937, only four states had abrogated the bar against contribution for concurrent independent tortfeasors. ¹⁰⁴ Therefore, in nearly all states the most feasible method of distributing a loss among multiple tortfeasors was by applying some principle of apportionment. ¹⁰⁵

C. Developments Between the First and Second Restatements

Between 1939 and 1965, several developments occurred that may have influenced the authors of the *Restatement (Second) of Torts* to incorporate black letter rules to govern apportionment of harm. The volume of accident litigation continued to grow inexorably, including many cases in which the negligence of multiple tortfeasors combined to produce injuries. In these cases, reasons of judicial efficiency may have influenced the courts to simply declare all tortfeasors involved in multiple vehicle collisions jointly liable. ¹⁰⁶ Additionally, in 1939, the National Conference of Commissioners on Uniform State Laws, in conjunction with the ALI, proposed the Uniform Contribution Among Tortfeasors Act. ¹⁰⁷

The distinctions made in the *Restatement of Torts* between nuisance cases and the general rule began to erode during this period. Several leading decisions ¹⁰⁸ adopted the general rule holding each tortfeasor liable for the entire harm and explicitly declaring that each tortfeasor was jointly and severally liable. In 1952, the Texas Supreme Court, in *Landers v. East Texas Salt Water Disposal Co.*, ¹⁰⁹ overruled earlier cases to the contrary and rejected the *Restatement's* rule of section 881. ¹¹⁰ In *Landers*, both defendants, one depositing oil and salt water and the other oil, which entered into plaintiff's lake, were held jointly and severally liable even though the extent of damage caused by each defendant would have been less than the total sustained from both. ¹¹¹ The Texas Supreme Court stated:

^{104.} Duluth, M. & N. Ry. v. McCarthy, 236 N.W. 766 (Minn. 1931); Underwriters at Lloyds v. Smith, 208 N.W. 13 (Minn. 1926); Furbeck v. I. Gevurtz & Son, 143 P. 654 (Or. 1914); Goldman v. Mitchell-Fletcher Co., 141 A. 231 (Pa. 1928); Haines v. Duffy, 240 N.W. 152 (Wis. 1931); Mitchell v. Raymond, 195 N.W. 855 (Wis. 1923); Ellis v. Chicago & N.W. Ry., 167 N.W. 1048 (Wis. 1918).

^{105.} Indeed, Prosser speculates that the judicial effort to apportion wherever reasonable means existed to do so was "due in no small measure in the past to the lack of any rule of contribution if one tortfeasor should be compelled to pay the entire damages." W. PAGE KEETON ET AL., PROSSER AND KEETON ON THE LAW OF TORTS § 52, at 349 (5th ed. 1984).

^{106.} See, e.g., Maddux v. Donaldson, 108 N.W.2d 33 (Mich. 1961).

^{107.} See 12 U.L.A. 57, 59-60 (1975). The initial Act was adopted in ten states, although usually with revisions, and the Revised Act of 1955 also governed in ten states, again with various modifications. Id.

^{108.} Phillips Petroleum Co. v. Hardee, 189 F.2d 205 (5th Cir. 1951) (applying Louisiana law and involving contamination); Landers v. East Tex. Salt Water Disposal Co., 248 S.W.2d 731 (Tex. 1952) (involving water pollution).

^{109. 248} S.W.2d 731.

^{110.} Id.

^{111.} Id.

Where the tortious acts of two or more wrongdoers join to produce an indivisible injury, that is, an injury which from its nature cannot be apportioned with reasonable certainty to the individual wrongdoers, all of the wrongdoers will be held jointly and severally liable for the entire damages and the injured party may proceed to judgment against any one separately or against all in one suit. 112

The court rationalized that unless it created joint liability for all of the plaintiff's damages, the plaintiff would be remediless, because the plaintiff could not demonstrate with sufficient exactitude the amount of damage attributable to each tortfeasor.¹¹³

The courts also began to use language that drew heavily on the authority of Prosser, speaking in terms of "a reasonable basis" for apportionment and whether "practical" means were present on the facts to justify a division of the harm. 114 By 1962, when the ALI drafted portions of the *Restatement (Second) of Torts*, Prosser had emerged as the most influential authority on tort law in America. 115 As the Reporter for the *Restatement (Second) of Torts*, Prosser exerted considerable influence over the proceedings and drafted the language of section 433A to comport with his treatise.

During the intervening twenty five years, courts began to rely more on a principle of burden-shifting. The courts shifted the burden to the defendant to prove how the damages should be apportioned once the plaintiff fulfilled the initial burden of proving that a defendant was a cause-in-fact of the plaintiff's damages. In the *Landers* case, the Texas Supreme Court ruled that burdenshifting was the proper solution to the problem of plaintiff's difficulty in demonstrating the amount of harm attributable to each of multiple tortfeasors.¹¹⁶ Thus, the court stated that its rule of joint and several liability

^{112.} Id. at 734.

^{113.} Id. The Fifth Circuit Court of Appeals reached a similar conclusion in *Phillips Petroleum Co. v. Hardee*. 189 F.2d 205 (5th Cir. 1951) (applying Louisiana law). In *Phillips*, rice farmers sued several oil companies to recover for damage to rice crops caused by oil pollution of irrigation water under circumstances indicating that each company's pollution alone was insufficient to cause the whole damage. The court stated:

[[]W]here persons acting independently are guilty of negligence, and the results of their negligence combine to set up a chain of causation resulting in the complained of damage, these persons, though not acting in concert, are yet joint tort-feasors and, as such, are liable for the damage caused by the conjunction of their separate negligence.

Id. at 211-12; *accord* Williams v. Pelican Natural Gas Co., 175 So. 28 (La. 1937) (involving pollution of stream by oil well operators); Eagen v. Tri-State Oil Co., 183 So. 124 (La. Ct. App. 1938) (involving damaged surface property caused by oil wastes drainage).

^{114.} See, e.g., McAllister v. Pennsylvania R.R., 187 A. 415 (Pa. 1936). In McAllister, the plaintiff, within six months, suffered an injury to each leg, with some combined effect on the back. The doctor who treated the first injury had died. The court held that there is a "reasonable basis of apportionment" when there is "some evidence to sustain the apportionment made, even though, due to the circumstances of the particular case, the proofs do not attain the degree of precision which would make possible an exact dividing line between the injuries." Id. at 417-18. In Loui v. Oakley, the plaintiff was involved in four accidents. 438 P.2d 393 (Haw. 1968). The Loui court held that the jury should be told to make a "rough apportionment" and if that were impossible, "to apportion the damages equally among the various accidents." Id. at 397.

^{115.} See generally American Law Institute, Proceedings 39th Annual Meeting 1962 (1963).

^{116.} Landers v. East Tex. Salt Water Disposal Co., 248 S.W.2d 731 (Tex. 1952).

was tempered by the opportunity for any defendant to reduce its liability by showing the amount of damages caused by its acts alone or the amount that was caused by other defendants. 117

Similarly, a leading Michigan decision, Maddux v. Donaldson, 118 involving a chain collision of several vehicles that injured the plaintiff, identified what it regarded as the core problem:

When we impose upon an injured plaintiff the necessity of proving which impact did which harm in a chain collision situation, what we are actually expressing is a judicial policy that it is better that a plaintiff, injured through no fault of his own, take nothing, than that a tortfeasor pay more than his theoretical share of the damages accruing out of a confused situation which his wrong has helped to create.

The policy issue, of course, permits two answers to the question. The majority in Maddux concluded that the proper resolution of the issue turns on the impossibility of the plaintiff's proving the origin of each injury and the manifest unfairness of leaving the burden of damages on the plaintiff, who alone of all the participants shares no blame. 120 This supported the conclusion that, in the event that the trier of fact decides that it was in fact impossible to ascertain the amount of damages caused by each wrongdoer, then all the wrongdoers are held jointly liable for all of the damages. In support of burdenshifting, the majority cited Dean Wigmore, who asserted that there is a manifest unfairness in "putting on the injured party the impossible burden of proving the specific shares of harm done by each. . . . Such results are simply the law's callous dullness to innocent sufferers. One would think that the obvious meanness of letting wrongdoers go scot free in such cases would cause the courts to think twice and to suspect some fallacy in their rule of law."121

In this same period, the California Supreme Court, in Summers v. Tice, 122 also shifted the burden of proof to the defendant. 123 This case, however, did not involve an apportionment of harm issue, but rather the question of which of two negligent hunters had fired a bullet that struck the plaintiff in the eye. 124 Because the plaintiff could not identify which of the two hunters had fired the offending bullet, the plaintiff could not satisfy the burden of demonstrating that either defendant was the cause-in-fact of his injury. 125 The California Supreme Court rescued the plaintiff, however, by holding both defendants liable for the entire injury and, on the question of shifting the burden of proof, remarked:

^{117.} Id.

^{118. 108} N.W.2d 33 (Mich. 1961). 119. *Id.* at 35.

^{120.} Id. at 36.

^{121.} Id. at 36 (citing Wigmore, supra note 16, at 458-59).

^{122. 199} P.2d 1 (Cal. 1948).

^{123.} Id. at 4.

^{124.} Id. at 2.

^{125.} Id.

When we consider the relative positions of the parties and the results that would flow if plaintiff was required to pin the injury on one of the defendants only, a requirement that the burden of proof . . . be shifted to defendants becomes manifest. . . . [The defendants] brought about a situation where the negligence of one of them injured the plaintiff, hence it should rest with them each to absolve himself if he can. . . . Ordinarily defendants are in a far better position to offer evidence to determine which one caused the injury. \(^{126}

The holding in *Summers* became the basis for one of the burden of proof subsections in section 433B of the *Restatement (Second) of Torts*. 127

All of these cases require the defendant to carry its burden of demonstrating that other tortfeasors contributed to the harm and the extent of the harm each tortfeasor caused. Since defendants in these cases are typically in no better position than the plaintiff to carry that burden, the practical effect is that, the injuries are indivisible and the liability is joint and several so far as the plaintiff is concerned. Most certainly these cases, and others like them, set the stage for the *Restatement (Second) of Torts* to expressly respond to these issues that were developed in the intervening twenty-five years.

D. Restatement (Second) of Torts on Apportionment

By Council Draft No. 10, which was considered by the ALI in October, 1961, a few modest changes were made. The language of the proposed section 433A is unchanged, and Prosser comments that the Advisers had approved the section, with the exception of Professor James who does not like subsection (2), as stating too broad a general rule. The only changes in Council Draft No. 10 to the comments of section 433A are the addition of a new comment f, titled Innocent Causes, and a new comment g, titled "Contributory Negligence."

Section 433B, "Potential Harm From Other Cause," is also retained. Here Prosser acknowledges that the section "was the subject of a long discussion among the Advisers." Moreover, while all of them agreed with subsection (1) "as sound in principle," a majority preferred that it be placed in the chapter

^{126.} Id. at 4.

^{127.} See id.; RESTATEMENT (SECOND) OF TORTS § 433B(3) (1965).

^{128.} RESTATEMENT (SECOND) OF TORTS § 433A (Council Draft No. 10, 1961) [hereinafter *Council Draft No. 10*]. Council Draft No. 10 was submitted to the Council of the ALI for discussion at the Council Meeting on December 14-16, 1961.

^{129.} Id. § 433A, at 18.

^{130.} Id. Subsection (2) provided: "Where there are distinct harms, or there is a reasonable basis for the division of a single harm, the liability may be apportioned among two or more causes." Id.

^{131.} Id. § 433A, at 22.

^{132.} Id. § 433A, at 23. The draft also adds a comment "h," entitled "Burden of Proof," which simply cross references § 433C. Id. § 433A, at 24.

^{133.} Id. § 433A, at 29.

on damages.¹³⁴ As to subsection (2) of section 433B, he noted that the Advisers agreed with the principle, but in light of the absence of any authority to support it, they recommended a caveat be included.¹³⁵

Section 433C, "Burden of Proof," remained substantially unchanged. Section 433C(1) added the words "tortious conduct" to the general rule that plaintiff bears the burden of proving that a defendant's tortious conduct has caused the harm to the plaintiff. 136 As to subsection (2) of 433C, the language was broadened from "the tortious conduct of the defendant" to "the tortious conduct of two or more actors," that combines to bring about a harm which can be apportioned, where each "such actor" bears the burden of apportionment. 137 However, Council Draft No. 10 added a caveat: "The Institute expresses no opinion as to whether the rule stated in Subsection (2) may not apply where the tortious conduct of a defendant combines with an innocent cause to bring about harm which is capable of apportionment."138 Prosser, in his Note to the Council, stated that the advisors, by a vote of six to four, approved subsection (2), "but there was almost unanimous refusal to extend it to the situation covered by the caveat." Prosser states that he "would be quite willing to extend the rule stated in Subsection (2)" to the innocent cause situation, but the Advisers, because of meager case support, prefer the question to be submitted to the Council for determination. ¹⁴⁰ As further support for the burden-shifting rule of subsection (2), Prosser adds a discussion of Maddux v. Donaldson, 141 which was not included in Preliminary Draft No. 7.

In comment "c" to subsection (2) of proposed section 433C(2), Prosser adds what proves to be a controversial statement which reads:

In order for the rule stated in Subsection (2) to apply, it must first be proved that the tortious conduct of the defendant has combined with that of others to bring about harm of a character which is capable of apportionment. On this issue the plaintiff has the burden of proof. 142

^{134.} Subsection (1) is the rule of Dillon v. Twin State Gas & Electric, 163 A. 111 (N.H. 1932) and the article by Peaslee, *supra* note 14. Prosser objected to placing the proposed § 433B(1) in the damages chapter, but because the section was ultimately deleted, he lost the debate. Indeed, it never resurfaces in the damages chapter either.

^{135.} Subsection (2) of proposed \S 433B(2) dealt with the situation where a second actor preempts a potential harm caused by another tortfeasor, as where one who is poisoned by A is shot by B before the poison can act. The subsection calls for B to be liable for whatever remained of plaintiff's interest and for depriving plaintiff of a cause of action against A. Council Draft No. 10, supra note 127, \S 433B, at 30.

^{136.} Id. § 433C(1), at 33.

^{137.} Id. § 433C(2), at 33.

^{138.} Id.

^{139.} Id.

^{140.} Id. § 433B, at 35A (supporting burden shifting).

^{141. 108} N.W.2d 33 (Mich. 1961). As to subsection (3) of proposed § 433C(3), the discussion is the same as in *Preliminary Draft No. 7. See Council Draft No. 10, supra* note 128, § 433C, at 36. He added, however, two further sources of academic support for the rule. *Id.* (citing JOHN H. WIGMORE, SELECT CASES OF THE LAW OF TORTS, § 153 (1912); Charles E. Carpenter, *Workable Rules for Determining Proximate Cause* (pt. 2), 20 CAL. L. REV. 396, 401 (1932)).

^{142.} Council Draft No. 10, supra note 128, § 433C(2), at 40.

Prior to the Annual Meeting of the Institute in May of 1962, a *Tentative Draft No.* 7 was circulated for use at the meeting that included the sections under discussion. Section 433A had been reorganized, but not substantively altered. Section 433B was revised by dropping in its entirety what had been 433B(2). Section 433C contained no changes but added a caveat respecting subsection (3) as to whether it should apply to cases where liability was based on strict liability. In addition, the comment quoted above for subsection (2) to the effect that plaintiff had the burden of proving that the character of the harm was capable of apportionment was designated as comment "e." 146

At the 1962 Annual Meeting, Prosser made a lengthy presentation describing the purposes of proposed sections 433A and 433B. As to section 433A, Prosser explained why it was desirable to have a few general principles on apportionment rather than to divide the issue between nuisance and nonnuisance cases as the first *Restatement* had done. Prosser then explained that Professor James is quite hostile to this Section—rather bitterly opposed to it, in fact—not because he disputes the case law, . . . but because he objects to it in principle, believing that the plaintiff should be permitted to recover his full damages for any harm which he has suffered at his election against any contributing tortfeasor including distinct harm cases. Professor Joiner believed that subsections (1) and (2) were inconsistent, another member observed that the subsections were in the wrong order, and finally, still another member recommended a more positive statement of the principle, which in fact was ultimately used in the final section 433A.

^{143.} RESTATEMENT (SECOND) OF TORTS § 433A (Tentative Draft No. 7, 1962) [hereinafter *Tentative Draft No. 7*] (submitted by the Council to the members for discussion at the Annual Meeting, April 16, 1962). Section 433A provided:

^{§ 433}A. Apportionment of Harm to Causes

Damages for any harm which is single and indivisible cannot be apportioned among two or more causes.

⁽²⁾ Damages for harm are to be apportioned among two or more causes where

⁽a) There are distinct harms; or

⁽b) There is a reasonable basis for the division of a single harm according to the contribution of each cause.

Id

^{144.} In *Tentative Draft No. 7*, a comment noted that what had been covered in subsection (2) involved situations where there were no decisions, so the Institute expressed no opinion. *Id.* § 433B cmt. d, at 67.

^{145.} Id. § 433C cmt. i, at 74.

^{146.} Id. § 433C cmt. e, at 70-71.

^{147.} AMERICAN LAW INSTITUTE, *supra* note 114, at 276-83. He commented that the black letter for § 433A was "not very satisfactory and is more in the nature of a vague, general guide than anything else." *Id.* at 279.

^{148.} Id. at 280. Prosser states that Professor James "regards this as necessary as a matter of desirable social policy for the protection of injured plaintiffs." Obviously, the Institute did not agree with James' position.

^{149.} Id. at 280-81.

^{150.} Id. at 282.

^{151.} Id. at 287. Mr. Israels suggested:

Damages for harm cannot be apportioned among two or more cases (sic) unless:

⁽a) There are distinct harms; or

The only other comments as to section 433A consisted of a concern that where one tortfeasor is insolvent, the rule allowing apportionment should not be applied. Prosser commented that Professor James had expressed a similar concern, and that the argument was "perfectly valid." These concerns may have been the impetus for the inclusion of a separate comment to the final form of section 433A that explicitly considers the problem of insolvency. Finally, Prosser, in response to a question, stated that "[t]here will be very few personal injury cases, if any, to which this section will apply." At this Meeting there was also a discussion of section 433B, the section on "Potential Harm," with a number of mostly adverse comments. As noted above, the entire section was deleted from the final Chapter 16. Section 433C was never considered at the 1962 Annual Meeting.

One year later, at the 1963 Annual Meeting, the only section relevant to this Article that was considered was section 433C. For that meeting, a *Tentative Draft No. 9* was submitted by the Council to the members that included that section. As presented, the *Tentative Draft No. 9* contained no changes to the language of section 433C from *Tentative Draft No. 7*. 158

At the 1963 meeting, the discussion of section 433C centered around the comment which had been added that required the plaintiff to bear the burden of showing that the "tortious conduct of the defendant has combined with that of others to bring about harm of a character which is capable of apportionment." Professors Keeton and Prosser had a debate respecting the propriety of such a provision, with Keeton arguing that it was "unrealistic" to place a burden on the plaintiff that was contrary to his interests. That debate, which ultimately resulted in the deletion of the comment, is described below. 160

In 1965, the ALI officially published Volume Two of the *Restatement (Second) of Torts*. Included among the new sections in Volume Two were sections 402A, 433A, and 433B. Sections 433A and 433B were not

⁽b) There is a reasonable basis for determining the contribution of each cause to a single harm.
Id.

^{152.} Id. at 282.

^{153.} See RESTATEMENT (SECOND) OF TORTS § 433A cmt. h (1965) (considering insolvency as a reason for not apportioning otherwise apportionable harms). See *infra* notes 183-86 & 255-63 and accompanying text for a criticism of § 433A cmt. h.

^{154.} AMERICAN LAW INSTITUTE, *supra* note 115, at 283. As developed *infra*, this statement and a comment to the same effect are unfortunate because focusing on the actual harm resulting and not on the contributing causes creates inconsistency. *See infra* notes 246-54 and accompanying text.

^{155.} AMERICAN LAW INSTITUTE, supra note 115, at 288-93.

^{156.} AMERICAN LAW INSTITUTE, PROCEEDINGS 40TH ANNUAL MEETING 1963, at 286-302 (1964).

^{157.} RESTATEMENT (SECOND) OF TORTS § 433C (Tentative Draft No. 9, 1963) [hereinafter *Tentative Draft No. 9*]. The draft was submitted by the Council to the members for discussion at the 40th Annual Meeting, May 22-25, 1963. *Id.* § 433C, at 8.

^{158.} *Id.* However, a note to the Institute explained that the Council, by a vote of 12 to 10, recommended omission of the caveat relating to strict liability. *Id.*

^{159.} Id. § 433C cmt. 3, at 9.

^{160.} See infra notes 223-29 and accompanying text.

^{161.} RESTATEMENT (SECOND) OF TORTS §§ 402A, 433A, 433B (1965). Section 402A governs liability

especially controversial in the ALI deliberations. Section 433A covers apportionment of harms, and section 433B deals with burden of proof issues as to apportionment.

1. Section 433A and Comments

Section 433A was included in the *Restatement (Second)* to expand the rules formerly stated in sections 875, 879, and 881 of the first *Restatement*. ¹⁶³ Thus, section 433A was designed to supplant the older sections from Volume 4 as those sections pertained to apportionment among "Contributing Tortfeasors," although those sections were retained with modifications. ¹⁶⁴ The title of

for products and produced one of the most dramatic changes in tort law in this century. Section 402A is beyond the scope of this Article.

- 162. This statement is based on the time dedicated to §§ 433A and 433B at the ALI Annual Proceedings in 1962 and 1963. See *supra* notes 147-65 and accompanying text for a discussion of §§ 433A and 433B at the ALI Annual Proceedings in 1962 and 1963.
- 163. RESTATEMENT (SECOND) OF TORTS § 433A app. Reporter's Notes, at 138 (1964) [hereinafter Reporter's Notes]. In May of 1958, William Prosser, the Reporter, submitted a preliminary draft of portions of Chapter 16, entitled Preliminary Draft (Second) No. 7, covering "The Causal Relation Necessary to Responsibility for Negligence." RESTATEMENT (SECOND) OF TORTS § 433A (Preliminary Draft No. 7, 1958) [hereinafter Preliminary Draft (Second) No. 7]. A "Note to Advisers" stated that preliminary draft § 433A was intended to move forward the rules from the first Restatement in §§ 875 and 879 "as to the liability of joint tortfeasors" and § 881 governing nuisances. Id. § 433A, at 15 (Note to Advisers). Section 433A of the Preliminary Draft (Second) No. 7 provided:
 - § 433A. Apportionment of Harm to Causes
 - Liability for harm which is single and indivisible cannot be apportioned among two or more causes.
 - (2) Where there are distinct harms, or there is a reasonable basis for the division of a single harm, the liability may be apportioned among two or more causes.

Prosser offered several reasons for placing apportionment under the causation heading. First, he pointed out that "the possibility of apportionment is not limited to joint tortfeasors, as would appear from §§ 879 and 881." *Id.* As support for that statement Prosser cited various cases, most of which were also cited in his treatise. *See generally* WILLIAM L. PROSSER, HANDBOOK ON THE LAW OF TORTS § 45, at 224-33 (2d ed. 1955) [hereinafter PROSSER, 2d ed.]. The cases all permitted apportionment among multiple tortfeasors and involved trespassing cattle (*Id.* § 45, at 227 n.73), dogs killing sheep (*Id.* § 45, at 227 n.74), workers' health impaired by successive employers, damage to library books from escaping steam, repetitious defamatory statements (*Id.* § 45, at 228 n.80), and alienation of affections (*Id.* § 45, at 228 n.81).

Second, Prosser pointed out that "the possibility of apportionment is not limited to joint tortfeasors, as would appear from §§ 879 and 881." See supra note 137. As support for that proposition Prosser offers authority for apportionment between a defendant's tortious conduct and an act of God, which Prosser describes as a situation "where an unforeseeable cloudburst combines with defendant's dam or embankment to cause a flood." Preliminary Draft (Second) No. 7, supra, § 433A, at 16. Prosser also offers other propositions, including when damages that would have resulted from defendant's reasonable conduct and were attributable to his negligence, apportionment of flood damage between defendant and plaintiff, each of whom caused a part of the condition, and apportionment of a disability where plaintiff had a pre-existing condition. Id. § 433A, at 17. Prosser also refers to cases of last clear chance. Id. Here too, the cases cited are drawn directly from his treatises. See PROSSER, 2d ed., supra, § 45, at 228 n.82 (cloudburst and defendant's dam); id. § 45, at 228-29 n.84 (defendant's reasonable conduct and excess attributable to his negligence); WILLIAM L. PROSSER, HANDBOOK ON THE LAW OF TORTS § 42, at 253 n.4 (3d ed. 1964) [hereinafter PROSSER, 3d ed.] (last clear chance cases and pre-existing condition cases). Finally, Prosser concludes the note by referring to the "familiar damages rule as to avoidable consequences always involves similar apportionment." Preliminary Draft (Second) No. 7, supra, § 433A, at 17.

164. Section 875 of the Restatement (Second) of Torts, entitled "Contributing Tortfeasors--General Rule,"

section 433A, "Apportionment of Harm to Causes," indicates that apportionment is to be based on "causes," as opposed to apportionment on some other basis, such as fault. Further, section 433A is located within that group of *Restatement (Second)* sections that considers legal cause, ¹⁶⁵ clearly indicating that apportionment is one of many causation-related issues. Section 433A reads:

(1) Damages for harm are to be apportioned among two or more causes where

(a) there are distinct harms, or

- (b) there is a reasonable basis for determining the contribution of each cause to a single harm.
- (2) Damages for any other harm cannot be apportioned among two or more causes. 166

The intended scope for these apportionment principles is very broad. The comments describe an immense range of coverage. Apportionment principles are applied to tortious and nontortious conduct, to parties joined as defendants and those not joined, to both plaintiffs and defendants, to pre-existing conditions, and to forces of nature. ¹⁶⁷ In other words, Section 433A was made

was changed to provide:

Each of two or more persons whose tortious conduct is a legal cause of a single and indivisible harm to the injured party is subject to liability to the injured party for the entire harm.

RESTATEMENT (SECOND) OF TORTS § 875 (1977). In § 875 of the first *Restatement*, tortious conduct was "a legal cause of a harm to another," whereas the *Restatement (Second)* calls for liability when the tortious conduct was the "legal cause of a single and indivisible harm." Thus, the change makes a more accurate description of the principle by clarifying that the harm must be "indivisible."

Section 879, entitled "Concurring or Consecutive Independent Acts," was also preserved with one major change and one minor change to provide:

If the tortious conduct of each of two or more persons is a legal cause of harm that *cannot be apportioned*, each is subject to liability for the entire harm, irrespective of whether their conduct is concurring or consecutive.

Id. § 879 (emphasis added). The earlier section's reference to "substantial factor" was replaced by reference to the "legal cause" of a harm, a broader term. Also, the section indicated that its rule of liability for the entire harm applied only in cases of harm that could not be apportioned. That inclusion in turn triggered the apportionment rules of sections 433A and B.

Section 881, entitled "Distinct or Divisible Harms," however, was completely modified. Section 881 of the first *Restatement* created a rule of proportionate liability for nuisance cases. *See supra* notes 93-100 and accompanying text. The *Restatement (Second) of Torts* § 881 eliminated any special treatment for nuisance situations and instead merely restates the general principle of § 433A:

If two or more persons, acting independently, tortiously cause distinct harms or a single harm for which there is a reasonable basis for division according to the contribution of each, each is subject to liability only for the portion of the total harm that he has himself caused.

RESTATEMENT (SECOND) OF TORTS § 881 (1977). Moreover, comment "a" to section 881 makes explicit that "[t]his Section is an application of § 433A." *Id.* § 881 cmt. a. Therefore, the new structure of the *Restatement (Second)* renders sections 433A and 433B the source of the governing rules for apportionment in *all* cases.

165. For example, section 431 is entitled "What Constitutes Legal Cause," section 432 is entitled "Negligent Conduct as a Necessary Antecedent to Harm" and section 433 is entitled "Considerations Important in Determining Whether Negligent Conduct is a Substantial Factor in Producing Harm."

166. RESTATEMENT (SECOND) OF TORTS § 433A.

167. Id. § 433A cmt. a. The draft comments to Preliminary Draft No. 7 and the later tentative drafts did not undergo major revisions. Comment "a" remained intact from this draft to the final published version. Comment "a," in its final published version, states:

They apply where each of the causes in question consists of the tortious conduct of a person; and it

to be applied to all forces that can be regarded as contributing causes of the harm and divisible harms, as set forth in subsection (1)(b). Regarding distinct harms as set forth in subsection (1)(a), the Restatement (Second) offers the example of two defendants shooting a plaintiff simultaneously in the leg and in the arm. 168 This example affords a "logical, reasonable and practical" basis for apportionment of the harm, even as to pain and suffering and medical expenses.¹⁶⁹ While there may be some difficulty as to apportioning such expenses, nevertheless it is "possible to make a rough estimate which will fairly apportion such" damages. 170 Thus, as to distinct harms, mere coincidence in time is not sufficient to render the harms a single harm or to convert the conduct of two defendants into a single tort. 171

Comment "c," entitled "Successive Injuries," observes that harm may be "severable in point of time." The comment posits that if two defendants pollute a stream over successive time periods, apportionment is appropriate because "it is clear that each has caused a separate amount of harm, limited in time, and that neither has any responsibility for the harm caused by the other."173 While this example may not be as "clear" as the Restatement (Second) suggests, it acknowledges that nuisance-type cases are subject to the application of the same apportionment principles as other kinds of tort cases. 174

Comment "d," entitled "Divisible Harm," elaborates on harms that are not as "clearly marked out as severable into distinct parts," but that are nevertheless amenable to "division upon a reasonable and rational basis." Comment "d," in effect, incorporates section 881 of the first Restatement by relying on nuisance examples to illustrate divisible harms. The official illustrations to

is immaterial whether all or any of such persons are joined as defendants in the particular action. The rules stated apply also where one or more of the contributing causes is an innocent one, as where the negligence of a defendant combines with the innocent conduct of another person, or with the operation of a force of nature, or with a pre-existing condition which the defendant has not caused, to bring about the harm to the plaintiff. The rules stated apply also where one of the causes in question is the conduct of the plaintiff himself, whether it be negligent or innocent.

Id.; see also id. § 433A cmt. e.

^{168.} *Id.* § 433A cmt. b. 169. *Id.*

^{170.} Id. 171. Id.

^{172.} Id. § 433A cmt. c.

^{173.} Id. For a recent example of temporal and quantitative apportionment in a CERCLA action, see In re Bell Petroleum Servs., 3 F.3d 889 (5th Cir. 1993); see also infra notes 487-99 and accompanying text.

^{174.} RESTATEMENT (SECOND) OF TORTS § 433A cmt. c (1965). This comment also points out that in some cases of successive injuries an earlier tortfeasor may be liable for damages for both the initial and the subsequent injury under principles of proximate or legal cause. An example of this principle is illustrated in the case of a tortfeasor who injures a person, who later receives medical treatment for these injuries. Id.

^{175.} Id. § 433A cmt. d. Another nuisance example demonstrates the point: Such apportionment is commonly made in cases of private nuisance, where the pollution of a stream, flooding, smoke, dust or noise, from different sources, has interfered with plaintiff's use or enjoyment of his land. Thus, where two or more factories independently pollute a stream, the interference with the plaintiff's use of the water may be treated as divisible in terms of degree and may be apportioned among the owners of factories on the basis of evidence of the respective quantities of pollution discharged into the stream. Id.

Comment "d" all apply proportionate liability, just like the former section 881, to two nuisance situations and one involving trespassing dogs. The illustrations demonstrate the continued vitality of the proportional liability rules transplanted from section 881 of the first *Restatement*. The illustrations also demonstrate that the apportionment process focuses not on the actual harm itself but on the contributing causes and authorizes apportionment on the basis of a comparison between the relative strengths of those causes. These principles of comparative causation are especially relevant in the toxic torts area, where measures of toxicity can be applied to determine apportionment. 178

Comment "e," entitled "Innocent Causes," authorizes apportionment between tortious and innocent causes, such as where a defendant's negligent maintenance of a dam combines with an unprecedented rainfall to flood plaintiff's property and some flooding would have resulted from the rainfall alone.¹⁷⁹ In addition, partially innocent non-tortious conduct of a defendant can be used to apportion harms from the harms tortiously caused by the defendant. Similarly, pre-existing conditions can be apportioned from the incremental harm attributable to the defendant's tortious conduct. In the illustrations of the *Restatement (Second)*, the touchstone of apportionment is reliance on the contribution that causes the ultimate harm and *not* to some actual division of the harm itself.¹⁸⁰

Comment "f" considers "Contributory Negligence" and provides that a plaintiff's own fault may be a source of apportionment. Comment "f" also refers to the avoidable consequences doctrine which is, after all, simply an example of post-tort conduct by the plaintiff that increases the extent of the harm suffered. This comment was written at a time when the comparative

^{176.} Preliminary Draft (Second) No. 7 comment "e" contained six illustrations, only two of which are incorporated into the final comment "d" because a new comment was created for innocent causes. See Preliminary Draft (Second) No. 7, supra note 163, § 433A cmt. 3, illus. 8, 9; RESTATEMENT (SECOND) OF TORTS § 433A cmt. d, illus. 4, 5 (1965); see also RESTATEMENT (SECOND) OF TORTS § 433A cmt. e (entitled "Innocent Causes").

^{177.} In illustration 3, A owns three dogs and B owns two dogs that kill 10 of C's sheep. A would be liable for six sheep, and B for four sheep if the dogs are relatively comparable in size and ferocity. Illustration 4, involving escaping water from irrigation ditches, allocates liability on the basis of the volume of water from each of three negligent sources. And in illustration 5, liability to a riparian owner from oil negligently discharged by two factories is proportional to the volume discharged by each. RESTATEMENT (SECOND) OF TORTS § 433A, cmt. d, illus. 3-5.

^{178.} See Gerald W. Boston, Toxic Apportionment: A Causation and Risk Contribution Model, 25 ENVTL. L. 549 (1995).

^{179.} RESTATEMENT (SECOND) OF TORTS § 433A cmt. e.

^{180.} The illustrations for comment "e" draw on two nuisance examples. In the first example, rainfall (an innocent cause) is assigned 20% of the harm, and two negligent releases of water the other 80% (50% and 30%). In the second example, the defendant's non-negligently caused emissions are assigned one-third, and its negligently caused emissions two-thirds of the interference with the plaintiff's use of his dwelling. The last illustration in comment "e" involves a pre-existing arthritic condition that is aggravated by an injury negligently inflicted by defendant, where the total disability is allocated one-half to the initial condition and one-half to the defendant. *Id.* § 433A cmt. e, illus. 6-8.

^{181.} Id. § 433A cmt. f.

^{182.} Id.

negligence movement had just begun and only a few states authorized juries to apportion liability on the basis of percentages of negligence assigned to the parties. Nevertheless, in cases of avoidable consequences or aggravation of injury, today's dominance of comparative fault does not preclude apportionment on the basis of causation.

After describing the availability of apportionment in fairly broad terms, the *Restatement (Second)* injects comment "h" to provide an override for "exceptional cases" when "injustice to the plaintiff may result from an application of the rule." Comment "h" describes "injustice" to mean a tortfeasor's insolvency or death, which would preclude the plaintiff's full recovery if each defendant were responsible only for its proportionate share of the total liability. In other words, the comment authorizes joint and several liability to trump apportionment whenever the "innocent plaintiff" must otherwise absorb a share of the loss attributable to an insolvent or unavailable tortfeasor. Moreover, comment "h" concludes with the admonition that nothing in section 433A or the comments "is intended to say that the court may not, in a case where justice requires it, refuse to apply the rule [authorizing apportionment of divisible harms]." Is a comment of divisible harms.]

Finally, in comment "i," which applies to subsection (2), non-divisible harms, the *Restatement (Second)* declares that "[c]ertain kinds of harm, by their very nature, are normally incapable of any logical, reasonable or practical division." Citing examples such as death, a broken leg, destruction of a house by fire, and the sinking of a barge, the comment observes that "[b]y far the greater number of personal injuries, and of harms to tangible property, are thus normally single and indivisible." Comment "i" then gives the example of the twin fires case in which either cause, an innocent fire and a tortious fire, would have been sufficient to bring about the destruction of a building. 189

^{183.} Id. § 433A cmt. h.

^{184.} Id

^{185.} *Id.*; see also id. § 433A cmt. i. The comments do not use the term "joint and several liability" but state that a solvent defendant is liable for the entire harm. *Id.* § 875 (referring to holding a defendant liable for the entire harm when the harm is "single and indivisible"); id. § 879 (holding a defendant liable for the entire harm when the "legal cause of harm that cannot be apportioned").

^{186.} Id. § 433A cmt. h. This Article challenges the propriety of these powerful statements from comment "h" because the statements represent a departure from sound tort principles. The fact that a tortfeasor is insolvent does not convert an otherwise apportionable harm into an indivisible injury.

^{187.} Id. § 433A cmt. i.

^{188.} Id.

^{189.} *Id.* It is here in comment "i" that the single indivisible injury rule is unequivocally declared: Where two or more causes combine to produce such a single result, incapable of division on any logical or reasonable basis, and each is a substantial factor in bringing about the harm, the courts have refused to make an arbitrary apportionment for its own sake, and each of the causes is charged with responsibility for the entire harm. The typical case is that of two negligently driven vehicles which collide and kill a bystander. The two drivers have not acted in concert, and the duties which they owe are separate and distinct, and may not be identical in character or scope; but the entire liability of each rests upon the obvious fact that each has caused the single result, and that no rational basis for division can be found.

Comment "i" also states that the principle of single indivisible injury may apply when one cause is innocent, i.e, a wind that carries defendant's negligently caused fire, as well as when two or more causes are culpable. The comment covers both "sufficient" causes, the twin fires example, and "necessary" or "essential" causes, the example of two vehicles colliding. Further, simultaneous conduct of two or more tortfeasors is not necessary. Thus, comment "i" incorporates the principles that were embodied in section 875 and section 879 of the first *Restatement*. Comment "i" to section 433A contains six illustrations. 190

2. Section 433B and Comments

Section 433B of the *Restatement (Second)* addresses the entirely new subject of the burden of proof required in apportionment of harm cases. Section 433B reads:

 Except as stated in Subsections (2) and (3), the burden of proof that the tortious conduct of the defendant has caused the harm to the plaintiff is upon the plaintiff.

(2) Where the tortious conduct of two or more actors has combined to bring about harm to the plaintiff, and one or more of the actors seeks to limit his liability on the ground that the harm is capable of apportionment among them, the burden of proof as to the apportionment is upon each such actor.

(3) Where the conduct of two or more actors is tortious, and it is proved that harm has been caused to the plaintiff by only one of them, but there is uncertainty as to which one has caused it, the burden is upon each such actor to prove that he has not caused the harm. ¹⁹¹

The first *Restatement* had no comparable provision that covered this subject. ¹⁹² In the twenty-five years between the first and second *Restatements*, several courts, including the California, Texas, and Michigan supreme courts, issued

Id.

^{190.} Illustration 12 involves two negligently driven automobiles that collide and injure a bystander. *Id.* § 433A cmt. i, illus. 12. Illustration 13 concerns the combined negligence of a street car driver, a crossing guard and a passenger that results in injury to another passenger. *Id.* § 433A cmt. i, illus. 13. In both illustrations, the plaintiff can recover full damages from any of the tortfeasors. These illustrations represent the classic examples of the single indivisible injury rule.

Illustrations 14 and 15 involve two tortfeasors who negligently discharge oil into a stream that ignites and destroys plaintiff's barn or plaintiff's cattle consume the water from the contaminated spring and die as a result. Id. § 433A cmt. i, illus. 14, 15. In both illustrations, the plaintiff can recover full damages from either source. Id. These illustrations are more problematic. For example, it is not obvious why the damage from the fire or the deceased cattle cannot be apportioned on the basis of the quantity of oil each discharged as was done in the earlier illustrations because it is the quantity deposited by each source that contributes to the harm. Illustration 16 involves two hunters who negligently shot the plaintiff, one in the arm, the other in the leg, and the plaintiff died from the combined effect of both bullet wounds. Id. § 433A cmt. i, illus. 16. Illustration 17 is a contributorily negligent driver who is barred from recovering anything from another negligent driver. Id. § 433A cmt. i, illus. 17.

^{191.} Id. § 433B.

^{192.} Restatement (Second) Preliminary Draft No. 7 first included a section on burden of proof in apportionment of harm cases.

opinions that held that once a plaintiff satisfied her initial causation burden, the plaintiff was entitled to entire damages from each tortfeasor. These same cases also established that a tortfeasor which wanted to limit its liability had the burden of demonstrating the precise portion of the harm for which it was responsible. ¹⁹³

Section 433B(1) states the obvious proposition that a plaintiff must prove that the tortious conduct of one or more defendants caused the harm suffered. According to comment "a" to section 433B, 194 causation, in this context, incorporates the substantial factor test of section 432, which requires that both necessary causes, or in the case of two or more forces, sufficient causes, be substantial factors. Unfortunately, the illustrations and discussions of subsection (1) do not make reference to multiple cause situations. 196

Subsection (2) is of particular relevance because it authorizes shifting the burden of proof from the plaintiff to the defendant. (197) Comment "c" describes

193. See infra note 197 and accompanying text.

- 194. RESTATEMENT (SECOND) OF TORTS § 433B cmt. a. The proposed comments to *Preliminary Draft* (Second) No. 7 § 433C(1) are substantially the same as the comment "a" the ALI ultimately adopted as § 433B(1), except for one sentence that was deleted. *Preliminary Draft* (Second) No. 7 comment "a" stated: "Where the conclusion [as to causation] is not one within the common knowledge of laymen, expert testimony may provide a sufficient basis for it, but in the absence of such testimony it may not be drawn in favor of the plaintiff." *Preliminary Draft* (Second) No. 7, supra note 163, § 433C(1) cmt. a. The comment addressed the general burden of proof that the plaintiff bears as to causation.
 - 195. RESTATEMENT (SECOND) OF TORTS § 432 (1965) reads:
 - § 432 Negligent Conduct as Necessary Antecedent of Harm
 - Except as stated in Subsection (2), the actor's negligent conduct is not a substantial factor in bringing about harm to another if the harm would have been sustained even if the actor had not been negligent.
 - (2) If two forces are actively operating, one because of the actor's negligence, the other not because of any misconduct on his part, and each of itself is sufficient to bring about harm to another, the actor's negligence may be found to be a substantial factor in bringing it about.
- 196. Instead, comments "a" and "b" to subsection (1) address what burden of proof the plaintiff bears. The comments specifically endorse the preponderance of the evidence standard, rather than the reasonable doubt standard. The comments further clarify that plaintiff is under no obligation to totally eliminate alternative causes. Comment "b" and the illustrations point out that in cases where it is impossible to know precisely what would have happened if the defendant had not acted negligently, an inference of causation may be drawn if "as a matter of ordinary experience, a particular act or omission might be expected to produce a particular result, and if that result has in fact followed." RESTATEMENT (SECOND) OF TORTS § 433B cmt. b. Comment "b" to subsection (1) of Preliminary Draft (Second) No. 7 § 433C also allowed an inference of causation to be drawn despite any uncertainty as to the causal nexus.
- 197. In *Preliminary Draft (Second) No. 7*, Prosser wrote an extensive note in which he explained that Subsection 2 attempted to restate a rule that had developed in California. *Preliminary Draft (Second) No. 7*, *supra* note 163, § 433C. Prosser contrasted the older cases, which had placed the burden on the plaintiff to prove apportionment and in turn necessitated "a great deal of leeway" and "very sketchy proof" in order to afford some basis for apportionment, with later California cases that placed the burden on the defendant. *Id.* Prosser noted that under those older cases there were occasions "in which the plaintiff was unable to offer any evidence to sustain his burden of proof, and was denied recovery against all of the tortfeasors, although it was clear that each had caused some damage to him." *Id.* Prosser found this result "indefensible." *Id.* Further, Prosser stated that the Texas and California cases that reached those outcomes were "no longer the law." *Id.* Prosser then set forth the California and Texas cases, including *Landers v. East Texas Salt Water Disposal Co.*, 248 S.W.2d 731 (Tex. 1952), which was one of the major developments between the first and second *Restatements* that held that defendant bears the burden of proof on apportionment once plaintiff shows that defendant was a cause of the harm. See *supra* notes 116-17 and accompanying text for a discussion of

subsection (2) as an exception to the general rule that the plaintiff bears the burden of proof on causation. 198 It is doubtful, however, if this was ever actually intended. Multiple tortious actors do not, ipso facto, eliminate the plaintiff's threshold burden of establishing causation. Rather, what Comment "c" means is that a plaintiff must show that each negligent actor was a substantial factor in bringing about the entire harm. Once the plaintiff satisfies this initial showing, the burden shifts to the defendant to show how the harm may be apportioned. Thus, after a plaintiff demonstrates that the tortious conduct of two defendants "combined" to bring about a harm, the burden shifts to the defendant seeking to limit liability or avoid joint and several liability to show what share of the harm flowed from the defendant's misconduct. As a result, in cases where the loss is capable of apportionment (those involving distinct or divisible harms under section 433A), the defendant rather than the plaintiff, bears the burden of proving the basis for apportionment so long as the plaintiff has proven that each defendant's tortious conduct is a cause of the entire harm. Section 433B(1) and (2), however, need to clarify precisely what the plaintiff must prove before the burden-shifting rule is triggered.

Comment "c" may suggest that this rule applies only when there are multiple tortious actors. Whether this rule applies to the single plaintiff/ single defendant case remains unclear. Since Comment "d" refers to the "entirely innocent plaintiff," it is likely that the burden-shifting principle of the rule was intended to apply to multiple-defendant cases only. Comment "c" also provides that the burden-shifting rule applies to all classes of tort cases, giving as a "typical example" the pollution of a stream by a number of factories, in which the harm is capable of apportionment. ²⁰¹

Comment "d" offers a fairness rationale for burden-shifting which argues that it is unfair to permit culpable tortfeasors to escape liability on the fortuity that multiple tortfeasors contributed to the harm, and the nature of the harm

Landers. For California cases, Prosser cited Finnegan v. Royal Realty Co., 218 P.2d 17 (Cal. 1950) (holding the defendant, who owned premises, liable for all injuries in a fire because he could not apportion what injuries attributable to its failure to provide exit doors); Corsey v. Purex Corp., 207 P.2d 616 (Cal. Ct. App. 1949) (burden of proof on bottle maker to show what portion of damage from explosion of bottle was attributable to excessive pressure in the bottle); City of Oakland v. Pacific Gas & Electric Co., 118 P.2d 328 (Cal. Ct. App. 1941) (defendant responsible for steam that damaged library books held liable for all the damage because it could not apportion the damage caused by steam of others).

^{198.} RESTATEMENT (SECOND) OF TORTS § 433B cmt. c.

^{199.} Preliminary Draft (Second) No. 7 § 433C(2) comment "c" contained a sentence that was later deleted: "The rule stated applies equally where a part of the apportionable harm is attributable to an innocent cause, as where water escaping from defendant's land combines with natural rainfall to flood the plaintiff's land." Preliminary Draft (Second) No. 7, supra note 163, § 433C(2) cmt. c. It is unclear whether the deletion of the sentence was intended to suggest that the burden-shifting rule only applies to cases involving multiple tortfeasors.

^{200.} For example, these subsections might apply to a case where the tortious conduct of one actor combined with a natural force or innocent source and caused the harm to the plaintiff.

^{201.} RESTATEMENT (SECOND) OF TORTS § 433B cmt. c.

necessitates the introduction of apportionment-related evidence.²⁰² Comment "d" concludes that "as between the proved tortfeasor who has clearly caused some harm, and the entirely innocent plaintiff, any hardship due to lack of evidence as to the extent of the harm caused should fall upon the former."²⁰³ This rationale adheres to the view Dean Wigmore expressed in his article of 1922.²⁰⁴

The illustrations to section 433B provide further clarification. Illustration 6 to subsection (2) involves a steam company that negligently delayed shutting off the steam after another defendant negligently broke a pipe, allowing steam to escape, thereby damaging books in a public library.²⁰⁵ The steam company is liable for the entire damages unless it can carry the burden of showing the extent of damages caused by its negligence. 206 Illustration 7 draws on the same nuisance example which appears in section 433A. Three defendants negligently allowed water to escape from irrigation ditches, damaging plaintiff's land.²⁰⁷ As in illustration 6, each defendant must prove the damages attributable to its own negligence to avoid joint liability for all the damage. 208 This same illustration was used in section 433A to demonstrate a harm that would be subject to apportionment on a reasonable basis, such as the quantity of water from each source.²⁰⁹ Taking the two illustrations together, it is clear that while apportionment is appropriate as a theoretical matter, the defendant must offer the evidence on the quantity of water its negligence contributed to the flood as well as at least some evidence on the total amount of water that inundated plaintiff's land.

The last illustration involves two negligently driven cars that collide, injuring a passenger's shoulder. After this accident, yet another car crashes into the pile, further injuring the plaintiff's shoulder. As a result of one or both of these injuries, the shoulder becomes paralyzed.²¹⁰ The second negligent

^{202.} Id. § 433B cmt. d.

^{203.} *Id.* Comment "d" underwent minor changes from its predecessor, *Preliminary Draft (Second) No.* 7 comment "c," that read:

The reason for the exceptional rule placing the burden of proof as to apportionment upon the defendant is the injustice of allowing a proved wrongdoer who has in fact caused harm to the plaintiff to escape liability merely because the harm which he has inflicted has combined with similar harm from other causes, and the nature of the harm inflicted has made it necessary that evidence be produced before it can be apportioned. In such a case the defendant may justly be required to assume the burden of producing that evidence, or if he is unable to do so, of bearing the full responsibility.

Compare Preliminary Draft (Second) No. 7, supra note 163, § 433C(2) cmt. c with RESTATEMENT (SECOND) OF TORTS § 433B(2) cmt. d.

^{204.} See supra notes 16-23 and accompanying text.

^{205.} RESTATEMENT (SECOND) OF TORTS § 433B cmt. d, illus. 6.

^{206.} Id.

^{207.} Id. § 433B cmt. d, illus. 7.

^{208.} Id.

^{209.} See supra notes 176-80 and accompanying text.

^{210.} RESTATEMENT (SECOND) OF TORTS § 433B cmt. d, illus. 8 (1965).

driver bears the burden of proving that the injury he was responsible for did not cause the paralysis. ²¹¹

Comment "e" to section 433B addresses the case where many actors contribute a de minimis amount to the total harm and where applying the burden-shifting rule would cause "disproportionate hardship to defendants." Comment "e" gives the example of one hundred factories each causing a small but incalculable amount of pollution to a stream in which application of burden-shifting would render such a small contributor potentially liable for the entire harm. The comment, however, notes that "[s]uch cases have not arisen, possibly because in such cases some evidence limiting the liability always has been in fact available." With the ushering in of environmental litigation, however, such cases are now widespread, and courts are struggling with rationales and rules for apportioning liability, especially cases under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). 215

The reasons behind the adoption of the burden shifting rule of section 433B(2) are not entirely clear. While several courts adopted the rule, ²¹⁶ a clear majority response never developed. ²¹⁷ Moreover, Prosser, beginning with the 1941 edition of his treatise and continuing to the 1964 edition, expressed unambiguously that the proof problems identified by some commentators and courts were "overstated." Prosser believed this because the demands for proof had been "relaxed" and "no very exact evidence will be required, and that general evidence as to the proportion in which causes contributed to the result will be sufficient to support a verdict." In the 1964 edition, as he had in the earlier editions, Prosser acknowledged the following contrary views:

There has remained, however, enough in the way of real difficulty experienced, and possible injustice feared, to lead several writers to urge that in any case where two or more defendants are shown to have been negligent, and to have caused each some damage, and only the extent as to each is in question, the burden of proof should be shifted to the defendants, and each should be held liable to the extent that he cannot produce evidence to limit his liability. The justification for this rests upon the fact that a choice must be made, as to where

^{211.} According to the Reporter's Notes, RESTATEMENT (SECOND) OF TORTS app. § 433B (1964), this illustration is based on Maddux v. Donaldson, 108 N.W.2d 33, 37 n.14 (Mich. 1961), discussed *infra* notes 410-21 and accompanying text. The Michigan Supreme Court held the driver of the last vehicle in a chain collision liable for all the plaintiff's damages after the jury found that it could not apportion the damages between the successive collisions. *Maddux*, 108 N.W.2d at 38.

^{212.} RESTATEMENT (SECOND) OF TORTS § 433B cmt. e.

^{213.} Id.

^{214.} Id.

^{215. 42} U.S.C. §§ 9601-75 (1988); see *infra* notes 448-90 and accompanying text for a discussion of CERCLA cases.

^{216.} See infra notes 379-91 and accompanying text.

^{217.} PROSSER, supra note 11, § 42, at 254 (identifying contrary authority).

^{218.} PROSSER 3d ed., supra note 163, § 42, at 253.

the loss due to failure of proof shall fall, between an entirely innocent plaintiff and defendants who are clearly proved to have been at fault, and to have done him harm. A few courts have accepted this position, and have placed the burden of proof as to apportionment upon the defendants in such cases, as for example where there are chain automobile collisions, and there is doubt as to the injuries inflicted by each driver. ²¹⁹

Section 433B(2) reflects the arguments advanced by "several writers," including Wigmore²²⁰ and Carpenter.²²¹ There was little debate, however, over the content of section 433B during the ALI proceedings. The only notable exchange occurred between Professors Keeton and Prosser in which Keeton objected to a draft comment to section 433A that would have placed the burden on the plaintiff to show that the character of the harm permitted apportionment.²²² Keeton argued that it would be "unrealistic" to expect the plaintiff to carry that burden, at least in multiple tortfeasor situations, because "by doing so he would limit his [recovery] against each of the defendants to the apportioned amount."²²³ Instead, Keeton argued that it is in the defendants' interest to prove apportionment since apportionment limits the defendants' liability.

Keeton further argued that the plaintiff need only prove that each defendant's conduct was a contributing cause in order to impose joint and several liability upon the defendant. Prosser responded that plaintiffs also have to show the "nature and character" of the harm, and based on that evidence, the court decides if the harm is capable of apportionment. Keeton responded with a nuisance case where cattle die from drinking polluted water where the plaintiff could not offer apportionment evidence, but defendants could offer such evidence by showing their contribution to the pollution of the stream. Keeton then offered a case of successive automobile collisions where the plaintiff will prefer to prove his total injuries, and each defendant may offer proof that the injuries can be apportioned. Prosser responded:

Now, you take the case where the plaintiff offers evidence that each defendant has contributed to some injury, but doesn't state what the injury is. Does anybody suppose he has sustained his burden of proof? Doesn't he have to make out that he was injured by these two defendants, and in doing that does he

^{219.} Id. § 42, at 254.

^{220.} See Wigmore, supra note 16.

^{221.} See Carpenter, supra note 23.

^{222.} Proceedings of the ALI Fortieth Annual Meeting, 1963, at 291-301.

^{223.} Id. at 291.

^{224.} Id. at 291-92.

^{225.} Id. at 292.

^{226.} At this point in the exchange, Prosser offered that if a house burned down from oil floating on the stream, no apportionment was possible, nor was it in a case where the pollution destroys the fertility of the land. *Id.* at 293. As to this latter case, Keeton said he understood § 433A to allow apportionment, but Prosser said, "Certainly section 433A doesn't say anything like that, and wasn't intended to." *Id.*

^{227.} Id. at 294.

not have to show the character of his injury, after which the court decides whether it is capable of apportionment or not?²²⁸

Keeton refused to concede the point and continued to argue that it is "unrealistic" to place the burden on "somebody who would always try not to meet it." Prosser said that he would attempt to clarify the issue, which he did by deleting the comment. Thus, although having previously discounted the proof problems facing plaintiffs, Prosser seemed to yield to a "realistic" argument that plaintiffs ought not to have to bear a burden which conflicted with their own interests.

Section 433B(3) incorporates the principle of the 1948 California Supreme Court case *Summers v. Tice*, ²³⁰ authorizing a shifting of the burden of proof once the plaintiff established that one of two or more tortious actors had injured the plaintiff. ²³¹ Thus, if the plaintiff establishes that both defendants were negligent and that the harm had been caused by one of the defendants, the burden was on each defendant to prove that he was not the cause of the harm. ²³² Comment "f" offers the same fairness rationale as contained in 433B(2); "the injustice of permitting proved wrongdoers . . . to escape liability merely because the nature of their conduct and the resulting harm has made it difficult or impossible to prove which of them has caused the harm."

^{228.} Id.

^{229.} Id. at 295.

^{230. 199} P.2d 1 (Cal. 1948).

^{231.} In Restatement (Second) Preliminary Draft No. 7, Prosser described subsection (3) of section 433C as "another California innovation," which "carries the principle of Subsection (2) to its logical conclusion of apportionment of the damages on the basis of all and none." Preliminary Draft (Second) No. 7, supra note 163, § 433C. While noting that where "liability is in the alternative," some older cases put the burden on the plaintiff, especially in cases of lost goods handled by successive bailees, in those cases there was no proof that each was negligent. Id. Prosser relies on a chain collision case, Cummings v. Kendall, 107 P.2d 282 (Cal. Dist. Ct. App. 1940). In Cummings, two automobiles, negligently driven by A and B, collided. Almost immediately after this accident, a car negligently driven by C piled into the wreck. Somewhere in the process the plaintiff, a passenger in A's car, was injured. Defendant C claimed that all of the plaintiffs injuries had occurred in the first collision and that he had not caused any of them. The court held that "[t]he appellants, wrongdoers, carry the burden of showing that no injuries resulted from their wrong and their task is to unravel the casuistries. In arguing the impossibility of doing this they concede their failure." Id. at 287. Accordingly, the court held C liable for the entire damage. These cases are not unlike Maddux v. Donaldson, 108 N.W.2d 33 (Mich. 1961), discussed infra notes 410-21 and accompanying text.

^{232.} In fact, several other decisions also supported the rule. See Cummings, 107 P.2d 282 (chain collision case); Micelli v. Hirsch, 83 N.E.2d 240 (Ohio App. 1948) (applying the presumption of continuing life when successive vehicles run over the plaintiff and he dies); see also Council Draft No. 10, supra note 128, § 433A, at 36-37.

^{233.} RESTATEMENT (SECOND) OF TORTS § 433B(3) cmt. f (1965). Comment "f" is essentially identical to comment "d" of *Preliminary Draft (Second) No.* 7 § 433C(3). *Compare Preliminary Draft (Second) No.* 7, *supra* note 163, § 433C(3) cmt. d *with* RESTATEMENT (SECOND) OF TORTS § 433B(3) cmt. f. Comment "d" in *Preliminary Draft (Second) No.* 7 contained a sentence that stated: "It is immaterial whether all of such actors are joined as defendants in the particular action, or whether one alone is sued." *Preliminary Draft (Second) No.* 7, *supra* note 163, § 433C(3) cmt. d. That sentence was subsequently deleted and in its place Prosser wrote comment "h," which in essence states that in the reported cases all the defendants had been joined. *See* RESTATEMENT (SECOND) OF TORTS § 433B(3) cmt. h. In addition, comment "g" explains that plaintiff bears the burden of proving that each defendant did act tortiously and that one of the defendants actually caused the harm. *Id.* § 433B(3) cmt. g.

Comment "h" explains that all of the cases supporting this rule involved simultaneously tortious conduct, and conduct of "substantially the same character," so that the risks created by each defendant also were similar. Three illustrations are offered. The first illustration is based on *Summers v. Tice* and involves two hunters who negligently fired in plaintiff's direction. In the second illustration, one of three parties dented a piano, and the rule did not apply since there was no showing that each defendant acted negligently. The third illustration is important because it involves facts to which section 433B(2) could also apply. B negligently struck A's automobile, and then, moments later, C also negligently struck A's automobile. In one of the collisions, A sustains an injury, but is unable to determine whether B or C was the cause. The *Restatement (Second)* calls for each defendant to exculpate himself or face joint liability for the injury.

These facts are almost indistinguishable from the chain collision cases considered under section 433B(2), where the harm is indivisible as a result of successive impacts. The only difference appears to be that under section 433B(2), the plaintiff contends that each caused some harm, and in section 433B(3) the plaintiff contends that only one caused all the harm. The facts of the individual cases, however, may render these situations indistinguishable when the plaintiff is unable to determine if each defendant caused some harm or all harm. Technically, section 433B(3) does not implicate the single indivisible injury rule, but in reality it may.

3. Commendations and Criticisms of the Restatement (Second) of Torts

Before making particular observations about the content of the *Restatements*, one general observation is paramount. The influence of Prosser is simply overwhelming.²³⁹ The language of the black letter rule of section 433A and the language, organization, examples and illustrations of the comments are drawn from Prosser's treatise. If Prosser were not the author of both, charges of plagiarism would certainly have surfaced. Phrases, sentences, and even whole paragraphs are taken almost verbatim from the apportionment section of the treatise and incorporated into section 433A.²⁴⁰ No impropriety is being

^{234.} The comment recognizes that cases might arise where not all actors could be joined as defendants, or the conduct was over an extended time period, or the risks created were dissimilar; as to these cases, "no attempt is made to deal with such problems." RESTATEMENT (SECOND) OF TORTS § 433B(3) cmt. h.

^{235.} Id. § 433B(3) cmt. h, illus. 9.

^{236.} Id. § 433B(3) cmt. h, illus. 10.

^{237.} Id. § 433B(3) cmt. h, illus. 11.

^{238.} Id.

^{239.} See G. EDWARD WHITE, TORT LAW IN AMERICA, 139-179 (1980). White's title to Chapter 5 is "William Prosser, Consensus Thought and the Nature of Tort Law, 1945-1970," which bespeaks the dominant position Prosser occupied in that period.

^{240.} In Prosser's 1941 edition, section 47 in the chapter on Proximate Cause was entitled "Apportionment of Damages." Following an introduction, section 47 contained subheadings of "Concerted

suggested, only the fact that Prosser's viewpoint on apportionment is reflected in the *Restatement (Second)*. Of course, Prosser did not write the judicial opinions that support the illustrations and constitute the body of authority that the black letter rule and comments purportedly reflect. Beginning with the first edition of his treatise in 1941, however, Prosser had a profound influence on the development of tort law between the publication of the first and second *Restatements*. Prosser's statements in his treatise respecting what the law "was" on a particular issue had a certain self-fulfillment because courts often quoted or cited Prosser's declarations on apportionment, thus further enhancing the authority of the treatise. Section 433B, however, does not bear his imprint, or at least does not reflect his preference.²⁴¹

a. Commendations

The Restatement (Second) represents a vast advancement over the first Restatement. The Restatement (Second) offers a set of intelligible standards for undertaking the apportionment of harms. Whereas the first Restatement offered no guidance whatsoever regarding the apportionment of harms and referred only to "distinct harms" in a comment to section 879, the Restatement (Second)'s entirely new section 433A provided standards that courts could and did use to perform the difficult and important task of apportioning harms among multiple tortfeasors.

The location of section 433A is significant. Instead of placing the topic of apportionment in the "Contributing Tortfeasors" chapter, as was done in the first Restatement, Prosser placed section 433A in the causation section of the Restatement (Second), where the section logically belongs. The emphasis and beginning point of apportionment is causation and harm is apportioned according to "causes." The plaintiff's threshold burden is to prove that the defendant's tortious conduct was a legal cause of the harm that is subject to potential apportionment. Only after the plaintiff clears the causation threshold can apportionment be considered; joint or entire liability is applicable only if apportionment proves unavailing. Thus, the analytical sequence is: (1) causation, (2) apportionability, and (3) entire/joint liability. The first Restatement, by locating apportionment in the "Contributing Tortfeasor"

Action," "Vicarious Liability," "Common Duty," "Single Indivisible Result," "Damage of the Same Kind Capable of Apportionment," "Successive Injuries," "Potential Damage" and "Acts Innocent in Themselves Which Together Cause Damage." In section 109 he considered "Joint Torts," which contained a subsection on "Entire Liability."

In the 1955 second edition, apportionment became section 45, but was still included as part of the causation chapter and the subsections remained the same. But section 46 became Joint Torts, thus juxta positioning the two topics. By the third edition in 1964, published contemporaneously with the *Restatement (Second) of Torts*, volumes 1 and 2, "Apportionment of Damages" became section 42, again with identical subsections; Joint Tortfeasors became an entire chapter following apportionment, and section 44, Joinder of Defendants, contains a subsection on "Entire Liability."

^{241.} See supra notes 191-229 and accompanying text.

chapter, put the emphasis on the end point and impliedly reversed the analysis. The *Restatement (Second)* 's placement of apportionment among the causation sections also reflects the manner in which Prosser organized his treatise.

The comments and illustrations also were a vast improvement over the first *Restatement*. The comments and illustration in the *Restatement (Second)* go beyond the obvious cases of a passenger injured when two vehicles collided and attempt to flesh out some of the more difficult and troublesome problems that can arise from multiple sources of tortious conduct or multiple causes that contribute to a potentially single harm.

Finally, section 433A, unifying the nuisance and non-nuisance cases under a single controlling principle, improved the first *Restatement's* unsatisfactory attempt to have one general rule in section 879 and a separate proportionality rule for nuisances in section 881. The new section 433A covers the situations that often arose in nuisance cases by authorizing apportionment based on the *contributions* from multiple sources to the harm, thereby recognizing the cumulative nature of the harm in many nuisance cases. Further, the comments and illustrations provide numerous examples of apportionment in nuisance situations. By articulating one general principle—a reasonable basis for apportionment—and judicious use of illustrations and comments, the *Restatement (Second)* was able to treat all tort cases in one section. Therefore, whether the harm represented cumulative effects, as in some nuisance cases, or single moment all or nothing events, as in some collisions, the same principles could be applied. These principles embodied in a single section contributed to the unity and harmony of the law.²⁴²

b. Criticisms and Problems with Section 433A

(i) The Tension Between Harms and Causes

This brief survey of the *Restatement (Second)* 's principles for apportioning harm reveals several problems. First, while the black letter rules of section 433A appear to permit apportionment in a significant number of cases, some of the comments suggest otherwise. This tension is created because at times the *Restatement (Second)* emphasizes the *harm*, and at other times, the *Restatement (Second)* emphasizes the *contributing causes*. For example, comment "d" provides that pollution of streams by multiple actors can be apportioned on a volumetric basis by measuring the quantity of contaminants from each source, thus focusing on the sources of the harm.²⁴³ In contrast, the polluted water—the actual harm—is not amenable to division, although the

^{242.} See White, supra note 239, at 177 (describing Prosser's contributions to tort law, emphasizing that "he classified and simplified doctrine; he buttressed his classifications with compendious footnotes, which, if examined, revealed his classifications to be far more preliminary than they seemed").

^{243.} RESTATEMENT (SECOND) OF TORTS § 433A cmt. d (1965).

forces that brought it about can be reasonably measured and compared. Therefore, the black letter rule that refers to the "contribution" of each cause and the polluted stream example in comment "d" apply the same basic principle. Later, however, comment "i" declares that damage to real property is indivisible, which is precisely what occurs in many nuisance, trespass, and abnormally dangerous activity cases. This inconsistency arises because the *Restatement (Second)* 's comments at some points consider only the resultant harm itself, as when the comments state that injury to real property is indivisible, and at other points the comments are willing to examine the forces responsible for the harm.

In addition, comment "i" states that death is the quintessential indivisible harm—and indeed it is—but in deaths attributable to toxic causes, as when a plaintiff dies from lung cancer brought about by the combined effects of smoking and asbestos exposure, each of the contributing causes can be compared and the harm apportioned on that basis. At least one recent decision has done precisely that by upholding the jury's apportionment of lung cancer. 246 Comment "i" also offers the example of property destroyed by twin fires as being indivisible, and therefore not subject to apportionment.²⁴⁷ Again, if the sources rather than the charred debris are examined, then division on a reasonable and practical basis may be feasible. Indeed, why is injury to real property from two sources of pollution regarded as capable of apportionment, but injury to real property from two fires not so capable? If injury to real property were truly indivisible, then the cause of injury makes no difference. The difference in outcomes is partially explained by the fact that the Restatement (Second) is at some points talking about causes and sources and at other points about resultant harms.248

The declaration in comment "i" states that "by far the greater number of personal injuries, and of harms to tangible property, are thus normally single and indivisible." That statement follows specific examples of death, a broken leg, "any single wound," the sinking of a barge, and destruction by fire. This statement regrettably prejudges the analysis. Many single injuries

^{244.} Id.

^{245.} Id. § 433A cmt. i.

^{246.} For a discussion of this case, see *infra* notes 264-74 and accompanying text. *See also* Dafler v. Raymark Indus., 611 A.2d 136 (N.J. Super. Ct. App. Div. 1992) (affirming apportionment between smoking and asbestos), *aff* d, 622 A.2d 1305 (N.J. 1993); *but see* Martin v. Owens-Corning Fiberglas Corp., 528 A.2d 947, 948 (Pa. 1987) (reversing instruction allowing apportionment between smoking and asbestos exposure).

^{247.} RESTATEMENT (SECOND) OF TORTS § 433A cmt. i.

^{248.} One plausible distinction between the case of pollution and the case of fire-damaged property is that the nature of the injuries are different: the pollution represents a cumulative injury, whereas the burned property is an all or nothing, single moment event. Further, in nuisance cases each cause is partial, whereas in the fire case each cause is sufficient. More elaboration in the comments on the role of the causal relationship would have been useful. See supra notes 37-82 and accompanying text.

^{249.} RESTATEMENT (SECOND) OF TORTS § 433A cmt. i.

^{250.} Id.

can be apportioned because the causes that contributed to the injuries are amenable to some rational comparison that permits an apportionment of the resultant harm, regardless of the singleness of the harm itself. The black letter rule of section 433A would authorize apportionment in such cases, but the statements in comment "i" undercut the rule.

(ii) Need for Elaboration on Causal Relationships

A second problem is the absence of elaboration on the role of the causal relationship between the tortious conduct and the harm. At least five distinct causal relationships can arise: (1) necessary causes; (2) sufficient causes; (3) partial causes; (4) successive causes; and (5) non-tortious causes.²⁵¹ Prosser seemingly believed that the Restatement (Second)'s incorporation of legal cause was sufficiently broad and flexible to cover all of these situations. Nevertheless, some further explanation would have proven useful. Comment "i," where indivisible harms are described, refers to both sufficient and necessary causes as giving rise to nonapportionable harms, using the twin fires example for sufficient causes and two vehicles colliding as an example of necessary or essential causes.²⁵² The apportionment examples of trespassing cattle and flooding property are illustrations of partial causes, although not expressly labeled as such in the comments. 253 Comment "c," is devoted exclusively to successive cause cases.²⁵⁴ The only category of causal relationships the Restatement (Second) does not consider, therefore, is nontortious causes which standing alone are not tortious, but result in injury when combined with other similar conduct. While judicial decisions implicating this last causal relationship are infrequent, they are likely to become more common with the increase in toxic-tort cases from multiple sources.

(iii) Inappropriateness of the Insolvency Override of Apportionment

A third problem with the *Restatement (Second)* is the authorization in comment "h" for an override of apportionment whenever one of the tortfeasors is insolvent or in cases "where justice requires it." These reasons are not compelling enough to justify ignoring the general black letter rule. Under comment "h," a court is permitted to ignore the legal and factual conclusion that harm is divisible on the basis of causes because of the financial status of the parties. Thus, comment "h" applies joint and several liability in situations

^{251.} See supra notes 37-82 and accompanying text.

^{252.} RESTATEMENT (SECOND) OF TORTS § 433A cmt. i.

^{253.} Id. § 433A cmt. d, illus. 3-4.

^{254.} Id. § 433A cmt. c.

^{255.} Id. § 433A cmt. h.

where the harm is divisible. If the harm is apportionable on a reasonable basis, then the fact finder has concluded that a defendant did not cause all of the harm but rather only a portion of it. Returning again to the sequence of analysis, causation and apportionment precede joint liability, not the reverse.

Moreover, in every tort case, the plaintiff faces the risk that the defendant may be insolvent, uninsured, underinsured, absent from the jurisdiction, or otherwise not amenable to suit. In a single-defendant case, an insolvent defendant translates into no recovery for the plaintiff. In multiple-defendant cases, however, plaintiffs will always have much better odds of satisfying at least a portion of the judgment. No reason exists, however, to dispense with apportionment, if it is otherwise called for, because one of the multiple tortfeasors is unable to satisfy its portion of the judgment. If an insolvent defendant were the only tortfeasor, then the plaintiff would have recovered nothing. The plaintiff should only recover damages for harm apportioned to those with sufficient resources not for harm from other sources as well. In addition, of course, a plaintiff has an interest in demonstrating that solvent defendants are responsible for most of the harm.

Rational reasons support a conclusion that joint and several liability should be applied when a harm and its causes are indivisible and cannot be apportioned on any basis.²⁵⁶ It stretches credibility, however, to declare that even when apportionment *is* appropriate, apportionment should be barred because one of the defendants is impecunious or subject to some immunity. Where harm can reasonably be apportioned but is not for reasons of "injustice," then some defendants will be liable for an amount that bears no relationship to their degree of responsibility.²⁵⁷

^{256.} Sections 875 and 879 also bear on this point:

^{§ 875.} Contributing Tortfeasors-General Rule

Each of two or more persons whose tortious conduct is a legal cause of a single and indivisible harm to the injured party is subject to liability to the injured party for the entire harm.

^{§ 879.} Concurring or Consecutive Independent Acts

If the tortious conduct of each of two or more persons is a legal cause of harm that cannot be apportioned, each is subject to liability for the entire harm, irrespective of whether their conduct is concurring or consecutive.

RESTATEMENT (SECOND) OF TORTS §§ 875, 879 (1977). These sections call for joint and several liability when the harm "cannot be apportioned" (§ 879) or the harm is "single and indivisible" (§ 875). This differs from comment h to section 433A, which assumes the harm and its causes are capable of apportionment. RESTATEMENT (SECOND) OF TORTS § 433A cmt. h.

^{257.} Kenneth S. Abraham, *Individual Action and Collective Responsibility: The Dilemma of Mass Tort Reform*, 73 VA. L. REV. 845, 862 (1987). Professor Abraham states:

Debate about whether the incentive effects created by joint and several liability rules are superior to approaches that decline to impose such forms of collective responsibility is unresolved. Arguably, the more collective responsibility a given rule entails—on its face or because of the collectivizing effects of liability insurance—the less optimal is its effect on the safety incentives of those to whom it applies. Free-riding will confound these incentives, because the cost of failing to optimize safety will be collectively, rather than individually, imposed. Because most enterprises subject to joint and several liability will not receive sufficient benefit to warrant optimal investment, they will underinvest in safety if others can capture some of that benefit.

Id. at 863 (footnotes omitted).

Moreover, imposing joint and several liability in such situations may result in either overdeterrence or underdeterrence when a tortfeasor's compensation to the plaintiff is disproportionate to its contribution to the harm. Kenneth Abraham noted that "because each defendant bears the risk of the others' insolvencies, it may have to pay both its own non-causal share and a portion of the shares of codefendants." This excessive liability will not result in optimum safety expenditures. A defendant who invests in safety and knows that it may have to pay for the failure of others to invest in safety will have an incentive to invest less for such purposes. Richard Epstein also makes this point in criticizing the effect of joint and several liability in CERCLA cases.²⁵⁹

At the other extreme, "deep-pocket" defendants who anticipate liability for insolvent or immune parties, will be encouraged to overinvest in safety in an amount which exceeds the losses which its tortious conduct alone would have caused. This does not mean that joint and several liability should be rejected in all cases, but where apportionment is appropriate, it ought not be jettisoned solely because of the insolvency of one tortfeasor or any similar reason that may deny the plaintiff one hundred percent of damages. ²⁶⁰

These multiple-defendant tort cases are analogous to market-share liability cases, in which courts craft their own version of market-share to permit proportionate liability only.²⁶¹ Those courts, such as the California Supreme

^{258.} Id. at 862.

^{259.} Richard A. Epstein, Two Fallacies in the Law of Joint Torts, 73 GEO. L.J. 1377, 1385-86 (1985); see also William M. Landes & Richard A. Posner, Joint and Multiple Tortfeasors: An Economic Analysis, 9 J. LEGAL STUD. 517, 543 (1980). Landes and Posner offer this example of an inefficient outcome in which strict liability applies:

There are ten polluters of a stream, each of whom imposes costs of \$1 million through his pollution. Five could avoid polluting at a cost of \$600,000 each, the other five at a cost of \$1.4 million each. Under a negligence standard the first five will have incentives to avoid polluting and society will be wealthier by \$2 million. Under strict liability, with each polluter jointly liable for the total \$10 million in pollution costs, the five polluters who can avoid pollution at a cost of \$600,000 a piece will not do so, since each will still have an expected liability of \$500,000 (assuming either a no-contribution rule with each equally likely to be sued or a contribution rule in which damages are divided by the number of defendants).

ld.

^{260.} Professors Mario Rizzo and Frank Arnold state the point convincingly:

Until now, we have implicitly assumed that all causally relevant defendants are present in the suit and that each is capable of satisfying the apportioned judgment. If, on the other hand, a tortfeasor either is not joined in the action or is judgment-proof, on whom should the burden of his causal contribution fall?

Causal apportionment demands that the burden rest on the plaintiff. If A and B jointly cause harm to C, and A's contribution is 70 percent while B's is 30 per cent, C is entitled to collect only 70 per cent of the damages from A. C's inability to gain full redress from B is irrelevant to the question of A's responsibility to C, because the limit of a tortfeasor's responsibility to his victim is defined by his causal contribution.

Mario J. Rizzo & Frank S. Arnold, Causal Apportionment in the Law of Torts: An Economic Theory, 80 COLUM. L. REV. 1399, 1422 (1980).

^{261.} See Brown v. Abbott Lab., Inc., 751 P.2d 470, 487 (Cal. 1988) (holding that liability is several, not joint); Sindell v. Abbott Lab., 607 P.2d 924, 937 (Cal.), cert. denied, 449 U.S. 912 (1980); Conley v. Boyle Drug Co., 570 So.2d 275, 286 (Fla. 1990) (applying several liability); Hymowitz v. Eli Lilly & Co., 539 N.E.2d 1069, 1078 (N.Y. 1984) (applying several liability), cert. denied, 493 U.S. 944 (1989). In

Court in *Brown v. Abbott Laboratories, Inc.*, ²⁶² were concerned that if the underlying theory is based on the probability of actual causation, absent or insolvent tortfeasors must diminish a plaintiff's recovery, lest remaining defendants end up paying more in judgments than what their tortious conduct actually caused. ²⁶³ Thus, motivated by a concern for fairness to defendants, some courts refuse to apply joint and several liability in market share cases because it inevitably produces disproportionate liability.

(iv) Integrating the Role of Fault

At the time the Restatement (Second) was published, comparative negligence had not yet emerged as the dominant doctrine governing the role of fault in tort cases. In some cases, the application of comparative fault has stood in the way of section 433A's call for apportionment according to causes. For example, the Michigan Supreme Court, in Brisboy v. Fibreboard Corporation, 264 relied on comparative fault as the basis for apportioning the plaintiff's damages between smoking and asbestos exposure. 265 The decedent smoked two packs of cigarettes a day for thirty years and was exposed to asbestos for twenty-six years.²⁶⁶ The decedent's representative sued nine asbestos manufacturers and distributors, but settled with eight of them before or during trial.²⁶⁷ The decedent was exposed to the remaining defendant's asbestos products for only six to nine months. 268 The jury found and the court affirmed that such a limited exposure could be a "substantial factor" in producing the plaintiff's fatal lung cancer condition. 269 The jury also found that the decedent's smoking history, based on the record, justified assigning him fifty-five percent of the fault, with the defendant being assigned the remaining forty-five percent of the fault.²⁷⁰ The trial court, however, overturned this finding, and the Michigan Court of Appeals affirmed on the grounds that the decedent was unaware that his smoking heightened his risk of developing lung cancer.271 Therefore, the plaintiff's smoking could not be considered comparative negligence.272 The Michigan Supreme Court reversed and

market-share cases the plaintiff is unable to identify the manufacturer of the product that caused her harm, where the product produced by many manufacturers is identical, and the evidence permits assigning to each a percentage share of the market for that product.

^{262. 751} P.2d 470.

^{263.} Id. at 485.

^{264. 418} N.W.2d 650 (Mich. 1988).

^{265.} Id. at 657.

^{266.} Id. at 651.

^{267.} Id.

^{268.} Id.

^{269.} Id. at 654.

^{270.} Id. at 652.

^{271.} Id. at 652-53.

^{272.} Id.

reinstated the jury's finding on the basis that the risk of developing lung cancer was within the scope of the risks assumed by a smoker, even though other factors, such as asbestos exposure, enhance that risk.²⁷³ The court concluded that the record provided a "rational basis for the jury's apportionment of fault."²⁷⁴ A recent New Jersey case on similar facts allows apportionment on the basis of the contribution that smoking and asbestos exposure each made to the plaintiff's lung cancer.²⁷⁵

Reliance on comparative fault in *Brisboy* is undesirable for several reasons. First, by compelling the jury to allocate the damages between the only remaining defendant and the plaintiff, over twenty-five years of contributing causes were ignored. The trial court and jury never had an opportunity to compare the contribution made by six to nine months of exposure to defendant's asbestos with over twenty-five years of exposure to other manufacturers' asbestos products. Part of the problem is the substantial factor test of causation which obfuscates the question of apportionment.²⁷⁶ Although the record may have justified a jury's finding in this regard, epidemiological data would not have justified assigning defendant forty-five percent of the harm based on the contribution of six to nine months of asbestos exposure in comparison to thirty years of smoking or twenty-six years of exposure to asbestos from other sources.

Second, *Brisboy* illustrates the difficulties of relying on comparative negligence as the basis for apportioning damages. The comparative fault system carries a lot of baggage that can be circumvented by applying an apportionment model that looks only to the rational divisibility of the harm and the risks contributing to that harm. Section 433A of the *Restatement (Second)* makes clear that apportionment can be predicated on innocent causes, including the plaintiff's innocent conduct.²⁷⁷ While smoking could be regarded as "negligence," why require such a finding by the jury?

Third, in many jurisdictions, juries are permitted to assign fault only to tortfeasors who are before the court and no fault is assignable to absent tortfeasors.²⁷⁸ In contrast, apportionment under section 433A authorizes a share

^{273.} Id. at 655.

^{274.} *Id.*; see also Champagne v. Raybestos-Manhattan, Inc., 562 A.2d 1100, 1122 (Conn. 1989) (sustaining the jury's finding that plaintiff's smoking was 75% responsible under Comparative Responsibility Act for asbestos and smoking-related lung diseases); Hao v. Owens-Illinois, Inc., 738 P.2d 416, 418-19 (Haw. 1987) (sustaining jury finding that shipyard worker's negligence in smoking was 51% responsible for causing his asbestos-related diseases and manufacturer's responsibility was 2%, with 47% applied to other defendants who were no longer parties in the case). In *Champagne*, the Connecticut Supreme Court concluded that "there is no reason to prohibit use of one's smoking history in determining comparative responsibility in this case involving asbestosis." 562 A.2d at 1118.

^{275.} See infra notes 341-56 and accompanying text for a discussion of Dafler v. Raymark Indus., 611 A.2d 136 (N.J. Super. Ct. App. Div. 1992), aff d, 622 A.2d 1305 (N.J. 1993).

^{276.} See supra note 44 for an explanation of the substantial factor test.

^{277.} Id. § 433A cmt. a.

^{278.} See, e.g., OHIO REV. CODE ANN. § 2315.19(B)(4) (Anderson 1995) (providing that when

of the harm to be assigned to all actors or forces that contributed to the harm, including non-parties and settling defendants.

As a doctrinal matter, apportionment of harm according to causes should take precedence over the application of comparative fault. So long as there exists a reasonable basis for determining the extent to which each person contributed to the harm, apportionment by causation should control, regardless of the degree of fault of each party. The application of comparative fault should be triggered only when no basis exists for making causal apportionment. The Uniform Comparative Fault Act (UCFA) appears to recognize this point, although it is not absolutely clear. The comment to section 4 of the UCFA, entitled "Right to Contribution," provides: "If the defendants cause separate harms or if the harm is found to be divisible on a reasonable basis, however, the liability may become several for a particular harm, and contribution is not appropriate." 280

Despite the ambiguity, a number of cases have held or stated that causal apportionment must precede fault apportionment. For example, in *Protectus Alpha Navigation Co. v. North Pacific Grain Growers, Inc.*, ²⁸¹ the plaintiff's ship caught fire, due to the negligence of its crew, while refueling at the defendant's dock. ²⁸² The defendant's foreman ordered the ship to cast off, contrary to the advice of the firefighters who had almost extinguished the fire. ²⁸³ The court held that the extent of the liability of the defendant was based on the loss that had occurred after the ship cast off, not on the relative negligence of the parties. ²⁸⁴ The defendant argued that the trial court erred in finding that 92.5% of the loss was sustained after the ship was set adrift because the court should have applied comparative negligence principles. ²⁸⁵ The Ninth Circuit, citing section 433A, rejected that notion: "The principles of

contributory negligence is established as an affirmative defense, special interrogatories shall be answered specifying "[t]he percentage of negligence . . . that is attributable to each party to the action from whom the complainant seeks recovery"); Eberly v. A-P Controls, Inc., 572 N.E.2d 633, 638 (Ohio 1991) (holding that apportionment of negligence to absent tortfeasors is not allowed); see also OR. REV. STAT. § 18.480(1)(b) (1988) (providing that, under comparative negligence scheme, trier of fact may be requested to answer special interrogatories indicating "[t]he degree of each party's fault expressed as a percentage of the total fault attributable to all parties represented in the action"); Mills v. Brown, 735 P.2d 603, 605 (Or. 1987) ("The statutory scheme of comparative fault restricts the [fact-finder] to consideration only of the fault of the parties before the court at the time the case is submitted to the fact-finder."). Moreover, the Uniform Comparative Fault Act, along with states that follow the Act, takes a different view. UNIF. COMPARATIVE FAULT ACT § 2(a), 12 U.L.A. 45, 50 (West Supp. 1995). These states limit fault apportionment only to parties before the court or to parties already released from liability. *Id*.

279. Section 2(b) provides: "In determining the percentages of fault, the trier of fact shall consider both the nature of the conduct of each party and the extent of the causal relation between the conduct and the damages claimed." UNIF. COMPARATIVE FAULT ACT § 2(b), at 50.

- 280. Id. § 4 cmt., at 55.
- 281. 767 F.2d 1379 (9th Cir. 1985).
- 282. Id. at 1381, 1384.
- 283. Id. at 1381.
- 284. Id. at 1384.
- 285. *Id.* at 1383.

comparative negligence are not applicable when damages can be apportioned to separate causes based on evidence in the record."286

Similarly, in Kalland v. North American Van Lines, 287 the court reached the same conclusion.²⁸⁸ The plaintiffs were injured in two motor vehicle collisions a few minutes apart.²⁸⁹ The court stated, in dictum, that if the harm can be apportioned by causation, it should be so apportioned and there is no need to compare the negligence of the parties.²⁹⁰ If the harm is indivisible, however, apportionment should be by the relative degree of negligence with causation being one factor to use in determining the degree of negligence.²⁹¹ The court stated:

Where injuries can properly be apportioned to separate causes based on evidence in the record, there is no occasion to invoke the doctrine of comparative negligence; and if injuries cannot be separately apportioned, then the comparative negligence ratio controls, unaltered by some independent assessment of degree of causation. The whole point of comparative negligence is that the relation between injury and cause cannot be accurately determined, and an allocation based on the degree of negligence of each party becomes the measure of liability. 292

The Restatement (Third) needs to explicitly state that comparative fault principles do not apply until the harm has been subjected to an apportionment analysis. Once apportionment according to the contributing causes has been completed, then comparative fault may enter the analysis.

c. Criticisms of Section 433B

The primary flaw in the Restatement (Second) is the burden-shifting rule set forth in section 433B(2). The burden-shifting rule has the following three distinct problems.

(i) Proving the Indivisibility of the Harm

The plaintiff must offer proof that each defendant was the cause of some harm and offer proof on the "nature and character" of the harm. 293 This point has been lost under section 433B(2) because some courts have not demanded proof of a prima facie case for non-apportionment.²⁹⁴ That is, plaintiffs have

^{286.} Id.

^{287. 716} F.2d 570 (9th Cir. 1983).

^{288.} Id. at 571-72.

^{289.} *Id*. at 572. 290. *Id*. at 574.

^{291.} Id.

^{292.} Id. at 573.

^{293.} This is the point made by Prosser, in his dialogue with Keeton. See supra notes 222-29 and accompanying text.

^{294.} See Lovely v. Allstate Ins. Co., 658 A.2d 1091 (Me. 1995). The court applied the single indivisible

not always been required to show, in addition to the causal contribution of each defendant, that the nature of the harm rendered it indivisible. Section 433B(2) left out a step in the analysis that Prosser identified in his debate with Keeton, but mistakenly deleted from the black letter rules. This omission was a mistake. The placement of an obligation on the plaintiff to demonstrate that the nature of the harm renders it indivisible, thus triggering the burden-shifting effect, is not "unrealistic." Sections 433B(1) and (2) have skipped an essential step in the analysis that should be explicitly recognized.

(ii) The Causation Threshold

Section 433B is ambiguous as to the threshold causation requirement. Section 433B(2) purports to be an "exception" to the rule in section 433B(1), which requires a plaintiff to bear the burden of proving that a defendant's tortious conduct "has caused the harm to the plaintiff." Because section 433B(2) provides for burden shifting where the tortious conduct of two or more actors "has combined to bring about harm to the plaintiff," it is unclear precisely what proof of causation the plaintiff must offer before burden shifting kicks in. 296 Section 433B should require that the plaintiff demonstrate that each defendant's tortious conduct was a substantial factor in bringing about the harm. That provision, combined with proof as to the "nature and character" of the harm, i.e., its indivisibility, would together eliminate ambiguities and omissions contained in section 433B. Some courts have been confused both as to the causation threshold and proof of indivisibility.²⁹⁷ Neither of these requirements places an unreasonable or unfair burden on the plaintiff. Even in the chain collision cases a plaintiff should be able to offer some proof that each defendant's vehicle was the cause of some harm and that the nature of the injuries sustained from these collisions renders apportionment unfeasible.

injury rule where the plaintiff had a pre-existing elbow condition, aggravated it in two accidents and then had an accident with defendant, followed by extensive surgery. A concurring opinion stated that plaintiff had no burden respecting the indivisibility of the injury:

The Court's reference to an aggregate injury that is "incapable of apportionment" should not be read for the proposition that the plaintiff has some discrete burden to prove that the injury is incapable of apportionment before the defendant has the burden of establishing the causal relationship between the preexisting or subsequent injury and the claim of damages. There is no such discrete burden. The issue of apportionment will be present whenever the defendant, in response to the damage claimed, produces evidence of a preexisting or subsequent injury which the defendant asserts is the cause of some portion of the plaintiff's problems. There is no need for the court to make a preliminary determination that the injury is incapable of apportionment before imposing the burden of apportionment on the defendant. That burden is inherent in the defendant's claim that there should be apportionment.

Id. at 1094 (Lipez, J., concurring).

295. Restatement (Second) of Torts § 433B(1) states that this burden of proof rule applies "except as stated in subsections (2) and (3)." RESTATEMENT (SECOND) OF TORTS § 433B(1) (1965).

296. Id. § 433B(2).

297. See supra notes 293-96 and accompanying text.

Thus, the first two problems with section 433B are problems that can be cured by modest revisions to the black letter rules. The third problem, however, is more fundamental because it goes to whether the burden-shifting rule is appropriate at all.

(iii) Burden Shifting: Is It Necessary?

The third problem with the burden-shifting rule is that the rule rests on a fallacious premise that plaintiffs cannot satisfy their normal burden of proving the amount of damages caused by each tortfeasor. Prosser maintained that liability for entire damages "will be imposed only where there is no reasonable alternative." Prosser's review of the cases suggested that "[t]he difficulty of proof may have been overstated," that courts have found general evidence of the amount of the harm contributed to by each to be sufficient, and that "[c]ases are few in which recovery has actually been denied for lack of such proof." Further, as recently as 1966, a federal district court judge wrote that the "orthodox viewpoint" of placing the burden of apportionment on the plaintiff "unquestionably had and continues to have the support of the vast majority of decided cases," despite the "injustice" which results. Only a few cases, however, were offered in which "injustice" actually resulted because the plaintiff was unable to carry her burden of proof.

One source of the difficulty facing plaintiffs in the early twentieth century was the fact that procedural rules often precluded joinder of all defendants in one action because the defendants had not acted in concert.³⁰⁴ Therefore, a plaintiff had to sue each defendant separately, increasing the plaintiff's burden of proving damages above that required in a unitary action against all the tortfeasors. In the single action in which all tortfeasors are parties, the jury can graphically see the consequences of concerted action. Only rarely would a jury deny recovery when the plaintiff has proved some harm and has established tortious conduct. Moreover, this fact was buttressed by the rules of evidence that allowed a jury to exercise a "liberal hand" in fixing damages.³⁰⁵

^{298.} PROSSER, 3d ed., supra note 163, at 249; see supra notes 163-92 and accompanying text.

^{299.} PROSSER, 3d ed., supra note 163, § 42, at 253.

^{300.} Id. After citing three cases to illustrate the "few," Prosser stated that "[a]II of these cases are believed no longer to be law." Id. § 42, at 253 n.7.

^{301.} William E. Doyle, Multiple Causes and Apportionment of Damages, 43 DEN. L.J. 490 (1966).

^{302.} Id. at 495.

^{303.} Prosser discusses Farley v. Crystal Coal & Coke Co., 102 S.E. 265 (W. Va. 1920), where each of six coal companies had polluted a stream with consequent damage to plaintiff's farm. The court seemed very concerned with procedural rules of joinder and whether each defendant had by itself inflicted sufficient harm to create a cause of action against it. This decision stimulated Wigmore to write his 1922 article. See Wigmore, supra note 16, at 458.

^{304.} See, e.g., THOMAS M. COOLEY, LAW OF TORTS §§ 85-86, at 273-87 (D. Avery Haggard ed., 4th ed. 1932); HARPER, supra note 11, at 676; see generally PROSSER, 1st ed., supra note 11, § 47.

^{305.} See supra notes 20-36 and accompanying text.

Several decisions rendered between the first and second Restatements had adopted the burden shifting principle and thereby imposed joint and several liability on multiple defendants. 306 The rationale for burden-shifting was that, in its absence, the plaintiff would recover nothing and defendants who were admittedly culpable would go "scot free." In fact, however, such outcomes are exceedingly rare, and non-existent in the last fifty years.

No such cases exist because when plaintiffs join all the responsible parties in one proceeding, the jury will award damages to the plaintiffs so long as the plaintiffs have proved that each defendant contributed some harm. The Texas Supreme Court, in Landers v. East Texas Salt Water Disposal Co., 308 described the situation as an all or nothing proposition.³⁰⁹ In Landers, two defendants each discharged oil or oil and salt water that polluted plaintiff's lake and killed the fish. 310 The trial court dismissed the plaintiff's claims for damages because the plaintiff refused to maintain two separate suits, one against each defendant.311 The Texas Supreme Court recognized that prior precedent required the plaintiff to prove what portion of his damages each defendant caused.312

Nevertheless, the Texas Supreme Court observed that placing the burden on the plaintiff to prove what share each of two wrongdoers contributed to a harm was just as "intolerable" as it was in concerted action and common design cases, in which courts have applied joint liability for decades. 313 In addition. the court was struck by the injustice of the plaintiff recovering no damages at all because of its inability under controlling damages jurisprudence to prove them with sufficient certainty.³¹⁴ The court concluded that under thenprevailing rules, the law "embraced the philosophy . . . that it is better that the injured party lose all of his damages than that any of several wrongdoers should pay more of the damages than he individually and separately caused."315 The court then overruled prior law and held that it would apply joint and

^{306.} See supra notes 107-27 and accompanying text.

See Wigmore, supra note 16, at 459.
 248 S.W.2d 731 (Tex. 1952).

^{309.} Id.

^{310.} Id.

^{311.} Id. at 731-32. Joint and several liability against both defendants was not permissible under existing Texas law. Id. at 732-33.

^{312.} The court acknowledged that "the courts of the country seem to be virtually unanimous in refusing to impose the joint and several liability on multiple wrongdoers whose independent tortious acts interfere with a landowner's interest in the use and enjoyment of land by interfering with his air or water." Id. (citing as authority for refusing to impose joint and several liability on multiple wrongdoers, among other authorities, the RESTATEMENT OF TORTS § 881 (1939)). In fact, Texas precedents had permitted joint and several liability in some cases involving simultaneous actions of two tortfeasors. See, e.g., Texas Power & Light Co. v. Stone, 84 S.W.2d 738, 740 (Tex. Civ. App. 1935).

^{313.} Landers, 248 S.W.2d at 733.

^{314.} Id. at 733-34.

^{315.} Id. at 734.

several liability unless a defendant could carry its burden of apportioning the harm.³¹⁶

The court in *Landers*, the Michigan Supreme Court in *Maddux v. Donaldson*, ³¹⁷ and the Fifth Circuit in *Phillips Petroleum Co. v. Hardee*, ³¹⁸ each relied on the ideas espoused in an article authored by Wigmore in 1922. ³¹⁹ That article, barely two pages in length, was primarily prompted by the West Virginia decision in *Farley v. Crystal Coal & Coke Co.* ³²⁰ In *Farley*, six coal companies had escaped liability for damage to plaintiff's farm because the companies could not be joined in a single action under joint tortfeasor rules. ³²¹ In his article, Wigmore argues in favor of the "beneficent rule" of joint and several liability in these nuisance cases because of the impossibility of the plaintiff proving what portion of the pollution came from each defendant. ³²² To reach that conclusion, Wigmore first describes the rationale for applying joint and several liability in the conspiracy and common design cases, such as when three persons acting in concert assault the plaintiff, each inflicting a separate wound. ³²³ Wigmore states:

This, of course, is only common decency on the part of the law. But note just what it is that the law does: It relieves M from the burden of proving what is practically impossible for him to prove. In short, the rule has its true place and application wherever the injured person has been injured by two or more persons and cannot prove the specific share of each.³²⁴

Then Wigmore posits the case of someone negligently knocked down by one driver and subsequently run over by two others. Here, according to

316. Id. The court's statement of its rule is as follows:

Where the tortious acts of two or more wrongdoers join to produce an indivisible injury, that is, an injury which from its nature cannot be apportioned with reasonable certainty to the individual wrongdoers, all of the wrongdoers will be held jointly and severally liable for the entire damages and the injured party may proceed to judgment against any one separately or against all in one suit. If fewer than the whole number of wrongdoers are joined as defendants to plaintiff's suit, those joined may by proper cross action under the governing rules bring in those omitted.

In

- 317. 108 N.W.2d 33, 35-36 (Mich. 1961).
- 318. 189 F.2d 205, 211-12 (5th Cir. 1951) (applying Louisiana law).
- 319. Wigmore, supra note 16, at 458.
- 320. 102 S.E. 265 (W. Va. 1920). Other decisions prompting Wigmore's article included: Verheyen v. Dewey, 146 P. 1116 (Idaho 1915); Standard Phosphate Co. v. Lunn, 63 So. 429 (Fla. 1913); Symmes v. Prairie Pebble Phosphate, 63 So. 1 (Fla. 1913).
- 321. See Farley, 102 S.E. at 266, 268. Wigmore describes a Farley-like decision as a "cruel wrong." Wigmore, supra note 16, at 458. Judge Doyle, in discussing Farley, states that if the plaintiff "has suffered a single cumulative injury he faces difficult and sometimes impossible problems of proof" because "the contribution of any single one of the miscreants can not readily be identified and isolated." William E. Doyle, Multiple Causes and Apportionment of Damages, 43 DENV. L.J. 490, 490-91 (1966). Moreover, if "no single one of the offenders has been a substantial factor in the production of the harm plaintiff will be unable to generate proof, even in terms of rough percentages, of the extent of each defendant's contribution." Id.
 - 322. Wigmore, supra note 16, at 459.
 - 323. Id. at 458.
 - 324. Id. at 458 (emphasis in original).
 - 325. Id.

Wigmore, the plaintiff will recover nothing because the plaintiff cannot show which broken bones were due to which car. Wigmore concludes, "this is what our law is doing today." The next step in Wigmore's syllogism is to maintain that because the nuisance cases and accident cases all impose an impossible burden of proof on plaintiffs, the same rationale that explains the common design cases applies with equal force to the independent tortfeasor cases. Wigmore concludes, with his characteristically marvelous language:

Such results are simply the law's callous dullness to innocent sufferers. One would think that the obvious meanness of letting wrongdoers go scot free in such cases would cause the courts to think twice and to suspect some fallacy in their rule of law. It does not take much reflection to see the reason of the original rule, i.e., making each joint tort-feasor liable for the whole of the harm done, and to perceive that the reason of that rule carries beyond the narrow limits of its orthodox application. The rule should be: Wherever two or more persons by culpable acts, whether concerted or not, cause a single general harm, not obviously assignable in parts to the respective wrongdoers, the injured party may recover from each for the whole. In short, wherever there is any doubt at all as to how much each caused, take the burden of proof off the innocent sufferer; make any one of them pay him for the whole, and then let them do their own figuring among themselves as to what is the share of blame for each. 328

One is reluctant to conclude that a figure as revered in the law as Wigmore got it wrong, but he did. Wigmore flatly erred in describing the rationale for joint liability in the conspiracy and common design cases as resting on a proof problem. The rationale for joint liability in these cases, going back for centuries, ³²⁹ has been that each defendant is *responsible* for the entire harm, regardless of whether each defendant actually inflicted any blows at all on the hapless victim. ³³⁰ How much damage each defendant caused in a physical sense has *never* been an issue in this genre of cases. Indeed, plaintiffs never had to make any such showing against each defendant because the defendants were regarded in the law as a joint enterprise, not separate tortious actors each held accountable for a separate invasion of plaintiff's interests. Hence, the underlying premise of Wigmore's argument—that the impossibility of apportioning harm required joint liability—is simply unfounded.

Secondly, the nuisance cases which Wigmore cited are no longer the law because in each case the joinder problems were significant, as well as the matter of proving the damages caused by each tortfeasor. This argument is

^{326.} Id.

^{327.} Id. Wigmore continues: "It is a piece of callous cruelty to innocent parties. A plaintiff put out of court by that rule may well rail against the hypocrisy of naming justice and law together." Id.

^{328.} Id., at 459 (emphasis in original).

^{329.} See Sir John Heydon's Case, 77 Eng. Rep. 1150, 1151 (K.B. 1613) ("[A]II coming to do an unlawful act, and of one party, the act of one is the act of all of the same party being present."). In actuality, this is a case of vicarious liability between those who actually inflict the harm and those who participated in the plan to do so.

^{330.} See, e.g., COOLEY, supra note 304, § 75, at 238-40.

undercut because by the late nineteenth century courts were already using a "liberal hand" when it came to the damages question so that plaintiffs injured by the independent tortious actions of multiple tortfeasors would secure a remedy.³³¹

Returning to *Landers* and the burden-shifting cases,³³² the principal rationale was that if the court did not create such joint liability, the plaintiff would recover nothing. In other words, these courts were driven by a compelling need for fairness that could not be fulfilled in any other feasible manner. The courts reasoned that either each defendant must be jointly and severally liable, and thereby risk liability for more harm than it caused, or the plaintiff would be without remedy.

The application of apportionment principles set forth in section 433A of the Restatement (Second) of Torts, however, provides an alternative to these inequitable results. By examining the contributing causes, the plaintiff would recover all of her proven damages, 333 but the presumption would be that each defendant would pay only for that portion of the total harm commensurate with the risks it created. Section 433A would permit apportionment on the facts in Landers based on the volume of salt water and/or oil each defendant contributed. The critical point is that the rigorous application of apportionment principles avoids the choice faced by the court in Landers to impose joint and excessive liability on each defendant or no liability at all. In concluding this section on burden shifting, the "problem" which section 433B(2) was intended to fix never really existed or the extent to which it existed was, as Prosser maintains, "overstated." It was exaggerated by Wigmore and others, and few plaintiffs ever experienced the harsh results that the single indivisible injury rule accompanied by burden shifting is designed to prevent. In fact, plaintiffs who have suffered injury at the hands of multiple tortfeasors have been largely successful in securing recovery.

II. PROPOSED RESTATEMENT THIRD AND JUDICIAL SUPPORT

A. The Black Letter Rule

- § 1 Apportionment of Harm to Causes
 - (1) Harms are to be apportioned among two or more causes whenever:

(a) The harms are distinct; or

- (b) Single harms are divisible on a reasonable basis as provided in subsection 2.
- (2) Harms are divisible on a reasonable basis whenever:

^{331.} See supra notes 20-36 and accompanying text.

^{332.} See supra notes 298-316 and accompanying text.

^{333.} For example, in *Landers*, the plaintiff recovered damages for all of the fish killed, water polluted, and economic consequences of such harm.

- (a) The nature of the harm itself can be apportioned on a reasonable basis; or
- (b) The contributing causes to the harm are reasonably capable of measurement or comparison.
- (3) Harms not apportioned under subsections (1) or (2) cannot be apportioned according to causes.
- (4) Causes that are the basis of apportionment under subsections (1) and (2) include causes attributable to two or more tortfeasors, nontortious causes, causes attributable to the plaintiff, causes attributable to nonparties, and causes attributable to forces of nature.

§ 2 Burden of Proof

- (1) Plaintiff bears the burden of proving that a defendant's tortious conduct was a substantial factor in causing the harm.
- (2) Where plaintiff maintains that the tortious conduct of two or more actors has combined to bring about a single harm, plaintiff bears the initial burden of proving that the harm is not capable of apportionment; a defendant may overcome that showing by establishing by the preponderance of the evidence that the harm is subject to apportionment pursuant to section 1.
- (3) Where the conduct of two or more actors is tortious, and it is proved that harm has been caused to the plaintiff by only one of them, but there is uncertainty as to which one caused it, the burden is upon each such actor to prove that he has not caused the harm.
- (4) The court shall determine as a legal matter whether the plaintiff has satisfied the burden of proof set forth in section 1 and section 2; if the court so determines, it shall determine if the defendant has sufficiently rebutted that showing to submit the factual question of apportionment to the jury.

The proposed language of section 1, "Apportionment of Harm to Causes," is intended to resolve some of the problems identified in Part II above. First and foremost, section 1 is intended to eliminate the ambiguity and tension currently existing in section 433A and the comments respecting apportionability of harms as compared to apportionability on the basis of contributing causes. The comments frequently speak in terms of whether the actual harm itself is amenable to division³³⁴ and identify certain harms as inherently indivisible, such as death or injury to real property. The comments, however, also support the divisibility of harms on the basis of a comparison between the contributing causes, especially in nuisance or similar kinds of cases. The most straightforward manner in which to eliminate this ambiguity is to provide explicitly in the black letter rule that either the harm or the causes will serve as an appropriate predicate for apportionment.

A number of recent decisions persuasively support the provisions of section 1(2)(b) that authorize apportionment by comparing or measuring the

^{334.} See supra notes 163-90 and accompanying text.

^{335.} See supra notes 163-90 and accompanying text.

^{336.} See supra notes 163-90 and accompanying text.

contributing causes.³³⁷ Those decisions, however, do not stand alone. In fact, nuisance cases which supported the first *Restatement of Torts* rule of section 881 that called for proportionate liability also support the black letter rule of subsection (2)(b). Moreover, the comments to section 433A contain numerous examples and illustrations that support the rule.

In addition, there are decisions that support the rule of section 1(2)(a), which authorize apportionment solely on the basis of the divisibility of the harm even though the factual record may not sustain a comparison of the contributing causes. Distinct harms represent, of course, simply one example of this principle. Even single harms, however, can sometimes be divided because of the intrinsic nature and character of the harm.

This Article next examines a series of comparisons that seek to illustrate judicial support and non-support for the proposed black letter rule. These comparisons are intended to flesh out how the rules would function by showing how courts have already applied them. In other words, the rules are *restatements* of holdings; they are not proposing new or different rules but are descriptive of the principles that many courts have already applied. The decisions that have not applied these principles supporting apportionment are also discussed, albeit critically.³⁴⁰

B. Cancer and Death

A recent case that vividly illustrates the black letter rule of section 1(2)(b) is Dafler v. Raymark Industries³⁴¹ in which the jury, relying on expert

^{337.} See infra notes 341-425 and accompanying text.

^{338.} For example, see cases discussed *infra*at notes 375-425 and accompanying text. These cases deal with multiple vehicle collisions that are separated by sufficient time to afford the plaintiff an opportunity to develop evidence respecting the nature and extent of injuries sustained in the first collision. *Id.*; see e.g., RESTATEMENT (SECOND) OF TORTS § 433A cmt. b (1965) (allowing apportionment of pain and suffering between two injuries, one to the arm and the other to the plaintiff's leg); see also supra notes 448-501 and accompanying text for a discussion of apportionment of harm in cases brought under CERCLA for the recovery of response costs. Where it is possible to apportion the resultant environmental harm itself, on the basis of geography or time, apportionment is authorized even though no measurable comparison of causes is feasible. See In re Bell Petroleum Servs., Inc., 3 F.3d 889 (5th Cir. 1993) (authorizing apportionment between three firms that discharged toxic waste water on the basis that each acted at a different time); United States v. Brodericle Inv. Co., 862 F. Supp. 272 (D. Colo. 1994) (finding apportionment on the basis of geographic location at the site of contamination from different sources).

^{339.} See *infra* notes 502-26 and accompanying text for a discussion of cases involving enhanced injury or crash worthiness where the jury and court may apportion between what injuries the plaintiff would have sustained anyway (regardless of the defect in the automobile) and those additional or "enhanced" injuries attributable to the product defect.

^{340.} No effort has been made to count cases. The better reasoned decisions are those that have applied these principles of apportionment based on a comparison of contributing causes when the facts would justify doing so; and the weaker decisions are those that refused to apportion even though the facts supported doing so. This Article also includes some decisions that factually could not have sustained an apportionment but which would be theoretically supportive of apportionment had the evidence in the case been developed for that purpose.

^{341. 611} A.2d 136 (N.J. Super. Ct. App. Div. 1992), aff'd, 622 A.2d 1305 (N.J. 1993).

testimony, found that the plaintiff's actions contributed seventy percent to his lung cancer and the defendant's actions contributed thirty percent; damages were apportioned on that basis.³⁴² The plaintiff, a shipyard worker, was exposed to asbestos fibers from 1939 to 1945 as a result of working in proximity to pipefitters who used asbestos-containing materials to cover pipes in the engine and boiler rooms.³⁴³ The record also showed that the plaintiff smoked a pack of cigarettes a day for forty-five years, until he was diagnosed with asbestosis in 1984.344 The plaintiff's two experts testified that the background or baseline risk for developing lung cancer for persons who do not smoke and are not exposed to asbestos was eleven cases out of one hundred thousand persons.³⁴⁵ The experts further testified that the epidemiological data disclosed that people with occupational exposure to asbestos comparable to the plaintiff's had a relative risk of lung cancer of between 5:1 or 7:1, or a five-to seven-fold increase over the baseline risk, while the relative risk associated with cigarette smoking for that period of time was between 10:1 and 12:1, a ten- to twelve-fold increase over the baseline risk.346 Both experts disavowed any apportionment of the cancer itself, and neither expert could say how much of the cancer each risk factor actually caused.³⁴⁷ Both experts, however, testified that it was the synergistic effect of both smoking and asbestos that caused the cancer.348 The relationship between the two factors was not additive, but multiplicative, such that the relative risks of 5:1 for asbestos and 10:1 for smoking yielded a 50:1 relative risk for those persons exposed to both carcinogens.349 The defendant's expert, in contrast, discounted any role for asbestos exposure, opining that smoking was the sole cause of plaintiff's lung cancer.350

The trial judge found that this evidence was sufficient to submit the issue of apportionment to the jury.³⁵¹ The jury, obviously accepting the opinions of the plaintiff's experts, apportioned the damages almost exactly as the relative

^{342.} Id. at 138.

^{343.} Id. at 139.

^{344.} Id. at 140.

^{345.} Id.

^{346.} Id. For a full discussion of the use of epidemiology in proof of causation, see Gerald W. Boston, A Mass-Exposure Model of Toxic Causation: The Content of Scientific Proof and the Regulatory Experience, 18 COLUM. J. ENVTL. L. 189 (1993) [hereinafter Mass-Exposure Model]; see also Boston, supra note 178, at 607-23; Troyen A. Brennan, Causal Chains and Statistical Links: The Role of Scientific Uncertainty in Hazardous-Substance Litigation, 73 CORNELL L. REV. 469 (1988); Michael D. Green, Expert Witnesses and Sufficiency of Evidence in Toxic Substances Litigation: The Legacy of Agent Orange and Bendectin Litigation, 86 Nw. U. L. REV. 643 (1992); Vern R. Walker, The Concept of Baseline Risk in Tort Litigation, 80 Ky. L.J. 631 (1992).

^{347.} Dafler, 611 A.2d at 140.

^{348.} Id. at 140-41.

^{349.} *Id.* at 140. While some studies suggest that the relationship is multiplicative, other studies found the risk is less than epidemiological multiplicative but more than additive. *See* U.S. DEP'T OF HEALTH & HUMAN SERVICES, UPDATE 51-52, TOXICOLOGICAL PROFILE FOR ASBESTOS (1993).

^{350.} Dafler, 611 A.2d at 141.

^{351.} Id.

risks would suggest: roughly two-thirds to the plaintiff's smoking history and one-third to the exposure to defendant's asbestos products.352 The plaintiff argued on appeal that the trial judge erred in submitting the question of apportionment to the jury because the record demonstrated that the harm itself was indivisible and no reasonable basis was offered to enable the jury to undertake the apportionment. 353 The New Jersey Superior Court rejected that argument:

We conclude that there was ample basis in the record of this trial to submit the issue of apportionment to the jury. The extant legal precedent supports rational efforts to apportion responsibility in such circumstances rather than require one party to absorb the entire burden. The jury obviously accepted the epidemiological testimony based on relative risk factors The result was rational and fair. We can ask no more. This is fairer than requiring the defendant to shoulder the entire causative burden where its contribution in fact was not likely even close to 100%. Or fairer, for certain, than no recovery at all for the plaintiff....³⁵⁴

In reaching this conclusion, the court relied on section 433A of the Restatement (Second) of Torts and other authorities. 355 Although the plaintiff's experts provided the evidentiary basis for undertaking the apportionment, the burden of proof was on the defendant to justify the apportionment once the plaintiff offered proof that the defendant's products were a cause of the harm. 356 If the burden was on the defendant, why did the plaintiff's experts provide the ammunition for apportionment? Perhaps defense counsel believed the evidence on the role of smoking causing the plaintiff's cancer was so strong as to permit a jury to assign one hundred percent of the responsibility to the plaintiff. Conversely, perhaps plaintiff's counsel also was fearful of a verdict placing all the responsibility on the plaintiff and elicited the relative-risk testimony to increase the chances of at least a partial recovery. The most likely explanation is that plaintiff's counsel believed that even the lesser relative risk for asbestos was more than adequate to render it "a" cause or contributing factor, thereby entitling the plaintiff to full recovery if the injury were held to be indivisible; and further, plaintiff's counsel likely believed that the relative risks alone would not be deemed a sufficient basis for undertaking the apportionment.

The New Jersey court in Dafler was correct. The defendant, who was responsible for exposing the plaintiff to a significant risk of cancer, should have borne part of the loss, and the plaintiff, who was also responsible for exposing himself to an even greater risk of cancer, should have borne part of

^{352.} Id.

^{353.} *Id.* 354. *Id.* at 145-46.

^{355.} Id. at 141-46.

^{356.} Id. at 142 (citing RESTATEMENT (SECOND) OF TORTS § 433(2) (1965)).

the loss. Imposing the entire loss on either party would have worked an injustice.

It is important to recognize that Mr. Dafler might have died from his cancer. At the time of trial he was still alive, but that fact is irrelevant to the apportionability of the harm. Mr. Dafler's death from lung cancer would logically have changed nothing respecting the propriety of apportionment. Prosser, in all editions of his treatise and in the comment to section 433A, stated that death is always indivisible. That statement, however, is at odds with the rule that requires apportionment when the contributing causes can be compared as they were in Dafler. Nothing in the Dafler opinion suggests that the court would have held the apportionment erroneous as a matter of law had plaintiff been deceased prior to trial. Thus, although death is indeed the quintessential indivisible single harm, that fact does not bar the application of apportionment principles that depend on contributing causes. The language of current section 433A on which the Dafler court relied and the new language of section 1(2)(b) provide an alternative basis for apportionment that transcends the harm itself. The proposed language, however, is designed to clarify that if the contributing causes or risks created by each can be compared, as they were in Dafler, apportionment is appropriate regardless of the nature of the harm.

An illustrative decision declining to permit apportionment on facts similar to Dafler is Martin v. Owens-Corning Fiberglass Corporation, 357 in which the Pennsylvania Supreme Court reversed the trial and intermediate appeals courts for permitting a jury's apportionment to stand. 358 In Martin, the plaintiff was an insulation worker exposed to asbestos for thirty-nine years who smoked for thirty-seven years.359 The plaintiff's experts testified that the interaction of emphysema, attributable to smoking, and asbestosis, attributable to occupational asbestos exposure, caused the plaintiff's lung cancer and, similar to the testimony in Dafler, that apportioning the lung disease itself between the two causes was not possible. 360 Also, in Dafler, the defendant's expert opined that the plaintiff's cigarette smoking was the sole cause of his lung diseases. 361 In Martin, neither side, however, offered any epidemiological evidence or relative risks data, as were offered in Dafler. The Pennsylvania Supreme Court, in a plurality opinion, concluded that the jury "was provided no guidance in determining the relative contributions of asbestos exposure and cigarette smoking to [the plaintiff's] disability" and that "the jury cannot be expected to draw conclusions which medical experts . . . could not draw."362 The court

^{357. 528} A.2d 947 (Pa. 1987).

^{358.} *Id.* at 948. 359. *Id.* at 949.

^{360.} Id. at 950; Dafler, 611 A.2d at 140-41.

^{361.} Dafler, 611 A.2d at 141.

^{362.} Martin, 528 A.2d at 950.

further observed that "[r]ough approximation' is no substitute for justice." 363 Three justices dissented, one commenting that "rough approximation[s]" are acceptable, 364 and another justice observing that he was "at a loss to imagine what additional testimony would satisfy the majority" and eschewing a rule that would require "experts to speak in terms of numerical percentages," which would introduce "a false precision" and a "[m]athematical exactitude . . . not found in the real world of medicine."365 In Dafler, the experts did indeed offer evidence involving numerical percentages to enable the jury to make its apportionment.³⁶⁶ Whether the Martin plurality opinion would have been satisfied had the record contained the same expert testimony as the parties offered in Dafler is questionable. The Martin plurality relied heavily on the experts' statements that while asbestos exposure and smoking "both play[ed] a significant role" and both were "important in producing the effect," it was nevertheless not possible to apportion the harm itself.³⁶⁷

One source of confusion here is that the medical experts in Martin employed the term "apportion" in a narrower sense than that contemplated by section 433A of the Restatement (Second) and the proposed black letter rule suggested here. Both of these rule sources envisage an inquiry not purely into the fact of causation, and certainly not the actual division of the harm itself, but rather, as Prosser declared, "the feasibility and practical convenience of splitting up the total harm into separate parts which may be attributed to each of two or more causes." The Pennsylvania Superior Court in Martin, 369 also relied on section 433A of the Restatement (Second) in concluding that apportionment was appropriate on the record of the case.³⁷⁰ Indeed, the Superior Court found that the record persuasively demonstrated the reasonable basis demanded by the Restatement:

I can't separate these two diseases for you in terms of percentage. My opinion is that both play a significant role in this man's disability, but I have no way of equating them or breaking them down. I can't tell you that asbestos contributed 48% and emphysema 52%, I don't know how to do that. There is no way I know of to separate these two diseases which are so closely intertwined.

I believe that both of them exist to a significant degree and they are both significant factors in this man's disability. That is the best I can do with that.

Id. Another expert testified:

It is not possible for me to separate out the relative contribution of cigarette smoking and asbestos from the cause of his obstructive pulmonary disease and the cause of his total and permanent disability. Both factors are important in producing the effect and the pulmonary disability that he has. ... It is not possible to separate out what fraction of his lung disease is due to cigarette smoking, what factor, what fraction is due to asbestosis.

Id. (citation omitted).

^{364.} Id. at 951 (Nix, C.J., dissenting).

^{365.} Id. at 954.

Dafler v. Raymark Indus., 611 A.2d 136, 140 (N.J. Super. Ct. App. Div. 1992).
 Martin, 528 A.2d at 950. One expert testified:

^{368.} KEETON ET AL., supra note 105, at § 52.

^{369.} Martin v. Johns-Manville Corp., 502 A.2d 1264 (Pa. Super. Ct. 1985), rev'd sub nom., Martin v. Owens-Corning Fiberglas Corp., 528 A.2d 947 (Pa. 1987).

^{370.} Id. at 1270-71.

Here, in contrast, appellant's witnesses [sic] testified that the smokers' diseases of emphysema and chronic bronchitis as well as asbestosis were significant "specific parts" of appellant's disability. Moreover, the jury saw the x-rays and heard Dr. Wiot's explanation of the "specific parts"—bullae, indicative of emphysema, in the upper portion of the lungs, and pleural plaques, indicative of asbestosis, in the lower portions. The jury knew, from appellant's testimony, the length of time he had been an asbestos worker and a smoker. That the testimony did not establish the exact proportion that each disease contributed to appellant's disability suggests, not that the damages should not have been apportioned, but only that medical science has not yet been able to calculate the proportions as exact percentages. This inability does not diminish the fact that the causes of the harm were . . . distinct and capable of rough approximation. ³⁷¹

The Superior Court in *Martin*, unlike the state supreme court, examined the contributing causes or sources of the harm and apportioned damages based on a comparison of the two sources.³⁷² In addition, the record in this case was unusual because expert testimony identified different *portions* of the plaintiff's lungs that were affected by smoking and asbestos, thus enabling apportionment of the *harm itself*.³⁷³ Nevertheless, subsequent federal and state cases have followed the Pennsylvania Supreme Court's opinion in *Martin*, disallowing apportionment when applying Pennsylvania law.³⁷⁴ Accordingly, *Dafler*

^{371.} Id. at 1271.

^{372.} Id.

^{373.} Because different areas of the lungs were affected in *Martin*, that case arguably presents an even stronger case for apportionment than *Dafler*. Nevertheless, the comparative cause or risk contribution principle does not depend on such facts. For decisions following *Martin*, see, e.g., Borman v. Raymark Indus., 960 F.2d 327 (3d Cir. 1992) (declining to find adequate evidence in the record to sustain a jury instruction on apportionment between smoking and asbestos exposure even though evidence on relative risks was offered); Taylor v. Celotex Corp., 574 A.2d 1084, 1098 (Pa. Super. Ct. 1990) (affirming trial court's decision not to grant apportionment instruction when neither party offered evidence about relative risks).

^{374.} In *Borman*, 960 F.2d 327, the Third Circuit predicted that the Pennsylvania Supreme Court would not allow a jury to apportion damages on the record in that case. Richard Borman worked as an insulator in various locations where asbestos products were used from 1956 until 1987 when he became disabled by lung cancer and could no longer work. *Id.* at 328. For the first thirteen years of employment, Borman came into daily contact with asbestos manufactured by Celotex. *Id.* Borman also smoked over a pack of cigarettes a day from 1950 to 1985. *Id.* In 1985, Borman was diagnosed as having asbestosis, and in 1988, he died from lung cancer. *Id.*

In reaching its decision, the Third Circuit concluded that the facts of *Martin* and *Borman* were strikingly similar. *Id.* at 333. The court noted that Mr. Martin had worked with asbestos for thirty-nine years and smoked over a pack a day for thirty-seven years, while Mr. Borman worked with asbestos for thirteen years and smoked for thirty-five years. *Id.* In both cases the experts could not allocate plaintiff's lung cancer between the two causes—asbestos exposure and cigarette smoking. *Id.* at 334. Therefore, the *Borman* court, following *Martin*, reasoned that because the experts were unable to draw a conclusion on the apportionment of damages, the jury could not be reasonably expected to do so either. *Id.* at 333.

Unlike *Martin*, however, one of the experts who testified in *Borman* was able to identify the relative risks of developing cancer from both asbestos exposure and cigarette smoking. *Id.* at 330. Dr. DuPont testified that significant cigarette smoking increases a person's risk of developing lung cancer "up to 12 to 15 times" more than a non-smoker. *Id.* Further, Dr. DuPont testified that a non-smoking individual with an occupational exposure to asbestos carries "up to five to six times" more risk than non-smoking, non-asbestos exposed people. *Id.* The court opined that the epidemiological data "speaks to the likelihood that either cigarette smoking, asbestos exposure or both will cause cancer, rather than to the apportionment of damages." *Id.* at 335.

Under the proposed Restatement section 1(2), such evidence would be sufficient. The court in Borman

illustrates the better approach to these kinds of cases and the black letter rule should explicitly authorize, and the comments illustrate, such outcomes.

C. Multiple Collisions

1. General Categories

One category of cases that frequently gives rise to use of the single indivisible injury rule involves collisions between automobiles. Where the collisions produce a single impact because of the negligence of two or more tortfeasors, courts have had no difficulty in declaring that the tortfeasors are subject to joint and several liability because of the indivisibility of the injuries sustained. Both the first and second Restatements use illustrations of these occurrences to represent the purest example of indivisible harm. Not only does the nature of the harm justify joint liability, but the essential nature of the causal forces add to the justification because each tortfeasor was a necessary cause of the entire harm.³⁷⁵

However, where the impacts become successive and are separated in time and space, the cases become more difficult. In the simplest example, the plaintiff is uninjured in the first collision (D1 hits A). The collision, however, knocked A into the path of a second negligently driven vehicle, which hit A and injured him (D2 hits A and causes injury). By definition only, one harm resulted and apportionment is conceptually irrelevant. D1 and D2 usually are held jointly and severally liable; D2 is liable because he is the physical cause of all the injuries and D1 is liable because he is a necessary cause in fact and proximate cause of all the injuries.

simply failed to understand the nature of the apportionment inquiry. For a criticism of Borman, see Richard Shuter, Apportionment of Damages - Third Circuit Predicts Pennsylvania Courts Would Not Allow Apportionment, 66 TEMP. L. REV. 223 (1993).

In Guidry v. Johns-Manville Corp., 547 A.2d 382 (Pa. Super. Ct. 1988), however, the Pennsylvania Superior Court decided, while not overtly adopting apportionment, that a low "compromise" verdict by a jury was appropriate considering the evidence before it, which the plaintiff argued on appeal represented "inadequate damages." Id. at 383. The plaintiff in Guidry was a cigarette smoker who had developed lung cancer after several years of asbestos exposure. Id. The plaintiff also suffered from both diabetes and hypertension. Id. at 386. The court held that the jury had properly considered all of these factors as contributing to plaintiff's death in arriving at its verdict, and reasoned that such a "compromise" verdict was fully supported by the evidence. Id. Although the Guidry court did not address the issue of apportionment of damages directly, by upholding a "compromise" verdict, the court essentially allowed the jury to apportion damages. The court referred to Martin and used some of the reasoning in both the

plurality and dissenting opinions to support its conclusion. Id. at 386 n.2. After noting that in Martin the evidence had been too indefinite to sustain an apportionment, here the jury was exercising its province "to resolve inconsistencies and contradictions." Id. Thus, Guidry represented a slight retreat from Martin's

stance on apportionment in an asbestos exposure-cigarette smoking case.

375. Both American and English common law permitted entire liability in these cases because a defendant was a cause in fact of all the damages, but each had to be sued separately. See HARPER ET AL., supra note 13, § 10.1, at 9 (citing Illidge v. Goodwin, 172 Eng. Rep. 934 (N.P. 1831) and Lynch v. Nurden, 113 Eng. Rep. 1041 (Q.B. 1841)).

The second situation involving multiple impacts occurs when D1 hits A, injuring one area of her body and subsequently D2 hits A, injuring a separate area of her body. This example represents the purest form of distinct harms. The plaintiff can maintain separate actions against each tortfeasor because the plaintiff can demonstrate the harm attributable to each. The only occasion for joint and several liability on these facts would arise if D1's negligence was the proximate cause of the second collision with D2, in which case D1 is solely liable for the first injury, but D1 and D2 are jointly liable for the second injury. This example raises no apportionment issues so long as the injuries are, in fact, distinct.

The third situation is represented by some of the cases discussed previously, including *Maddux v. Donaldson*, ³⁷⁶ *Wallace v. Jones*, ³⁷⁷ and *Hill v. Peres*. ³⁷⁸ These cases involved successive impacts in which each impact caused (or may have caused) some injuries. Assigning specific injuries to each collision was also very difficult in these cases. Apportionment is theoretically available in this situation, but the challenge is in determining whether apportionment can be practically applied. This Article now examines a few decisions in greater detail to examine the functioning of the proposed black letter rule.

2. Unrelated Collisions

The factual situations giving rise to successive impact cases fall into two general categories: those situations where two collisions are sufficiently disconnected and unrelated in a legal sense that the principles of proximate cause would preclude the first tortfeasor from bearing liability for the second impact; and those situations where the relationships between the two causes are sufficiently related that the first cause may be a proximate cause of the second. The question, however, is how does the proximate cause issue affect the separate question of indivisible injuries and application of joint liability? A few decisions illustrate the problem.

In *Bruckman v. Pena*, ³⁷⁹ the plaintiff was involved in two unrelated accidents that occurred eleven months apart, each of which caused brain injuries. ³⁸⁰ The plaintiff brought an action against the driver and owner of a truck involved in the first accident only. ³⁸¹ At trial, the court instructed the jury that:

^{376. 108} N.W.2d 33 (Mich. 1961).

^{377. 190} S.E. 82 (Va. 1937).

^{378. 28} P.2d 946 (Cal. Dist. Ct. App. 1934).

^{379. 487} P.2d 566 (Colo. Ct. App. 1971).

^{380.} Id. at 567.

^{381.} Id.

Where a subsequent injury occurs which aggravated the condition caused by the collision, it is your duty, if possible, to apportion the amount of disability and pain between that caused by the subsequent injury and that caused by the collision. . . . But if you find that the evidence does not permit such an apportionment, then the Defendants are liable for the entire disability. 382

The jury returned a verdict in favor of the plaintiff and the defendants appealed.³⁸³ The *Bruckman* court held that the second instruction was erroneous because it "permit[ted] the plaintiffs to recover damages against the defendants for injuries which the plaintiff received subsequent to any act of negligence on the part of the defendants and from causes for which the defendants were in no way responsible."³⁸⁴ The court found that the effect of the erroneous instructions would be to place, contrary to apportionment principles, "upon the defendants the burden of proving that plaintiff's disability can be apportioned between that caused by the collision here involved and that caused by the subsequent injury in order to limit their liability to the damages proximately caused by their negligence."³⁸⁵

Finally, the Colorado Court of Appeals distinguished an earlier Colorado Supreme Court decision which held that if a tortfeasor aggravates a pre-existing condition and apportionment is not possible between the condition and the aggravation, liability for the entire harm attaches. The court reasoned:

[I]t is one thing to hold a tort-feasor who injures one suffering from a preexisting condition liable for the entire damage when no apportionment between the pre-existing condition and the damage caused by the defendant can be made,

^{382.} Id.

^{383.} Id.

^{384.} *Id.* at 568; see also Hashimoto v. Marathon Pipe Line Co., 767 P.2d 158 (Wyo. 1989). *Hashimoto* involved a trial against the first of two tortfeasors (the second tortfeasor settled before trial). The trial court instructed the jury that the plaintiff had to prove to a "reasonable certainty" that his damages were caused by the first tortfeasor and not the second. Dissatisfied with the jury's award, plaintiff appealed. On appeal, plaintiff argued that the defendants (once determined to be negligent) had the burden of apportioning damages; and if the jury was unable to apportion, then the defendants would be liable for all damages. The Wyoming Supreme Court disagreed. Relying on *Bruckman*, the *Hashimoto* court reasoned that:

The ultimate injuries were caused by the second collision which is a distinct intervening cause because the first injuries had stabilized. Consequently, it would be inappropriate to hold [the first tortfeasor] liable for the entire damage when no correlation between the two accidents was shown.

^{... [}T]he first injuries were not the proximate cause of the second accident.

Id. at 161.

^{385.} Bruckman, 487 P.2d at 568.

^{386.} *Id.*; see also Newbury v. Vogel, 379 P.2d 811 (Colo. 1963). The Colorado Supreme Court held: We find the law to be that where a pre-existing diseased condition exists, and where after trauma aggravating the condition disability and pain result, and no apportionment of the disability between that caused by the pre-existing condition and that caused by the trauma can be made, in such case, even though a portion of the present and future disability is directly attributable to the pre-existing condition, the defendant, whose act of negligence was the cause of the trauma, is responsible for the entire damage.

Id. at 813; see also Lovely v. Allstate Ins. Co., 658 A.2d 1091 (Me. 1995) (relying on Restatement (Second) of Torts sections 433A(2) cmt. i and 433B(2) cmt. d, the court held that, where single negligent actor, by aggravating preexisting injury, produces aggregate injury that is incapable of apportionment, that negligent actor is liable for entire amount of damages).

but it is quite another thing to say that a tort-feasor is liable, not only for the damages which he caused, but also for injuries subsequently suffered by the injured person. We hold that the defendants here cannot be held liable for plaintiff's subsequent injury and this is so whether or not such damage can be apportioned between the two injuries.³⁸⁷

The combined effect of the pre-existing condition rule and the *Bruckman* holding is to make a plaintiff's recovery dependant on which tortfeasor's liability is at issue. Had plaintiff sued the second tortfeasor in *Bruckman*, the result presumably would have been different because it makes no difference whether the pre-existing condition derived from an earlier accident or other causes.³⁸⁸

Bruckman raises competing interests. In theory at least, the plaintiff recovers nothing despite defendant's negligence because the jury is unable to apportion damages between the successive impacts. Holding the defendant liable for injuries caused by the subsequent impact with which the defendant had no connection, however, creates liability for damages which the defendant did not cause. The solution to the apparent injustices either way resides in two facts. First, where there is a substantial time between the collisions, the plaintiff has the opportunity to develop medical evidence as to the extent of his injuries from that first collision. Second, the plaintiff could have joined the second tortfeasor in the action which increases the probability that a jury would make some kind of apportionment. The rule of the Bruckman case is the correct rule because its practical effect is to force the plaintiff to join all responsible parties in the action and to encourage the parties to develop and offer apportionment-related proof.

While a Bruckman-like plaintiff makes a superficially appealing equitable case for holding the defendant liable for all of the plaintiff's damages, the

^{387.} Bruckman, 487 P.2d at 568.

^{388.} See John F. Head, Comment, Torts - Apportionment of Damages - Indivisible Injuries, 49 DEN. L. J. 115, 120 (1972) ("[T]he mere substitution of the second tortfeasor for the first, would have compelled a different result in Bruckman."); see also Hylton v. Wade, 478 P.2d 690-91 (Colo. Ct. App. 1970). In Hylton, an action against the second of two tortfeasors, the Colorado Court of Appeals applied the Newbury rule where the pre-existing condition resulted from a prior accident for which a recovery had been obtained. The appellate court refused to distinguish a diseased or congenital pre-existing condition from one caused by a prior trauma. Because a Newbury instruction was not given, the court reversed and remanded the case for a new trial on damages. Id. at 691.

^{389.} In the Hawaii case, Bachran v. Morishige, the plaintiff suffered a degenerated cervical disc as a result of two accidents that occurred two years apart, and plaintiff sued the driver involved in the second accident. 469 P.2d 808 (Haw. 1970). The court held that the defendant should be liable for entire damages if plaintiff had fully recovered from the first accident stating:

We believe a fair rule is to hold that where a person has suffered injuries in a prior accident and has fully recovered, and later he is injured by the negligence of another person and the injuries suffered in the later accident bring on pain, suffering and disability, the proximate cause of the pain, suffering and disability is the negligence of that other person. In such circumstances that other person should be liable for the entire damages.

Id. at 811. Whether a person is "fully recovered" or "still suffering pain or disability" is a factual question for the jury. Id.

liberal joinder rules combined with liberal damages rules rescued the case. Together, these principles render a rule that denies entire liability, or joint and several liability if plaintiff sues both tortfeasors, and is eminently fair and reasonable.

Whether *Bruckman* represents a majority or minority position in cases involving unrelated collisions is unclear. Some courts, however, have clearly applied the single indivisible injury rule to unrelated collisions, thereby rejecting the logic of *Bruckman* and other cases.³⁹⁰ For example, the Ohio Supreme Court recently held in a case involving three totally unrelated accidents, each separated by several months, that the rule of section 433B(2) would apply, shifting the burden of apportionment to defendants once plaintiff offered evidence that each tortfeasor contributed to her injuries.³⁹¹ Some courts have also clearly restricted the single indivisible injury rule and burden shifting to accidents that are closely related in time.³⁹²

390. See, e.g., Phennah v. Whalen, 621 P.2d 1304 (Wash. Ct. App. 1980). In Phennah, the plaintiff who had a pre-existing osteo-arthritic condition was injured in one accident on January 14, 1976 and again in an unrelated accident on April 8, 1976. The court treated this as a case of "successive tortfeasors whose negligent acts are wholly unrelated in time and causation." Id. at 1307. Finding this situation an "anomaly" in the law and that "only one harm was produced," the court adopted § 433B to shift to defendants the burden of apportioning the harm. Id. at 1309. Further, the court stated that: "[t]he emerging rule from this line of cases is that when the harm is indivisible as among successive tortfeasors, the defendants must bear the burden of proving allocation of the damages among themselves." Id.; see also Watts v. Smith, 134 N.W.2d 194 (Mich. 1965). In the Watts case, involving two accidents separated by 8 hours, the court held that the actions against both defendants could be tried at one trial and "[i]f a deadlock should develop over apportionment of damages, it would then be incumbent on the trial court to consider the language of Maddux v. Donaldson," which authorizes joint and several liability under the burden-shifting rule. Id. at 196-97. One justice concurred separately to state that "[t]he time element . . . is usually crucial . . . because . . . that lapse usually provides some proof . . . [to] assess the plaintiff's damages in separate amounts; if the time is too short for such proof" then joint and several liability attaches. Id. at 198 (Black, J., concurring). Another justice dissented because he felt that the majority's opinion "could extend the rule [of Maddux] beyond chain collision cases to include all cases irrespective of how far the accidents are separated by time or space." Id. at 199 (Kelly, J., dissenting).

391. See Pang v. Minch, 559 N.E.2d 1313 (Ohio 1990). The Ohio Supreme Court considered a case where the plaintiff suffered lower back injuries in three separate accidents on June 1, 1984, August 21, 1984 and on October 15, 1984. The Pang court, overruling the earlier decision of Ryan v. Mackolin, 237 N.E.2d 377 (Ohio 1968), held that under section 433B that once plaintiff offered proof that each of the three tortfeasors was a substantial factor in causing his injuries and offered testimony that the injuries were indivisible, the burden shifted to defendants to prove by the preponderance of the evidence that the injuries were divisible. Id. at 1324-25. The court stated that even though the injuries were successive and unrelated made no difference to the application of sections 433A and 433B. Id. at 1325. Moreover, the court stated that "evidence of medical scrutiny following each tortious act is relevant only insofar as it assists the defendants in fulfilling [the] responsibility [of apportioning damage]." Id. But, of course, until sued defendants would have no ability to take steps to develop such evidence, only requiring medical examinations and testing.

392. Several other state supreme courts followed *Maddux* and adopted similar holdings in chain collision cases, but explicitly limited the rule to accidents closely related in time or space thereby implying that they might not apply the rule to unrelated accidents. *See, e.g.*, Holtz v. Holder, 418 P.2d 584 (Ariz. 1966) (*en banc*) where the court adopts the single indivisible injury rule for collisions closely related in time:

[J]oint and several liability may also be imposed upon two or more negligent actors, notwithstanding that their tort is not a joint one in a multiple collision case, where their acts occur *closely in time and place* and the result is such that the injured party suffers damages or injuries which the trier of the facts determines to be unapportionable between or among the several tortfeasors.

The plaintiff in a Hawaii case, *Loui v. Oakley*, ³⁹³ was involved in four accidents spread over three years, each of which injured the same area of his body. ³⁹⁴ The plaintiff filed a suit against the first tortfeasor only. ³⁹⁵ The *Loui* court reversed the trial court for instructing the jury to award damages for injuries from all of the accidents if the jury was unable to apportion the damages attributable to the first accident. ³⁹⁶ The court found that holding the defendant liable for all of the damages violated the fault theory because the defendant would be responsible for damages "greatly disproportionate to the injury inflicted," which is "contrary to the concept of fairness implicit in the fault theory." ³⁹⁷ Similarly, it would be "an even more unlovely spectacle" to leave the plaintiff without any remedy. ³⁹⁸ The court's solution was to facilitate apportionment by softening the plaintiff's burden of proof on damages. ³⁹⁹

Id. at 588 (emphasis added).

In Rudd v. Grimm, the court stated:

The rule is, where two or more persons acting independently are guilty of consecutive acts of negligence closely related in point of time, and cause damage to another under circumstances where the damage is indivisible, i.e., it is not reasonably possible to make a division of the damage caused by the separate acts of negligence, the negligent actors are jointly and severally liable. The damage is indivisible when the triers of fact decide that they cannot make a division or apportionment thereof among the negligent actors.

110 N.W.2d 321, 324 (Iowa 1961) (emphasis added); see also Mathews v. Mills, 178 N.W.2d 841 (Minn. 1970). In Mathews, the plaintiff was struck by one vehicle at an intersection, and then by another vehicle. The Mathews court's syllabus stated:

Where two or more persons acting independently are guilty of consecutive acts of negligence closely related in point of time, causing damage to another under circumstances where it is not reasonably possible to make a division of the damage caused by the separate acts of negligence, the negligent actors are jointly and severally liable.

Mathews, 178 N.W.2d at 842 (emphasis added).

393. 438 P.2d 393 (Haw. 1968).

394. Id. at 395.

395. Id.

396. The court described the extreme positions taken by the trial court, the plaintiff and defendant: Each party advocates an extreme position. On the one hand, the plaintiff urges us to adopt a rule which permits the first in a series of defendants to be charged with the entire loss the plaintiff sustained as the result of accidents, spaced months and even years apart, where the plaintiff is unable to prove the amount of the damages attributable solely to the first defendant. Under that theory, adopted by the trial court, a plaintiff is required to prove only the total damages from all the accidents and that apportionment is impossible. As the plaintiff's attorney acknowledged in oral argument, the adoption of such a theory could result in multiple suits and multiple recoveries. On the other hand, the defendant advocates a rule denying a plaintiff any relief unless the plaintiff can establish by a preponderance of the evidence the precise damages attributable to the defendant's negligence.

Id. at 396.

397. Id.

398. Id. at 396.

399. The court explained:

We hold that the proper procedure is for the trial court to instruct the jury that if it is unable to determine by a preponderance of the evidence how much of the plaintiff's damages can be attributed to the defendant's negligence, it may make a rough apportionment. Heretofore, this court has recognized that the law never insists upon a higher degree of certainty as to the amount of damages than the nature of the case admits, and that where, as here, the fact of damage is established, a more liberal rule is allowed in determining the amount. . . .

... Inherent in such a lessening of the burden of proof is the assumption that both parties will be

Finally, the court observed that the most desirable procedure for management of cases such as these is for the plaintiff to join all the tortfeasors in a single action so that the plaintiff recovers full damages and all of the evidence bearing on apportionment is available.

In 1994, the Hawaii Supreme Court⁴⁰⁰ reaffirmed its holding in *Loui* and extended its philosophy to an even more complex case involving a plaintiff with a pre-existing back condition who was also injured in unrelated accidents before the accident sued upon, and incurred post-accident incidents of aggravation.⁴⁰¹ The court held that apportionment was mandatory:

On remand, the jury should be carefully instructed to first determine whether Montalvo had fully recovered from any pre-existing condition or whether such condition was dormant or latent as of November 29, 1988. If the answer is "yes" to any of the above inquiries, then the City is liable for all damages legally caused by the November 29, 1988 City accident. However, if Montalvo's pre-existing condition was not fully resolved or not dormant or latent at the time of the city accident, then the jury must apportion. If the jury is unable to apportion, even roughly, then it must divide the damages equally among the various causes.

The jury must deal with the post-accident incidents separately. The City cannot be held fully liable for damages caused by subsequent incidents (unless the city accident was the legal cause of the subsequent incidents). Thus, if the jury determines that the subsequent incidents and resulting injuries were not caused by the City accident, then the jury *must* apportion pursuant to *Loui* and the dissent in *Matsumoto*.

In *Matsumoto v. Kaku*, 403 which *Montalvo* overruled, held that when a plaintiff is suffering from a pre-existing condition that is aggravated by an accident and medical experts testify that apportionment is not possible, the tortfeasor is liable for all of the damages including the pre-existing condition. 404 Relying on the same rationale as expressed in *Loui*, the court in *Montalvo* reasoned that unfairness to the defendant in holding the defendant responsible

permitted to introduce all relevant evidence pertaining to all the accidents even though all the alleged tortfeasors may not be before the court in the same action. . . .

^{...} The trial court should instruct the jury that if it is unable to make even a rough apportionment, it must apportion the damages equally among the various accidents. We recognize that this resolution is arbitrary. It is, however, no less arbitrary than placing the entire loss on one defendant.

Id. at 396-97 (citations omitted).

^{400.} Montalvo v. Lapez, 884 P.2d 345 (Haw. 1994).

^{401.} In 1988 plaintiff was in an accident with a city refuse truck, injuring his back; however, in 1964 and again in 1980 he was involved in accidents that also injured his back, requiring surgery. *Id.* at 347. In 1987 he was in a serious accident when rear-ended by a dump truck that resulted in disc surgery; and was the victim of two assaults, one in which he was kicked repeatedly in the spine. *Id.* Following the 1988 accident, he aggravated his back condition by boogey boarding and then by pushing his car off a road to change a tire. *Id.* at 348.

^{402.} Id. at 362 (emphasis added).

^{403.} Matsumoto v. Kaku, 484 P.2d 147 (Haw. 1971).

^{404.} Id. at 149. Thus, the rule of Matsumoto was the Newbury rule of Colorado, Newbury v. Vogel, 151 Colo. 520, 379 P.2d 811 (1963), which is quoted above at supra note 386. The court in Montalvo adopted the dissenting opinion in Matsumoto, which rejected the Newberry rule. Montalvo, 884 P.2d at 362.

for damages the defendant did not cause required that the damages be apportioned, either roughly or, if all else failed, equally among the causes.

Montalvo supports the black letter rule so long as the equal-shares approach is a "reasonable basis" for an apportionment. Prosser has referred to an equal division among tortfeasors as a "last resort [where] in the absence of anything to the contrary, it may be presumed that the defendants are equally responsible." Montalvo represents modern authority that is driven by a sense of fairness to all the parties and a preference for a single proceeding in which all responsible parties are joined. It seems that if multiple defendants are jointly and severally liable for an indivisible harm and each defendant is solvent, the net result is an equal division of the judgment among them. Consequently, if rough approximations are too difficult and there is an "absence of anything to the contrary," equal division is a rational basis for an apportionment of damages. The comments to the black letter rules of the Restatement (Third), however, must explicitly provide for such a basis and offer an illustration.

Wholly apart from the equal-division rule, however, is the court's clear doctrinal preference for apportionment that is reflected in the court's requirement that the jury be instructed that if the evidence does not permit an exact basis for division, a "rough approximation" is sufficient. This idea is not new, cases dating back nearly a century have reflected a willingness to give the jury a "liberal hand" in assessing damages. Moreover, as was pointed out in the *Dafler* decision, rough approximations are indeed compatible with achieving justice in individual cases. The plurality opinion in *Martin*, which rejected rough approximations as incompatible with justice and as not sufficient for undertaking apportionment, is out of touch with the reality of the trial of cases.

3. Related Collisions

Another category of successive collisions are the "chain" variety of cases, where each impact is related. In these cases, the temporal and physical events are so close that the entire series of impacts may be regarded as a unitary event. The Michigan Supreme Court decision, *Maddux v. Donaldson*, is representative of this category. The first defendant struck the front of the

^{405.} PROSSER, 1st ed., supra note 11, § 47, at 335; Joint Torts, supra note 13, at 439. That statement is repeated in subsequent editions of his treatise. PROSSER, 2d ed., supra note 163, § 45, at 229; PROSSER, 3d ed., supra note 163, § 42, at 253.

^{406.} See supra notes 28-36 and accompanying text.

^{407.} See supra notes 341-56 and accompanying text.

^{408.} Martin v. Owens-Corning Fiberglas Corp., 528 A.2d 947, 950 (Pa. 1987) ("Rough approximation" is no substitute for justice.").

^{409.} See Caygill v. Ipsen, 135 N.W.2d 284, 289 (Wis. 1965) (observing that some chain collisions may occur in such close proximity as to be considered "one event or occurrence in the eyes of the lay onlooker"). 410. 108 N.W.2d 33 (Mich. 1961).

plaintiff's car and thirty seconds later a second skidding vehicle operated by another defendant struck the rear of plaintiff's car. Apportionment of the injuries between the two collisions apparently was not possible,411 and the court, relying on Wigmore's burden-shifting argument, asked the rhetorical question: "Is it better . . . that a plaintiff, injured through no fault of his own, take nothing, rather than that a tort-feasor pay no more than his theoretical share of the damages accruing out of a confused situation which his wrong has helped to create?" The court answered the question in the negative and, as was described earlier, created joint and several liability for cases of indivisible injury. 413 In these situations, the facts argue more persuasively for nonapportionment because of the relationship between the collisions. The plaintiff obviously is unable to obtain medical attention between the impacts that are separated by mere seconds. Moreover, the actual injury sustained may truly be a "composite injury" that is medically not amenable to any division. Application of the black letter rule likely would result in non-apportionment because neither the harm itself nor the contributing causes can be apportioned on any reasonable basis or be compared or measured. As the Wisconsin Supreme Court stated in another collision case, the impacts may occur in such close proximity as to be considered "one event or occurrence in the eyes of the lay onlooker."414

Even in Maddux, however, the court stated:

[I]f there is competent testimony, adduced either by plaintiff or defendant, that the injuries are factually and medically separable, and that the liability for all such injuries and damages, or parts thereof, may be allocated with reasonable certainty to the impacts in turn, the jury will be instructed accordingly and mere difficulty in so doing will not relieve the triers of the facts of this responsibility. 415

Accordingly, the court regarded the real issue as whether the injury was indivisible. The court eschewed placing any significance on the temporal relationship between the collisions, 416 even though it was that fact that rendered

^{411.} The court, in creating joint and several liability, emphasized the factual problem: The challenging situation is . . . before us, involving 2 substantial impacts with multiple injuries, in respect of which a jury would be well justified in concluding that the plaintiff's various injuries may not be identified as to origin. As a matter of fact, it may be utterly unrealistic to insist that the plaintiff is suffering from merely a series of wounds, separable either legally or medically. Actually the plaintiff may suffer from a composite injury, the ingredients of which are impossible to identify in origin and impracticable to isolate in treatment.

Id. at 36.

^{412.} Id. at 38.

^{413.} *Id*.

^{414.} Caygill v. Ipsen, 135 N.W.2d 284, 289 (Wis. 1965).

^{415.} Maddux, 108 N.W.2d at 36.

^{416.} The *Maddux* court stated: "It is pointed out, also, that one impact took place some 30 seconds after the other. The fact that one wrong takes place a few seconds after the other is without legal significance. What is significant is that the injury is indivisible." *Id.* at 38.

the injuries indivisible, or at least substantially contributed to that effect. The court's underlying rationale, drawn from Wigmore, was that "[t]he reason for the rule as to joint liability for damages was the indivisibility of the injuries" and therefore the impossibility for the plaintiff to prove his damages against each with the requisite degree of certainty. It was the concern of "denying the blameless victim of a traffic chain collision of any recovery whatever" that drove the court to its conclusion.

Are there any respectable contrary arguments against non-apportionment in such a case? Three judges dissented in *Maddux*, primarily because they found no support in the record showing that the sole remaining defendant had caused *any* injuries. In their view, the single indivisible injury rule with which they had no quarrel as a matter of principle, was simply inapplicable because the plaintiff failed in satisfying any threshold of causation. The dissenters urged that no testimony was introduced upon which a jury might conclude that the injuries sustained by the plaintiff resulted from defendant's negligence. The dissenters' apprehension was that the majority's rule would result "in relieving a plaintiff bringing action against two or more successive tortfeasors of a duty of proving his case against each in order to be entitled to recover damages therefrom."

The Restatement (Third) must clarify that the plaintiff has an initial burden of offering proof that any defendant sought to be held liable for entire damages be a legal cause (a substantial factor) of the harm. Section 433B(1) of the Restatement (Second) does not explicitly require such proof since it fails to specify that the plaintiff must prove that each tortfeasor was a substantial factor in producing the harm. The proposed section 2(1) attempts to clarify this point. Mere speculation or conjecture that a defendant may have contributed to plaintiff's injuries is, as a general matter, an insufficient basis on which to reach a jury on the causation element of plaintiff's case. Any

^{417.} Id.

^{418.} Id.

^{419.} The *Maddux* dissent stated: "In fact, there was a dearth of proof that defendant Bryie, with whose liability we are solely concerned in the instant cases, was responsible for *any* of the injuries sustained by Mrs. Maddux or the daughter." *Id.* at 40 (Carr, J. dissenting) (emphasis added).

^{420.} Id. at 39.

^{421.} Id. at 42.

^{422.} In Pang v. Mich, the court applied sections 433A and 433B in a case involving three separate accidents occurring several months apart. 559 N.E.2d 1313, 1323 (Ohio 1990). In authorizing joint and several liability, the court stated:

Thus, where a plaintiff suffers a single injury as a result of the tortious acts of multiple defendants, the burden of proof is upon the plaintiff to demonstrate that the conduct of each defendant was a substantial factor in producing the harm. Once this burden has been met, a prima facie evidentiary foundation has been established supporting joint and several judgments against the defendants. Thereafter, the burden of persuasion shifts to the defendants to demonstrate that the harm produced by their separate tortious acts is capable of apportionment.

Id. at 1324 (emphasis added) (citing Porterie v. Peters, 532 P.2d 514, 517-18 (Ariz. 1975); Richardson v. Volkswagenwerk, A.G., 552 F.Supp. 73, 82-83 (W.D. Mo. 1982)).

^{423.} See RESTATEMENT (SECOND) OF TORTS § 433B(1) (1965).

burden shifting that may take place is only triggered when the plaintiff proves that (1) each tortfeasor was a cause-in-fact of at least some harm, and (2) that harm, and others suffered, are incapable of division. ⁴²⁴ At that point the burden shifting of section 433B(2) (or the proposed section 2(2)) kicks in, and the defendant must show by the preponderance of the evidence the basis for apportionment.

Even decisions that have adopted sections 433A and 433B and applied the sections to automobile collisions have held that the plaintiff must offer evidence that each tortfeasor has caused some damage before plaintiff is entitled to the benefits of burden shifting.⁴²⁵

D. Nuisance and CERCLA Cases

We turn now to some examples of nuisance cases that were subject to proportionate liability under the first *Restatement* in section 881 and governed by the general rules of apportionment under section 433A of the *Restatement (Second)*. Some CERCLA apportionment cases are included because that

424. The Washington Supreme Court, one of the most aggressive in applying the single indivisible injury rule, states that "[J]oint and several liability is premised upon causation and the indivisibility of the harm caused." Seattle First Nat'l Bank v. Shoreline Concrete Co., 588 P.2d 1308, 1313 (Wash. 1978). The Washington Supreme Court also described the rule:

Since the harm caused by both joint and concurrent tort-feasors is indivisible, similar liability attaches. We have long held that such tort-feasors are each liable for the entire harm caused and the injured party may sue one or all to obtain full recovery. While respondent correctly notes that such liability at common law applies only to joint tort-feasors, the indivisible nature of the harm caused by both of these tort-feasors, requires, at a minimum, that each be wholly responsible for the entire harm caused.

Id. at 1312.

425. See, e.g., Phennah v. Whalen, 621 P.2d 1304 (Wash. App. 1980). Applying single indivisible injury rule to unrelated automobile collisions, the court held:

We therefore hold that once a plaintiff has proved that *each successive negligent defendant has caused some damage*, the burden of proving allocation of those damages among themselves is upon the defendants; if the jury find that the harm is indivisible, then the defendants are jointly and severally liable for the entire harm.

Id. at 1310; see also Bergeron v. Thomas, 314 So.2d 418 (La. Ct. App. 1975). In Bergeron, the plaintiff was hit head-on by one defendant at 50 mph., and was a few minutes later hit in the rear by a second car. Id. at 419. The court refused to shift the burden of proof to the second defendant because the testimony offered showed that "in all probability . . . all injuries were incurred in the first accident," and there was "insufficient showing of injury through the second accident to shift the burden of proof . . . to defendants." Id. at 425-26.

In Rozark Farms, Inc. v. Ozark Border Elec. Coop., the court held that where the owner of a plant destroyed by fire brought action against an electric company for negligent failure to respond to request to shut off the power within a reasonable time, which the evidence showed was a "substantial factor" in causing owner's damages, the trial court erred in not instructing the jury on §§ 433A and B. 849 F.2d 306 (8th Cir. 1988) (applying Missouri law). The court ruled that damages caused by fire were "incapable of apportionment as a matter of law," and the plaintiff was entitled to recover for entire damages "where damages arose out of an indivisible loss which defendant's negligence was a substantial factor in causing." Id. at 311; accord, Holtz v. Holder, 418 P.2d 584 (Ariz. 1966) (en banc). In Porterie v. Peters, the court affirmed trial court's refusal to given an instruction on the single indivisible injury rule because the evidence was conflicting, in a chain collision case, as to whether the drivers of the vehicles were negligent and whether their negligence caused any injuries. 532 P.2d 514, 517-18 (Ariz. 1975).

statute has produced a significant number of decisions interpreting sections 433A and 433B.

1. Nuisance Cases

The Landers v. East Texas Salt Water Disposal Co. 426 case which has been discussed repeatedly in this Article is a classic example of a nuisance. 427 Two tortfeasors each discharged pollutants into a lake, killing fish in the pond belonging to plaintiff. 428 The Texas Supreme Court opted for treating the harm as indivisible and imposing joint and several liability on the two defendants because of what it perceived as the unfairness of having the plaintiff bear the loss because of his difficulty in establishing the amount of harm caused by each. 429 The trial court dismissed the plaintiff's claims for damages because he refused to maintain two separate suits, one against each defendant; 430 joint and several liability against both defendants was not permissible under existing Texas law when each acted independently of the other and without unity of design. 431 The Texas Supreme Court recognized that prior precedent required the plaintiff to prove what portion of his damages each defendant caused 432 and acknowledged that "the courts of the country seem to be virtually unanimous in refusing to impose joint and several liability on multiple wrongdoers whose independent tortious acts interfere with a landowner's interest in the use and enjoyment of land by interfering with his air or water."433 Of course, this statement comes as no great surprise because section 881 of the first Restatement mandated apportionment in nuisance cases.

In addition to *Landers*, one other often cited nuisance case resulted in application of the single indivisible injury rule. In *Michie v. Great Lakes Steel Division, National Steel Corporation*, ⁴³⁴ thirty-seven plaintiffs living in Canada sued three corporations operating seven plants across the Detroit River from Canada. The plaintiffs alleged that the plants discharged pollutants that air currents then carried onto their properties, injuring their persons and property. ⁴³⁵ The question on appeal, as the Sixth Circuit framed it, was

^{426. 248} S.W.2d 731 (Tex. 1952).

^{427.} See supra notes 109-13 & 308-16 and accompanying text for a further discussion of Landers.

^{428,} Landers, 248 S.W.2d at 732.

^{429.} Id. at 734.

^{430.} Id. at 732.

^{431.} Id. at 732-33; see also Texas Power & Light Co. v. Stone, 84 S.W.2d 738 (Tex. Civ. App. 1935).

^{432.} Landers, 248 S.W.2d at 733. In fact, Texas precedents had permitted joint and several liability in some cases involving simultaneous actions of two tortfeasors. See, e.g., Stone, 84 S.W.2d at 740 (stating that two persons are liable if their acts concurred in causing the injury); see also Jackson, supra note 11, at 404-06 (discussing several Texas decisions that had applied apportionment in nuisance cases).

^{433.} Landers, 348 S.W.2d at 733 (citing, among other authorities, the RESTATEMENT OF TORTS § 881 (1930)).

^{434. 495} F.2d 213 (6th Cir.), cert. denied, 419 U.S. 997 (1974).

^{435.} Id. at 213-14.

whether these multiple defendants—acting independently in discharging pollutants and creating a nuisance—could be jointly and severally liable for the plaintiffs' injuries "where said pollutants mix in the air so that their separate effects in creating the individual injuries are impossible to analyze."436 The court, in applying Michigan law, rejected the rule of the Restatement of Torts⁴³⁷ and older Michigan cases⁴³⁸ that required the plaintiff to apportion the harm among multiple causes. Instead, the court chose to rely on later Michigan cases involving automobile collisions, 439 especially the Maddux case discussed earlier. Although recognizing a conflict in the decisions, the court ruled that once the plaintiff proves the harm is indivisible, the net effect of "the plaintiff's right to recover for his harm should not depend on his ability to apportion damage but that this is a problem which is properly left with the defendants themselves."440 Thus, once the plaintiffs proved both injury and tortious conduct by the defendants, "Michigan's new rule [was] to shift the burden of proof as to which one was responsible and to what degree from the injured party to the wrongdoers."441

The one non-Michigan decision that the Sixth Circuit quoted in *Michie* was the *Landers* case. *Michie* and *Landers* each pronounced new law, at least as to nuisance cases, that authorized joint and several liability where injuries are indivisible or cannot be apportioned with reasonable certainty. In both cases, the principal rationale was that if the court did not create such joint liability the plaintiff would recover nothing. In other words, they were driven

^{436.} Id. at 215.

^{437.} Id. This case rejects section 881 of the Restatement of Torts, which reads:

Where two or more persons, each acting independently, create or maintain a situation which is a tortious invasion of a landowner's interest in the use and enjoyment of land by interfering with his quiet, light, air or flowing water, each is liable only for such proportion of the harm caused to the land or of the loss of enjoyment of it by the owner as his contribution to the harm bears to the total harm. RESTATEMENT OF TORTS § 881 (1939).

^{438.} Michie, 495 F.2d at 216 (citing and rejecting Meier v. Holt, 80 N.W.2d 207 (Mich. 1956); DeWitt v. Gerard, 275 N.W. 729 (Mich. 1937); DeWitt v. Gerard, 264 N.W. 379 (Mich. 1936); Frye v. City of Detroit, 239 N.W. 886 (Mich. 1932)).

^{439.} Michie, 495 F.2d at 216 (citing Watts v. Smith, 134 N.W.2d 194 (Mich. 1965) and Maddux v. Donaldson, 108 N.W.2d 33 (Mich. 1961)).

^{440.} Id. at 218 (quoting 1 FOWLER V. HARPER & FLEMING JAMES, JR., THE LAW OF TORTS § 10.1, at 702 (1956)). Harper and James also make the statement respecting nuisance cases in which the harm, "while theoretically divisible, is single in a practical sense so far as the plaintiff's ability to apportion it among the wrongdoers is concerned (as where a stream is polluted as a result of refuse from several factors)." I FOWLER V. HARPER & FLEMING JAMES JR., THE LAW OF TORTS, § 10.1, at 701-02 (1956).

^{441.} *Michie*, 495 F.2d at 218. On the basis of this rule the plaintiffs were able to satisfy the jurisdictional amount requirement to maintain diversity jurisdiction. *Id.* at 218-19.

^{442.} Some courts continued to require apportionment. See, e.g., Somerset Villa, Inc. v. City of Lee's Summit, 436 S.W.2d 658 (Mo. 1969). Somerset Villa was a suit to recover damages from an apartment complex flooding brought against the city for negligence and against a shopping center for maintaining a nuisance. Id. at 660-61. Both permitted weeds and debris to obstruct drainage culverts, thereby causing banks of a natural watercourse to overflow into the apartment complex. Id. The court held that the plaintiff could not hold the defendants jointly and severally liable, but each could only be liable for the portion of the damage each caused, with the burden of proving such portion resting on the plaintiff. Id. at 665.

by a compelling need for fairness that could not be fulfilled in any other feasible manner; either each defendant must be jointly and severally liable, and thereby be liable for more harm than it caused, or the plaintiff would be without remedy.

The proper application of apportionment rules under current section 433A or the new proposed section 1(2)(b) advanced here, however, provides an alternative to these inequitable results. Under the apportionment rules the plaintiff would recover all of his proven damages (for example, in Landers all of the fish killed, water polluted and economic consequences of such harm), but the presumption would be that each defendant would pay only for that portion of the total harm commensurate with the risks it created. Section 433A of the Restatement (Second) of Torts would permit apportionment on the facts in Landers based on the volume of salt water (or oil) each defendant contributed. 443 The first Restatement section 881 could have required apportionment on these facts. As to Michie, the opinion contains so few facts that it is not possible to opine on what basis the court might have established apportionment. The opinion identifies neither the nature or quantity of the emissions nor the nature of the plaintiffs' injuries.444 The Landers opinion reveals the quantity and content of the toxic substances and the nature of the harm suffered, so it is much easier to offer in hindsight a feasible basis for undertaking an apportionment in that case. Pretrial discovery in Michie might have produced more detail respecting such matters. The critical point is that the rigorous application of apportionment principles avoids the Hobson's choice facing the courts in Michie and Landers to impose joint and excessive liability on each defendant or no liability at all.

Moreover, neither the *Landers* nor the *Michie* court ever said they would impose joint and several liability *even if* apportionment were feasible. In *Landers*, the court qualified its rule of joint liability by stating that it applied only where there existed "an injury which from its nature cannot be apportioned with reasonable certainty." In *Michie*, the court made it clear, after referring to the "latest" *Restatement* 446 how the rule is to function:

^{443.} RESTATEMENT (SECOND) OF TORTS § 433A cmts. c, d; see also supra notes 162-89 and accompanying text.

^{444.} See Oakwood Homeowners Assn. v. Marathon Oil Co., 305 N.W.2d 567 (Mich. App. 1981). In Oakwood Homeowners Assn., four defendants, three of whom settled, emitted air pollution that injured members of the home association. Id. at 569. The court affirmed the jury's verdict apportioning the harm caused by the non-settling defendant and declining to apply the rule of Michie case because the evidence supported a rational apportionment. Id. Unfortunately, the opinion does not set forth the facts upon which the apportionment was made. Id.

^{445.} Landers v. East Texas Salt Water Disposal Co., 248 S.W.2d 731, 734 (Texas 1952).

^{446.} Michie, 495 F.2d at 217. The opinion never cites § 433A, but the text makes it clear that the court is referring to the successor section for § 881 of the first Restatement. See RESTATEMENT (SECOND) OF TORTS § 433A (1965).

In the latest Restatement, however, both the old and the newer rule are recognized and as the Michigan court held in *Maddux*, the question of whether liability of alleged polluters is joint or several is left to the trier of the facts. Where the injury itself is indivisible, the judge or jury must determine whether or not it is practicable to apportion the harm among the tortfeasors. If not, the entire liability may be imposed upon one (or several) tortfeasors subject, of course, to subsequent right of contribution among the joint offenders. ⁴⁴⁷

Therefore, it is clear that while the courts in *Michie* and *Landers*, based on the record in those cases, were disposed to find indivisible injuries and impose joint liability, both cases left open the possibility of apportionment where the facts could sustain it. Thus, most nuisance cases will support apportionment because there will be evidence of the contributions of each tortfeasor, or some means will be available, given the greater sophistication in measuring pollutants of all kinds, to compare the relative risks created by each source. If the courts in *Michie* and *Landers* had regarded apportionment as the preferable approach, the evidence could have been developed to fulfill that purpose.

2. CERCLA Cases

CERCLA is a tort-like statute, as far as some aspects of its liability scheme are concerned. CERCLA provides a wealth of jurisprudence on the application of *Restatement*⁴⁴⁸ apportionment principles to toxic harms in general and to multiple-defendant cases in particular. CERCLA is nevertheless not entirely "tort-like" in its application because courts interpret it to dispense with tort law's demand for strict causation proof⁴⁴⁹ and because of a judicially

^{447.} *Michie*, 495 F.2d at 217; *see also* Wade v. S.J. Groves & Sons Co., 424 A.2d 902 (Pa. Super. Ct. 1981) (refusing to apportion in a nuisance case where no evidence was offered to show how much debris and silt was attributable to each defendant).

^{448.} RESTATEMENT (SECOND) OF TORTS § 433A; see also RESTATEMENT (SECOND) OF TORTS §§ 875, 879 (1979).

^{449.} The House version of CERCLA would have based liability on causation, imposing liability on "person[s] who caused or contributed to the release or threatened release" of a hazardous substance. See H.R. 7020, 96th Cong., 2d Sess. § 3701(a)(D) (1980), reprinted in 3 SUPERFUND: A LEGISLATIVE HISTORY, at 47-48 (1982). That standard is precisely what Congress did create in the Resource Conservation and Recovery Act, 42 U.S.C. § 7002(a)(1)(B) (1988). In contrast, the Senate version of CERCLA contained no such causation provision and instead based liability on the status of certain responsible parties. See S. 1480, 96th Cong., 2d Sess. § 4(a) (1980), reprinted in 3 SUPERFUND: A LEGISLATIVE HISTORY, at 24.

Congress enacted the Senate version. The basic principles of liability are set forth in CERCLA as: Notwithstanding any other provision or rule of law, and subject only to the defenses set forth in subsection (b) of this section—

⁽¹⁾ the owner and operator of a vessel or a facility,

⁽²⁾ any person who at the time of disposal of any hazardous substance owned or operated any facility at which such hazardous substances were disposed of,

⁽³⁾ any person who by contract, agreement, or otherwise arranged for disposal or treatment, or arranged with a transporter for transport for disposal or treatment, of hazardous substance owned or possessed by such person, by any other party or entity, at any facility or incineration vessel owned or operated by another party or entity and containing such hazardous substances, and

gleaned congressional preference for retroactive, strict, and joint and several liability. As a result, whereas tort law requires a plaintiff to satisfy either the "but-for" or "substantial factor" test of cause-in-fact, 451 CERCLA contains no such explicit requirement and the courts have consistently so ruled. Federal

- (4) any person who accepts or accepted any hazardous substances for transport to disposal or treatment facilities, incineration vessels or sites selected by such person, from which there is a release, or a threatened release which causes the incurrence of response costs, of a hazardous substance, shall be liable for—
 - (A) all costs of removal or remedial action incurred by the United States Government or a State or an Indian tribe not inconsistent with the national contingency plan;
 - (B) any other necessary costs of response incurred by any other person consistent with the national contingency plan;
 - (C) damages for injury to, destruction of, or loss of natural resources, including the reasonable costs of assessing such injury, destruction, or loss resulting from such a release; and
 - (D) the costs of any health assessment or health effects study carried out under section 9604(i) of this title.

42 U.S.C. § 9607(a) (1988).

- 450. The courts uniformly interpret CERCLA as providing for strict liability, despite congressional silence on this critical point. *See, e.g.*, United States v. Monsanto, 858 F.2d 160, 171-73 (4th Cir. 1988), *cert. denied*, 490 U.S. 1106 (1989); New York v. Shore Realty Corp., 759 F.2d 1032, 1042 (2d Cir. 1985); United States v. Chem-Dyne Corp., 572 F. Supp. 802, 804 (S.D. Ohio 1983). CERCLA's legislative history suggests that Congress intended to leave the task of developing the appropriate liability standard to the judiciary rather than requiring courts to impose a potentially inflexible or inequitable standard. Moreover, CERCLA's definition section states that liability under CERCLA "shall be construed to be the standard of liability which obtains under section 1321 of title 33 [Federal Water Pollution Control Act (FWPCA), 33 U.S.C. §§ 1251-1387 (1988 & Supp. V 1993)]." 42 U.S.C. § 9601(32) (1988). Although the FWPCA is similarly silent on the liability standard, Congress was aware that courts had interpreted it to be a strict liability standard. *See* H.R. Rep. No. 253, 99th Cong., 2d Sess., pt. 1, at 74 (1986), *reprinted in* 1986 U.S.C.C.A.N. 2835, 2856. In enacting the Superfund Amendments and Reauthorization Act in 1986, Congress reaffirmed its intention that courts impose a strict liability standard on potentially responsible parties under CERCLA. *Id.*
- 451. See, e.g., KEETON ET AL., supra note 104, §§ 41-42; RESTATEMENT (SECOND) OF TORTS § 431(a) (1979).
- 452. See, e.g., United States v. Alcan Aluminum Corp., 964 F.2d 252, 264 (3d Cir. 1992) (CERCLA "does not, on its face, require the plaintiff to prove that the generator's hazardous substances themselves caused the release . . . [only] that the release or threatened release caused the incurrence of response costs, and that the defendant is a generator of hazardous substances at the facility."); Dedham Water Co. v. Cumberland Dairy Farms, Inc., 889 F.2d 1146, 1152 (1st Cir. 1989) ("A literal reading of [CERCLA] imposes liability if releases or threatened releases from defendant's facility cause the plaintiff to incur response costs; it does not say that liability is imposed only if the defendant causes actual contamination of the plaintiff's property."); Monsanto, 858 F.2d at 168 ("The traditional elements of tort culpability on which the site-owners rely simply are absent from the statute. The plain language of section 107(a)(2) extends liability to owners of waste facilities regardless of their degree of participation in the subsequent disposal of hazardous waste.").

For a thorough analysis of the causation issues in CERCLA litigation and relevant policy, see generally John C. Nagle, CERCLA, Causation, and Responsibility, 78 MINN. L. REV. 1493 (1994).

Moreover, if the courts required strict causation as part of the plaintiffs' proof in CERCLA litigation, satisfying that burden would be difficult in many cases because many waste sites contain a multitude of hazardous substances, from a multitude of sources, often commingled, and without any documentation of what was sent to the site. See, e.g.. United States v. Rohm & Haas Co., 2 F.3d 1265, 1268 (3d Cir. 1993); B.F. Goodrich Co. v. Murpha, 958 F.2d 1192, 1196 (2d Cir. 1992) (involving two hundred third-party defendants); Alcan Aluminum Corp., 990 F.2d, at 717 (involving 83 parties, including Alcan Aluminum, who were involved with the waste disposal center); Idaho v. Hanna Mining Co., 882 F.2d 392, 393 (9th Cir. 1989); Violet v. Picillo, 648 F. Supp. 1283, 1286 (D. R.I. 1986) (involving 10,000 barrels and containers); United States v. South Carolina Recycling & Disposal, Inc., 653 F. Supp. 984, 990 & 993 n.6 (D. S.C. 1984) (noting

courts, especially when faced with a governmental plaintiff seeking to reimburse the Superfund for monies expended on site remediation, 453 conclude that the government is not required to trace how hazardous waste from a particular defendant caused it to incur response costs. 454 In addition, the inclusion of three statutory causation-based affirmative defenses, in which the defendants bear the burden of proving that they were not the cause of environmental harm at the site, imply the absence of any causation requirement. 455

Some of the same considerations influencing judicial interpretation regarding causation also influence courts to hold defendants jointly and severally liable, thereby rejecting defendants' efforts to limit their liability

that, at a storage facility containing 7,200 55-gallon drums of different hazardous substances, "it would have cost in the range of \$2.5 million to attempt through analytical means to identify all waste types in the conglomerate of materials stored at the [site], approximately five times the cost of surface removal itself"), aff d in part, vacated in part, United States v. Monsanto, 858 F.2d 160 (4th Cir. 1988), cert. denied, 490 U.S. 1106 (1989); United States v. Chem-Dyne Corp., 572 F. Supp. 802, 811 (S.D. Ohio 1983) (involving 289 generators and transporters).

453. CERCLA § 107(a)(4)(A) permits the recovery of "all costs of removal or remedial action incurred by the United States Government . . . not inconsistent with the national contingency plan." 42 U.S.C. § 9607(a)(4)(A). For government actions, "all costs of removal or remediation action" afford compensation to EPA for virtually all expenses in any way related to its efforts to secure cleanup of an area. See id. § 9607(a)(4)(B) (extending liability to private parties for "any other necessary costs of response"); Id. § 9601(25) ("The terms 'respond' or 'response' means remove, removal, remedy, and remedial action; all such terms (including the terms 'removal' and 'remedial action') include enforcement activities related thereto.").

454. In *United States v. Monsanto Corp.*, the Fourth Circuit observed that "Congress knew of the synergistic and migratory capacities of leaking chemical waste, and the technological infeasibility of tracing improperly disposed waste to its source." 858 F.2d 160, 170 (4th Cir. 1988), *cert. denied*, 490 U.S. 1106 (1989).

455. CERCLA provides:

(b) Defenses.

There shall be no liability under subsection (a) of this section for a person otherwise liable who can establish by a preponderance of the evidence that the release or threat of release of a hazardous substance and the damages resulting therefrom were caused solely by—

- (1) an act of God;
- (2) an act of war;
- (3) an act or omission of a third party other than an employee or agent of the defendant, or than one whose act or omission occurs in connection with a contractual relationship, existing directly or indirectly, with the defendant . . . if the defendant establishes by a preponderance of the evidence that (a) he exercised due care with respect to the hazardous substance concerned, taking into consideration the characteristics of such hazardous substance, in light of all relevant facts and circumstances, and (b) he took precautions against foreseeable acts or omissions of any such third party and the consequences that could foreseeably result from such acts or omissions; or
- (4) any combination of the foregoing paragraphs.

42 U.S.C. § 9607(b).

The Monsanto court considered these defenses as evidence that Congress "allocated the burden of disproving causation to the defendant who profited from the generation and inexpensive disposal of hazardous waste." 858 F.2d at 170; see also United States v. Alcan Aluminum Corp., 964 F.2d 252, 265 (3d Cir. 1992) (asserting that "[i]mputing a specific causation requirement would render these defenses superfluous"); New York v. Shore Realty Corp., 750 F.2d 1032, 1044 (2d Cir. 1985) (stating that "a causation requirement makes superfluous the affirmative defenses provided in section 9607(b)"); Violet v. Picillo, 648 F. Supp. 1283, 1292 (D. R.I. 1986) (concluding that an interpretation of CERCLA requiring a causation element "would reduce the CERCLA defenses to statutory surplusage").

through apportionment of the harm. 456 One might have expected that because of the importance of the issue to CERCLA litigation, Congress would have expressly provided for joint and several liability; however, that is not the case. Neither the phrase "joint and several," nor the words "apportionment" or "divisibility" ever appear in the statute. The first case to review the availability of joint and several liability under CERCLA was United States v. Chem-Dyne Corporation. 457 In Chem-Dyne, a federal district court in Ohio, finding that CERCLA was ambiguous on the joint liability standard, turned to Congressional intent and legislative history for guidance. 458 The court found that Congress purposefully left the issue unresolved, intending courts to apply traditional and evolving federal common law principles in determining whether liability was joint and several or proportionate only. The court in Chem-Dyne therefore turned to the Restatement (Second) of Torts sections 433A and 433B for guidance as to the content of federal common law. The defendants in Chem-Dyne had moved for partial summary judgment, arguing that they were not jointly and severally liable for EPA's response costs. The court held, relying on section 433B, that the burden of proof as to apportionment rested with the defendants. After reviewing the facts of the case, the court concluded that genuine issues of material fact remained that precluded granting defendant's motion.459

The court raised several obstacles for defendants in future cost recovery cases in proving a distinct and apportionable harm. Significantly, the court questioned whether it was *ever* possible to show a discrete harm if wastes were

^{456.} See, e.g., United States v. Wade, 577 F. Supp. 1326, 1337-38 (E.D. Pa. 1983); United States v. Chem-Dyne Corp., 572 F. Supp. 802, 807-08 (S.D. Ohio 1983). United States v. Ottati & Goss, Inc. was a cost recovery action against operators and former operators of drum reconditioning businesses, property owners, and generators of waste contained in the drums that were sent to the site for reconditioning. 630 F. Supp. 1361 (D. N.H. 1988). The evidence showed that chemical substances leaked or spilled from drums and were mixed together. Id. at 1396. Although the generators satisfied their burden of proving approximately how many drums each brought to the site, the court nevertheless imposed joint and several liability, because "the exact amount or quantity of deleterious chemicals or other noxious matter [could not] be pinpointed as to each defendant" and "[t]he resulting proportionate harm to surface and groundwater [could not] be proportioned with any degree of accuracy as to any individual defendant." Id.

^{457. 572} F. Supp. 802 (S.D. Ohio 1983).

^{458.} The legislative history indicated that prior to CERCLA's enactment in 1980, Congress considered mandating that liability under CERCLA § 107(a) be joint and several. However, fearing that such a requirement would produce inequitable results in certain situations, Congress rejected mandatory joint and several liability.

^{459.} Chem-Dyne, 572 F. Supp. at 811. The court pointed to these facts:

The Chem-Dyne facility contains a variety of hazardous waste from 289 generators or transporters, consisting of about 608,000 pounds of material. Some of the wastes have been commingled but the identities of the sources of these wastes remain unascertained. The fact of the mixing of the wastes raises an issue as to the divisibility of the harm. Further, a dispute exists over which of the wastes have contaminated the ground water, the degree of their migration and concomitant health hazard. Finally, the volume of waste of a particular generator is not an accurate predictor of the risk associated with the waste because the toxicity or migratory potential of a particular hazardous substance generally varies independently with the volume of the waste.

commingled.⁴⁶⁰ Relevant factors it identified for this demonstration included a waste's migratory potential, relative toxicity, and synergistic capacity.⁴⁶¹ Further, the court rejected a volumetric apportionment scheme because volume could not provide an independent basis for apportionment.⁴⁶²

There is no question that the *Chem-Dyne* analysis of apportionment became the dominant method of analysis that courts consistently used for a decade to uphold the government's request for joint and several liability and to deny defendants' efforts to limit their liability by apportioning the harm at the site. Thus, the courts opted for joint and several liability because of what they viewed as the practical difficulties in apportioning the harm and CERCLA's statutory preference to fully reimburse the government, forcing defendants to exercise their contribution rights against other potentially responsible parties. 464

Similarly, in *United States v. Monsanto Corp.*, three defendant generators whose waste had been shipped to a disposal site argued unsuccessfully that although the release of the various hazardous wastes at the site produced a "single harm," there nevertheless existed a rational basis for apportioning harm based on the volume each shipped to the site. 858 F.2d 160, 171-72 (4th Cir. 1988), *cert. denied*, 490 U.S. 1106 (1989). The Fourth Circuit, finding the *Restatement (Second) of Torts* § 433A to provide the governing tort principles, rejected the defendants' position because they failed to satisfy their burden of proof:

To meet this burden, the generator defendants had to establish that the environmental harm at [the site] was divisible among responsible parties. They presented no evidence, however, showing a relationship between waste volume, the release of hazardous substances, and the harm at the site. Further, in light of the commingling of hazardous substances, the district court could not have reasonably apportioned liability without some evidence disclosing the individual and interactive qualities of the substances deposited there. Common sense counsels that a million gallons of certain substances could be mixed together without significant consequences, whereas a few pints of others improperly mixed could result in disastrous consequences. Under other circumstances proportionate volumes of hazardous substances may well be probative of contributory harm. In this case, however, volume could not establish the effective contribution of each waste generator to the harm at the . . . site

^{460. 572} F. Supp. at 811.

^{461.} Id.

^{462.} Id.

^{463.} See O'Neil v. Picillo, 883 F.2d 176 (1st Cir. 1989). The site at issue was a Rhode Island pig farm that had been used as a waste disposal site. The site was described as having "massive trenches and pits 'filled with free-flowing, multi-colored, pungent liquid wastes' and thousands of 'dented and corroded drums containing a veritable potpourri of toxic fluids." Id. at 177. The defendants argued that it was possible to apportion the removal costs because there was evidence of the total number of barrels excavated during each phase of the cleanup, the number of barrels in each phase attributable to them, and the cost of each phase. Id. at 181. There was testimony that, of the approximately 10,000 barrels excavated, only 300-400 could be attributable to a particular defendant. Id. at 182. The court concluded that because most of the waste could not be identified, and the defendants had the burden of accounting for the uncertainty, the imposition of joint and several liability was appropriate. Id. The court noted that, even if there had been evidence of the number of barrels attributable to each defendant, more would be required to demonstrate that the removal costs were capable of apportionment because the cost of removing barrels varied depending upon their contents. Id. at 182 n.11. Furthermore, the costs of removing contaminated soil, in which the waste had commingled, "would necessarily be arbitrary." Id.

Id. at 172-73 (footnotes omitted).

^{464.} Monsanto held that the district court acted within its discretion in refusing to apportion liability among all the defendants pursuant to the contribution provisions of CERCLA section 113(f) [42 U.S.C. § 9613(f) (1987)] and instead choosing to defer the contribution action until "plaintiff has been made whole." Monsanto, 858 F.2d at 173 (quoting United States v. South Carolina Recycling & Disposal, Inc., 653 F.

After a decade of uniform judicial rejection of apportionment, however, courts in CERCLA actions are becoming more receptive to apportionment for two reasons. First, the practical difficulties in finding a rational basis for apportionment may not be insurmountable. Second, compelling one or a few defendants to pay the entire cost of removal or remediation, especially when contribution rights do not exist, is inherently unfair. 465

Two recent decisions involving the same defendant cracked the government's string of successes with joint and several liability. In *United States v. Alcan Aluminum Corp. (Alcan-New York)*, 466 the Second Circuit adopted a divisibility of harm affirmative defense to CERCLA liability, as did the Third Circuit in *United States v. Alcan Aluminum Corp. (Alcan-Butler)*. 467

Both the Second and Third Circuit *Alcan* decisions arose from CERCLA cost recovery claims by the United States against Alcan Aluminum. At each disposal site, Alcan arranged for disposal of an emulsion used in its aluminum sheet and plate products manufacturing process. 468 Alcan's emulsion was mostly deionized water and mineral oil, but the government maintained that it

465. See, e.g., In re Bell Petroleum Servs., Inc., 3 F.3d 889, 896-97 (5th Cir. 1993); United States v. Rohm & Haas Co., 2 F.3d 1265, 1279-80 (3d Cir. 1993); United States v. Alcan Aluminum Corp., 964 F.2d 252, 267 (3d Cir. 1992); Monsanto, 858 F.2d at 173 (quoting that the court "shar[ed] the appellants' concern that they not be ultimately responsible for reimbursing more than their just portion of the governments' response costs"); O'Neil v. Picillo, 682 F. Supp. 706, 725 (D. R.I. 1988) (citing concerns about burdens on defendants, but refusing to apportion anyway), aff'd, 883 F.2d 176, 179 (1st Cir. 1989); United States v. Stringfellow, 661 F. Supp. 1053, 1060 (C.D. Cal. 1987) (citing concerns about fairness of joint and several liability, but not at the fault stage).

466. 990 F.2d 711 (2d Cir. 1993) [herinafter Alcan-New York]. Alcan-New York involved a 15-acre waste disposal and treatment center in Oswego County, New York, operated in the 1970s by Pollution Abatement Services (PAS). Id. at 717. In 1977, EPA and the State of New York undertook response measures that amounted to over \$12 million over the ensuing ten years. Id. Alcan's wastes consisted of 4.6 million gallons of oil emulsion, containing mostly water and mineral oil, along with small quantities of aluminum ingot shavings containing heavy metals. Id.

The district court granted summary judgment for the Government on joint and several liability, rejecting Alcan's arguments concerning its minimal contribution of hazardous substances and lack of causation. *Id.* at 718. The court also held that Alcan "failed to meet its burden to show that the harm at PAS was divisible, and awarded the Government approximately \$4 million in accumulated response costs." *Id.* The Government had entered into a consent decree with eighty two of the eighty three defendants, recovering seventy four percent or \$9.1 million of the cleanup costs it incurred. *Id.* at 717.

467. 964 F.2d 252 (3d Cir. 1992) [hereinafter Alcan-Butler]. Alcan-Butler involved harm to the Susquehanna River in Pennsylvania, at the site of the Butler Tunnel, a network of underground mine-sand tunnels bordering the river. Id. at 255. In the late 1970's, companies disposed of various liquid wastes through an open borehole, directly into the mine workings at the site. Id. at 256. A hurricane in 1985 flushed approximately 100,000 gallons of water contaminated with hazardous substances from the site into the Susquehanna River, necessitating EPA's response costs. Id. at 257.

In the EPA's cost recovery action, the Government settled with nineteen of the twenty defendants except Alcan, leaving Alcan with liability for approximately thirty six of the Government's response costs, even though Alcan's volumetric contribution was less than five percent. Alcan argued that its waste neither caused nor contributed to the release, nor necessitated response costs incurred by the Government. The district court disagreed and granted the Government's motion for summary judgment, holding Alcan jointly and severally liable for the response costs.

468. Id. at 256.

Supp. 984, 995 & 995 n.8 (D. S.C. 1984)).

contained small amounts of aluminum shavings with less than background concentrations of lead, copper, chromium, zinc, and cadmium compounds.⁴⁶⁹

In Alcan-New York, the district court granted the government's motion for summary judgment, holding Alcan jointly and severally liable for the entire harm at the site. The Second Circuit reversed, finding that genuine issues of material fact existed as to whether Alcan's material contributed to a divisible harm, if any, or whether it contributed at all to the release or cleanup costs. 470 The Second Circuit in Alcan-New York focused first on the potentially "harsh result" that "there is no limit to the scope of CERCLA liability." To avoid that "harsh result," the court looked to the Restatement (Second) of Torts section 433A for the proposition that when joint tortfeasors cause a single harm for which there is a reasonable basis for division, each is liable for damages only for its own portion of the harm. 472 Holding first that Alcan could avoid all or at least a portion of liability if it could "prove[] that its oil emulsion, when mixed with other hazardous wastes, did not contribute to the release and the clean-up costs that followed, or contributed at most to only a divisible portion of the harm."473 The court placed the burden on Alcan, as the defendant, to establish a reasonable basis for apportioning liability and noted that "apportionment . . . is an intensely factual determination." 474

The Second Circuit explicitly rejected the government's position that commingling of wastes is synonymous with indivisible harm. To avoid summary judgment on divisibility, "Alcan need only show that there are genuine issues of material fact regarding a reasonable basis for apportionment of liability." Based on its analysis of expert affidavits presented by both the government and Alcan, the court found that questions of fact precluded summary judgment on the divisibility issue. Further, the Second Circuit stated that on remand Alcan would have the opportunity to prove the harm caused by its wastes was distinguishable from the harm caused by others' wastes through introduction of evidence respecting "the relative toxicity,

^{469.} Id.

^{470.} Both decisions, however, reaffirmed the principle that the Government is not obligated to prove that a specific defendant's waste caused the incurrence of response costs. *Alcan-New York*, 990 F.2d at 721; *Alcan-Butler*, 964 F.2d at 266.

^{471.} Alcan-New York, 990 F.2d at 721.

^{472.} Id. at 722.

^{473.} Id.

^{474.} Id. The court "candidly admit[ted]" that, after having concluded that the Government need not prove that a specific PRP's waste caused the incurrence of cleanup costs, "causation is being brought back into the case—through the back door." Id. In seeking to explain this apparent contradiction, the court cautioned that a defendant must show that "its pollutants did not contribute more than background contamination and also cannot concentrate." Id. It also noted that "this limited exception [applies] only in the absence of any EPA thresholds" for the substance in question. Id.

^{475.} Id.

^{476.} *Id.* at 722-23. Finally, the court recognized the "common sense approach" of resolving divisibility claims during the initial liability phase (the approach adopted in *Alcan-Butler*) but ultimately left the timing question to the trial court's discretion. *Id.* at 723.

migratory potential, degree of migration, and synergistic capacities of the hazardous substances at the site."

The Third Circuit in *Alcan-Butler* reached the same basic conclusions. The Third Circuit also applied section 433A of the *Restatement (Second)* and held that so long as the defendant's material "did not or could not, when *mixed with other hazardous wastes*, contribute to the release and the resultant response costs, then [the defendant] should not be responsible for *any* response costs." Furthermore, in *Alcan-Butler* the Third Circuit quoted from the *Restatement (Second)* section 433A, comment "d," to show that "the drafters of the *Restatement* found that joint pollution of water is typically subject to the divisibility rule." Although both circuit courts held that commingling is not synonymous with indivisible harm, the Third Circuit's opinion may provide somewhat more support for the proposition that a single harm can be reasonably apportioned based on the volume contributed by the various PRPs. The Third Circuit also noted that on remand Alcan faced a considerable burden "in attempting to prove the divisibility of harm to the Susquehanna River is substantial." ⁴⁸⁰

Finally, the Third Circuit indicated that the trial court should decide divisibility at the initial liability phase of the case, before a determination of joint and several liability.⁴⁸¹ The court expressed concern that "the logical consequence of delaying the apportionment determination may well be drastic, for it seems clear that a defendant could easily be strong-armed into settling where other defendants have settled in order to avoid being held liable for the remainder of the response costs."

The *Alcan* decisions are not alone in expressing a willingness to allow apportionment in CERCLA cases. In the case *In re Bell Petroleum Services*, 483

^{477.} Id. at 722.

^{478.} Alcan-Butler, 964 F.2d 252, 270 (3d Cir. 1992) (emphasis in original). The Alcan-Butler court was troubled by the district court's handling of the divisibility issue in that it granted summary judgment for the full claim in favor of the EPA without a hearing. Interestingly, neither Alcan nor the government maintained that a hearing was necessary. Alcan's rationale was that it was technically impossible for the emulsion to contribute to any harm to the Susquehanna River and thereby cause EPA to incur response costs. Alcan argued that the emulsion contained below "background" quantities of metals that were ubiquitous in the environment. The government argued that a hearing was unnecessary because Alcan's emulsion was commingled with other generators' waste and therefore the harm inflicted at the site was indivisible as a matter of law. Id. at 270 n.29. Nonetheless, the Third Circuit remanded the case and ordered that there be a hearing on divisibility. Id. at 271.

^{479.} Id. at 269 n.27.

^{480.} Id. at 269.

^{481.} Id. at 270 n.29.

^{482.} *Id.* Although it preferred the Third Circuit's "common sense approach," the Second Circuit thought that fixing liability first for enforcement purposes and then later litigating the contribution from other responsible parties "may be contrary to the statutory dictates of CERCLA." *Alcan-New York*, 990 F.2d 711, 723 (2d Cir. 1993).

^{483. 3} F.3d 889 (5th Cir. 1993). At a site in Odessa, Texas, discolored drinking water led to an investigation focusing on a chrome-plating shop operated from 1971 through 1977 successively by three entities: John Leigh (during the years 1971-1972), Bell Petroleum Services, Inc. (1972-1976), and Sequa Corporation (1976-1977). *Id.* at 893, 903. Some operator or operators pumped rinse water from the finished

the Fifth Circuit Court of Appeals issued a lengthy opinion in which a two-member majority ruled that when a defendant can show a "rough approximation" of its contribution to a single injury, the imposition of joint and several liability is inappropriate. The court ruled that Sequa Corporation, the only non-settling defendant, had met its burden of proving, as a matter of law, that a reasonable basis existed for apportionment because it demonstrated that it was possible to approximate the volumetric contribution of each of three successive operators of the plating shop from which chromium waste originated. Ass

Before reaching those conclusions, the Fifth Circuit reviewed the Restatement (Second) concepts for guidance, discussing section 433A and its comments on apportionment of harm, finding both the comments and illustrations instructive. The court noted that the Restatement (Second) concluded that "the interference with the plaintiff's use of the water may be treated as divisible in terms of degree, and may be apportioned among the owners of the factories, on the basis of evidence of the respective quantities of pollution discharged into the stream." The Bell Petroleum court then examined the line of cases on CERCLA joint and several liability, beginning with Chem-Dyne and concluding with the Alcan opinions. The Fifth Circuit

parts out of the building onto the ground during this time period, eventually leading EPA to designate a 24-block area as a Superfund site. *Id.* at 892. After EPA filed a cost recovery action against the defendants, the district court heard arguments in three phases: Phase I considered liability, Phase II addressed the recoverability of EPA's response costs, and Phase III evaluated response cost responsibility. *Id.* at 893. After the Phase III hearing, the district court concluded there was no basis for dividing the liability among the defendants that was not speculative. *Id.* at 894. Therefore, the district court imposed joint and several liability for the replacement of private water supply systems and all future costs incurred by the EPA in developing permanent remedial actions. *Id.*

Prior to entry of a final judgment, the court entered orders approving consent decrees with Leigh and Bell Petroleum providing for payments of \$100,000 and \$1,000,000 respectively. *Id.* The consent decrees encompassed past and future response costs and provided complete contribution protection. *Id.* The district court held the sole remaining non-settlor, Sequa, jointly and severally liable for the unrecovered response costs (approximately \$1.8 million) and for the costs of the final remedy. The court held that there was no method to accurately apportion liability given that important production documents and records had been lost, requiring Sequa's experts to rely on significant assumptions in establishing a proposed apportionment model. *Id.* Further, the court held apportionment was inappropriate because conflicting theories advanced by the three defendants and EPA reached different results. *Id.* Sequa appealed the imposition of joint and several liability and other significant aspects of the trial court's decision to the Fifth Circuit. *Id.* at 892.

- 484. Id. at 904 n.19.
- 485. Id. at 903-04.
- 486. Id. at 895-96 (citing RESTATEMENT (SECOND) OF TORTS § 433A cmt. d (1965)).
- 487. *Id.* at 897-902. After analyzing in detail several cases addressing joint and several liability under CERCLA, the court chose to follow what it called the *Chem-Dyne* approach. *Id.* at 901-02; *see also* United States v. Chem-Dyne, 572 F.Supp. 802 (S.D. Ohio 1983). From its review of CERCLA jurisprudence, it distilled several "basic principles:" 1) joint and several liability is not mandated, but courts should impose it when appropriate under common-law principles; 2) all cases rely on the *Restatement* in resolving joint and several liability issues; and 3) even when there are commingled wastes of unknown toxicity, migratory potential, and synergistic effect, PRPs can attempt to prove that a reasonable basis for apportionment exists ("although they rarely succeed," the court noted), and when such factors are not present, volume may be a reasonable means of apportionment. *In re Bell Petroleum*, 3 F.2d at 901. Further, the Fifth Circuit said it preferred early resolution of the divisibility inquiry, but left the matter up to the trial court's discretion. *Id.*

endorsed the *Chem-Dyne* and *Restatement (Second)* approach, and followed the *Alcan* rulings in agreeing that divisibility of harm could be established even if wastes were commingled. 488

In applying the common law principles as set forth in *Chem-Dyne* and the *Restatement (Second)* to the case, the court focused on Sequa's burden of proof in showing a reasonable basis for apportionment. The court opted for a literal reading of the *Restatement (Second)* principle: Sequa had to show only a *reasonable* basis for apportionment based on a preponderance of evidence. Scientific and expert evidence would be key to this showing, the court said, explaining:

Essentially, the question whether there is a reasonable basis for apportionment depends on whether there is sufficient evidence from which the court can determine the amount of harm caused by each defendant. If the expert testimony and other evidence establishes a factual basis for making a reasonable estimate that will fairly apportion liability, joint and several liability should not be imposed in the absence of exceptional circumstances. The fact that apportionment may be difficult, because each defendant's exact contribution to the harm cannot be proved to an absolute certainty, or the fact that it will require weighing the evidence and making credibility determinations, are inadequate grounds upon which to impose joint and several liability.⁴⁸⁹

According to the Fifth Circuit, the fact finder's role in CERCLA cost recovery cases is similar to its role in tort cases brought under comparative negligence statutes, where decisions on apportioning harm "are rarely, if ever, made on the basis of evidence showing to a certainty the proportion of each party's fault." 490

This case, unlike the CERCLA "chemical soup" cases, did not require an assessment of the migration, toxicity, and synergistic effects of various substances, 491 and the relative harm contributed by each operator could be determined by the volume of contaminated wastewater each discharged into the environment. Because "[t]he chromium entered the groundwater as the result of similar operations by three parties who operated at mutually exclusive times[,]" and because "it [was] reasonable to assume that the respective harm done by each of the defendants [was] proportionate to the volume of chromium-contaminated water each discharged into the environment[,]" the harm could be reasonably apportioned. 492 Examining the evidence, the court said that while the exact contribution of each operator could not be known, a "reasonable and rational approximation of each defendant's individual

^{488.} In re Bell Petroleum, 3 F.3d at 902-03. Having lost that issue in the Alcan case, the EPA acknowledged on the appeal that apportionment was theoretically possible at sites where wastes were commingled. Id.

^{489.} Id. at 903.

^{490.} Id. at 903 n.16.

^{491.} Id. at 903.

^{492.} Id.

contribution to the contamination can be made."⁴⁹³ In a footnote, the court clarified further that "evidence sufficient to permit a rough approximation is all that is required under the *Restatement (Second)*."⁴⁹⁴ The court said Sequa could rely on the calculations of its expert in making its case, even in the face of EPA's competing expert analysis.⁴⁹⁵

The *Alcan* and *Bell Petroleum* opinions at a minimum reflect a new openmindedness of the federal judiciary toward the question of whether to impose joint and several liability or authorize apportionment.⁴⁹⁶ The *Alcan* decisions

493. *Id.* The Fifth Circuit acknowledged that there were no documents indicating the amount of chromium disposed of by each successive operator. Instead, the court relied on circumstantial, and sometimes conflicting, evidence to estimate wastewater discharge volume. The court considered the length of time each operator conducted chrome-plating activities and the amount of chrome flake each purchased. The court also considered sales records, although it noted that Sequa destroyed records prior to 1977 pursuant to its records retention policy. The court found helpful testimony from various employees regarding the rinsing and wastewater disposal practices of each operator. In addition, two experts estimated the discharged wastewater volume of each operator and calculated apportionment from existing production volume data and electrical usage records. *Id.* at 903-04. The Fifth Circuit decided that competing apportionment theories and expert opinions relying on significant assumptions were not fatal to Sequa's apportionment claim. In reversing the district court, the Fifth Circuit essentially noted that there could be a reasonable basis for volumetric apportionment despite the lack of an accurate, complete set of records. *Id.*

494. Id. at 904 n.19. Chief Judge Robert M. Parker of the Eastern District of Texas, sitting by designation, dissented in part. Chief Judge Parker agreed that determining whether the court can quantitatively apportion the harm in a particular case is a question of law and that "the single chromium harm suffered by the Trinity Aquifer is the sort theoretically capable of apportionment." Id. at 909 (emphasis added). Judge Parker believed Sequa had failed to meet its factual burden relative to apportionment, proving by a preponderance of the evidence the extent of environmental injury that could be attributed to it. Id. (Parker, J., concurring in part, dissenting in part). The dissent argued that by ruling in Sequa's favor, the majority essentially abandoned the requirement of proof by a preponderance of the evidence in CERCLA apportionment cases and thereby "eviscerat[ed] the very concept of joint and several liability." Id.

495. Id. at 903. On remand, the district court held that Sequa was liable for four percent (4%) of the remediation costs after refusing to permit additional discovery or evidence on apportionment. The EPA appealed. United States v. Bell Petroleum Services, Inc., 64 F.3d 202 (5th Cir. 1995). On appeal, the Fifth Circuit held that while its decision did preclude joint and several liability and did require apportionment on a volumetric basis, those holdings did not preclude the district court from taking additional evidence into determining the actual apportionment. Id.

496. Other recent cases where the courts have considered the divisibility issue have split. See Kamb v. United States Coast Guard, 869 F. Supp. 793 (N.D. Cal. 1994); United States v. Broderick Invest Co., 862 F. Supp. 272 (D. Colo. 1994) (relying on Bell Petroleum and the Restatement (Second) § 433A, the court approved apportionment on a geographical basis at a wood treatment facility based on expert testimony that there were two distinct groundwater plumes); Chesapeake & Potomac Tel. Co. v. Peck Iron & Metal Co., 814 F. Supp. 1269 (E.D. Va. 1992) (declining to apportion harm at a battery recycling facility on a volumetric basis because of insufficient evidence and its belief that C&P would have to show the volume of lead in each battery ever sent to the site over a 15-year period).

In Kamb, the court found that "[t]here [was] a reasonable basis for apportioning [the defendants'] CERCLA liability based on the volume of lead each [defendant] contributed to the Site and based on the divisibility of the Site into two discrete sections: a trap/skeet range, not used by the defendants, and a firing range." Kamb, 896 F. Supp. at 799. As a result, the court found that imposition of joint and several liability was not appropriate and that, as the parties agreed, "the proper framework for addressing this issue is set forth in In re Bell Petroleum Servs., Inc." Id. (citation omitted); see also Hatco Corp. v. W.R. Grace & Co., 801 F. Supp. 1309, 1330-31 (D. N.J. 1992) (holding that the issue of divisibility of CERCLA liability precluded summary judgment), vacated, 59 F.3d 400 (3d Cir. 1995); but see United States v. Rohm & Haas Co., 2 F.3d 1265 (3d Cir. 1993) (rejecting apportionment on a volumetric basis because it was not a "reasonable basis" and finding that defendant could prove apportionment only if it established that "none of the harm was attributable to it.") Id. at 1280.

also struggled with the conflict between CERCLA's strict liability and no causation requirements and the *Restatement (Second)*'s approach to apportionment that looks to "the contribution of each *cause* to a single harm." Whereas the *Restatement (Second)* is premised on the fact that causation is proved, such proof is immaterial in CERCLA cost recovery actions. However, the conflict was of no concern in *Bell Petroleum* because it was admitted that each of the three successive operators caused harm to the site.

CERCLA's liability is sufficiently analogous to tort liability to justify reliance on these decisions as support for the correct application of apportionment rules. By allowing defendants to show what harm, if any, their wastes caused to the site's environment and what response costs are attributable to such wastes, the courts are returning to Restatement (Second) principles. For example, the Alcan cases show that synergistic properties of toxic waste do not ipso facto preclude divisibility of the harm. Of course, Dafler v. Raymark Industries, Inc. 498 vividly illustrates this point—smoking and asbestos exposure function synergistically, but the fact finder could nevertheless rationally apportion the harm based on testimony regarding the substances' relative toxicity. In addition, these CERCLA cases clearly indicate that apportionment may require consideration of the effects of comparative toxicity, migratory potential, and actual migration in determining the contribution of each defendant's hazardous waste to the harm at the site. These cases also demonstrate that whether to permit divisibility and reject joint and several liability is entirely a technical, scientific inquiry having nothing to do with culpability, cooperation, fault, or any other such conduct factors that may bear on the allocation of costs in a CERCLA contribution action. 499

^{497.} RESTATEMENT (SECOND) OF TORTS § 433A(1)(b) (1965) (emphasis added).

^{498. 611} A.2d 136 (N.J. Super. 1992), aff'd, 622 A.2d 1305 (N.J. 1993). See supra notes 341-356 for a discussion of Dafler.

^{499.} Equitable factors are relevant to the contribution phase of CERCLA litigation. CERCLA authorizes courts to apply "such equitable factors as the court determines are appropriate" in allocating response costs among PRPs. 42 U.S.C. § 9613(f)(1) (1988). Among the factors usually relied upon are the Gore factors, named for former representative Al M. I. Gore (D-Tn), which were not included in the final version of the law. The Gore factors include:

The ability of the parties to demonstrate that their contribution to a discharge, release or disposal
of a hazardous waste can be distinguished;

⁽²⁾ The amount of the hazardous waste involved;

⁽³⁾ The degree of toxicity of the hazardous waste involved;

⁽⁴⁾ The degree of involvement by the parties in the generation, transportation, treatment, storage, or disposal of the hazardous waste;

⁽⁵⁾ The degree of care exercised by the parties with respect to the hazardous waste concerned, taking into account the characteristics of such hazardous waste; and

⁽⁶⁾ The degree of cooperation by the parties with Federal, State or local officials to prevent any harm to the public health or the environment.

United States v. Western Processing Co., 734 F. Supp. 930, 934-35 (W.D. Wash. 1990) (citations omitted). Courts overwhelmingly refuse to apply equitable factors in the apportionment or the joint and several liability phase of the litigation. See In re Bell Petroleum Servs., 3 F.3d 889, 901-02 (5th Cir. 1993); Alcan-Butler, 964 F.2d 252, 270 n.29 (3d Cir. 1992) (noting that "the contribution proceeding is an equitable one in which a court is permitted to allocate response costs based on factors it deems appropriate, whereas the court is not vested with such discretion in the divisibility determination"); United States v. Monsanto, 858

The message of the CERCLA cases and the nuisance cases is that courts should look seriously at evidence of apportionment. While the two nuisance cases, *Landers* and *Michie*, were remarkably simple compared to many CERCLA cases, the record in those cases was not sufficient to support divisibility; in contrast, in the more complex CERCLA cases, courts are now amenable to predicating apportionment on the basis of "reasonable" evidence that looks to contribution of multiple causes to the environmental harm.

Adopting the proposed section 1(2)(b) would facilitate and clarify the task. Courts could understand that a "reasonable basis" exists whenever the contributions of a defendant can be measured or compared to contributions from others. The basis for that comparison may be volume, as it was in Bell Petroleum, comparative toxicity, as was done by the Eighth Circuit in another decision, 500 or even geographically as was seen in yet another case. 501 because the Alcan decisions both held that commingling of substances did not preclude apportionment, courts should be willing to explore that issue. Ironically, the issue of commingling is not new; comments to the first Restatement section 881 provided that the "physical or chemical union" of chemicals did not prevent application of the proportionate liability rule. Moreover, those comments also considered synergistic effects when they provided that one substance standing alone may be relatively harmless (renders the water distasteful) but when combined with others may be very harmful (renders the water poisonous), and yet the proportionate liability rule still governs.

E. Products Liability and Enhanced Injury Cases

Next to CERCLA cases, the largest group of cases applying apportionment principles in the last decade consists of enhanced injury or secondcollision cases. In these cases, the injured plaintiff maintains that a vehicle was not crash worthy because of a design or manufacturing defect that resulted in the aggravation or enhancement of injuries attributable to the initial accident. For example, where the plaintiff is involved in a collision unrelated to any product defect such as the negligence of another driver or the plaintiff's own negligence, she may assert that if the vehicle had contained a more energyabsorbent steering column the injuries she suffered would have been less or

F.2d 160, 171 n.22 (4th Cir. 1988) (holding that while equitable factors are relevant in an action for contribution, "[t]hey are not pertinent to the question of joint and several liability, which focuses principally on the divisibility among responsible parties of the harm to the environment"), cert. denied, 490 U.S. 1106 (1989); Western Processing Co., 734 F. Supp. at 938 ("[D]efendants may . . . bring contribution actions for ultimate allocation of damages among the responsible parties where it is entirely appropriate to utilize the Gore Factors to determine the burden each party must bear.").

^{500.} Control Data Corp. v. S.C.S.C. Corp., 53 F.3d 930 (8th Cir. 1995) (finding a contribution action). 501. United States v. Broderick Inv. Co., 862 F. Supp. 272 (D. Colo. 1994).

that she may have experienced no injuries at all. These cases inherently raise difficult causation problems because it is necessary to determine the extent of the increased harm for which the product manufacturer is responsible. The law governing this category of cases is fairly well developed in the twenty-eight years since crash worthiness was first recognized as a cognizable product liability theory, 502 and the principle has been extended to a variety of products other than automobiles and trucks, such as airplanes, 503 riding lawnmowers, 504 snowmobiles 505 and agricultural tractors. 506

In these cases, plaintiff shows that the harm suffered is greater than that which would have occurred had the product been more crash worthy. Conceptually, therefore, the gravamen of the claim requires that the plaintiff apportion the harm between that which would have happened anyway and that which was caused by the product defect.

Of course, apportionment in these cases may prove difficult because the fact finder must compare the injuries associated with different events, one of which is purely hypothetical. For that reason the courts have not insisted on exact proof of the enhanced injuries attributable to the product defect, but instead have held that reasonable estimations by the experts are sufficient for apportionment purposes. For example, the Iowa Supreme Court has stated that reasonable approximations are all that can be expected of the parties and the experts:

We believe that plaintiff's proof, if believed, was sufficient for a jury to find that he sustained additional injury and pain and suffering because of the inability to shut the machine off. The extent of the enhanced injury is certainly not fixed to any degree of definiteness. We do not believe, however, that the degree of uncertainty is so great as to preclude the jury from quantifying the enhanced loss within a reasonable margin of error. ⁵⁰⁸

^{502.} The first decision to recognize the duty of a manufacturer to design and manufacture vehicles to be reasonably crash worthy, given that collisions are a foreseeable consequence of vehicle use, was Larsen v. General Motors Corp., 391 F.2d 495 (8th Cir. 1968).

^{503.} See, e.g., McGee v. Cessna Aircraft, 139 Cal. App. 3d 179 (Cal. Ct. App. 1983).

^{504.} Tafoya v. Sears Roebuck & Co., 884 F.2d 1330 (10th Cir. 1989).

^{505.} Smith v. Ariens Co., 377 N.E.2d 954 (Mass. 1978).

^{506.} Roe v. John Deere & Co., 855 F.2d 151 (3d Cir. 1988).

^{507.} E.g., Reed v. Chrysler Corp., 494 N.W.2d 224 (Iowa 1992); Hillrichs v. Avco Corp., 478 N.W.2d 70 (Iowa 1991); May v. Portland Jeep, Inc., 509 P.2d 24 (Or. 1973).

^{508.} Hillrichs, 478 N.W.2d at 75. In Hillrichs, the court found that there was adequate evidence from which a jury could calculate the extent of the enhanced injury. Plaintiff's hand became entangled in a corn harvesting machine, which, because it was not equipped with an emergency stop device, resulted in the loss of his fingers. The plaintiff testified that a shut-off device would have made a difference—"I might have ended up with broken fingers." Id. The court did, however, state that "Damages, may be awarded... when the only dispute is the amount of damages and the evidence affords a reasonable basis for estimating the loss." Id.

In *Reed*, the plaintiff's arm was crushed in a rollover accident when the fiberglass top of a Jeep CJ-7 shattered. 494 N.W.2d at 288. The plaintiff contended, and his expert testified, that a metal top would have prevented such injuries. *Id.* As to what injuries would have resulted if a metal top had been used, the court was satisfied with proof that but-for the fiberglass top his arm would not have been injured. *Id.* The court

The recognition that reasonable efforts at dividing a harm among multiple causes is all that the law can expect, and courts, for more than a century, have applied a principle of reasonableness in measuring damages.

The more difficult question that has split the courts is allocating the burden of proof as to apportionment once the plaintiff has proved that the product defect has been a cause of the enhanced injuries. In *Huddell v. Levin*, ⁵⁰⁹ the Third Circuit held that the burden of apportionment falls on the plaintiff and if the injuries are indivisible, the plaintiff will fail to satisfy his burden of proof, with the effect that he may recover nothing. ⁵¹⁰ In contrast, the majority of courts have applied section 433B(2) of the *Restatement (Second)* to these cases and have held that the defendant bears the burden of apportionment with the consequence that the plaintiff recovers for all his injuries should the injuries be found indivisible and the burden not carried. In essence the courts have applied the single indivisible injury rule by holding that "once the plaintiff has proven that the defect was a cause of his injuries, he need not prove what portion of indivisible harm is attributable solely to the manufacturer." An Arizona court summarized the rule:

[I]n a crashworthiness case with an *indivisible* injury, the plaintiff fulfills his burden of proof by showing that the defective design caused him to sustain injuries over and above those that otherwise would have occurred in the first collision. Once the plaintiff has [proven some enhancement], the burden shifts to the defendant to show that the damages that arose from the enhanced injury are apportionable.⁵¹²

Moreover, where the initial collision is the result of the negligence of another, the product manufacturer is held jointly and severally liable with that other tortfeasor when the harm is found to be indivisible, thus applying the single indivisible injury rule.⁵¹³ Accordingly, the crashworthiness or enhanced injury

found that some reasonable estimation of the enhanced damages was possible, and stated: "Where some damages appear, recovery should not be denied merely because of difficulty in fixing an exact amount." *Id.* 509. 537 F.2d 726 (3d Cir. 1976) (applying New Jersey law).

^{510.} See also Duran v. General Motors Corp., 688 P.2d 779 (N.M. Ct. App. 1983); Caizzo v. Volkswagenwerk A.G., 647 F.2d 241 (2d Cir. 1981) (applying New York law).

^{511.} Sumnicht v. Toyota Motor Sales, U.S.A., Inc., 360 N.W.2d 2, 11 (Wis. 1984); see also Lee v. Volkswagen of America, Inc., 688 P.2d 1283 (Okla. 1984). In Lee, the court stated that the plaintiff has the burden of proving that the product defect was the cause of enhanced injuries. *Id.* at 1287. If the court finds that the injury is single and indivisible, the parties are treated as concurrent tortfeasors and are jointly and severally liable. *Id.* at 1288. At that point the burden shifts to the defendant to prove apportionment of the enhanced injuries, if possible. *Id.*

^{512.} Czarnecki v. Volkswagen of America, 837 P.2d 1143, 1148 (Ariz. Ct. App. 1991) (emphasis added).

^{513.} Harvey by Harvey v. General Motors Corp., 873 F.2d 1343 (10th Cir. 1989) (applying Wyoming law); Chrysler Corp. v. Todorovich, 580 P.2d 1123 (Wyo. 1978). The *Chrysler Corp.* court stated:

The [enhanced] injuries sustained by [the plaintiff] are incapable of any logical, reasonable, or practical division. Since the conduct of Chrysler and that of Rummell each constituted a legal cause of the injuries sustained by [the plaintiff], they stand jointly and severally liable for the full extent of

cases apply the general rules that are expressed in section 433A and section 433B of the *Restatement (Second)*.

The Restatement (Third) of Torts: Products Liability has explicitly addressed the apportionment issues for these cases by promulgating black letter rules that capture the weight of judicial authority. The Tentative Draft No. 2, section 11 entitled "Increased Harm Due to Product Defect," provides:

- (a) When a product is defective within the meaning of § 2 and the defect is a substantial factor in increasing the harm suffered by the plaintiff beyond the harm that would have resulted from nondefect-related causes, the product seller is subject to liability for the increased harm.
- (b) If proof supports the apportionment of liability among responsible actors, the extent of the seller's liability is determined according to such proof and is limited to the increased harm.
- (c) If proof does not support apportionment of liability, the product seller is liable for all of the harm suffered by the plaintiff from the defect and other causes.
- (d) A seller of a defective product who is held liable for part of the harm suffered by the plaintiff under the rule stated in Subsection (b), or all the harm suffered by the plaintiff under the rule stated in Subsection (c), is jointly and severally liable with all other parties who bear legal responsibility for causing the harm, determined by applicable rules of joint and several liability.

Section 11(a) of *Tentative Draft No. 2* makes explicit what is implicit in section 433A of the *Restatement (Second)*: The plaintiff must establish as a threshold matter that the product defect was a substantial factor in causing the increased harm. Even if the nature of the injuries renders apportionment difficult, the plaintiff's initial burden is not relieved because the essence of the claim is that the defect increased the harm suffered. The comments reiterate that requirement. For example, comment "a" states that:

Since the product seller is responsible only for the increased harm, and not for the harm that would have occurred even had the product been fully adequate, basic principles of causation limit the damages to those resulting from the increase in plaintiff's harm caused by the defect. Plaintiff must establish that the defect was a substantial factor in producing harm beyond that which would have resulted from nondefect-related causes. 516

In comment "b" the point is reiterated:

his injuries.

Id. at 1131.

^{514.} See RESTATEMENT (THIRD) OF TORTS: PRODUCTS LIABILITY (Tentative Draft No. 2, 1995) [hereinafter Products Liability Tentative Draft No. 2].

^{515.} Id. § 11, at 268-69.

^{516.} Id. § 11(a) cmt. a; see also id. § 11(a) cmt b. Comment "b" states: "In connection with a design defect claim in the context of increased harm, it is important to emphasize the requirement that plaintiff must establish that a reasonable alternative design would have reduced plaintiff's harm." Id. § 11(a) cmt. b.

Proof of defect does not, of itself, establish a case of increased injury. Plaintiff must also establish that the defect was a substantial factor in increasing the plaintiff's harm beyond the harm that would have occurred as a result of nondefect-related causes. Subsection (c) of § 11 provides that, when proof does not support apportionment of liability, the product seller is liable for all the harm suffered by the victim. However, the rule stated in that subsection does not take effect until the plaintiff establishes by competent testimony that plaintiff's harm was, in fact, increased as a result of the product defect.⁵¹⁷

Consequently, the *Restatement (Third)* provides powerful support for the requirement set forth in this Article's proposed *Restatement* on apportionment in section 2(1) that the "plaintiff bears the burden of proving that the defendant's tortious conduct was a substantial factor in causing the harm." ⁵¹⁸

Once the plaintiff establishes the initial causation threshold, section 11(b) and section 11(c) kick in as to apportionment of the harm. Essentially, if the proof offered by the parties supports apportionment, then liability of the product manufacturer is limited to the enhanced harm as provided in section 11(b). Conversely, if the proof offered does not support apportionment between the harm that would have occurred and the increased harm, then pursuant to section 11(c), the manufacturer's liability will extend to the entire harm. Comment "d" in its entirety provides:

Subsection 11(c) provides that when plaintiff has proved defect-caused increased harm, the product seller is subject to liability for all the harm suffered by the plaintiff, if proof does not support apportionment of liability between the product seller and nondefect-related causes that contributed to the plaintiff's harm. Defendant, a proved wrongdoer who has in fact caused harm to the plaintiff, should not escape liability because the nature of the harm makes apportionment impossible.⁵¹⁹

The illustrations further make it clear that the question of whether section 11(b) or section 11(c) controls is solely a function of the proof as to indivisibility or divisibility. Moreover, the proof required is, according to the principles encountered repeatedly, only that necessary to render a reasonable apportionment, as is expressed in comment "c":

Apportionment of liability among causal agents. The task of apportioning liability under § 11(b) is often difficult. Outright guesswork is not permitted, but neither should anything approaching certainty be required. When an expert offers an allocation based on a rational explanation derived from a causal

^{517.} Id.

^{518.} Id. § 2(1).

^{519.} Id. § 11 cmt. d. Cf. § 433B(2) of the Restatement (Second) of Torts.

^{520.} See, e.g., id. § 11 cmt. b, illus. 3 (concluding that in a situation where the roof of a van detached in an accident because of a manufacturing defect, the defendant manufacturer's liability is limited because "expert testimony describes the extent to which [plaintiff's] damages were increased by the failure of the roof panel to remain attached"); see also id. cmt. b, illus. 4.

analysis, the testimony should, subject to the normal discretion of the trial court, be admitted for consideration by the trier of fact. 521

Unlike section 433B(2) that formally shifts the burden of proof, section 11(c) has no such effect. Instead:

[I]ts effect is that, if the plaintiff has established that the product defect increased the harm over and above that which the plaintiff would have suffered had the product been nondefective, and if at the close of the case proof does not support apportionment of liability among the responsible actors, then the defendant is liable for all the harm suffered by the plaintiff. 522

Consequently, while it is obviously in the defendant's interest to offer evidence that supports a division of the harm, technically it is not required to do so. Should the evidence from either party provide a basis for the fact finder to undertake the apportionment, then the liability of the defendant will be limited to the enhanced injury.

The rule set forth in section 11(d) flows as the natural consequence from the single indivisible injury rule.⁵²³ If the total harm cannot be divided, and two or more tortfeasors each contributed to that harm, then each is liable for entire damages. For example, if a negligent driver was responsible for the initial collision and the harm cannot be allocated between that collision and the enhanced injury claim, both the negligent driver and the manufacturer will be jointly liable for all of plaintiff's damages.

The rules of section 11 are not remarkable. Indeed, they simply represent an example of the rules governing the chain collision cases. The crashworthiness cases are chain collision cases: the initial collision is between plaintiff's vehicle and, say, a pole or another vehicle, and the second collision, milliseconds later, is between the plaintiff and the interior of the vehicle. Thus, in the related collision cases, 524 the two impacts are separated usually only by seconds or fractions. Here the separation between the two collisions is of even shorter duration. Therefore, it also is unsurprising that some of the authority relied upon by the Reporters for the *Products Liability Restatement (Third)* as support for the black letter rule in section 11 consists of the chain collision cases. For example, the Ohio Supreme Court decision of *Pang v. Minch*, 525 which adopted the single indivisible injury rule even in cases of unrelated collisions, is cited as suggesting that the Ohio Supreme Court would adopt the

^{521.} Id. § 11 cmt. c.

^{522.} Id. § 11 cmt. d.

^{523.} See Tentative Draft No. 7, supra note 143, § 11(d), at 269.

^{524.} See supra notes 409-25 and accompanying text.

^{525. 559} N.E.2d 1313 (Ohio 1990) (holding in a successive unrelated collision case that where "a single, indivisible injury is proximately caused by the successive tortious acts of multiple defendants," section 433B(2) of the *Restatement (Second) of Torts* applies, and the plaintiff is entitled to treat the successive tortfeasors as jointly and severally liable).

rule of section 11(c). The Reporters' prediction is correct; if the Ohio Supreme Court applies the rule of section 433B(2) of the *Restatement (Second)* to situations where collisions are separated by months, most assuredly the court would apply section 433B(2) where the collisions are separated by less than a second.

The rule of section 11(c) could be questioned on the ground that these cases do not involve necessary or sufficient causes, but only partial causes, because by definition, defendant is responsible for the enhanced injury only. In the partial cause cases, courts have been more reticent about declaring liability for entire damages since theoretical apportionment always exists. See Nevertheless, that is also true in most chain collision cases, and yet courts have clearly opted for total liability where the harm proves to be indivisible.

As to the burden of proof issues, the practical effect of the rule of section 11(c) is that defendant must come forward with apportionment-related proofs or face liability for entire damages. The plaintiff has an interest in offering evidence suggesting that the harm is incapable of apportionment. In the proposed rule, section 2(2), the burden of proof issue is clarified by explicitly requiring plaintiff to assume an initial burden of showing that the nature of the harm makes apportionment infeasible; the defendant must then overcome plaintiff's proof by demonstrating with the greater weight of all the evidence that the harm is apportionable on the basis of the rules in section 1.

F. Some Concluding Thoughts on Apportionment

The judicial decisions discussed in this section support a number of conclusions that bear on the standards for apportionment and how those standards can be applied. First and most importantly, the CERCLA cases and Dafler represent persuasive evidence that apportionment can be predicated on a comparison of contributing causes. In those cases there was not even the slightest indication that the harm itself was divisible—the cancer, the harm to the Susquehanna River or the treatment and disposal center—the courts each believing that section 433A authorized an examination of the contributing causes. Moreover, it was the measurement or comparison of those causes that enabled the creation of a "reasonable basis" for apportionment. In other words, what renders the apportionment of a single harm "reasonable" is the ability of the court and jury to undertake a comparison of the respective causes. The kinds of numerical evidence available in Dafler and the CERCLA cases will often be available or can be developed if apportionment is viewed as preferable to holding defendants liable for entire damages. Indeed, even in automobile collision litigation it may be possible to compare the respective causal forces

^{526.} See supra notes 243-54 and accompanying text.

using principles of physics that incorporate evidence respecting velocity, weight, road conditions and other variables.

Second, *Dafler*, *Montalvo*, and *Bell Petroleum* in particular, as well as the enhanced injury products liability cases, also stand for the proposition that precise data is not essential; all those courts expressly acknowledged that a "rough approximation" is sufficient to enable the court or jury to make the division of harm among multiple tortfeasors or multiple causes. ⁵²⁷ Justice can be fulfilled by reliance on reasonable estimations. Moreover, such approximations can be made even in the face of conflicting evidence or experts, as was the case in both *Dafler* and *Bell Petroleum*. The comments to the *Restatement (Third)* should explicitly refer to this point.

Third, apportionment is more judicially efficient because it avoids a second phase of litigation respecting contribution. The Fifth Circuit in *Bell Petroleum* made that observation, which seems intuitively correct. So long as plaintiffs can sue just one party and expect to secure joint and several liability, judicial efficiency will suffer. Having one proceeding in which all responsible parties are joined will lead to the most efficient and rational fact-finding. Having all parties introduce evidence relevant to the divisibility of the harm before one fact finder will increase consistency and lower transaction costs.

Fourth, the decisions in this section (apart from the CERCLA cases) also illustrate that the plaintiff must offer some evidence from which it may be inferred that each tortfeasor was a substantial factor in producing the harm that plaintiff sustained. The better reasoned automobile collision cases, even those that applied the single indivisible injury rule to hold a defendant jointly and

^{527.} In re Bell Petroleum, Dafler, Montalvo, and Loui are not unusual in authorizing apportionment on the basis of rough approximations. All of the damages jurisprudence discussed in Part I, going back into the 19th century allowing the jury to exercise a "liberal hand" in assessing damages, were expressing the same principle that precision and exactness is not essential to reaching fair apportionments. See also McAllister v. Pennsylvania R.R. Co., 187 A. 415 (Pa. 1936). In McAllister, the plaintiff was injured by a fall from the station platform and subsequently was involved in a trolley accident, the court sustained an apportionment between the two injuries, commenting:

It seems to us that, however desirable it may be wherever possible to segregate with certainty the effects of such similar accidents, it would be unreasonable and impossible to require in every case that it be done with exactitude. Not always can a conscientious physician state with positiveness what portion of claimant's present injuries was the result of a prior accident, and what portion thereof was caused by a subsequent injury aggravating the effects of the first one. For us to require that this be done would place a premium on false testimony and penalize honest claimants. While the jury should not be permitted to hazard a guess upon vital issues of a case, nevertheless the difficulty of separating the damages resulting from independent causes will not relieve a defendant from liability if there is evidence upon which, as Mr. Justice Walling said in Osterling v. Frick, 284 Pa. 397, 404, 131 A. 250, 252, "an approximate separation of such damages from those otherwise sustained" can be made. The jury must, under such circumstances, determine where the "dividing line" is to be drawn, under careful instruction of the court.

Id. at 417. In a medical malpractice case against two doctors, each of whom was negligent in failing to correctly diagnose plaintiff's breast cancer, the court reinstated the jury's apportionment of damages between the two, finding that the first doctor's negligence caused a progression of the cancer from Stage I to Stage II (shortened plaintiff's life expectancy from a 94% chance of 10-year survival to 50% chance of a 10-year survival), and the second doctor's negligence resulted in an inoperable cancer, subsequent brain metastasis and vastly shortened life expectancy. Glicklich v. Spievack, 452 N.E.2d 287, 291 (Mass. App. Ct. 1983).

severally liable, required that the plaintiff offer sufficient proof that the tortfeasor did in fact contribute to the injury suffered. Moreover, the enhanced injury cases and the proposed section 11 of the *Restatement (Third) on Products Liability* make this requirement absolutely clear.

Fifth, the better reasoned decisions also required the plaintiff to offer evidence of indivisibility. Demanding such evidence is reasonable because it is in the plaintiff's self interest to provide it, whereas it is in the defendant's self interest to offer evidence limiting its liability. On the basis of that evidence offered by all parties the court will determine as a legal matter whether the harm is capable of apportionment, and the jury will determine, if the issue is submitted to it, the actual division. The *Restatement (Third)* should spell out these thresholds and the allocations of the respective burdens of proof.

Sixth, the past decade has witnessed considerable controversy within legislatures as to the appropriate modifications to the law governing joint and several liability. One of the real advantages of greater use of apportionment is that it short circuits that entire debate. If the harm is divisible there is simply no reason to confront the merits of joint and several liability or to determine how it meshes with comparative fault or economic versus non-economic damages. State legislatures have enacted a potpourri of reforms scaling back the availability of joint and several liability; but apportionment permits courts to sidestep those legislative reforms by rendering the application of such statutes moot to the case before the court.

Seventh, these cases also demonstrate that there simply does not exist any kind of harm that is not capable of apportionment, if the evidence is presented as to the contributing causes and if the evidence provides some reasonable basis for comparing those causes. Death, always regarded even by Prosser as indivisible, is indeed capable of being apportioned among multiple causes. The evidence offered in Dafler would be equally probative of apportionment whether the plaintiff lived or died. And Dafler does not stand alone in this regard. For example, a Pennsylvania decision approved an apportionment between injuries incurred in a traffic accident, attributable to the negligence of the city and a traffic control company, and further injuries attributable to the malpractice of a hospital, which resulted in death. 528 The Restatement (Second) in comment "i" also describes "any single wound," the sinking of a barge or fire-damaged property as also constituting harms incapable of apportionment. That statement is valid *only* if the inquiry is limited to looking at the resultant harm itself; it is facially invalid as soon as the inquiry is enlarged to include a comparison of the multiple causes that may have contributed to that harm.

Eighth, these cases also illustrate the increasing availability of the kinds of data that may facilitate the apportionment process. In *Dafler* it was epidemiological data, in the CERCLA cases it was volumetric and toxicity

^{528.} See, e.g., Embrey v. Borough of West Mifflin, 390 A.2d 765, 766 (Pa. Super. 1978).

data, and in other cases it was a variety of data that enable a reasonable comparison of the causal forces. In nuisance and toxic product cases especially, numerous federal agencies are engaged in developing precisely the kinds of data that can offer litigants the ammunition needed to undertake apportionment. 529

Ninth, the allocation of responsibilities between the court and jury are also illustrated in these decisions. The Restatement (Second) section 434 assigns to the court the function of determining whether the plaintiff has offered sufficient evidence of causation and whether the harm is capable of apportionment. The jury has the function of determining whether defendant's conduct was a substantial factor and the actual apportionment of the harm. The proposed black letter rule does not challenge these allocations but adds an additional duty on the court: to determine if the plaintiff has offered sufficient evidence of causation and indivisibility to justify the burden-shifting effect authorized in section 2(2). If the court determines that the plaintiff has fulfilled that threshold burden of proof, any defendant wishing to avoid liability for entire damages (or joint and several liability) must carry the burden of demonstrating the basis for apportionment. At the conclusion of the evidence the court will determine whether the factual question of apportionment is sufficiently close that reasonable minds could arrive at either conclusion. In that case, the jury will be instructed that defendant bears the overall burden of persuasion on that question.

III. RATIONALES FOR APPORTIONMENT

The principle rationale for apportionment is that apportionment is fundamentally fair. Therefore, any black letter rules that facilitate apportionment lead to fairer results. This Article now offers justification that apportionment produces fairer results than holding a tortfeasor liable for entire damages or holding multiple tortfeasors jointly and severally liable.

A. Causation's Role in Corrective Justice

We begin with the premise that causation is a root principle of fairness and corrective justice. The universality of causation to principles of fairness is illustrated by the diverse legal theorists who either explicitly advocate⁵³⁰ or

^{529.} See Boston, supra note 178, at 631-35 (describing agencies and the kinds of data generated).

^{530.} See, e.g., Richard A. Epstein, Causation—In Context: An Afterword, 63 CHI.-KENT L. REV. 653 (1987) [hereinafter Causation—In Context]; Richard A. Epstein, A Theory of Strict Liability, 2 J. LEGAL STUD. 151 (1973) [hereinafter Theory of Strict Liability]; Alan Schwartz, Causation in Private Tort Law: A Comment on Kelman, 63 CHI.-KENT L. REV. 639 (1987); Richard W. Wright, Causation, Responsibility, Risk, Probability, Naked Statistics, and Proof: Pruning the Bramble Bush by Clarifying the Concepts, 73 IOWA

implicitly assume the presence of causation in their corrective justice models.⁵³¹ The reasons for doing so are clear. Fundamental fairness requires that a defendant compensate for those losses, but only those losses, which his tortious conduct caused.⁵³²

These generalizations respecting the causal requirement in corrective justice do little, however, to address the search for fair outcomes in some tort cases because many cases necessarily involve at least some causal indeterminacy. These cases are troublesome precisely because the causal questions are intractable and elusive. With the exception of cases involving distinct harms, the single harm cases often present some causal uncertainty; that is, how much harm did the tortious conduct cause? Indeed, sorting out the causal questions in nuisance and toxic tort cases have become so difficult that many commentators have sought to create vastly non-traditional solutions by advocating contractual remedies, 533 creating new kinds of legally cognizable harms, 534 or advocating probabilistic causation. 535

L. REV. 1001, 1018-19 (1988).

^{531.} See Jules L. Coleman, Tort Law and the Demands of Corrective Justice, 67 IND. L.J. 349, 358 (1992) (arguing that "corrective justice is concerned with the gains and losses that one person causes another" as it "prohibits creating a wrongful loss").

^{532.} See id. at 359.

^{533.} For example, Professor Richard Epstein has noted that the "most vexing questions of causation" arising in the Bendectin cases would permit the relationship between drug companies and users to be governed by contract law. In this way, tort law and juries would be spared the array of conflicting scientific data that is incapable of precisely resolving the ambiguous causation question. Causation—In Context, supra note 530, at 677. Professor Epstein further argues that "[t]he theories did not create the factual problems of the modern asbestos, delayed trauma toxic tort case. Rather the difficulty arises because the present legal system is so wedded to its own conceptions of causation and responsibility that it does not permit any form of contracting out, even where it is feasible." Id. at 678.

^{534.} Professor Wright takes an entirely different tack. He roundly criticizes those commentators who would depend entirely on probabilistic evidence or "probabilistic causation" for confusing ex ante risk with ex post cause-in-fact. See Wright, supra note 530, at 1049-77; see also Richard W. Wright, The Efficiency Theory of Causation and Responsibility: Unscientific Formalism and False Semantics, 63 CHI.-KENT L. REV. 553, 560 (1987) [hereinafter Efficiency Theory]. He would instead preserve the strict causality requirement by redefining the nature of the harm of which the defendant's conduct was the cause-in-fact by recognizing a new type of injury—risk exposure per se or risk exposure that possibly led to the subsequent injury:

[[]I]f each defendant is held liable only for her share of the risk exposure, there is no conflict with the corrective-justice view. It still must be proven that each defendant caused the risk exposure that possibly led to the manifested injury, and liability is for such risk exposure, rather than the manifested injury. If the defendant can establish that she did not contribute to the manifested injury—that is, that the risk that she created could not have led to the manifested injury—the courts absolve her from any liability.

Wright, supra note 530, at 1073; see also Efficiency Theory, supra, at 576-77.

^{535.} Professors Rosenburg and Robinson advocate another approach to the causation problem, maintaining that probabilistic causation is the fairest system to apply in mass toxic exposure cases. However, these approaches achieve fairness across groups of cases but are troublesome in individual toxic tort cases. Glen O. Robinson, *Multiple Causation in Tort Law: Reflections on the DES Cases*, 68 VA. L. REV. 713, 743-44 (1982); see also David Rosenberg, *The Causal Connection in Mass Exposure Cases: A "Public Law" Vision of the Tort System*, 97 HARV. L. REV. 849, 924-29 (1984).

But these difficulties do not detract from the underlying premise that if a court can reasonably evaluate the causal forces and assign some value to each of the causes that contributed to a harm, the court should do so. That is precisely what the courts were doing in the CERCLA cases discussed in Part II. D. Moreover, in *Dafler*, ⁵³⁶ the court could never know for certain whether the plaintiff's smoking history or exposure to asbestos was the cause of his lung cancer, or whether both functioning synergistically was the cause, or whether Dafler's lung cancer was simply a background case unrelated to either smoking or asbestos exposure. ⁵³⁷ If corrective justice accepts the requirement of causation-in-fact, and that the inquiry can never eliminate all causal indeterminacy, ⁵³⁸ then it should embrace an apportionment model based on the very same evidence that was relied upon to establish causation. The plaintiff in *Dafler* proved, to the extent possible, that smoking was a cause of his cancer, and he also proved, to the extent anyone could, that asbestos exposure was also a cause of his cancer.

It does not violate principles of corrective justice to require the defendant to ante up in these cases because the plaintiff has met her burden of proof by offering sufficient evidence that asbestos exposure was "a" cause of the harm by showing the magnitude of the excess risk (through epidemiological and toxicological evidence) and particular evidence of her medical and personal history to help eliminate alternative causes. Corrective justice principles should allow a court to declare both smoking and asbestos exposure a cause of the cancer. The fairest way to factor in the existence of dual causes is to apportion the harm, and that is precisely what the proposed black letter rule as well as section 433A of the *Restatement (Second)* would require. The proposed black letter rule in section 1(2)(b), however, would recognize that it is the comparison of the respective causal forces that serves as the basis of the apportionment.

^{536.} See supra notes 341-56 and accompanying text for a discussion of Dafler.

^{537.} For extensive discussions of *Dafler* and the scientific issues involved, see *supra* note 527. *See generally* Boston, *supra* note 178; *Mass-Exposure Model*, *supra* note 346. In *Dafler*, both of the plaintiff's experts testified that asbestos and smoking produced quite substantial relative risks to the tune of 5.0 to 7.0 for asbestos and 10.0 to 12.0 for smoking. Apportionment explicitly recognizes the relevance of the excess risks that each toxic substance created. Dafler v. Raymark Indus., Inc., 611 A.2d 136, 140 (N.J. Super. Ct. App. Div. 1992).

^{538.} When the harm consists of diseases such as cancer, whose precise etiology is as yet poorly understood, there will always remain some element of arbitrariness in assigning responsibility to the defendant. This element will remain regardless of how much persuasive evidence the plaintiff offers. Thus, "despite any amount of scientific information directly on point, the existence of residual baseline risk renders any categorical decision on causation epistemologically arbitrary." Vern R. Walker, *The Concept of Baseline Risk in Tort Litigation*, 80 KY. L.J. 631, 669 (1992); see also Troyen A. Brennan, Causal Chains and Statistical Links: The Role of Scientific Uncertainty in Hazardous-Substance Litigation, 73 CORNELL L. REV. 469, 470-71 (1988). Even in tobacco and asbestos litigation, the distinct possibility exists that the plaintiff's lung cancer was a background case and not actually attributable to these toxic exposures.

^{539.} See Boston, supra note 178, at 607-16. For an analysis of epidemiological and toxicological evidence; see also supra notes 346-50.

B. Apportionment Avoids Unsatisfactory All-or-Nothing Outcomes: The Comparative Fault Analogy

The principal motivation behind the adoption of comparative negligence systems was the unfairness of the all-or-nothing rule of contributory negligence. Courts adopting comparative negligence were striving to create a system that permitted apportionment of fault, in which each party's liability was commensurate with the percentage of fault attributable to it. However, the same all-or-nothing unfairness that compelled the abandonment of the bar of contributory negligence should equally compel the abandonment of a rule of indivisible harm or indivisible causation. Although Professor Wright has declared that causation, unlike fault, can never be a matter of degree, ⁵⁴⁰ in many tort cases it is *always* a matter of degree. Causes come in a wide variety: necessary, sufficient, partial, successive, and nontortious. In a number of these, causation *is* a matter of degree, of gradations, and comparisons between multiple causes.

C. The Avoidable Consequence Analogy

The law of torts prescribes an award of damages to achieve fair compensation for loss or injury, but the law also shields a tortfeasor from paying more than fair compensation for the harm that was done. The doctrine of avoidable consequences serves to adjust plaintiff's available damages to reflect the plaintiff's post-tort conduct that may have increased those damages. The doctrine rests on a common sense notion that one injured should act in a reasonable manner to bring about her own recovery from the injury inflicted by the defendant.

Under this doctrine of mitigation, a jury may segregate a plaintiff's harm between two causes: the portion of the harm the defendant's tortious conduct caused and the portion by which the plaintiff's post-tort conduct increased the total harm. For example, if a plaintiff's continued smoking after a treatment

^{540.} See generally Wright, supra note 530.

^{541.} See JACOB A. STEIN, PERSONAL INJURY DAMAGES § 8:1, at 319 (1986). I SUTHERLAND, supra note 11, § 149, at 458-59 expresses the idea:

[&]quot;[m]itigation of damages," a term which "... is what the term imports, a reduction of their amount; not by proof of facts which are a bar to a part of the plaintiff's cause of action, or a justification, nor of facts which constitute a cause of action in favor of the defendant; but rather of facts which show that the plaintiff's conceded cause of action does not entitle him to so large amount as the showing on his side would otherwise justify the jury in allowing him. Mitigation is addressed to the equity of the law. It is a concept admitted to assist in the application of the paramount rule that damages should not exceed just compensation unless the case calls for severity in the form of exemplary damages."

STEIN, supra, § 8:1, at 320 (quoting from 1 SUTHERLAND, supra note 11, § 149, at 459-59). The doctrine of avoidable consequences serves to adjust plaintiff's awardable damages to reflect the plaintiff's post-tort conduct that may have increased those damages.

increases the risks of an amputation, which eventually becomes necessary, then the jury may reduce the plaintiff's damages because of that fact. Even though the defendant's tortious conduct was a "but-for" cause of the harm, the plaintiff's conduct nevertheless increases that harm, and courts willingly recognize the propriety of a commensurate adjustment in the damages awarded. Indeed, Prosser has used the avoidable consequences rule as an argument in favor of the doctrine of apportionment. If juries are required to mitigate damages as a result of the plaintiff's post-tort unreasonable conduct even when there exists difficulty in making the division, so too juries should be authorized to apportion harm as to causes even when the process is difficult. 543

D. Multiple Defendant Cases and Fairness Concerns: Thin Skulls and Insolvency

When the harm is divisible, the multiple-defendant case becomes a plaintiff's claim against each defendant individually because each defendant's liability will be based on its proportionate share of the harm. As a result, the plaintiff will recover full compensation by suing all responsible parties and holding each liable for its share, much like market-share theory operates in those jurisdictions that hold each defendant only proportionately liable. But what about insolvent defendants or those that are unavailable or cannot be located? Why is it fair for the plaintiff to bear those defendants' portion of liability, which equates to their divisible portion of the harm? Admittedly, in these situations corrective justice notions are the most compelling against allowing only proportionate liability. Nevertheless, even in cases of insolvent tortfeasors, the principle of apportionment should not be abandoned.

In cases comprising a single plaintiff and single defendant, one defendant's status as uninsured, underinsured, insolvent, immune, or absent will affect the plaintiff's recovery, because tort law makes no guarantee regarding any party's ability to satisfy a judgment. This fact is well known to courts and legislatures, which rarely require a significant level of liability insurance to engage in a particular business (or even to drive an automobile). Thus, in these cases the plaintiff faces the risk that the defendant may be unable to satisfy a judgment. Similarly, both legislatures and courts have created immunities that permit some entities to engage in tortious conduct while shielding them from liability for damages, with the consequence that an injured plaintiff will recover nothing.

^{542.} See, e.g., Ostrowski v. Azzara, 545 A.2d 148 (N.J. 1988).

^{543.} See KEETON ET AL., supra note 105, § 52, at 350 (stating that apportionment of damages cannot be precluded solely because of the difficulty in doing so, and comparing the avoidable consequences doctrine in that "[t]he difficulty is certainly no greater than in cases where part of the damage is to be attributed to the unreasonable conduct of the plaintiff, and the rule of avoidable consequences is applied to limit recovery").

^{544.} See Aaron D. Twerski, The Joint Tortfeasor Legislative Revolt: A Rational Response to the Critics, 22 U.C. DAVIS L. REV. 1125, 1130-36 (1989).

While concern with insolvent tortfeasors is often expressed, Professor Twerski has pointed out that the real culprits are not tortfeasors who are insolvent but rather those who enjoy some immunity. Even if there is some unfairness in having a plaintiff bear a loss attributable to a defendant without financial resources, there is no unfairness in refusing to have one solvent defendant bear the share of an immune defendant. If the legislature has conferred governmental immunity to an employer via the workers' compensation system, there is no reason based on fairness why another non-immune defendant, rather than the plaintiff, should absorb that portion of the loss.

Further, the law's desire to make the plaintiff whole is no different when there is one tortfeasor or many tortfeasors. The realities of the accident "marketplace"—the lottery of a given defendant's wealth or immunity—compels the plaintiff to take the defendant as she finds him, economically speaking. In multiple-defendant litigation, the plaintiff is always better off because the odds are that at least one defendant will be able to satisfy its portion of the plaintiff's damages. Tort law, however, should not encourage a suit only against well-heeled defendants. This is precisely what happens, however, when apportionment is unavailable and joint and several liability is imposed. A better approach would be for the law to provide

545. Professor Twerski states:

The true problem is "institutionally immune" defendants. These defendants have been granted a broad license to act, bearing limited financial responsibility for their conduct. It is not surprising for legislatures to conclude that it is unfair to saddle solvent defendants with the full brunt of damages substantially caused by conduct which society immunized. The decision against joint tortfeasor liability essentially states society's belief that the limited compensation available from recovery-immune defendants reflects the appropriate level of compensation for the immune conduct. For example, motorists who are permitted by law to drive with woefully inadequate liability insurance limits are not simply insolvent tortfeasors. Instead, they are recovery-immune defendants, legally sanctioned to drive with full knowledge that they will only be able to pay a small fraction of the costs of the harm they cause. To shift losses to the solvent joint tortfeasor is to treat him as a "whipping boy" and to require him to bear full responsibility for broad-based immunities that cut a very large swath through traditional tort liability.

Twerski, supra note 544, at 1132-33.

546. A few courts have explicitly acknowledged this point in declining to retain joint and several liability after the adoption of comparative fault. See, e.g., Brown v. Keill, 580 P.2d 867 (Kan. 1978). In Brown the Kansas Supreme Court stated:

The perceived purpose in adopting [the Kansas comparative negligence statute] is fairly clear. The legislature intended to equate recovery and duty to pay to degree of fault. Of necessity, this involved a change of both the doctrine of contributory negligence and of joint and several liability. There is nothing inherently fair about a defendant who is 10% at fault paying 100% of the loss, and there is no social policy that should compel defendants to pay more than their fair share of the loss. Plaintiffs now take the parties as they find them. If one of the parties at fault happens to be a spouse or a governmental agency and if by reason of some competing social policy the plaintiff cannot receive payment for his injuries from the spouse or agency, there is no compelling social policy which requires the codefendant to pay more than his fair share of the loss. . . . Previously, when the plaintiff had to be totally without negligence to recover and the defendants had to be merely negligent to incur an obligation to pay, and argument could be made which justified putting the burden of seeking contribution on the defendants. Such an argument is no longer compelling because of the purpose and intent behind the adoption of the comparative negligence statute.

Id. at 873-74.

plaintiffs with incentives to sue all of the responsible parties. Indeed, if the plaintiff sues all responsible parties, the plaintiff will increase the amount of damages collected under the apportionment model. Requiring a single defendant to bring third-party actions against other potential tortfeasors and thereby spread the loss among more of the risk creators is inefficient. Instead, judicial efficiency increases if, in one unitary proceeding, one judge and one fact finder hear all of the evidence on every party's contribution to the harm and render a comprehensive apportionment on the basis of that evidence. The more parties the plaintiff joins, the greater the likelihood that most will be able to satisfy a judgment for their respective allocated share of the plaintiff's total damages.⁵⁴⁷ When plaintiffs' lawyers believe there is some possibility of apportionment, which might serve to increase their clients' recovery, they will be more likely to join all risk creators whose conduct contributed to the plaintiffs' damages.

With joint and several liability less available, both sides would have an incentive to offer evidence on the apportionment of the harm. Each defendant would argue that there is a reasonable basis for comparing the risks created by all of the defendants. Each defendant would also seek to minimize its share, while the plaintiff would maintain that no reasonable basis for apportionment exists, or failing that, would argue for an apportionment that maximizes recovery. With a doctrinal preference for apportionment, parties would have an interest in joining all responsible parties, because a parties' absence would reduce the plaintiff's recovery and make it more difficult for the fact-finder to apportion the entire harm. Moreover, to assure even greater incentive for the plaintiff to join all responsible parties, a defendant could offer proof of the risks which absent parties created, and the jury could assign proportionate shares to such "phantom" nonparties. Thus, this apportionment scheme would differ from those comparative fault statutes that allow the jury to assign percentages of fault only to those before the court. While the comments to the current Restatement (Second) of Torts section 433A⁵⁴⁸ authorizes this assignment of a portion of the harm to absent causes, be they tortious or innocent, 549 the proposed Restatement (Third) would include that assignment in the black letter rule. The plaintiff would aim to offer evidence seeking to minimize the absent shares, while the defendants would aim to maximize such shares.

^{547.} In 1992, the Tennessee Supreme Court judicially adopted comparative fault, eliminated joint and several liability, and provided that:

[[]B]ecause a particular defendant will henceforth be liable only for the percentage of a plaintiff's damages occasioned by that defendant's negligence, situations where a defendant has paid more than his "share" of a judgment will no longer arise, and therefore the Uniform Contribution Among Tort-feasors Act will no longer determine the apportionment of liability between codefendants.

McIntyre v. Balentine, 833 S.W.2d 52, 58 (Tenn. 1992) (citation omitted).

^{548.} RESTATEMENT (SECOND) OF TORTS § 433A (1965).

^{549.} Id. § 433A cmt. a.

Another problem exists, which is expressed in comment "h" to section 433A of the *Restatement (Second)*. 550 Comment "h" calls for abandonment of apportionment in cases where one of multiple tortfeasors is insolvent and "justice" requires treating the harm as indivisible even though apportionment is otherwise called for. Comment "h," however, is directed at divisible, single harms only and is not applicable to distinct harms because comment "h" modifies subsection (2) of section 433A which is addressed to divisible harms only. It seems to me that distinguishing between distinct and divisible harms is arbitrary. The same principles should govern both groups of cases.

E. Fairness Objects to Disproportionate Liability

In the CERCLA cases, Alcan-Butler, 551 Alcan-New York 552 and In re Bell Petroleum, 553 the courts were concerned about the fairness of imposing joint and disproportionate liability. Thus, the courts' statements in the Alcan cases and In re Bell Petroleum respecting the "harshness" of imposing joint and several liability were directed precisely at that concern. In In re Bell Petroleum, recognition that CERCLA could be "terribly unfair" in cases in which defendants must reimburse the government for "huge amounts for damages to which their acts did not contribute"554 influenced the court's willingness to fashion rules to "ameliorate this harshness." 555 Similarly, the Third Circuit in Alcan-Butler was expressing a fairness concern when it commented that "delaying the apportionment determination" to the contribution phase may have "drastic" consequences because defendants may be "strong-armed into settling" in order to avoid the prospects of liability for the remainder of the response costs. 556 Finally, in Alcan-New York the Second Circuit also expressed concern with the "harsh result" that derives from the fact that "there is no limit to the scope of CERCLA liability."557

These fairness concerns motivated all three courts to fashion and apply rules of apportionment that would mitigate harsh and unfair extremes. Apportionment of response costs, or apportionment of tort liability in a tort case, will yield results that are more compatible with fairness objectives than the imposition of disproportionate liability. If courts are sufficiently cognizant of the unfairness associated with joint and several liability when Congress is presumably setting the broad policy goals, then surely courts faced with difficult issues in tort litigation can arrive at the same accommodation of all parties' interests.

^{550.} See supra notes 183-86 & 234-38 and accompanying text.

^{551.} Alcan-Butler, 964 F.2d 252 (3d Cir. 1992).

^{552.} Alcan-New York, 990 F.2d 711 (2d Cir. 1993).

^{553.} In re Bell Petroleum Servs., Inc., 3 F.3d 889 (5th Cir. 1993).

^{554.} Id. at 897.

^{555.} Id.

^{556.} Alcan-Butler, 964 F.2d at 270 n.29.

^{557.} Alcan-New York, 990 F.2d at 721.

Concern for disproportionate liability is the basis for many tort law rules, such as no-duty and proximate-cause limitations.⁵⁵⁸ For example, the economic loss rule, which shields a negligent actor from liability for purely economic losses, is predicated on the apprehension that the ripple effects of negligent conduct may produce staggering economic losses, even where no physical harm to persons or property results.⁵⁵⁹

In fact, it seems pretty clear that the harshness of disproportionate liability is the single most powerful argument explaining the decisions of legislatures in abolishing or modifying joint and several liability. Whether it is CERCLA, toxic tort, or even sporadic accident litigation, the concern of legislatures is to soften the excessive liability imposed on so-called "deeppocket" defendants. The principal argument against this position is that each defendant is responsible for the entire harm, a cause in fact and proximate or legal cause of all the harm sustained. However, that characterization, while valid in describing the causal nexus in some accident cases, simply does not hold in many tort cases involving multiple causes.

Where the causes are partial, successive or nontortious, as opposed to necessary or sufficient, it simply cannot be found that a tortfeasor's conduct was the cause of the entire harm. Even if liability created by joint and several liability may not be disproportionate or excessive when defendant's tortious conduct truly is a but-for or sufficient cause of all the harm suffered, when a defendant's tortious conduct is *not* a legal cause of all the harm or such a relationship cannot be demonstrated, then liability for entire damages or joint and several liability does produce disproportionate and excessive liability.

Relatedly, several courts have rejected the application of joint and several liability to defendants held liable under the market-share theory due to concerns over disproportionate liability. When market-share theory is predicated on the probability of actual causation, ⁵⁶² a defendant's share of the market will

^{558.} See, e.g., In re Kinsman Transit Co., 338 F.2d 708 (2d Cir. 1964), cert. denied, 380 U.S. 944 (1965); Ryan v. New York Cent. R.R. Co., 35 N.Y. 210 (1866); Overseas Tankship (U.K.), Ltd. v. Morts Dock & Eng'g Co., LTD. (The Wagon Mound), 1 Eng. Rep. 404 (P.C. 1961).

^{559.} One classic opinion is Louisiana ex rel. Guste v. M/V Testbank, that involved a collision of two ships that produced a chemical spill and quarantine of the New Orleans Port area. 752 F.2d 1019 (5th Cir. 1985) (en banc), cert. denied, 477 U.S. 903 (1986). The opinion contains a wealth of arguments respecting unlimited liability in the context of public nuisance liability and also discusses liability for economic losses based on negligence stemming from what could have been a mass exposure. The Fifth Circuit refused to permit ripple-effect plaintiffs (other than crabbers and shrimpers who fished in those waters) to recover the economic losses they sustained from the cessation of all shipping, marina, and recreational activities for 17 days. Id. at 1032. The court opted for a bright-line rule requiring physical property damage in order to prevent the specter of unlimited and unpredictable losses flowing from the defendant's negligence. Id. at 1029.

^{560.} See Twerski, supra note 544, at 1132-33.

^{561.} See supra notes 538-42 and accompanying text.

^{562.} See Conley v. Boyle Drug Co., 570 So.2d 275, 286-87 (Fla. 1990) (using only local market shares to apply several liability); Hymowitz v. Eli Lilly & Co., 539 N.E.2d 1069, 1078 (N.Y.), cert. denied, 493 U.S. 944 (1989) (holding that liability of each defendant is several, not joint and several, with liability based on national market shares and each firm's contribution to the public's risk); Sindell v. Abbott Lab., 607 P.2d

converge with the harm it actually caused over many cases (but not in individual cases) but it is unfair to hold it liable for a percentage of harm it did not cause. The proposed *Restatement (Third) of Torts* that governs products liability explicitly rejects joint and several liability in market-share cases:

However, if a court does adopt some form of proportional liability, the liability of each defendant is properly limited to the individual defendant's share of the market. The rules of joint and several liability are incompatible with a market share approach. Unlike the case of concurrent tortfeasors, where several parties contribute to a single plaintiff's entire harm, in the imposition of market share liability it is not established that all the defendants contributed to the plaintiff's injury. Instead, each defendant should pay for harm in proportion to the risk that it caused in the market at large. Joint and several liability would impose liability on each defendant for the entirety of the harm based on its presence in the market with other defendants. In the absence of some concerted conduct among the defendants, such liability is inappropriate. ⁵⁶³

Furthermore, because market shares are a known percentage, applying joint and several liability, coupled with absent defendants, will always result in disproportionate liability. As we have seen, many tort cases involve what amounts to proportionate causation based not on a defendant's sales of a product but on the strength of causal relationship to the harm. When the single indivisible injury rule is applied and not all defendants are joined or some are insolvent or immune, others will necessarily end up paying beyond their responsibility. Although this may be an acceptable consequence when no basis for apportionment can be found, it is unfair when apportionment is available on some rational basis.

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^{924, 937 (}Cal.), cert. denied, 449 U.S. 912 (1980), modified, Brown v. Superior Court of San Francisco, (Abbot Lab.), 751 P.2d 470, 487 (Cal. 1988) (holding that liability is several only, with each defendant liable only for its respective market share); but see Collins v. Eli Lilly & Co., 342 N.W.2d 37, 49-53 (Wis.) (allocating joint and several liability based on risk contribution), cert. denied, 493 U.S. 944 (1989).