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**To: The participants of the Law and Economics Seminar,
Boalt Hall School of Law**

From: Ariel Porat

Dear participants,

The following article is a draft of a chapter in a book I co-author with Professor Alex Stein from the Hebrew University of Jerusalem, titled *Liability Under Uncertainty: Evidential Deficiency and the Law of Torts* (Oxford University Press).

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The discussion on Monday, April 5, will refer to pages 2-59. Comments and suggestions are most welcome.

LIABILITY FOR UNCERTAINTY:

MAKING EVIDENTIAL DAMAGE ACTIONABLE

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OUTLINE

Because factual uncertainty distorts the allocation of civil liability, this Article argues that the law should impose *liability for uncertainty*. Justified on both corrective justice and economic efficiency grounds, this liability should be imposed upon any person who negligently aggravates the uncertainty of a civil case by making its evidential base deficient. Because "evidence" belongs to the world of inferences rather than things, evidential damage may be inflicted in a variety of ways, far beyond destruction of documents and other physical tampering with evidence. Through adoption and refinement of this insight, the Article diagnoses the presence of evidential damage in many legally important settings, such as mass torts, medical malpractice, exposure to risk and employment discrimination. It also identifies a number of legal doctrines that handle the evidential damage problem indirectly and thus attempt to resolve it within the narrow scope of their application. Criticized by the Article as underdeveloped forms of liability for evidential damage, these doctrines are urged to be replaced by an explicit and comprehensive liability.

From the corrective justice perspective, evidential damage should be actionable because a person sustaining such a damage is deprived of information to which she was entitled. This deprivation makes her less autonomous in pursuing her legal rights and also diminishes the settlement value of her case. From the economic efficiency viewpoint, liability for evidential damage will serve two purposes: as an incentive for people to cost-effectively prevent evidential damage and as a vehicle for optimizing allocation of the primary damage in conditions of uncertainty.

The Article also develops a remedial mechanism for cases involving evidential damage. Drawing upon game theory, this mechanism monetizes evidential damage by comparing the post-damage settlement value of the case with its pre-damage value in a way that precludes both undercompensation and overcompensation of the afflicted party. In cases that became evidentially damaged through fault of one of the litigants, this mechanism is fortified by a reallocation of the persuasion burden to the benefit of the afflicted party. By analyzing both the economics and the egalitarian cast of the rules controlling the burden of proof, the Article demonstrates that its proposed shifting of the risk of non-persuasion will promote both efficiency and fairness.

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I. INTRODUCTION

Factual uncertainty resulting from missing evidence is a salient feature of every litigated case. Absolute certainty is unattainable. Judicial¹ decisions thus always involve risk of error. This risk cannot be totally eliminated. But it is sought to be minimized by increasing the amount of probative evidence that needs to be considered by the triers of fact². Missing evidence should therefore be perceived as a damaging factor. Destruction of evidence, as well as non-physical eradication of its probative value, should accordingly be perceived as damage-inflicting actions. Would such actions have any legal consequences? Should they have any? What are and what should be the criteria for ascribing liability to a person inflicting evidential damage? What are and what should be the remedies available to a person sustaining such damage?

Although uncertainty is pervasive in both civil and criminal trials, these questions are rarely brought to the fore of the legal argument. In criminal litigation, where any reasonable doubt benefits the accused -- who is generally presumed to be innocent until proven guilty -- these questions are relatively insignificant. They are, however, important in civil trials, where liability for uncertainty may play a potentially decisive role in determining the litigants' rights. Nonetheless, civil litigants rarely raise those questions, which by no means is attributable to poor lawyering. Those questions are rarely raised because liability for evidential damage is recognized by the law only in exceptional cases, typically involving intentional destruction or suppression of pivotal evidence. Subject to these exceptions, which are yet to crystallize into bright-line rules, evidential damage is generally irremediable³. This damage is thus largely internalized by the afflicted party as a *damnum sine injuria*. In some settings, the evidential damage problem is tackled indirectly by a number of tort law and contract law doctrines, which provide the afflicted

1 This and related terms will be used throughout this Article generically, as referring to both judges and jurors.

2 See generally Alex Stein, *The Refoundation of Evidence Law*, 9 CAN. J. L. & JURIS. 279 (1996).

3 See generally JAMIE S. GORELICK, STEPHEN MARZEN & LAWRENCE SOLUM, *DESTRUCTION OF EVIDENCE* chs. 2 & 4 (1989; appended 1995).

litigants a limited set of *ad hoc* remedies⁴. These fragmented remedies, however, fall short of solving the problem.

Scholarly writings have dealt with the questions presented at the outset in a highly fragmented and unsystematic fashion. This neglect can partly be ascribed to the indirect doctrinal solutions of the evidential damage problem, which emerged in different jurisdictions. At a general principled level, this neglect has no apparent justification. As could be expected, failure to confront the problem directly has engendered difficulties and anomalies in the application of the law.

This Article confronts the problem directly by focusing upon civil trials. It argues that evidential damage should be actionable⁵. Part II of this Article explicates the nature of evidential damage and provides a number of examples which exhibit both the importance and the pervasiveness of the evidential damage problem. Further examples are provided in Part III, which discusses and removes a seemingly powerful objection to making evidential damage actionable. This objection is grounded in the "process theory" of tort liability that justifies differential treatment of *prima facie* indistinguishable damage situations by the savings of litigation costs attainable through non-liability rules. We argue that this theory has a limited normative force and should not bar recovery for evidential damage.

Parts IV and V conduct a normative inquiry into the question of liability for evidential damage. This question is examined from two alternate viewpoints, that of corrective justice and that of deterrence. Remedies attendant upon liability for evidential damage are also examined from each of these viewpoints. We develop a mechanism, suitable for both deterrence and corrective justice systems, by which evidential damage can be reduced to money. The aim set for this mechanism is to afford the right amount of compensation to a person whose entitlement to evidential information was tortiously destroyed by another person. Under the corrective justice account, we treat this entitlement as a valuable determinant of a person's autonomy. Destruction of this entitlement is damaging to a person because it impairs her ability to exercise her autonomous choices in enforcing her legal rights. The afflicted person should therefore be

4 See discussion *infra*, nn.6-26 and accompanying text.

5 "Actionable" refers to any legal redress, including shifting the burden of proof.

compensated for the value of the lost information. Because this information could be of value only between the parties to the underlying litigation, its probative potential should be translated into the afflicted party's probability to prevail in the litigation. Evidential damage may thus also be determined by its impact on the litigation's settlement value, which will involve an uncomplicated application of the game theory. Any reduction in the value of the afflicted party's litigation-threat vis-a-vis her opponent should be compensated for in this way.

Under the deterrence theory, an entitlement to evidential information is associated with its truth-value. Less evidential damage means more information and thus greater efficiency in implementing the controlling substantive law. This by itself justifies liability for evidential damage. Avoidance of evidential damage, however, must also be conducted within the bounds of efficiency. Its costs should therefore never exceed the cost of the damage. Apart from that, liability for evidential damage should account for its impact upon the allocation of the primary damages. It should thus be imposed in a way that optimizes the allocation of the primary damage in conditions of uncertainty.

Our discussion will thus demonstrate that evidential damage, when inflicted negligently, should normally be actionable in torts. This conclusion does not, however, exhaust the existing range of normatively sustainable possibilities. Part VI, which discusses the remaining possibility, leaves the terrain of torts by moving to evidence law. It examines the idea of treating liability for evidential damage as a ground for reallocating the risk of non-persuasion in the evidentially damaged trial. According to this idea, when *both parties* fail to discharge the controlling standard of proof (typically, that of preponderance of the evidence) judges should rule against the party responsible for the evidential damage. Modifying the original allocation of the non-persuasion risk, this solution of the problem is not comprehensive. Usually, it would be available only against the defendant in an evidentially damaged trial. Evidential damage inflicted by strangers can be actionable only in torts. Tort remedies, however, are also limited. They would not always be adequate when applied against a party to the evidentially damaged trial. In many cases, reallocation of the persuasion burden would constitute a better remedy. Tort law and evidence law mechanisms should therefore complement each other which, indeed, is the crux of our thesis.

Our conclusions in Parts III-VI thus combine into the following normative scheme:

- (1) Evidential damage should be actionable in torts under the negligence doctrine;
- (2) In a trial that became evidentially damaged, a party responsible for the damage should compensate the afflicted party or, when appropriate, carry the risk of non-persuasion.

Throughout the Article, we mention the ways (both explicit and implicit) in which the Anglo-American legal systems attempt to resolve the evidential damage problem. This is done in order to further exhibit the advantages of bringing the evidential damage doctrine to the fore of the legal discourse. We demonstrate that making evidential damage actionable will remove the problems currently involved in the application of several legal doctrines. These doctrines include, *inter alia*, the tort of evidence spoliation⁶, market-share⁷ and enterprise liability⁸, alternative tort liability⁹ and the risk-

6 *I.e.*, liability for destruction of some important evidence. *See* Gorelick *et al.*, *supra* n.3, chs. 2 & 4.

7 This doctrine applies when a number of manufacturers separately produce an identical product which turns out to be damaging. In any such case, if the damage cannot be identified as originating from one of the manufacturers, each of them will have to compensate the afflicted person in proportion to his share in the market. *See* W. PAGE KEETON, PROSSER & KEETON ON TORTS §41 (5th ed., 1984).

8 This doctrine applies when the litigated damage cannot be traced back to its individual producer, but is shown to have originated from a particular industry at large. Any manufacturer participating in that industry will accordingly be liable. *See* Hall v. E.I. Du Pont De Nemours & Co. Inc., 345 F.Supp. 353 (N.Y. 1972).

9 According to the RESTATEMENT 2d, TORTS, §433B, this doctrine holds as follows:

"(2) Where the tortious conduct of two or more actors has combined to bring about a 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 caused it, the burden is upon each such actor to prove that he has not caused the harm."

as-damage doctrine¹⁰. Our argument equally applies to two contract law doctrines that can be perceived as handling the evidential damage problem indirectly. These doctrines we do not discuss¹¹.

The specific doctrines dealing with the problem at hand have an inherently limited scope of application. As such, they provide a number of uncoordinated ad hoc solutions to the problem, which cannot be satisfactory. In cases involving market-share liability, alternative tort liability, and the risk-as-damage doctrine, this limitation is transparent. These doctrines are confined to their particular factual patterns. They also handle the evidential damage problem only implicitly and thus indirectly. Hence, their solution to the problem is not merely incomplete, but may also be inadequate even within the narrow scope of their application. As demonstrated throughout this Article, the main problem upsetting the application of these doctrines lies in the non-presence of the evidential damage as a liability-controlling factor¹².

10 Namely, the controversial doctrine treating bare risk as an actionable tort. *See infra*, nn.32-36 and accompanying text.

11 One of these doctrines, known as *contra proferentem*, holds that contractual ambiguities should be resolved against the party who drafted the contract. This party consequently becomes responsible for the evidential damage. In the RESTATEMENT 2d, CONTRACTS, §206, this doctrine is formulated as follows:

"In choosing among the reasonable meanings of a promise or agreement or a term thereof, that meaning is generally preferred which operates against the party who supplies the words or from whom the writing otherwise proceeds."

Under the second doctrine, which applies in breach-of-contract cases, factual indeterminacy of the expectation damages allows the aggrieved party to recover the reliance damages even when these may exceed the actual value of her expectation interest. An allegation that the aggrieved party would have incurred losses if the contract were performed is thus required to be preponderantly proved by the party in breach. *See* RESTATEMENT 2d, CONTRACTS §349; E. ALLAN FARNSWORTH, CONTRACTS 930 (2d ed., 1990). This doctrine can be justified by the fact that the evidential damage, as related to determination of the aggrieved party's expectation interest, was inflicted by the breach of contract.

These and other specific doctrines are discussed in detail in Ariel Porat & Alex Stein, *The Evidential Damage Doctrine: A Positive Analysis of the Law* 21 *Iyune Mishpat* 191 (1998).

12 For details *see* Porat & Stein, *id.*

The spoliation doctrine confronts the evidential damage problem directly. It is, however, limited to cases where evidence was destroyed *physically*. This limitation is premised on a fallacious ascription of physicality to evidence. As explicated later in this Article, evidence is not a physical essence. Rather, it is made out of physical essences by arguments inferentially relating those essences to a contested issue¹³. Such arguments may be made unavailable without physically damaging any evidential material. Moreover, destruction of evidential material will not necessarily lead to the unavailability of the relevant arguments. Physical tampering with evidence is therefore neither necessary nor sufficient for the infliction of evidential damage. Evidential damage is inflicted in the world of inferences, not in the world of things.

Normally, spoliation of evidence is actionable only as an *intentional* tort¹⁴. This further limitation of the spoliation doctrine is prompted by the reluctance to apply it in cases of negligence. Is there anything that can justify this reluctance? For numerous reasons, we find this reluctance and the consequent limitation of the doctrine unjustified. This reluctance is linked to the allegedly "economic" nature of the damage. Educated in the Israeli legal tradition, which softened, if not altogether abolished, the "economic" / "physical" damage distinction long before we attended law schools¹⁵, we find the reluctance to compensate plaintiffs for economic losses somewhat puzzling. More importantly, evidential damage is not purely economic. Making it actionable is instrumental to both the deterrence and the corrective justice objectives of the law of torts, as related to physical damages. To allow a plaintiff to recover for evidential damage

13 See Stein, *supra* n.2 (explaining the transforming nature of such arguments).

14 See generally Gorelick *et al.*, *supra* n.3, ch.4; Hazen v. Municipality of Anchorage, 718 P.2d 456 (Alaska 1986) (only intentional spoliation of evidence recognized as a tort). This limitation does not apply in California and Florida (*see* Velasco v. Commercial Bldg. Maintenance Co. 169 Cal.App.3d 874 (1985); Coca-Cola Bottling Co. v. Superior Court, 233 Cal.App. 3d 1273; Bondu v. Gurvich, 473 So.2d 1307 (Fla. 3d DCA 1984); Miller v. Allstate Ins. Co., 573 So.2d 24 (Fla.App. 3 Dist. 1990) -- all holding that negligent spoliation of evidence is actionable in torts) and is likely to be abolished in Alaska (*see* Sweet v. Sisters of Providence in Wash., 881 P.2d 304 (Alaska 1994), holding that negligent breach of the defendants' record-retaining duty justifies shifting the persuasion burden on the medical malpractice issue).

15 See Weinstein v. Kadima, 8 PISKEY DIN 1317 (1954) (in Hebrew).

will compensate her, wholly or partially, for the physical damage she might have tortiously sustained.

The reluctance to compensate plaintiffs for economic losses is typically justified by the "floodgate argument". According to this argument, allowing recovery for economic losses would proliferate litigation and generate overdeterrence. This argument has no force in the present case, because liability for evidential damage will always be attendant upon the afflicted party's action for some physical (or other actionable) damage. Indeed, this auxiliary character of the evidential damage doctrine makes it special.

The ancient predecessor of the spoliation doctrine, which is still very much alive, is embedded in the legal instruction that urges judges to presume "all things" against the spoliator of the evidence: *omnia praesumuntur contra spoliatorem*¹⁶. Despite this presumption's impressive age, the nature of the inferences warranted by it still awaits determination¹⁷. Whether it should work not only against malicious, but equally against

16 *See* *Armory v. Delamirie*, 93 Eng. Rep. 664 (K.B. 1722) (the defendant, a goldsmith, converted a jewel from the plaintiff's ring; the jury were told to "presume the strongest" against the goldsmith by appraising the missing jewel as having the conceivably highest value). This decision may be understood as furthering a prophylactic and a punitive objective: *see* *Gorelick et al.*, *supra* n.3, 34.

17 *See generally* JOHN H. WIGMORE, ON EVIDENCE, 3d ed., VOL. II, §291; John M. Maguire & Robert C. Vincent, *Admissions Implied from Spoliation or Related Conduct*, 45 YALE L. J. 226 (1935). For description of the current state of the law *see* JOHN W. STRONG, et al., MCCORMICK ON EVIDENCE, VOL. II, 193-94 (4th ed. 1992) (describing the law in this area as rapidly changing and yet to become clear); *Gorelick et al.*, *supra* n.3, ch.2; *Appendix*, 5-14 (it is unclear whether the presumption should be confined to epistemically permissible inferences or should also serve prophylactic and punitive goals); *Nation-Wide Check Corp. v. Forest Hills Distributors, Inc.*, 692 F.2d 214, 218 (1st Cir. 1982) ("the inference was designed to serve a prophylactic and punitive purpose"); *Glover v. BIC Corp.*, 6 F.3d 1318, 1329 (9th Cir. 1993) (strong tendency to treat the presumption as discretionary in federal courts).

In some English cases, the presumption was applied only to the assessment of tort damages: *see* *Seager v. Copydex Ltd.* [1969] R.P.C. 250, 258 (where there is an insoluble doubt between two possible versions of damage assessment, the *omnia praesumuntur contra spoliatorem* principle controls the decision); *General Tire & Rubber Company v. Firestone Tyre & Rubber Company Ltd.* [1975] R.P.C. 203 (the presumption applied against the defendant by determining the measure of damages awarded to the plaintiff in a patent infringement action through adoption of the version most favorable to the plaintiff; the presumption was held not to apply in proving the wrongful act

negligent spoliators is also unclear¹⁸. It is usually considered to be a discretionary rather than mandatory presumption, which further aggravates its indeterminacy¹⁹. In addition, its application is limited to cases where evidential damage was inflicted by a party to the underlying litigation. The comprehensive evidential damage doctrine advocated in this Article will therefore constitute an optimal replacement for this presumption. The proposed doctrine should also replace all other legal doctrines that handle the problem of evidential damage both indirectly and incompletely.

Let us now mention a number of issues that we are not going to discuss. All of them relate to *intentional* destruction of evidence, a particular pattern of inflicting evidential damage which entails well-known legal consequences. These include criminal

itself); *Infabrics Ltd v. Jaytex Ltd* [1985] F.S.R. 75 (in an enquiry as to damages in a copyright infringement action, the defendant's invoices, stock records and other relevant documents were missing; the *omnia praesumuntur contra spoliatorem* principle was applied against the defendant, but the court held that it should be applied with caution and only in determining the measure of the damage, as opposed to the wrongful act itself). In bailment law, however, the presumption was applied differently. *See Coldman v. Hill* [1919] 1 K.B. 443 (cattle deposited in the hands of a bailee was lost, and no evidence concerning the cause of its loss was available; the bailee was found liable under the *omnia praesumuntur contra spoliatorem* principle); *Morrison v. Walton* (House of Lords; unpublished decision of May 10, 1909; cited in *Coldman v. Hill, id.*) (the defendant, a bailee of a boat, which he undertook to take across the Atlantic together with a team of seamen, had no men on board; the boat was lost at night, and there was no evidence as to whether she was lost by gradual straining and leakage or by a sudden and overwhelming wave. Held: the man who by breaking his contract had destroyed the possibility of any evidence on the subject, could not be heard to say that there was no evidence that his breach of contract caused the loss); *In re S. Davis and Company, Ltd.* [1945] Ch. 402 (furniture deposited in the hands of a bailee was partly lost and partly damaged, and no evidence explaining the cause of the losses was available; the bailee was found liable under the *omnia praesumuntur contra spoliatorem* principle).

18 *See Gorelick et al., supra* n.3, 40-43; and, *e.g.*, *Baughner v. Gates Rubber Co., Inc.*, 863 S.W.2d 905, 908 (Mo.App.E.D. 1993) (if a party has intentionally spoliated evidence, *indicating fraud and a desire to suppress the truth*, that party is subject to an adverse evidentiary inference). At the same time, it seems to be fairly settled that negligent breach of physicians' record-retaining duties will activate the presumption: *see Sweet v. Sisters of Providence in Wash.*, 881 P.2d 304 (Alaska 1994); *Public Health Trust v. Valcin*, 507 So. 2d 596 (Fla. 1987).

19 *See Gorelick et al., supra* n.3, *Appendix*, 12-13.

liability²⁰, liability for contempt of court²¹, tort liability for interference with a prospective economic advantage²², adverse inferences²³ and, in cases of documents (and sometimes, in cases of witnesses²⁴), an exclusion of non-original evidence adduced by a party responsible for the unavailability of the original²⁵. Discussion of these special consequences, which constitute fragmented *ad hoc* solutions to the evidential damage problem, falls beyond the scope of the present Article²⁶. As stated above, the aim set for this Article is to provide a comprehensive doctrinal solution to the evidential damage problem.

II. THE NATURE OF EVIDENTIAL DAMAGE

Evidence is an inherently relational concept. Testimony, documents and tangibles (functioning as "real" or "physical" evidence²⁷) never constitute evidence by themselves. Rather, they are *turned into* evidence by arguments inferentially relating them to some legally material event²⁸. Constructed by arguments from experience, it is this *inferential extension* that makes evidence out of testimony, documents and tangibles²⁹. Evidential damage may therefore be inflicted only by precluding an inferential argument that could otherwise work in another person's favor. Evidential damage would thus not necessarily

20 See Lawrence Solum & Stephen Marzen, *Truth and Uncertainty: Legal Control of the Destruction of Evidence*, 36 EMORY L. J. 1085, 1106-13 (1987).

21 *id.*, 1113.

22 See Gorelick *et al.*, *supra* n.3, §4.3.

23 *id.*, § 2.8.

24 See Federal Rules of Evidence (hereafter: FRE), Rule 804(a).

25 See FRE 1004(1); CHRISTOPHER B. MUELLER & LAIRD C. KIRKPATRICK, EVIDENCE, 1197-1200, 1230 (1995); Dale A. Nance, *The Best Evidence Principle*, 73 IOWA L. REV. 227 (1988) (advocating a broad best evidence principle, including adverse inferences for nonproduction of evidence).

26 See generally Gorelick *et al.*, *supra* n.3.

27 See Wigmore, *supra* n.17, VOL. I, §24.

28 JEREMY BENTHAM, RATIONALE OF JUDICIAL EVIDENCE, VOL. I, 15ff; 39ff (1827); N. Rescher & C.B. Joynt, *Evidence in History and in the Law*, LVI J. PHIL. 561, 562ff (1959).

29 See Stein, *supra*, n.2.

be caused by the physical destruction of some important evidential material or by not discharging a duty to generate such material. If the appropriate inferential arguments can still be made out, the sheer impossibility of grounding them upon the missing material would not constitute *evidential* damage. Making out these arguments without the missing material may, of course, be more costly. Such damage, however, bears an ordinary pecuniary rather than an evidentiary character. To retain its distinctiveness, evidential damage must be reflected in the substantive outcome rather than in the costs of the litigation. It must therefore be associated with an aggravated uncertainty that reduces the victim's chances to succeed in the evidentially damaged trial.

Relatedly, evidential damage may be inflicted without physically destroying evidential material. The probative value of documentary, testimonial and real evidence can be reduced and, indeed, nullified in a variety of other ways. The following example (adapted from a widely known tort case³⁰) is illuminating.

THE HUNTERS' CASE

P was negligently fired at by D₁ and D₂. One of the shots passed over him; another penetrated P's head, gravely incapacitating him. D₁ and D₂ used identical ammunition, firing at P independently of each other. No further evidence is available.

By merely firing at P, either D₁ or D₂ nullified the evidential significance of the injuring shot. One of them thus caused P serious evidential damage. If the non-injuring shot had not been fired, the existing evidence would have been strong enough to mark out P's injurer. Crystallizing in P's inability to attribute his injury to either D₁ or D₂, P's evidential damage is pecuniarily equivalent to his physical damage. If D₁ is not responsible for the latter damage, he should certainly be held liable for the former, which holds true also in relation to D₂³¹.

30 Summers v. Tice, 199 P.2d 1 (1948).

31 Not surprisingly, it was held that D₁ and D₂ are both responsible for P's injury, jointly and severally: "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

Illustrating essentially the same point, our second example takes a fresh look at one of the most important issues in the area of tort law: the controversial idea of treating bare risk as an actionable damage. We approach this issue from the evidential damage perspective. As will soon become apparent, our approach is likely to eliminate the controversy surrounding this issue.

*IS BARE RISK A DAMAGE?*³²

Hospital patient P required urgent surgery, which would have given him a 75% chance to recover. The doctors negligently delayed the surgery. The delayed surgery was performed impeccably, but it promised P only a 25% chance of recovery. Ultimately, P did not recover. He now attributes his terminal illness to his doctors' malpractice.

It is apparent that P cannot establish the actual (*i.e.*, individualized rather than purely statistical³³) causation between the malpractice and his damage. Should he succeed

on that subject be shifted to defendants becomes manifest. They are both wrongdoers - both negligent towards plaintiff. They 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. *The injured party has been placed by defendants in the unfair position of pointing to which defendant caused the harm*".

id., at p.4 (emphasis is ours). For an illuminating discussion of this case and related issues (which does not, however, explore the evidential damage doctrine) see JUDITH J. THOMSON, RIGHTS, RESTITUTION, AND RISK: ESSAYS IN MORAL THEORY, chs. 12 & 13 (William Parent, ed.) (1986). See also RESTATEMENT, TORTS 2d, §433B (incorporating the holding of *Summers v. Tice*) and *Cook v. Lewis*, [1952] 1 D.L.R. 1, 3-4 (the Canadian twin of *Summers v. Tice*, holding that each of the defendants is liable because "by confusing his act with environmental conditions, he has, in effect, destroyed the victim's power of proof."). See also *Sommers v. Hessler*, 323 A. 2d 17 (1974) (a child was assaulted by a group of children on a school bus; since it was impossible to tell which child had inflicted the litigated injury, the persuasion burden was shifted to each defendant to absolve himself, if he can); and *Johnston v. Burton*, 16 D.L.R. (3d) 660, 668 (1970) (a holding similar to that of *Cook v. Lewis* made in regard of the plaintiff's co-assaulters).

32 Adapted from the landmark decision of the English House of Lords, *Hotson v. East Berkshire Area Health Authority* [1987] 1 A.C. 750. For an American example close to this case see *Herskovits v. Group Health Cooperative of Puget Sound*, 664 P.2d 474 (1983).

in suing the doctors for aggravating his risk of becoming afflicted by 50%? Those who believe that mere endangerment of a person should constitute an actionable tort when it increases the person's risk of sustaining damage, would answer this question in the affirmative. The issue, however, is far from settled³⁴.

Supporters of the risk-as-damage doctrine face difficulties in justifying their position in cases where the risk is known not to have materialized. If a driver passes X's car at 200m/h and X does not even notice her red Ferrari, X can hardly sue her for the risk she exposed him to. It is difficult not to agree with this view³⁵. If so, would it be consistent to agree with this view and at the same time hold P's doctors liable *solely* for increasing his risk of terminal illness, regardless of whether it materialized or not? We do not think so. We also suspect that there is a gap between the rhetoric employed by supporters of the risk-as-damage doctrine and their actual intuition.

Let us now articulate this intuition. What differentiates between our malpractice case and the Fast-Driver hypothetical is the existence of a damage in the first case and its lack in the second. This is the only difference between the two cases. If the identity between the plaintiffs' causes of action in both cases be taken seriously, this difference should be regarded as immaterial. Each of these causes of action is based upon an *ex ante* aggravation of the risk, not upon the damage incurred *ex post*. We suspect, however, that supporters of the risk-as-damage doctrine would not take this identity seriously. They would not take it seriously because P has actually sustained a damage that may have been caused by his doctors' malpractice. Supporters of the risk-as-damage doctrine would also

33 Naked statistical probabilities are normally not sufficient for awarding recovery to a plaintiff. See David H. Kaye, *The Limits of the Preponderance of the Evidence Standard: Justifiably Naked Statistical Evidence and Multiple Causation*, [1982] AMER. BAR. FOUND. RES. J. 487; Brian Coote, *Chance and the Burden of Proof in Contract and Tort*, 62 AUST. L. J. 761, 762-63 (1988).

34 See *infra* n.87. In the actual case, the House of Lords ruled that the risk to which the plaintiff was exposed does not constitute actionable damage. See *Hotson*, *supra* n.32.

35 But see Christopher H. Schroeder, *Corrective Justice and Liability for Increasing Risks*, 37 UCLA L. REV. 439 (1990) (favoring imposition of compensation duty upon risk-creators even in cases where no actual damage was inflicted, which would channel the compensation money into a general compensation fund).

agree that, if it were known that P's damage did not originate from his doctors' malpractice, his lawsuit would have to be dismissed.

This position is not easy to sustain. If P belonged to the 25% of the patients that are doomed to become afflicted, his damage should be blamed upon nature, not upon the doctors. And if P could be saved, the negligent doctors should be held responsible for his actual damage rather than merely for increasing his risk of sustaining it. Application of the risk-as-damage doctrine therefore appears to be anomalous in both cases³⁶. Unfortunately, we are unable to classify P's case as falling under either category. We are unable to do this because the causal forces that were at work in P's case are unknown. If so, the intuition held by supporters of the risk-as-damage doctrine needs to be restated. P's lawsuit ought to succeed not because his doctors aggravated his risk of becoming terminally ill. It ought to succeed because P's doctors may have actually caused his illness, a possibility that could be confirmed or disconfirmed, if P's surgery had not been negligently delayed. P's case is factually indeterminate, and it is his doctors who are responsible for this indeterminacy. This indeterminacy reflects P's evidential damage, for which he should be compensated by his doctors.

Let us now try to assess P's evidential damage by placing him amongst 100 similarly situated patients selected at random. He is one of 75 afflicted patients, 50 of whom became afflicted because their surgeries were delayed, while the remaining 25 were doomed to become afflicted. Because of the evidential damage inflicted by P's doctors we are unable to locate P within either of those categories of deserving and non-deserving claimants. P's chance of being a deserving claimant is 50/75, *i.e.*, about 67%. His chance of being a non-deserving claimant accordingly amounts to 33%³⁷. Because

36 This doctrine will retain its force in cases involving risks that may or may not materialize in the future, because living in the shadow of harm blemishes the person's well-being. *Cf.* David Rosenberg, *The Causal Connection in Mass Exposure Cases: A "Public Law" Vision of the Tort System*, 97 HARV. L. REV. 849, 885-87 (1984).

37 This outcome can be established in more formal terms by applying Bayes' Theorem:
 $p(D)$ = the probability of becoming afflicted either by natural causes (N) or through malpractice (M), which amounts to 0.75.
 $p(M)$ = the probability of malpractice, which in the present case is known to be 1 (since the malpractice of P's doctors is certain).

there is a 67% chance that the lost evidence could have identified P as one of the deserving claimants, P's evidential damage amounts to 67% of his physical damage³⁸. Under the risk-as-damage doctrine, P will recover for only 50% of his physical damage³⁹. The risk-as-damage doctrine can thus be seen as systematically undercompensating deserving plaintiffs⁴⁰.

Another example, extracted from a landmark Title VII decision delivered by the US Supreme Court⁴¹, is no less revealing.

THE GENDER BIAS CASE

P, a professionally skilled and successful female accountant, was denied partnership in D's firm. Remarks were made by D's partners that P should

$p(D|N)$ = the probability of becoming afflicted by natural causes, which amounts to 0.25.

$p(D|M)$ = the probability of becoming afflicted by malpractice, which amounts to 0.50.

$p(M|D)$, *i.e.*, the probability that P's damage originated from his doctors' malpractice, needs to be established. This probability equals to:

$$p(M) \times \frac{p(D|M)}{p(D)},$$

i.e., 0.667.

On forensic applications of Bayes' Theorem *see generally*, BERNARD ROBERTSON & G.A. VIGNAUX, *INTERPRETING EVIDENCE: EVALUATING FORENSIC SCIENCE IN THE COURTROOM* (1995).

38 This method of assessing evidential damage is explained and justified below. *See infra*, Part IV (b).

39 *See* Prosser, *supra* n.7, 272.

40 Shifting back to the traditional "all-or-nothing" paradigm of liability will lead to either undercompensation (*Hotson*, *supra* n.32) or overcompensation. The overcompensation problem is well-exemplified by *McGhee v. National Coal Board*, [1972] 3 All ER 1008 (House of Lords) (in an action to recover for dermatitis contracted in the course of employment, the plaintiff's disease was found to have originated from two significant causes, which inseparably merged into one: a hot dusty atmosphere at the workplace, for which the defendant employers were not liable, and the defendants' negligent failure to provide washing facilities to their workers; the defendants were held liable for the *whole* damage). This decision overcompensated the plaintiff because his disease was partly attributable to a non-tortious event.

41 *Price Waterhouse v. Hopkins*, 490 US 228 (1989).

talk more femininely, walk more femininely, make her hair look more stylish and wear make-up. P's interpersonal skills were also criticized: her conduct was described as brusque and abrasive. Title VII's anti-discrimination remedies are due to P only if she was not elevated to partnership as a result of gender-stereotyping. If she was not promoted because of her brusquerie and abrasiveness, D should prevail. No further evidence is available.

This example is more difficult. The non-injuring shot fired at the plaintiff in the Hunters' Case was a negligent act. In the present case, D was entitled to describe P as brusque and abrasive. As to D's gender-stereotyping remarks, these caused P no evidential damage, even if taken as culpable *eo ipso*. Had these remarks not been made, P's evidential task would have been more onerous than it actually was. At the same time, it was D's conduct that introduced indeterminacy into the evidence. As a result of D's conduct, two conflicting arguments about the case acquired equal evidential warrant:

(i) P was discriminated against because of her gender. D's explanation that P was not promoted because she lacked interpersonal skills was pretextual. D's description of P as brusque and abrasive needs to be understood contextually by considering the background set by D's gender-stereotyping remarks. P was described as brusque and abrasive not because she really was; her behavior simply failed to exhibit a kind of femininity that would satisfy D's taste;

(ii) Although some unfortunate gender-stereotyping remarks were made in regard to P, she was not elevated to partnership because she really behaved brusquely and abrasively.

Consequently, everything became provable, and when everything is provable, nothing is. Arguably at least, this constitutes an evidential damage for which D should be

held responsible⁴². It is interesting to note that this damage was inflicted *by addition* rather than *by detraction* of information.

Another paradigmatic example is provided by cases involving an unconcerted infliction of two (or more) damages by two (or more) defendants, when those damages inseparably merge into one. In such cases, the joint tortfeasor doctrine is inapplicable. Determination of each defendant's liability consequently becomes a rather daunting task.

*THE THREE-CAR ACCIDENT CASE*⁴³

Car-driver D_1 negligently collided with P's sedan. D_2 , who followed P's sedan in his car, saw D_1 's car moving diagonally from the opposite direction into P's sedan. D_2 , however, was busy watching the sunset. He negligently failed to timely stop his car and consequently also collided with P's sedan. As a result of these collisions, P sustained severe physical injuries. There is no evidence individually attributing any of P's injuries to either D_1 or D_2 .

At the same time, either D_1 or D_2 (or both) negligently caused the plaintiff's evidential damage. Each of them either caused this damage or is responsible for the plaintiff's physical injuries. Each of them should therefore assume liability for at least the evidential damage⁴⁴. In the present case, this damage is equal to the plaintiff's physical damage.

42 As indicated by Justice O'Connor, *id.*, 263; 273. The actual holding shifted the persuasion burden to the defendant by creating a rebuttable presumption of discrimination, activated upon direct showing of a prohibited discriminatory motive (such as gender-stereotyping) in the contested employment decision. *See id.*, 228-79.

43 Adapted from *Copley v. Putter*, 207 P.2d 876 (1949).

44 They were, indeed, found liable under the *Summers v. Tice* principle: *Copley v. Putter, id.*, 878. *See also Eramdjian v. Interstate Bakery Corp.*, 315 P.2d 19, 29 (1957) (upholding a trial court ruling similar to that of *Copley v. Putter*).

Azure v. City of Billings, 596 P.2d 460 (1979) is another remarkable decision. Injured in a bar fight, the plaintiff appeared drunk and was mistakenly detained by the police in its search for a burglar. In disregard of the plaintiff's patent injuries, the arresting officers failed to timely secure his medical

Evidential damage will typically be present in a litigation prompted by the plaintiffs' exposure to a hazardous substance. Along with the multiple-risk problem, this litigation involves the problem of liability for bare risk⁴⁵.

*A CASE OF RADIOACTIVE EXPOSURE*⁴⁶

D's manufacturing plant emitted radioactive rays, to which a fraction of 10,000 people residing in the vicinity of the plant were exposed. P was one of those residents. Subsequently, the annual incidence of cancer in the

treatment, which further aggravated his condition. The plaintiff's total damage was nondivisible, so that he could not prove the harm separately inflicted upon him in the bar and by the police. The persuasion burden on the apportionment of the damage issue was consequently shifted to the defendant. This ruling was justified by the court as a proper allocation of the risk of error:

[W]here the tortious act is established, it is better that the tortfeasor should be subject to paying more than his theoretical share of the damages in a situation where the tortious conduct has contributed to the confused situation making it difficult to prove which tortious act did the harm. (at 471)

45 For discussion of the risk-as-damage problem *see supra* nn.32-36 and accompanying text.

46 Adapted from *Allen v. United States*, 588 F.Supp. 247, 412-13 (1984) (in an action to recover for cancer allegedly caused by testing of atomic devices, the government's failure to adequately monitor radiation exposures was held to have "yielded many glaring deficiencies in the evidentiary record", as relates to the issue of causation, which justified shifting the persuasion burden to the government). We suspect this decision to have overcompensated the plaintiffs and, in what follows, offer another solution to this and similar cases. The presently prevailing doctrinal view seems not to favor recovery in such cases. *See, e.g.*, *University System of New Hampshire v. U.S. GYPSUM*, 756 F.Supp. 640 (D.N.H. 1991); *Thompson v. Johns-Manville Sales Corp.*, 714 F.2d 581 (5th Cir. 1983) (both exemplifying the causation problem in asbestos litigation as thwarting recovery for asbestos-related afflictions); and *see generally* Richard Delgado, *Beyond Sindell: Relaxation of Cause-in-Fact Rules for Indeterminate Plaintiffs*, 70 CAL. L. REV. 681 (1982). In any event, reversal of the persuasion burden in our example would not help the plaintiffs.

See, however, *In re "AGENT ORANGE" PRODUCT LIABILITY LITIGATION*, 597 F.Supp. 740, 828-29 (1984) (held, in connection with burden-shifting, that "if a manufacturer negligently supplied a harmful product with the knowledge that it would be mixed and sprayed in a mixture so that its product would no longer be separately identifiable, that manufacturer may have been negligent in allowing the destruction of the evidence that would have enabled a plaintiff to identify it.").

vicinity of the plant rose from 75 to 100 cases. P is now suffering from cancer. No further evidence is available.

Should P be allowed to recover from D? Not necessarily related to D's actions, P's cancer could have been a misfortune. It could have been caused by a variety of yet-to-become-known factors unassociated with D. However, if P had not been exposed to D's radioactive rays, she would have known that she had fallen into misfortune. Now she cannot be certain about this, which is also true about the judges in P v. D. The case is evidentially damaged, and it is D, not P, who is responsible for the damage. At the same time, holding D liable will convert into a fully-blown tort any action that casts on the actor both undisPELLable and unverifiable suspicion of causing the litigated damage. D would be liable merely because he brought upon himself one of such suspicions. Because this suspicion is irremovable, it would mark D's pockets as open not only to P, but also to any other similarly situated resident. Likely to have brought cancer only to 25 neighboring residents, D will be forced to compensate 100. The misfortune of 75 residents will thus be converted into actionable damage. This decisional strategy is indeed problematic. It might, nonetheless, still be better than that of converting the actionable damage of 25 residents into a non-actionable misfortune. D's responsibility for the uncertainty of the case tilts the scales in that direction. But how strongly does it tilt them in that direction? Perhaps not strongly enough. Should D consequently be held responsible only for a fraction (25%) of each of the 100 residents' damage? This question will be discussed (and answered in the affirmative) later in this Article⁴⁷. At the present stage, it is worth noting that reversal of the persuasion burden (the optimal remedy in many cases where the evidential damage was inflicted by the defendant) would not be helpful to P. It would not help P because the probability that her cancer is unrelated to D equals 0.75, which allows D to prevail under the preponderance-of-the-evidence standard. But since it is known that this probability is conditioned upon a deficient evidential

47 See *infra* nn.114-115; 129 and accompanying text.

48 The conditionalization of probabilities problem and its implications on judicial fact-finding are discussed in Stein, *supra* note 2, at 299-307, 312-42.

base,⁴⁸ which became deficient through D's fault, to decide the case on the basis of this probability would be manifestly unjust.

We now turn to another example demonstrating that evidential damage may also be inflicted independently of the primary damage. Moreover, it may even be inflicted by omission.

*THE SWIMMING POOL CASE*⁴⁹

The plaintiff sues motel operators for the wrongful deaths of her husband and her son who drowned while swimming in the motel's pool. The defendants negligently failed to secure a lifeguard's presence in the pool area and affixed no warning to this effect. No specific evidence highlighting the proximate cause of the litigated fatality is available.

In a decision that came close to explicitly recognizing the evidential damage doctrine, the court held the defendants liable. It ruled that the persuasion burden, as related to the disputed issue of causation, should be shifted to the defendants, a decision which was justified as follows:

"The absence of ... a lifeguard in the instant case thus not only stripped decedents of a significant degree of protection to which they were entitled, but also deprived the present plaintiffs of a means of definitely establishing the facts leading to the drownings".⁵⁰

The defendants obviously failed to discharge this burden.

Evidential damage originating from an omission is paradigmatic in medical malpractice litigation, as demonstrated by the following Israeli case.

*A CASE OF INADEQUATE DOCUMENTATION*⁵¹

The plaintiff experienced spinal cord problems accompanied with severe backaches. He was prescribed medications and physiotherapy. Patients in this condition were prescribed a spinal cord surgery only when their pains

49 Adapted from *Haft v. Lone Palm Hotel*, 478 P. 2d 465 (1970).

51 Kantor v. Mussayoff, 39 (3) *PISKEY DIN* 253 (1985) (in Hebrew).

became unbearable. Patients exhibiting neurological symptoms were to undergo this surgery immediately. The plaintiff underwent this surgery, but it could not save him from partial paralysis. The plaintiff alleges that this outcome could have been prevented if he underwent the surgery earlier than he did, namely, when he first complained to his physician -- the defendant -- about his neurological problems, or shortly thereafter. According to the defendant, the plaintiff's complaints to him pointed to pain only; when they raised a neurological problem, the plaintiff was immediately referred to a hospital to undergo surgery. Records monitoring the plaintiff's treatment by the defendant have been found to be fragmentary and deficient, which violated the defendant's record-compiling duties.

The court adopted the plaintiff's description of the events. It justified its decision as mandated (*inter alia*) by the defendant's responsibility for the evidential damage⁵².

Evidential damage can also be inflicted by a stranger to the underlying litigation. The following example, adapted from a landmark decision of the California Court of Appeal⁵³, is most revealing.

A CASE OF EVIDENCE DESTRUCTION

A car driven by P was approached by a van which came from the opposite direction. Suddenly, the left rear wheel flew off the van and crashed into the windshield of P's car, severely injuring her. The van was towed to a

52 For an essentially similar decision made by the Florida Supreme Court *see* Public Health Trust v. Valcin, 507 So. 2d 596 (Fla. 1987). *See also* Welsh v. United States, 844 F. 2d 1239 (6th Cir. 1988) (holding the same). This position is also endorsed in other countries: *see* DIETER GIESEN, INTERNATIONAL MEDICAL MALPRACTICE LAW: A COMPARATIVE STUDY OF CIVIL LIABILITY ARISING FROM MEDICAL CARE 521-22 (1988).

53 Smith v. Superior Court, 151 Cal. App. 3d 491 (1984).

garage, where some of its parts, evidentially critical to P's lawsuit against the driver of the van, were inadvertently disposed of by mechanics⁵⁴.

Can P successfully sue the garage owners for reducing her chances to succeed in a lawsuit against the driver of the van? In our view, this question should be answered in the affirmative, but the issue may not always be clear⁵⁵.

Evidential damage may be perceived as essentially economic. Making it actionable may therefore clash with the traditional view that bars recovery for purely economic losses⁵⁶. As mentioned above, this view has no transparent justification and its endorsement has not been universal. Moreover, attribution of an economic character to evidential damage would not be entirely accurate. In most instances, this damage will be manifested by the plaintiff's reduced chance to recover for her physical damage. As already mentioned, to categorize evidential damage as falling between the "physical" and the "economic" categories would therefore be far more adequate.

Evidential damage has no fixed temporal dimension. Inferential significance of evidential material may be eradicated not only during and after the emergence of this material, but also before it. This can easily be deduced from the examples provided above. Thus, in the *Hunters' Case*, it is quite possible that the shot leaving the plaintiff uninjured was fired at him before the injuring shot. Because events resulting in evidential damage may assume virtually any temporal sequence, evidential damage is often unforeseeable. Under the traditional theories of proximate cause, this may constitute a ground for not imposing liability for its infliction⁵⁷. Evidential damage may therefore arguably be treated as *damnum sine injuria* in numerous cases.

Evidential damage is dependent upon circumstantial contingencies more heavily than familiar tort damages, predominantly physical, rather than economic, in their essence. Factors causally relevant to physical damage can be abstracted from the totality

54 In the actual case, the evidential damage was inflicted intentionally. The case was therefore decided analogously to the intentional tort of "interference with prospective business advantage". See generally Gorelick *et al.*, *supra* n.3, § 4.3.

55 It will depend on the duty to avoid an infliction of evidential damage, as determined by the governing tort law policy. See *infra* Parts IV and V.

56 See, e.g., Barber Lines A/S, *et al.* v. M/V Donan Maru, 764 F.2d 50 (1985).

57 See Prosser, *supra* n.7, §43.

of events on relatively stable empirical grounds⁵⁸. Familiar tort damages can consequently be attributed to individuals without experiencing great epistemic discomfort. Represented by the factual indeterminacy of the case, evidential damage is usually predicated on many variables jointly contributing to its occurrence. Like knowledge in general, missing information can be obtained from various sources. Therefore, elimination of one of these sources should not, *eo ipso*, be regarded as evidentially damaging. Attribution of liability for evidential damage thus becomes causally problematic. The ability to satisfy the demands of the foreseeability standard in ascribing liability for that kind of damage would be further weakened by this causal indeterminacy. In order to be foreseeable, a course of events ending up in a damage must be sufficiently determinate *ex ante*, a condition that cannot be satisfied when the issue of causation is inherently indeterminate⁵⁹.

The extent of the foreseeability problem with respect to evidential damage should not, however, be exaggerated. The anticipated emergence of this problem is partially attributable to the current non-recognition of evidential damage as actionable in torts. Once recognized as actionable, *i.e.*, as a damage that people are required to prevent, evidential damage would become foreseeable in many instances. Its existence will be psychologically internalized by its potential producers. Apart from that, as demonstrated by the examples provided above, evidential damage is foreseeable when inflicted directly⁶⁰, and there are numerous instances where it can be foreseen as attendant upon a foreseeable primary damage⁶¹. In such instances, the person inflicting the primary damage can typically foresee that the exact course of the infliction will not be identifiable. Exemplified by the Radioactive Exposure Case, this state of affairs can be described metaphorically as involving a damage "with no address".

It must also not be forgotten that foreseeability is a legal notion with a distinctively normative trait. As such, it is situated in the realm of "oughts". Its

58 See H.L.A. HART & TONY HONORE, *CAUSATION IN THE LAW*, 2d ed., 408ff (1985).

59 Cf. Gorelick *et al.*, *supra* n.3, 28-29; 154-55 (addressing the foreseeability problem in the context of evidence destruction).

60 This is shown by the *Case of Inadequate Documentation* and the *Case of Evidence Destruction*. See *supra* nn.51,53.

determination must consequently account for policy considerations quite independent of the individuals' actual ability to foresee particular events⁶². The need to minimize evidential damage and thus make the implementation of the law of torts (or other substantive law) more effective is one of those factors. Another factor is fairness that needs to be maintained in relation to people who have sustained evidential damage. Associated, respectively, with deterrence and corrective justice, each of those factors deserves to be balanced against the foreseeability problem. Limited foreseeability is therefore not a valid *threshold objection* for treating evidential damage as an actionable tort.

As previously mentioned, monetary assessment of evidential damage (as a value of the lost information) is predicated upon a reduction of the victim's chances to succeed in the evidentially damaged trial. This implies that the victim must have had a real chance to succeed prior to the infliction of the damage. Her damage would amount to zero, if she were to lose her case anyway. Therefore, when it can be proved that the victim was *ab initio* not entitled to the litigated good, she should be denied recovery. Such proof, however, would be extremely difficult to provide without taking unfair advantage of the victim's evidential incapacitation. To establish that the victim would have lost her case in any event would be possible only by ascertaining the probative value of the lost evidence, *i.e.*, by fully reinstating the inferential arguments wiped out by the allegedly damaging action. This would make good the evidential damage, which is certainly a desirable outcome, if it could only be attained.

But it would almost never be attained. Whether the lost inferential arguments have been reinstated would usually be an insolubly counterfactual issue. Zealous attorneys would nonetheless take up the challenge wherever the stakes are sufficiently high. Unresolvable counterfactual issues would thus be attempted to be resolved by replaying or rehearsing the evidentially damaged trial. The increase in litigation costs resulting from these predictably wasteful activities is apparent.

Losses emanating from evidential damage would also be difficult to assess. Assessing them by ascertaining the actual entitlement to the litigated good is patently

61 As exemplified by all other cases discussed so far.

62 See Prosser, *supra* n.7, 280-81.

impracticable. It would entail an exorbitant replay or rehearsal of the evidentially damaged trial. Assessment of the value of the lost information in terms of the victim's *lost chances* to prevail in her trial therefore appears to be the only viable possibility. Under this framework, the victim's lost chances must be translated into a probability that will subsequently be multiplied by the value of the litigated good⁶³.

III. EVIDENTIAL DAMAGE AND PROCESS CONSTRAINTS

Taken together, these difficulties may, perhaps, explain the puzzling non-presence of a comprehensive evidential damage doctrine in the positive law. They may be perceived as supporting a threshold objection to making evidential damage actionable. Making evidential damage actionable would, arguably, complicate the determination of tort liability, thus making it unaffordably costly. Evidential damage, therefore, should not be actionable even when this is justified by the reigning substantive policy of the law of torts, such as deterrence or corrective justice. Associated with the "process theory" of tort liability, this objection legitimizes differential treatment of seemingly indistinguishable cases of damage. Under this theory, substantial savings in process costs, attainable through non-liability rules, would justify the uneven execution of substantive tort law policies⁶⁴.

This seemingly powerful objection is ultimately unpersuasive. First, it can hardly be raised against the evidence law doctrine, which shifts the persuasion burden to the party causing the evidential damage. Under this doctrine, when an evidential damage is attributable to the defendant and the existing evidence supports both parties equally, the plaintiff should prevail. This doctrine would not lead to substantial increase in the process costs, for it would not require judges to determine evidential damage with the same degree of precision that applies to an independent cause of action. The defendant's responsibility for amplifying the uncertainty of the case would, *per se*, be sufficient for

64 See James A. Henderson Jr., *Process Constraints in Tort*, 67 CORNELL L. REV. 901 (1982) (advocating the "process theory" as a limit to tort liability); Fred C. Zacharias, *The Politics of Torts*, 95 YALE L.J. 698 (1986) (exemplifying non-liability rules motivated by process concerns).

activating the burden-shifting mechanism⁶⁵. Costs involved in determining this responsibility would not be prohibitively high.

Second, the process theory as a ground for denying tort liability cannot be carried through limitlessly. Tort liability may be held desirable on utilitarian grounds even when its determination is costly: the process costs may simply be outweighed by the benefits generated by the imposed liability. By forcing people into taking adequate precautions, tort liability -- however costly its enforcement may be -- may prevent even more substantial losses. In the present context, it must by now have become apparent that negligence accompanying an infliction of evidential damage is not "negligence in the air".⁶⁶ Tort liability will be likely to reduce this damage and thus contribute to the accuracy of adjudication. In the long run, this will lead to the efficient allocation of the primary damage.⁶⁷ Apart from that, liability for evidential damage may be employed directly as a vehicle for optimizing the allocation of the primary damage in conditions of uncertainty. Regardless of its impact on the trial costs, tort liability for evidential damage may also be demanded by corrective justice. People sustaining this damage should not be left without redress. Tort victims' rights would consequently be allowed to trump utility and thus escape the net of an ordinary cost-benefit calculus⁶⁸.

The process theory also cannot be carried through acontextually. Its persuasiveness is heavily dependent upon the context within which it is claimed to be reigning. Paradigmatic evidential damage situations, sought to be controlled by this theory, should accordingly set the stage. Most of these situations have already been depicted in the previously provided examples. At the intuitive level, these examples must have already generated some hostility toward the idea of treating evidential damage as a *damnum sine injuria*. This intuition is not hard to defend. Making evidential damage non-actionable would allow the wrongdoers appearing as defendants in tort cases to benefit from their own wrongs, an outcome running against common ethics.⁶⁹ Our examples also

65 See below, Part VI.

66 The expression "negligence in the air" is taken from *Palsgraf v. Long Island Ry. Co.*, 162 N.E. 99 (1928).

67 See discussion *infra*, Part V.

exhibit a disturbing imbalance in the present allocation of the information-controlling power. Much of this power -- which translates itself into the ability to hurt others without leaving evidential traces -- lies in the hands of corporations and skilled professionals. These are usually most powerful litigants. If their power is left unconstrained, might will often be allowed to make a right. Making evidential damage actionable would substantially rectify this disturbing imbalance. This latter argument may require some additional concretization, easily provided by our further example. Together with the *Case of Radioactive Exposure*,⁷⁰ this example comprises a fully developed paradigm for mass tort litigation. In the *Case of Radioactive Exposure*, the causation issue was indeterminate in relation to the plaintiffs. In the present example, it is indeterminate in relation to the defendants. Evidential damage, however, is present in both cases, and it is the defendants, not the plaintiffs, who should be blamed for its occurrence. The comprehensive evidential damage doctrine, advocated by this Article, can therefore resolve most of the problems associated with mass torts.⁷¹

68 See RONALD DWORKIN, *LAW'S EMPIRE* 23-29; 286-301 (1986). In Part IV of this Article, a case will be made for recognizing evidential damage as actionable as a matter of corrective justice.

70 See *supra* n.46 and accompanying text.

71 For full discussion see Porat & Stein *supra* n.11. As for the present condition of mass tort litigation, see Peter H. Schuck, *Mass Torts: An Institutional Evolutionist Perspective*, 80 *CORNELL L. REV.* 941, 941-42, 949-50 (1995) (that mass torts are poorly handled is now a matter of consensus: plaintiffs, armed with contingency fee lawyers, seek essentially unlimited compensatory and punitive damages from sympathetic juries on the basis of mutating, and often manufactured, scientific evidence). See also Heidi Li Feldman, *Science and Uncertainty in Mass Exposure Litigation*, 74 *TEX. L. REV.* 1, 43ff (1995) (analyzing a number of solutions to the uncertainty-of-causation-problem in mass tort litigation, and expressing efficiency-related concerns about using tort liability as an incentive for manufacturers to eliminate uncertainty about the causal powers of their products prior to marketing them). We can envisage no overdeterrence in our approach, which would not force manufacturers into paying more damages than justified by their probabilistic share in the risk engendered by a potentially damaging product. Manufacturers' investigations into the causal properties of their products will thus not be impelled to go beyond estimating this probability. See *infra*, Part V.

*THE DES CASE*⁷²

DES, a drug aimed at preventing miscarriage, turned out to be latently carcinogenic to female fetuses. Twenty years later, women whose mothers took the drug have become afflicted by cancer, which led to a tort action against the drug's manufacturers. None of the cancer-suffering plaintiffs could link the specific pills consumed by her mother with one of the defendants.

By marketing a latently carcinogenic drug (under its generic rather than brand name), the defendants caused the plaintiffs evidential damage. They deprived the plaintiffs of information critical to the tortfeasors' identification. Should might (the ability to tracelessly market a hazardous drug) be allowed to make a right (a practical immunity from tort liability)? We think it should not. We believe that the defendants should be held liable under the evidential damage doctrine, advocated in this Article⁷³. And if there are good grounds for holding these defendants liable, to deny the plaintiffs recovery in the name of the process theory would amount to a blatant and systematic injustice. Similar examples, involving physicians, lawyers, accountants and banks, can easily be produced, but are hardly required⁷⁴.

The "process theory" may be unattractive also when invoked against evidential damage as an independent cause of action, typically brought against a stranger to the evidentially damaged litigation. It may be unattractive not only because of its crude instrumentalism, insensitive to the private concerns of individuals, but also because it

72 Adapted from *Sindell v. Abbott Laboratories*, 607 P.2d 924 (1980). See Ariel Porat, *Collective Responsibility in the Law of Torts* 23 *Mishpatim* 311 (1994) (in Hebrew).

73 In the actual case, the defendants were held liable proportionally to their respective shares in the DES market. For further applications of this holding, which exhibit the difficulties involved in determining the relevant "market", see *Martin v. Abbott Laboratories*, 689 P.2d 368 (Wash. 1984); *Brown v. Superior Court*, 751 P.2d 470, 485-87 (Cal. 1988); *Hymovitz v. Eli Lilly Co.*, 539 N.E. 2d 1069 (N.Y. 1989). For discussion of other problems see Aaron D. Twersky, *Market-Share -- A Tale of Two Centuries*, 55 *BROOKLYN L. REV.* 863 (1989); Judith Jarvis Thomson, *Remarks on Causation and Liability*, 13 *PHIL. & PUB. AFF'S.* 101 (1984).

74 See *Gorelick et al.*, *supra* n.3, §§ 4.15-4.16.

produces more disutility than utility. As has already been pointed out, liability for evidential damage will often produce an information-protecting incentive, thus increasing the amount of correctly decided cases. The paradigmatic *Evidence-Destruction Case*⁷⁵ is certainly part of the list, which can easily be supplemented with other straightforward examples. In any such case, evidential damage should be actionable under the general negligence doctrine. A utilitarian objection to making it actionable would thus be valid only in cases where the damage could not be reasonably anticipated when the defendant's action was taken⁷⁶. In such cases, resolution of complex liability-related issues would hardly produce an information-protecting incentive. Because adjudication of those issues would always be costly, substantial resources would be spent in vain. A non-liability rule, based on the "process theory", would accordingly be in order. The same cost-saving outcome can, however, also be attained under the negligence doctrine, by invoking its familiar foreseeability requirement. Unforeseeability of the damage and its proximate cause would imply lack of liability.

The non-liability rule nurtured by the "process theory" may still be defended on another ground. Because foreseeability would be litigated in numerous cases, using it as a liability-limiting device might still be exorbitant. This objection to liability is too sweeping. If straightforward and complex cases of evidential damage were separable by a bright line, to reduce the amount of complex cases by laying down an appropriate non-liability rule would indeed be economically sensible. Unfortunately, there is no bright line that could give us a clear-cut rule unequivocally separating the two categories of cases. Straightforward and complex cases of evidential damage can be separated only by a broad standard. To apply such a standard in order to activate the non-liability rule when appropriate, would be at least as costly as to determine foreseeability. Furthermore, even if it were theoretically possible to separate the two categories of cases by some highly refined set of rules, costs incurred by this endeavor would be patently exorbitant⁷⁷. Facing

75 See, e.g., *Smith v. Superior Court*, supra n.53.

76 See, e.g., *Velasco*, supra n.14, and its discussion *infra* nn.90-91 and accompanying text.

77 See generally Louis Kaplow, *Rules versus Standards: An Economic Analysis*, 42 DUKE L. J. 557 (1992) (a seminal article drawing attention to promulgation costs as a problem that needs to be addressed by designers of legal rules).

this difficulty, the "process theory" and its non-liability rule may either leave the stage completely or occupy it in its entirety by controlling *all* cases where evidential damage is advanced as an independent cause of action. Because none of these sweeping strategies is economically (or otherwise) attractive, the endorsement of foreseeability and negligence as controlling standards becomes inevitable.

IV. EVIDENTIAL DAMAGE AND CORRECTIVE JUSTICE

Corrective justice demands reinstatement of the status quo when this is interrupted by a person's action that wrongfully damages another person. It requires the action's harmful consequences to be wiped off. Losses sustained by the afflicted party should be made good, normally by the wrongdoer. Corrective justice thus delineates its legal framework as never transcending the rights and the duties of the individuals involved in a damaging event.⁷⁸ Social policies, to which law of torts is potentially instrumental, are excluded from this framework.⁷⁹ This insistence upon monocentricity of the tort law doctrine⁸⁰ hallmarks every individual conception emanating from the general concept of corrective justice⁸¹.

79 *Id.* See also ERNEST J. WEINRIB, *THE IDEA OF PRIVATE LAW* ch.3 (1995) (examining Aristotle's account of the "intrinsic unity" of the plaintiff-defendant relationship).

80 See Lon L. Fuller, *The Forms and Limits of Adjudication*, 92 HARV. L. REV. 353 (1978) (introducing the notion of "monocentricity" in relation to legal disputes and arguing that adjudication is not a suitable mechanism for settling polycentric disputes that present issues of social policy).

81 These conceptions are presented in Weinrib, *supra* n.78; George P. Fletcher, *Fairness and Utility in Tort Theory*, 85 HARV. L. REV. 537 (1972); Richard A. Epstein, *A Theory of Strict Liability*, 2 J. LEGAL STUD. 151 (1973); Stephen R. Perry, *The Impossibility of General Strict Liability*, 1 CAN. J. L. & JURIS. 147 (1988); Stephen R. Perry, *The Moral Foundations of Tort Law*, 77 IOWA L. REV. 449 (1992); JULES L. COLEMAN, *RISKS AND WRONGS* 329-85 (1992). See generally IZHAK ENGLARD, *THE PHILOSOPHY OF TORT LAW* chs. 2 & 4 (1993) (examining and criticizing corrective justice together with other "monistic" theories of tort liability). For an instrumentalist critique of corrective justice theories see Richard A. Posner, *The Concept of Corrective Justice in Recent Theories of Tort Law*, 10 J. LEGAL STUD. 187 (1981). For a recent attempt to base the negligence doctrine on a "social contract" that differentiates between acceptable and unacceptable levels of risk see Gregory C. Keating, *Reasonableness and Rationality in Negligence Theory*, 48 STAN. L. REV. 311 (1996).

The existing conceptions of corrective justice advocate similar remedial mechanisms that will be activated in reaction to a wrongfully damaging action.⁸² Holders of those conceptions also agree that damaging actions can, in principle, be distinguished from non-damaging ones on relatively stable empirical grounds. There is, however, no consensus concerning the standards that should divide damaging actions into "wrongful" and "non-wrongful". Some of the theories roofed under the corrective justice concept identify "wrongfulness" with fault and, consequently, stop short of imposing tort liability in the absence of negligence.⁸³ Other theories favor strict liability for a damage inflicted under certain specified conditions, not necessarily coinciding with negligence. Under these conditions, a person who produces damage and the person afflicted by it are

The following writings, also approaching tort law problems from the corrective justice perspective, are of particular relevance to the present discussion: Schroeder, *supra* n.35; Kenneth W. Simons, *Corrective Justice and Liability for Risk-Creation: A Comment*, 38 UCLA L. REV. 113 (1990); Christopher H. Schroeder, *Corrective Justice, Liability for Risks, and Tort Law*, 38 UCLA L. REV. 143 (1990) (risk-creation as actionable *per se*). *See, however*, Stephen R. Perry, *Risk, Harm, and Responsibility*, in David Owen, ed., PHILOSOPHICAL FOUNDATIONS OF TORT LAW 321, 322-36 (1995) (arguing that the deterministic account of causation and liability for risk are incompatible). For another critique of the attempt to base the risk-as-damage doctrine upon corrective justice *see* Englard, *id.*, 221-22 (because risk is situated in the domain of general probabilities, the doctrine professes factual separation between the wrongdoer and his victim and thus alienates itself from corrective justice).

82 Annulment of tortious gains may be perceived as yet another objective of corrective justice, which, in turn, will produce some tension between "gains" and "losses". An individual wrongfully damaging another person may have gained very little or even nothing. He will nonetheless be required to fully compensate the afflicted party even when the damage is disproportionately large, which goes beyond the purely corrective measures sanctioned by the system. *See* JULES L. COLEMAN, *MARKETS, MORALS AND THE LAW* 185-186 (1988). As demonstrated by Weinrib (on the basis of Aristotle's writings), this tension can be relieved. The system cannot reasonably be required to do more than its practical best in attempting to achieve *restitutio ad integrum*. Because we cannot usually estimate the actual value of the tortfeasor's direct and indirect gains, we can justifiably treat them as equal to the loss sustained by the afflicted party. *See* Weinrib, *supra* n.79, ch.5; Ernest J. Weinrib, *The Gains and Losses of Corrective Justice*, 44 DUKE L. J. 277, 286-89 (1995) (correlativity of gains and losses structuring the tortfeasor-victim relationship as bearing a normative rather than material character).

83 *See, e.g.*, Perry, *supra* n.81, in 1 CAN. J. L. & JURIS. 147.

perceived as standing in a special relationship. This special relationship justifies treatment of the damage-inflicting action as a *wrongful taking* that upsets the protected equilibrium even in the absence of negligence.⁸⁴ According to one of these theories,⁸⁵ there are generally accepted risks to which people mutually expose each other. Because these risks are reciprocal, they are not regarded as wrongful. But when a person unilaterally subjects another person to a non-reciprocal risk, which subsequently materializes into a damage, the protected equilibrium is perceived as being upset.⁸⁶ This powerful theory will be resorted to in our subsequent discussion.

(a) the liability standard

Should evidential damage be actionable under the corrective justice theory? If so, under what conditions?

Answering the first question is expectably much easier than answering the second. Evidential damage is damage. A person sustaining it is deprived of something of value. She is deprived of evidential information to which she was entitled. This information might have enabled her to prevail in the trial that became evidentially damaged.⁸⁷ This deprivation constrains the autonomous pursuit of her legal rights. In so

84 See Epstein, *supra* n.81 (a libertarian account of strict tort liability); Fletcher, *supra* n.81 (proposing to replace the "negligence - strict liability" dichotomy with a liability for non-reciprocal risks and the consequent harm).

85 Fletcher, *id.*

86 Fletcher, *id.*, 543-551.

87 Her position can thus be analogized to that of a person who was exposed to a risk of becoming damaged in the future. That such an exposure constitutes harm and may be actionable in torts (when accompanied with the relevant fault) has become widely accepted. See generally Schroeder, *supra* n.35; Simons, *supra* n.81; Richard W. Wright, *Causation in Tort Law*, 73 CAL. L. REV. 1735, 1814-16 (1985); Glen O. Robinson, *Probabilistic Causation and Compensation for Tortious Risk*, 14 J. LEGAL STUD. 779 (1985); WILLIAM M. LANDES & RICHARD A. POSNER, *THE ECONOMIC STRUCTURE OF TORT LAW* 263 (1987); Jane Stapleton, *The Gist of Negligence: Part II*, 104 LAW Q. REV. 389 (1988). See also Joseph H. King Jr., *Causation, Valuation and Chance in Personal Injury Torts Involving Preexisting Conditions and Future Consequences*, 90 YALE L. J. 1353, 1390-94 (1981) (contributing to uncertainty of the causation issue should also be actionable).

doing, it also reduces the threat-value, *i.e.*, the settlement value, of her case vis-a-vis the party opponent.⁸⁸ As held by the California Supreme Court, to sustain such damage is no different from being deprived of a prospective economic advantage.⁸⁹

Stephen Perry powerfully argues that under the deterministic theory of causation, risk does not constitute harm and should not therefore be actionable:

"[I]t is individuals who are said to suffer risk damage, not classes of persons, and therein lies the fallacy of the claim that risk damage constitutes injury in its own right. ... [I]f the processes that caused or might in the future cause physical harm are deterministic, then there is no basis for saying that a person who has been put at risk by another of suffering such harm has, just by reason of being put at risk, sustained damage distinct in kind from the physical harm. In other words, in cases where determinism holds, there is no such thing as risk damage".

Perry, in Owen *supra* n.81, pp.335-36. See also Stephen R. Perry, *Protected Interests and Undertakings in the Law of Negligence*, 42 U. TORONTO L. J. 247, 252-62 (1992).

Because judicial fact-finding is not a deterministic causal process, evidential damage appears to be actionable also under Professor Perry's account. As admitted by Professor Perry:

"[I]f a particular objective probability of physical harm reflects an indeterministic causal process, so that the reference class with respect to which that probability is defined cannot be further partitioned, conduct that has the effect of placing someone within the reference class in question might perhaps be characterized as having caused a distinct form of damage. The question is not straightforward, but conduct that places someone's well-being at the mercy of an indeterministic roll of the dice seems distinguishable from the situations [w]here the assumption was, in effect, that the risk-imposer would either definitely cause physical harm or would definitely not cause physical harm, but because of imperfect knowledge we would not be in a position to say which of these two states of affairs in fact obtained. In the indeterministic case there seems to be a true detrimental shift in position that is simply not present in the deterministic case (unless, of course, true *physical* [sic.] harm in fact is caused)".

Perry, in Owen *supra* n.81, pp.336-37. Professor Perry rightly observes that in cases involving deterministic causation,

"[t]he assertion that the plaintiff suffered risk damage is simply a fiction employed to get around the practical difficulties [i]n establishing causation with respect to the physical harm". *Id.*, 334.

Therefore, in cases where the risk-damage equation constitutes nothing but a fiction, we suggest to apply the evidential damage doctrine. If the defendant is responsible for the above "practical difficulties", the plaintiff should win the case. Besides, if loss of evidential information be perceived as harmful by itself, the difficulties pointed to by Professor Perry would become altogether irrelevant to our thesis.

88 Each of these factors is explained below. See *infra* n.106 and accompanying text.

But what makes an infliction of evidential damage *wrongful*? When a bystander inadvertently disturbs the eyesight of a tort victim, thus making her unable to identify the escaping tortfeasor, the bystander can hardly be held responsible for the victim's evidential damage. Similarly, no liability can be attributed to a bystander who turned his head away and consequently did not witness a tortious event. An office cleaner who throws away an empty bottle left on an attorney's table, not suspecting the bottle to be the key evidence in a product liability lawsuit, also will not be liable.⁹⁰ But what about the attorney? It appears that she acted wrongfully and should therefore be held responsible for the evidential damage. By allowing the bottle to be mistaken for trash she violated the duty to protect evidence needed for her client's case.⁹¹ Generally owed by attorneys to their clients, this duty can also be perceived as an implied undertaking in an attorney-client relationship. An attorney-client relationship is not the only one that involves a duty to protect evidence. Services rendered by banks, accountants, stock brokers, and many other professionals often include a similar duty. Some professionals, most notably doctors, may be required not only to retain, but also to generate evidence.⁹²

Cases involving bystanders provide us with extreme and hence obvious examples of non-wrongfulness.⁹³ Cases that involve breach of a duty to protect evidence, predicated upon special relationships, constitute extreme and therefore obvious examples

89 *Smith v. Superior Court*, *supra* n.53.

90 As, indeed, held in *Velasco*, *supra* n.14.

91 *See Velasco, id.*, 878-79 (a dictum expressing the same opinion).

92 A duty to eliminate evidential damage may also arise when a person non-negligently forces another person into a dangerous situation. Let it be assumed that the *DES Case* (*supra* n.72 and accompanying text) is controlled by the negligence doctrine and that one of the defendants was faultless in producing the carcinogenic drug. At some point, however, this defendant became aware of the drug's potential hazard and immediately recalled it from the drugstores. He could also have obtained from the drugstores a comprehensive list of those who purchased his drugs, but failed to do so. To compile such a list 20 years later (when the females given birth by the DES consumers become afflicted by cancer) is impossible. In our view, the defendant should be held liable for the resulting evidential damage.

93 *Cf. Barbosa v. Liberty Mut. Ins. Co.*, 617 So.2d 1129, 1130 (Fla.App. 3 Dist. 1993) (for a defendant to be liable, there must be a special duty to produce and protect evidence); *Gorelick et al.*, *supra* n.3, §§4.14-4.15 (discussing conflicting court opinions on the issue).

of wrongfulness. Cases falling between these two polarities are more puzzling. Litigation involving an evidential damage unintentionally inflicted by one of the parties belongs to this category of cases. It is certainly not a bystander case. Nor is it a case that involves a violation of some special duty to protect evidence.⁹⁴ This "in-between" category of cases will also include tort actions where the damage can be traced back to a number of uncoordinated risks originating from mutually unrelated sources. As long as the damage can be equally related to any of the causally relevant risks, the tortfeasor's identity cannot be determined as being more probable than not. In any such case, because the particular risk for which the defendant is responsible may not have materialized into the litigated damage, the defendant may escape liability.⁹⁵ Factual indeterminacy of the causation issue may work in his favor. But why is the causation issue so indeterminate? It is indeterminate partly because of the defendant. By adding his risk to the list of the causally relevant risks, the defendant contributed to the indeterminacy of this issue. If so, did he cause this evidential damage *wrongfully*? He did not violate any special duty to protect evidence. As the same time, it is quite hard to consider him to be merely a bystander.

This intuition can be explained by two pivotal factors: the non-reciprocal nature of the risk to which the defendant exposed the plaintiff, and the fact that the evidential damage was inflicted negligently. The risk's non-reciprocal nature unmistakably identifies the defendant as its originating cause. Negligence with regard to the evidential damage ensuing upon materialization of this risk marks out the defendant's actions as faulty. As will be explained, in the absence of a special duty to prevent evidential damage, non-reciprocity and negligence will both be necessary for justifiably imposing liability for that damage. These two pillars of liability for evidential damage are mutually dependent. There can be no fault without causal identification of the person at fault. Absence of fault will, in turn, engender insurmountable difficulties in causally identifying the party responsible for the evidential damage.

94 The only special duty, bilaterally owed by the parties to a civil trial, would usually be a duty not to incur evidential damage intentionally.

95 The *Hunters' Case*, where none of the defendants escaped liability (*see supra* n.30), is the tidiest example of a case falling under this category.

When a litigant unintentionally inflicts an evidential damage upon her opponent, the key issue that needs to be addressed is whether the risk associated with the damage was reciprocal.⁹⁶ This issue is crucial for a number of reasons. Trial evidence is always wanting. Judicial fact-finding is bound to be conducted under uncertainty. As such, it will always entail risk of error. Risk of error attendant upon evidential insufficiency therefore represents, *eo ipso*, the accepted level of risk to which litigants are allowed to expose each other by bringing out and substantiating their contested allegations. This adversarial exposure to the risk of error is accepted because it is reciprocal. To be considered as wrongfully inflicted, evidential damage must thus be non-reciprocal and originate from negligence.

Fact-finding in civil litigation is based upon mutual disclosure and the subsequent production of all available evidence. Litigants are generally required to take all reasonable steps necessary for the attainment of this objective.⁹⁷ Under this framework, actions taken by the litigants in connection with the evidence may make a difference. When a relevant evidential item is unavailable, it may be unavailable because of bad luck or because one of the parties did something that made it unavailable. In the former case, none of the parties can be marked out as responsible for the evidential damage and the corresponding risk of error. In the latter case, lack of evidence can be attributed to one party only, which makes the ensuing risk of error non-reciprocal.

Attribution of liability in the latter case would still be questionable if the damage was inflicted without negligence. According to a more rigorous perception of causation, which may look somewhat formal, damage produced without negligence should be perceived as produced jointly by all the persons involved. In the absence of negligence, to perceive the allegedly "active" tortfeasor as "acting upon" the allegedly "passive" victim would be unjustified for at least two reasons. First, the above role-description can easily be reversed without distorting the narrative.⁹⁸ Second, it is two distinct activities, not just

96 See generally Fletcher, *supra* n.81.

97 See, e.g., ROBERT M. COVER, OWEN M. FISS & JUDITH RESNIK, *PROCEDURE* 826ff (1988).

98 The alleged victim could easily be depicted as not preventing or even coming upon his damage.

one, that produced the damage *as a matter of fact*.⁹⁹ Moreover, because facts can be inferentially established in a variety of ways, lack of particular evidence, for which one of the parties is peculiarly responsible, would have been unlikely to produce harm if substitute evidence were available. Lack of substitute evidence may thus constitute an equally harmful damage. In the absence of negligence as a liability criterion, this equally harmful damage can easily be attributed to the other party.

The dual standard of non-reciprocity and negligence does not guarantee precision in its application. It seems nonetheless to be the only justifiable standard in allocating liability for evidential damage.¹⁰⁰ Take, for example, the *Case of Radioactive Exposure*,¹⁰¹ tainted with indeterminacy of the causation issue in respect of each of the plaintiffs. In this and similar cases, the non-reciprocal character of the risk imposed by the defendants upon the plaintiffs is transparent. Engendered by negligence, this risk should be understood as including not only the increased likelihood of contracting cancer, but also the inability to obtain evidence concerning the cause of this disease. Both components of this risk seem equally foreseeable. Their foreseeability can be derived from the current state of knowledge concerning the hazards associated with radioactive rays, asbestos, and the like. The evidential damage doctrine would thus resolve one of the most serious problems in the mass torts area, which is still awaiting satisfactory resolution.¹⁰²

Arguments favoring liability for evidential damage in cases that involve more than one defendant and indeterminate causation are more straightforward. These cases can be viewed as "attempted torts" perpetrated by defendants. This is so because the risk generated by each individual defendant could have materialized into an actionable damage. Any such risk would therefore be regarded as both negligent and non-reciprocal. By transcending the accepted level of risk, it upsets the protected equilibrium. Each

99 See OLIVER WENDELL HOLMES, Jr., *THE COMMON LAW* 84ff (1881); Ronald H. Coase, *The Problem of Social Cost*, 3 J. L. & ECON. 1, 13 (1960); Perry, *supra* n.81, in 1 CAN. J. L. & JURIS. 147, 154-59.

100 As remarked by Holmes, "a choice which entails a concealed consequence is as to that consequence no choice". Holmes, *id.*, 94.

101 See *supra* n.46 and accompanying text.

102 See generally Delgado, *supra* n.46.

defendant should therefore be viewed as adding his risk to the cluster of risks causally relevant to the plaintiff's damage. One of those risks, which cannot be singled out as the most probable cause of the damage, had materialized. For this indeterminacy of the causation issue, which constitutes evidential damage, each defendant should be held liable. This holding would represent each defendant's *minimal* liability.¹⁰³ Absolving him from this liability would logically require to hold him liable for the plaintiff's physical damage, for he is undoubtedly responsible for one of these damages.

Under the reciprocal risk theory, any person should also be liable for intentionally inflicting evidential damage upon another person. It is only accidental risks that can properly be regarded as reciprocal. Representing a "rapid acceleration of risk, directed at a specific victim",¹⁰⁴ intentional damage will always go beyond this acceptable level of risk.¹⁰⁵

Let us now turn to the remedies to which a person sustaining evidential damage should be entitled. Under the corrective justice theory, these remedies should achieve, and also be confined to, the *restitutio ad integrum*. Undercompensation and overcompensation are both impermissible. To meet this demand in connection with evidential damage is not an easy task. How to evaluate a plaintiff's entitlement to the lost information? After all, this information was not necessarily beneficial, and could even have been detrimental, to her action. At the same time, to wipe out the intuition that the plaintiff had lost something of value would be even more difficult. The plaintiff became less informed about her action. This undoubtedly impaired her ability to exercise her autonomous choices as a person enforcing her legal rights. Before the damage was inflicted, these choices may have included the uncompromising pursuit of victory in the litigation, a settlement and, admittedly, a possible retreat from the case. These choices and, consequently, the plaintiff's autonomy¹⁰⁶ have become different as a result of the

103 Cf. King *supra* n.87, 1390-94 (implying practically the same).

104 Fletcher, *supra* n.81, 550.

105 *Id.*

106 According to John Stuart Mill, being less informed in making risk-related choices is tantamount to making those choices less autonomously:

"If either a public officer or any one else saw a person attempting to cross a bridge which had been ascertained to be unsafe, and there were no time to warn him of his danger, they must seize him and

damage. They are now more restricted. The mere fact that the lost information could potentially assist the plaintiff in exercising her legal rights also justifies treating her as a person who sustained a meaningful damage. For these reasons, measures should be taken to bring the plaintiff, as close as possible, to her original, more autonomous, informational position. Only this will implement the *restitutio ad integrum* requirement of corrective justice. To wipe out the intuition that the plaintiff lost something of value will therefore be not merely difficult, but virtually impossible. The plaintiff ought to be compensated for her damage. Following this conclusion, we will now offer the mechanism of reducing this damage to money.

(b) the compensation problem

Assessment of evidential damage invites speculation because the question, "What would be the outcome of the trial, had it not become evidentially damaged?" is irreducibly counterfactual.¹⁰⁷ Evaluation of familiar tort damages also involves counterfactual questions, but these questions are different because they refer to the familiar. Take, for example, the familiar question "How much money would the plaintiff have earned, if she remained physically undamaged?". This and similar questions can be answered by referring to our knowledge about people and their earnings in general. This general knowledge allows us to determine the plaintiff's lost earnings as equal to the earnings of her uninjured equals. No similar frame of reference is available in evidential

turn him back, without any real infringement of his liberty; for liberty consists in doing what one desires, and he does not desire to fall into the river. Nevertheless, when there is not a certainty, but only a danger of mischief, no one but the person himself can judge of the sufficiency of the motive which may prompt him to incur the risk: in this case therefore (unless he is a child, or delirious, or in some state of excitement or absorption incompatible with the full use of the reflecting faculty), he ought, I conceive, to be only warned of the danger, not forcibly prevented from exposing himself to it".

JOHN STUART MILL, ON LIBERTY (1859), in Mary Warnock ed., JOHN STUART MILL: UTILITARIANISM; ON LIBERTY; ESSAY ON BENTHAM 228-29 (1962).

The same would apply to a person's choices about litigation and settlement. Cf. GERALD DWORKIN, THE THEORY AND PRACTICE OF AUTONOMY 100-112 (1988) (a person's informed decision as to her medical treatment justified by the intrinsic value of her autonomy).

¹⁰⁷ See Gorelick *et al.*, *supra* n.3, §4.23.

damage cases. Evidential damage is always unique and there is no general knowledge that could enable us to assess it counterfactually.

Despite this difficulty, one cannot ignore the possibility that the lost information could have enabled the afflicted party to prevail in her trial. The possibility therefore needs to be converted into dollars. One way of doing this is to focus on the potential value of the lost information *to the plaintiff*. Her chances to prevail in her trial by utilizing this information should be roughly estimated in probabilistic terms and subsequently multiplied by her primary damage.

Another way of doing this is to focus on the potential market value of the lost information, by treating the threat posed by a civil law suit, *i.e.*, the plaintiff's chance of winning the case, as an asset that the plaintiff is willing to sell and the defendant is prepared to buy off for the right price. We will thus treat any lawsuit as having a settlement value ranging from zero (when the plaintiff's chances to prevail are negligible) to the claimed amount (when the plaintiff's victory is virtually certain). Evidential damage may reduce or increase this value, depending on whether it was sustained by the plaintiff or the defendant. The settlement value of a lawsuit prior to the infliction of evidential damage will be represented by SV_1 . The lawsuit's post-damage settlement value will be denoted as SV_2 . *Loss sustained by the evidentially damaged plaintiff will thus be equal to $SV_1 - SV_2$* . An attempt should therefore be made to determine SV_1 and SV_2 separately, by hypothesizing two rationally self-interested negotiations toward settlement between the plaintiff and the defendant.

Let us start with determination of the post-damage value of the plaintiff's litigation threat (SV_2).

The basic condition for rationally preferring a settlement over litigation holds as follows:¹⁰⁸

$$P_d J_d + C_d - S_d + R_d > P_p J_p - C_p + S_p - R_p,$$

when:

J_p & J_d = the stakes of the litigation, as estimated by the plaintiff and the defendant, respectively;

108 See Robert D. Cooter & Daniel L. Rubinfeld, *Economic Analysis of Legal Disputes and Their Resolution*, XXVII J. ECON. LIT. 1067 (1989).

P_p & P_d = the probability of the plaintiff's victory, as estimated by the plaintiff and the defendant, respectively;¹⁰⁹

C_p & S_p and C_d & S_d = the litigation (C) and the settlement (S) costs expected to be spent by each party;

R_p & R_d = the "risk-premium" each party is prepared to pay in order to eliminate the possibility of a greater loss, associated with continuation of the litigation (which represents the degree of each party's aversion to risk).¹¹⁰

The tortfeasor responsible for the plaintiff's evidential damage should neither suffer nor benefit from:

- (1) information about the case held asymmetrically by the plaintiff the defendant;
- (2) possible inequality between the plaintiff's and the defendant's spendings on the litigation and the settlement negotiations;
- (3) an idiosyncratic attitude toward risk that may characterize one or both parties. Both parties will thus be assumed to be reasonably risk-averse;
- (4) the likelihood that one or both parties will embark on strategic bargaining and thus foil a mutually beneficial settlement;
- (5) the defendant's incentive not to settle the case in order to gain a reputation as a stubborn player, which would help him in other cases.

None of these factors should be taken into account in assessing the plaintiff's evidential damage, because this may either overcompensate or undercompensate the

109 These probabilities represent the plaintiff's likelihood to prevail under the controlling standard of proof, *e.g.*, her chances to persuade the jury, by a preponderance of the evidence, that her factual allegations are true. The probability of these allegations being true is a separate matter.

110 We ignore the possibility of cost-shifting. Being a routine practice in England, this measure is exceptional in the United States. We also suspect that a rational choice between litigation and settlement will not be affected by this measure. See John J. Donohue III, *Opting for the British Rule, or if Posner and Shavell Can't Remember the Coase Theorem, Who Will?*, 104 HARV. L. REV. 1093 (1991) (demonstrating that the settlement rate will be identical under both English and American rules).

plaintiff. Assessment of this damage (as of any other consequential damage) should proceed upon the assumption that both the plaintiff and the defendant will be pursuing their individual interests rationally. The parties should also be assumed to have mutually utilized the discovery mechanism, thus making the existing evidence equally accessible to both of them. These assumptions are required because they reflect the proper course of events, from which the evidentially damaged plaintiff was entitled to benefit.

Another necessary assumption holds that none of the parties will be able to take unfair advantage of her adversary by forcing him into making distorted choices. Partially deriving from the rationality assumption, this mutual inability should also be assumed to be known to both parties. These two assumptions are self-explanatory. An opportunity for taking undue advantage of another person and a possibility of being taken advantage by another person cannot serve to affect the assessment of the tort victim's damage. These possibilities are extraneous to the damage sustained by the victim. They should therefore be ignored, which simplifies the judicial task of predicting the outcome of hypothetical communications between the plaintiff and the defendant. In assessing the evidential damage inflicted by the tortfeasor, these communications should accordingly be assumed to be undistorted by false signals.

The defendant may still be unwilling to enter into a beneficial settlement, if he decides to build up a reputation as a stubborn litigant. In assessing the plaintiff's evidential damage, this possibility should also be ignored. It should be ignored not only as extraneous to the plaintiff's damage, but also because the defendant may ultimately lose the case. His possible unwillingness to settle the case does not therefore diminish the value of the plaintiff's litigation threat.

The judge may thus step into the plaintiff's and the defendant's shoes under the following simplifying assumptions:

- (1) Information about the case held by the parties is symmetrical;
- (2) The parties are equally rational;
- (3) The parties' spendings on the litigation and the settlement negotiations are equal to those of an average litigant;
- (4) The parties' attitudes toward risk are roughly similar;
- (5) There is no strategic bargaining.

These assumptions can be made quite naturally, as only the judge will make the evaluations. Hence, $J_p = J_d = J$; $P_p = P_d = P$; $C_p = C_d = C$; $S_p = S_d = S$; $R_p = R_d = R$.

The parties will thus prefer settlement whenever $2(C+R-S) > 0$, which will always be the case because litigation costs (even without the risk-premium) are higher than settlement costs. The parties will always be better off agreeing on PJ as a basic settlement value, which will allow them to divide the surplus amount $2(C+R-S)$ between themselves. Because both parties are rational and none of them can take advantage of her adversary, this surplus amount will be equally divided between them. The post-damage value of the plaintiff's litigation threat (SV_2) will thus be equal to JP. As for the plaintiff's saving of the expenses (C-S) and of the risk-premium (R), because she could also save them if she sustained no evidential damage, the tortfeasor should derive no benefit from any of those savings. Hence, $SV_2=JP$.

SV_1 will be determined by following the same procedure, subject to the evaluation of the evidential deficiency for which the tortfeasor is responsible. The judge should now hypothesize that the parties to the evidentially damaged trial are negotiating a settlement on the assumption that the missing evidence is locked in a box that will be unlocked if the litigation continues. Each party must thus take into account the probability that the missing evidence will work in favor of her adversary. This latter determination will, of course, also be made by the judge on behalf of the parties.¹¹¹ If the potential impact of the missing evidence cannot be predicted, the judge should assume

111 Missing evidence and its probative significance have been subject to a statistical analysis that employed Bayes' Theorem. See Dennis V. Lindley & Richard Eggleston, *The Problem of Missing Evidence*, 99 LAW Q. REV. 86 (1983). In the absence of hard statistical data, this analysis (more complicated than ours) cannot help to solve the puzzle. One of the present authors had subscribed to the opinion that the subjectivist Bayesian method is also generally unhelpful in judicial fact-finding. See Alex Stein, *Judicial Fact-Finding and The Bayesian Method: The Case for Deeper Scepticism About Their Combination*, 1 EVIDENCE & PROOF (forthcoming, 1996) (arguing that application of the Bayesian method in judicial fact-finding is either anomalous or otiose). See also Ronald J. Allen, *Factual Ambiguity and a Theory of Evidence*, 88 NW. U. L. REV. 604, 608 (1994) ("in order to apply statistical concepts to cases, whether frequency or Bayesian, the dependency relationships

that this evidence, in conjunction with the evidence actually available, could equally favor either the plaintiff or the defendant (*i.e.*, that $SV_1 = 0.5J$). Therefore, if $SV_2 = 0.5J$, the plaintiff will be held to have sustained no evidential damage. If $SV_2 > 0.5J$, the damage will be held to have been sustained by the defendant alone. The plaintiff will thus be allowed to recover from the tortfeasor only if $SV_2 < 0.5J$.¹¹²

In some cases, the lost impact of the missing evidence can be appraised probabilistically on the basis of the existing evidence. Take, for example, the famous *Hunters' Case* that has already been discussed.¹¹³ If the orthodox tort law doctrine remained unmodified, the plaintiff would have lost this case without reaching the jury. SV_2 would therefore amount to 0. As for SV_1 , it would clearly amount to $0.5d$ vis-a-vis each defendant, when d represents the damage sustained by the plaintiff. The box that contains the evidence identifying one of the defendants as responsible for the plaintiff's damage is going to be unlocked if the litigation continues. Each defendant therefore knows that the probability of him being forced to pay the plaintiff d equals 0.5. Each defendant would consequently prefer to remove the litigation threat by paying the plaintiff $0.5d$, an offer that will be gladly accepted by the plaintiff. Because both defendants are equally responsible for the plaintiff's evidential damage (unless one of them admits the infliction of the primary damage), each of them should indeed pay this amount to the plaintiff.

It is equally plausible to hold the defendant liable, both jointly and severally, for the whole physical damage sustained by the plaintiff. From the plaintiff's perspective, the value of the box equals his whole damage. If he owned the box, he would not sell it for less than this amount. Focusing upon the injured party, this mode of compensation well accords with traditional tort law doctrine.

must be known. This is an example of a general problem ... virtually all theories of evidence require that one know too much.").

112 Note that SV_2 is not an evidentially based finding that can affect the verdict in the underlying litigation and thus make good the evidential damage. The model proposed by Lindley and Eggleston (*id.*) will therefore work, as they implicitly suggest, only when the missing evidence can be probabilistically reconstructed by substitute evidence (*e.g.*, when there are indications that the missing evidence was intentionally destroyed or suppressed by one of the parties).

113 See *supra* n.30 and accompanying text.

The *Radioactive Exposure Case*¹¹⁴ can be used as another example. Under the traditional tort law doctrine, P has no case against D. Therefore, $SV_2=0$. Because D is responsible for the uncertainty of the case, let it now be assumed that evidence identifying the 25 residents who contracted cancer as a result of D's radiation is locked in a box that will be opened if P and D do not settle the case. Both D and P should now anticipate the forthcoming evidence to either identify P as one of the 25 residents for whose cancer D is responsible or mark her as one of the 75 residents that fell into misfortune. SV_1 will thus be equal to $0.25d$, when d denotes P's whole damage. D should indeed pay this amount to P, because by making the causation issue indeterminate, he evidentially damaged the case. D should pay P *only* this amount because if the causation issue were determinate, he would be held responsible for causing cancer only in 25 out of 100 cases. P's chance to recover $\$d$ from D in a determinate case therefore amounted to only 25%.¹¹⁵

Most cases, however, would not be as easy. Difficulties in applying the proposed damage-assessment principle are apparent. Because evidential damage cannot be determined counterfactually by resorting to general experience, it will be determined by aleatory reasoning.¹¹⁶ Focusing upon chances that may or may not materialize, this reasoning will ascribe dollar values to the litigants' fear of the unknown before and after the infliction of evidential damage. The difference between the two values will determine the magnitude of the damage. Aleatory reasoning is certainly not irrational.¹¹⁷ Settlements voluntarily reached in many civil cases are all products of aleatory reasoning. But judgments that entail compulsion are not voluntary settlements. In the absence of an actual settlement between the parties, judgments need to be justified. This requirement is violated if the judgement is conjectural.

The proposed damage-assessment principle constitutes, nonetheless, the best solution to the problem. A person sustaining evidential damage is deprived not only of

114 See *supra* n.46 and accompanying text.

115 As demonstrated below, this solution would also be economically efficient. See *infra* n.129 and accompanying text.

116 Aleatory reasoning and its underpinnings are helpfully examined by L. JONATHAN COHEN, AN INTRODUCTION TO THE PHILOSOPHY OF INDUCTION AND PROBABILITY chs. 1 & 2 (1989).

information to which she was entitled, but also of the opportunity to reach a more favorable settlement with her adversary. To be sure, this opportunity is merely a chance that may or may not materialize into real dollars. Not readily translatable into dollars, such chances are, however, still valuable. Taking them away from their legitimate owners would not be a harmless act. If the proposed principle is not adopted, people sustaining evidential damage would either be overcompensated or undercompensated. The resulting disservice to corrective justice will not be offset by the reduced number of untidy approximations in the judicial assessment of tort damages. After all, rough approximations are not uncommon in this and other areas of the law.¹¹⁸

Corrective justice would be frustrated if, after recovering from the evidential tortfeasor, the plaintiff were also able to recover from her adversary in the underlying litigation. This anomalous outcome can be prevented by introducing a "ripeness" requirement into the evidential damage doctrine. Under this requirement, evidential damage will not be actionable prior to completion of the underlying litigation.¹¹⁹ By forcing evidentially damaged plaintiffs to go through tenuous lawsuits, this requirement will place upon them too heavy a burden. Furthermore, in an action ensuing from the plaintiff's defeat in such a lawsuit, the tortfeasor will seek to establish that the lawsuit would not have been defeated if prosecuted more diligently. The evidentially damaged trial and the plaintiff's action against the tortfeasor should therefore be joined. This can be done by requiring the plaintiff to sue the evidential tortfeasor and the principal defendant as alternate co-defendants. Alternatively, if the plaintiff brings no action against the

117 See Cohen, *id.*

118 See, e.g., *Smith v. Superior Court*, *supra* n.53, 500-501 (holding in relation to the spoliation of evidence tort that damages should be proved as accurately as possible, and pointing out that there are many interests protected through damages that cannot be proved with certainty).

119 See *Gorelick et al.*, *supra* n.3, §4.20 (not favoring introduction of the ripeness requirement). The caselaw on this issue is not well-settled: see *Baughner v. Gates Rubber Co., Inc.*, 863 S.W. 2d 905, 913-14 (Mo.App.E.D. 1993) (upholding the ripeness requirement in connection with similar lawsuits); *Velasco*, *supra* n.14 (not conditioning a spoliation-of-evidence lawsuit upon filing of the underlying action).

principal defendant, the latter should be allowed to be impleaded by the evidential tortfeasor.¹²⁰

In cases involving evidential damage negligently inflicted by the principal defendant, this remedial mechanism will often be inadequate. After succeeding in the principal lawsuit, the defendant will contend that the lawsuit would have failed also in the absence of the evidential damage. If the defendant won the lawsuit on the merits, rather than by benefiting from factual indeterminacy, this contention should succeed, thus leaving the plaintiff with no compensation or, at best, with minimal compensation. But this will not often be the case, a possibility that should be taken into account. If the defendant won the lawsuit by benefiting from factual indeterminacy, so that the plaintiff's defeat resulted from her failure to discharge the burden of persuasion, to set the plaintiff's award as equal to the hypothetical difference between SV_1 and SV_2 may undercompensate the plaintiff. By sustaining the evidential damage, the plaintiff was deprived not merely of the chance to obtain a relatively favorable settlement of the case. She was deprived of the possibility to prevail in the trial by tipping the scales to her side. Together with other factors, this chance is consolidated in the settlement value of the case. It would, however, be compensated for more accurately if the persuasion burden were shifted from the plaintiff to the defendant. The latter should not be allowed to derive *any* benefit from his own wrong.

Another feature of the proposed evidential remedy deserves special emphasis. This remedy will not be limited to instructing the fact-finders that if the existing evidence does not favor one of the parties on a balance of probabilities, it is the plaintiff rather than the defendant who ought to prevail. It will also draw the fact-finders' attention to both the evidential damage and the ensuing possibility of factual impasse. This two-directional instruction will make the plaintiff's evidential remedy meaningful.¹²¹

120 See John K. Stipanovich, *The Negligent Spoliation of Evidence: An Independent Tort Action May Be the Only Acceptable Alternative*, 53 OHIO ST. L. J. 1135, 1153-54 (1992) (advocating an essentially similar idea with regard to a more restricted spoliation tort).

121 For full explanation see Part VI.

V. EVIDENTIAL DAMAGE AND DETERRENCE

The evidential damage doctrine will now be examined instrumentally by looking at the social utility it can be expected to yield. From this angle, it will be examined as a means to a means-to-an-end. Less evidential damage entails more accurate fact-determination and consequently more effective execution of the substantive law.¹²² Individuals should therefore be deterred from causing evidential damage. As is true for other damages, however, evidential damage should not be prevented at any cost. When the costs of preventing damage are greater than the damage, taking precautions would be suboptimal. Tort liability for evidential damage will therefore be efficient when it cost-effectively minimizes this damage, *i.e.*, when the total sum representing both the damage and the costs of its prevention is kept at its lowest. This can be attained by allocating responsibility for the damage to a person situated in the comparatively best position to minimize the above sum. This person will thus be singled out as the "cheapest cost-avoider".¹²³

122 The controlling substantive law will be presumed to be efficient because otherwise judicial fact-finding would have no economic value. We thus examine the utility of the evidential damage doctrine similarly to that of the law of evidence and procedure. This follows Jeremy Bentham's approach, as formulated by Gerald Postema:

"[w]e are to judge the adequacy of a system of judicial procedure not directly in terms of the Principle of Utility [sic.] but rather in terms of the system's success (or likely success) in properly executing the substantive law, and only indirectly in terms of the system utility".

Gerald Postema, *The Principle of Utility and the Law of Procedure: Bentham's Theory of Adjudication*, 11 GA. L. REV. 1393, 1396-97 (1977).

123 In what follows, we endorse the view that the "cheapest cost-avoider" status derives from a person's *position*, which enables her properly to consider if and how to dispense money in order to avoid the damage, rather than from her actual ability to cost-effectively prevent it. A holder of this status can thus be described more accurately as the "best assessor" of the situation at hand. As such, she will internalize either the costs of preventing the damage or the damage itself. Preferences self-interestedly accorded by her to one of these outcomes (through accounting for the probability of the damage, which will determine its expected rather than full value) will achieve the desired utility. See GUIDO CALABRESI, *THE COSTS OF ACCIDENTS* 68-94; 135-73; 244-65 (1970); Guido Calabresi & Jon T. Hirschoff, *Toward a Test for Strict Liability in Torts*, 81 YALE L. J. 1055 (1972). For a critique of this approach see Englard, *supra* n.81, 31-35 (arguing that instrumentalist

In cases featuring evidential damage inflicted by defendants, lack of liability for that damage will preclude efficient allocation of the primary damages. This inefficiency will occur because cheapest cost-avoiders will be allowed to pay less, or even pay nothing, for the primary damage they are likely to have inflicted. Allocation of liability for evidential damage to its cheapest cost-avoider may, accordingly, achieve two utilitarian goals at once. It may optimize deterrence not only in relation to the evidential damage but also in connection with the primary damage itself. This, once again, will happen in cases where the cheapest cost-avoider of the evidential damage is also likely to have inflicted the primary damage. In such cases, deterrence will be optimally furthered by charging to each defendant the expected value of the primary damage associated with his actions. This value will be determined by activating the remedial mechanism

objectives favored by this approach will be thwarted by their complexity and lack of necessary information).

Another approach links the "cheapest cost-avoider" status with a person's actual ability to cost-effectively prevent the damage. This invokes the Learned Hand formula, according to which negligence will occur if $B < PL$, when:

(1) B represents the costs to be spent on discharging the burden of adequate precautions;

(2) L represents the loss avoidable by taking these precautions;

and

(3) P represents the *ex ante* probability of L.

See Conway v. O'Brian, 111 F.2d 611, 612 (2d Cir. 1940), *rev'd on other grounds*, 312 US 492 (1941); United States v. Carroll Towing Co., 159 F.2d 169 (2d Cir. 1947). This formulation of tort liability was adopted and refined by Judge Posner. *See* Richard A. Posner, *A Theory of Negligence*, 1 J. LEGAL STUD. 29 (1972); Richard A. Posner, *Strict Liability: A Comment*, 2 J. LEGAL STUD. 205 (1973); WILLIAM M. LANDES & RICHARD A. POSNER, *THE ECONOMIC STRUCTURE OF TORT LAW* 54-84 (1987); RICHARD A. POSNER, *THE PROBLEMS OF JURISPRUDENCE* 454-69 (1990). For critique of this approach *see* Izhak Englard, *The System Builders: A Critical Appraisal of Modern American Tort Theory*, 9 J. LEGAL STUD. 27, 33-55 (1980); Englard, *supra* n.81, 36-59; Izhak Englard, *Law and Economics in American Tort Cases: A Critical Assessment of the Theory's Impact on Courts*, 41 U. TORONTO L. J. 359, 420-28 (1991) (arguing that Posner's principle is inherently ambiguous, which makes it operationally insignificant, and that a reductionist attempt at making it operative will oversimplify the efficiency problem and generate distortions).

For a critical appraisal of the economic approach to tort liability *see* Gary T. Schwartz, *Reality in the Economic Analysis of Tort Law: Does Tort Law Really Deter?*, 42 UCLA L. REV. 377 (1994).

developed in Part IV. Were there no evidential damage, deterrence could be optimized more accurately by charging the defendant for the actual losses he inflicted. But the case is evidentially damaged, which precludes accurate deterrence. Attainable through the evidential damage doctrine, approximate deterrence with regard to the primary damage is therefore the best that can be attained.

The cheapest-cost-avoider status will not, however, always attach to the same person with regard to both the primary and the evidential damages. These two kinds of damage may have two separately cheapest avoiders. Any such case will exhibit tension between deterrence, as related to the evidential damage, and deterrence in connection with the primary damage. To optimize both kinds of deterrence will be patently impossible, which entails that one of these objectives can be promoted to its full extent only at the full expense of the other. Alternatively, some compromise needs to be struck between these two objectives, which would lead to insufficient deterrence with regard to both evidential and primary damages.

(a) convergence between the two objectives exemplified

Take our hypothetical *DES Case* with its insoluble defendant-identification problem,¹²⁴ and consider how it could be resolved under the evidential damage doctrine. In this case, each of the manufacturers was clearly the cheapest avoider of both the primary and the evidential damage. Each manufacturer was best positioned to consider the means of substantially reducing the extent of, if not altogether eliminating, the identification problem (*e.g.*, by marketing the drug under its brand rather than generic name, or by maintaining records documenting the purchasers of the drug).¹²⁵ Arguably, the plaintiffs' mothers could have eliminated the problem even more efficiently by recording their drug-purchases. This argument is, however, unconvincing. The mothers' inadequate information about the drug and its producers, accompanied in some cases by

124 See *supra* n.72 and accompanying text.

125 This monitoring could be arranged with drugstore retailers. See, *e.g.*, Glen O. Robinson, *Multiple Causation in Tort Law -- Reflection on the DES Cases*, 68 VA. L. REV. 713, 729, 734-35 (1982); Richard P. Murray, *Note, Sindell v. Abbott Laboratories: A Market Share Approach to DES Causation*, 69 CAL. L. REV. 1179, 1202 (1981).

psychological barriers, will remove plausibility from any attempt to assign to them the "cheapest-cost-avoider" status. It must also not be forgotten that the drugs purchased by the plaintiffs' mothers were advertised as both *chemically identical* and safe. Upon this warranty, explicitly or implicitly given by each manufacturer, the plaintiffs' mothers were perfectly entitled to rely. This warranty sent the unequivocal message that it would be a waste of time for consumers to differentiate between different DES producers across the country. Because the plaintiffs' mothers purchased not only the drugs, but also their accompanying warranties, they cannot be blamed for the evidential damage. Consequently, each manufacturer will have to compensate each plaintiff by paying her the expected value of the damage associated with his own actions.

This, however, will not necessarily optimize deterrence with regard to both primary and evidential damages.¹²⁶ Leaving aside reputation-related incentives, it will be proper to divide the DES manufacturers into two groups. The first group will include manufacturers with no incentives to remove the identification problem. Some of them will be downright hostile to the idea of removing this problem, because the damage they produce will exceed the liability to which they will be exposed. These manufacturers will be joined by those whose expected liability is going to be roughly equal to the damage they produce. For any such manufacturer, investing in the elimination of the identification problem would generate no gains. The second group will include manufacturers producing less damage than the damage they expect to pay for under the controlling liability doctrine. Manufacturers belonging to this group would be interested in eliminating the identification problem, if the costs of removing it are exceeded by the difference between their current and future liabilities. Hence, many manufacturers will still have no incentive to minimize the evidential damage and, indeed, the primary damage itself.

Take a manufacturer contemplating a reduction of the hazard associated with his product. This manufacturer will be facing an uneasy choice. If, for example, a \$5 investment in product improvement (per unit) will bring the anticipated damages down from \$40 to \$20, everyone would agree that the investment ought to be made. Although

126 The possibility of holding the defendants liable on the market-share-liability theory, see *infra* note 128 and Porat, *supra* note 72.

correct from a social utility perspective, this proposition will not be endorsed by our manufacturer if the liability he will be exposed to is not going to be reduced by more than \$5. As long as the identification problem remains unsolved, he may decide not to improve his product because other manufacturers will be sharing the fruits of his investment. Lack of identification will allow other manufacturers to free-ride on his investment by lowering their compensation payments to the plaintiffs at his expense. Thus, if our manufacturer and four others are held identically liable, his liability would be reduced by only \$4, which implies a \$1 loss.¹²⁷ Our manufacturer will therefore be prepared to remove the identification problem at any cost less than \$15. If his total investment in improving his product and in removing the identification problem falls below \$20, it will be efficient not only from his private perspective, but also as a matter of social utility. No such investment, however, can be expected without the evidential damage doctrine. Deterrence attainable by deploying this doctrine in indeterminate-tortfeasor cases would not always satisfy the perfectionist. It would, however, always be the best economic alternative.¹²⁸

127 Calculation of this average liability per each unit of the hazardous product is straightforward. Prior to the improvement of our manufacturer's product, he and four other manufacturers averaged \$40 liability per person. After the improvement, compensation to be paid by the five was reduced from \$200 to \$180, *i.e.*, to \$36 of average liability per manufacturer. The free-riding fellows of our manufacturer will thus take away \$16 from him.

128 A similar outcome can arguably be attained under the market-share liability doctrine. Note, however, that market-share liability is imposed on a collective rather than individual basis. *See* Rosenberg, *supra* n.36; Robert A. Baruch Bush, *Between Two Worlds: The Shift from Individual to Group Responsibility in the Law of Causation of Injury*, 33 UCLA L. REV. 1473 (1986). This factor made it controversial: *see, e.g.*, Englard, *supra* n.81, 219-26. Liability for evidential damage is thoroughly individual, which places our solution of the problem beyond the controversy. Market-share liability is also restricted to cases involving identical products, which is not the case with the evidential damage doctrine. Furthermore, according to a more refined version of the market-share doctrine, it will not be activated against defendants not responsible for the evidential damage. Thus, in *Kinnett v. Mass Gas & Elec. Supply Co.*, 716 F.Supp. 695 (D.N.H. 1989), a tort action was brought to recover for fire damages, allegedly caused by a heat tape that covered waterpipes in a house visited by the plaintiff. Unable to identify the tape's producer, the plaintiff sued several manufacturers of seemingly identical tapes on the basis of alternative liability and/or market-share liability theories. The plaintiff's action was dismissed because her "[i]nability to identify the

It should now be apparent that the same economic reasoning will also apply to indeterminate-victim cases,¹²⁹ such as the *Case of Radioactive Exposure*.¹³⁰ In such cases, the defendant will be the cheapest cost-avoider of both the evidential and the primary damage. None of the plaintiffs he unilaterally exposed to the risk of contracting cancer was in a position to know about it, let alone prevent it. Holding the defendant liable vis-a-vis each plaintiff will put in motion the proposed remedial mechanism, which will end up forcing the defendant to fully internalize the costs of his actions. This will produce optimal deterrence with regard to both the primary and the evidential damage.

(b) tension between the two objectives exemplified

Take a tort action brought by a person who sustained two discrete injuries in two car accidents, separated from each other by one year, and hypothesize that those injuries have inseparably merged into one. Prior to the second accident, the plaintiff's physical condition could be inexpensively determined by doctors. He nonetheless decided not to seek that determination because he thought he had more exciting things to do.¹³¹ In this case, the costs of the plaintiff's decision should be internalized by the plaintiff, because

manufacturer of the heat tape which caused her injuries can in no part be attributed to the nature of the defendants' products, the product defects, or the manner in which they were distributed". *id.*, at 700.

Incorporation of this condition into the market-share liability theory will turn this theory into a disguised and underdeveloped variant of the evidential damage doctrine. This variant will also produce inefficiency. Take a case where lack of information, for which the defending manufacturers are responsible, does not allow the judges to determine the manufacturers' shares in the market. In any such case, the market-share mechanism might remain dormant, which would clearly be a disservice to economic efficiency. Under the evidential damage doctrine, the manufacturers will be equally sharing the plaintiffs' losses, which will fully compensate the plaintiffs for their primary damages. Straightforwardly arrived at through the remedial mechanism offered by this Article, this outcome will promote efficiency. For more details see Porat & Stein, *supra* n.11.

129 Cf. Delgado, *supra* n.46 (supporting the conclusion in the text on grounds close to ours, but without invoking the evidential damage doctrine); Rosenberg, *supra* n.36 (supporting the same conclusion on social policy grounds).

130 See *supra* n.46 and accompanying text.

neither the first nor the second defendant could have prevented the evidential damage more cheaply. The plaintiff's decision not to seek medical information thus amounted to a mismanagement of the risk. He was uniquely well-positioned to prevent the evidential damage, but failed to do so. The deterrence objective, as related to the evidential damage, will therefore allocate this damage to the plaintiff.¹³²

At the same time, absolving the defendants from liability would undermine deterrence in relation to the primary damage. A conflict between the two utilitarian objectives thus becomes transparent. This conflict is difficult to resolve because none of the conflicting objectives can easily be sacrificed for the sake of the other. A compromise between the two objectives, *i.e.*, the adoption of some comparative fault mechanism, will consequently be in order.

(c) the victim's burden

Evidential damage will be regarded as self-inflicted and non-compensable if its victim was also its cheapest cost-avoider. Mentioned in our preceding discussion, this point may be supplemented by another point concerning the victim's burden. In some cases, the victim will be in the best position to rectify the evidential damage *ex post* by providing substitute evidence that can fill in the informational gap. He would, however, refrain from doing this, if the substitute evidence does not promote his compensatory objective and liability for the evidential damage falls upon his opponent. Thus, one of the plaintiffs in our DES Case could actually have evidence identifying the manufacturer of the drug taken by her mother. Fearful of the manufacturer's possible bankruptcy, she may nonetheless decide to withhold this evidence. Application of the evidential damage doctrine may thus end up in a disutility.

This argument simply says that evidential damage will not always be real. An issue of this kind would have to be resolved through discovery proceedings and by

131 *Cf.* Ryan v. Mackolin, 237 N.E. 2d 377, 382-83 (1968) (a similar factual setting, in regard to which the court reached a conclusion different from ours).

132 This allocation of the damage will impel the insurers of physical injuries to condition their coverage upon timely medical examination of the insured. Lack of this condition would jeopardize the insurer's subrogation claim against the tortfeasor.

examining witnesses and other evidence during the litigation. If there is no evidence pointing to the plaintiff's attempted misuse of the evidential damage doctrine, the plaintiff would obviously prevail. If he prevails undeservedly, his case would simply be categorized as one of the unfortunate but unavoidable instances of injustice. This injustice would certainly amount to a social disutility. It is clear, however, that such occasional disutilities ought to be tolerated in order to prevent the distortions and, indeed, the systematic injustice likely to occur in the absence of the evidential damage doctrine. Besides, evidentially damaged plaintiffs will not always have incentives to misuse this doctrine.¹³³

(d) negligence or strict liability?

Under the deterrence theory, liability for an evidential damage will be imposed on its cheapest cost-avoider even in the absence of negligence. A person identified as best positioned to weigh the evidential damage against the costs of its prevention will thus be driven to take the most efficient course of action. This person will be held liable even when found to have been unable to cost-effectively prevent the damage at the time when it occurred. This liability will impel him to develop cost-efficient measures for preventing similar damages in the future.¹³⁴ Taking of such measures can particularly be expected in the mass tort context, where the manufacturers are in exclusive possession of both the tools and the information necessary for elimination of the damage.

Our proposal will nonetheless be to condition liability for an evidential damage upon the finding of negligence. Looking beyond the deterrence objectives of the law of torts, this proposal is influenced by the fact that negligence is still the prevailing standard of liability, while strict liability for tort damages is imposed only on special grounds, usually for personal injuries. Legal conventionalism is not our only reason. As already indicated, the "process theory" of tort liability persuasively opposes the idea of imposing strict liability for evidential damages. On different grounds, the same opposition will be

133 See *infra*, Part VI (a).

134 See discussion *supra* n.123.

voiced by the corrective justice theory. When all things are considered together, negligence as a liability standard therefore seems to present a better alternative.¹³⁵

VI. EVIDENTIAL DAMAGE AS EVIDENCE LAW DOCTRINE

Regulation of fact-finding under uncertainty through appropriate allocation of the risk of error is the principal objective of evidence law.¹³⁶ In civil litigation, this objective is pursued within a doctrinal framework consisting of standard of proof requirements and rules placing the burden of persuasion upon either the plaintiff or the defendant.¹³⁷ Any such framework expresses the legal system's risk-related preferences, as determined by its more general normative perspective. In what follows, we present two normatively plausible perspectives that can be adopted by the law. These can be roughly described as "efficiency" and "fairness" (or, more ambitiously, as "utilitarianism" and "egalitarianism"), which denotes their mutual incompatibility. We will indeed demonstrate that these perspectives lay the ground for divergent risk-allocating frameworks. We will also demonstrate, however, that despite this divergence, the two perspectives afford identical treatment to evidential damage cases. Our discussion will thus unequivocally support the conclusion that risk of error in an evidentially damaged trial should be shifted to a party responsible for the damage.

As established by the preceding parts of this Article, parties to a litigation ought to owe each other a duty of care that would require them to abstain from inflicting evidential damage upon each other. Based on the negligence theory, this duty should not apply to a damage that could not be reasonably anticipated. Because parties are privy to

135 Cf. Englard, *supra* n.81, *passim* (endorsing the idea of theoretical complementarity in the area of torts in general).

136 See Stein, *supra* n.2.

137 Exceptionally (and often anomalously), this objective is also pursued by a few exclusionary rules. Exclusionary rules are far more appropriate in criminal litigation, where they should function as immunities protecting the accused from wrongful conviction. See Stein, *id.*; Alex Stein, *The Form and Substance of the Hearsay Doctrine: A Response to Professor Seidelson*, 16 MISS. C. L. REV. 55 (1995) (the rule against hearsay justified in criminal and unjustified in civil cases).

the trial issues and the evidence, the risk of inflicting evidential damage would usually fall within their reasonable contemplation. Judges would thus be able to act upon a presumption that the damage was inflicted in violation of the duty of care. They would have to decide differently only in special cases, where the damage could not be reasonably anticipated. Under the proposed doctrine, an infliction of evidential damage *inter partes* would lead to a reversal of the persuasion burden, whenever this can help the afflicted party.¹³⁸ The issue would consequently not arise if the burden was originally placed on the inflicting party.¹³⁹ Nor would judges have to determine the magnitude of the damage. Its mere infliction in violation of the duty of care would be sufficient for shifting the burden. Costs to be spent on settling those issues do not therefore threaten to become exorbitant. As will now be demonstrated, these costs will also be well-spent.

(a) evidential damage from the efficiency perspective

From an efficiency perspective, a plaintiff should bear the risk of error when the overall probability of her case does not exceed 0.5. Holding true subject to special countervailing factors, this utilitarian imperative ("the $P > 0.5$ rule") rests upon formal proof furnished by the law and economics literature.¹⁴⁰

Let D denote the value of the litigated good and allow p_1 and p_2 to represent, respectively, the probabilities of the plaintiff's and the defendant's conflicting allegations. As always is the case:

$$0 < p_1 < 1; 0 < p_2 < 1;$$

$$p_1 + p_2 = 1,$$

138 To mention again: this will not exclude the compensatory remedy proposed above.

139 Evidential damage inflicted by the plaintiff, may, however, entail other consequences. *See Hirsch v. General Motors Corp.*, 628 A.2d 1108 (N.J.Super.L. 1993) (negligent destruction of evidence by the plaintiff as amounting to interference with discovery, which dictates preclusion of the plaintiff's evidence on the issue and, in appropriate cases, may justify a dismissal of the lawsuit).

140 Its brief summary can be found in Alex Stein, *Allocating the Burden of Proof in Sales Litigation: The Law, Its Rationale, a New Theory, and Its Failure*, 50 U. MIAMI L. REV. 335 (1996). The economic model presented below focuses on the general performance of the legal system. Its use of mathematical probabilities should not therefore be understood as implying that judges should follow the same method in determining facts in individual cases.

when 1 stands for certainty and 0 for impossibility. The following decisions thus become available:

d_1 = the plaintiff loses (the risk of error imposed on the plaintiff);

d_2 = the defendant loses (the risk of error imposed on the defendant);

d_3 = a compromise reflecting the expected value of each allegation: the plaintiff recovers from the defendant p_1D ; p_2D goes to the defendant by not allowing the plaintiff to recover this amount.¹⁴¹

Damages involved in each of those decisions will be dependent on the actual state of affairs, favorable to either the plaintiff (S_1) or the defendant (S_2). The *average damage* to be incurred by each decision will thus be as follows:

<i>DECISION</i>	<i>DAMAGE IF S_1</i>	<i>DAMAE IF S_2</i>	<i>TOTAL DAMAGE</i>
d_1	p_1D	0	p_1D
d_2	0	p_2D	p_2D
d_3	p_1p_2D	p_2p_1D	$2p_1p_2D$

This allows us to represent and assess the long-run probability-damage relationships:

[THE ATTACHED GRAPH TO BE INSERTED HERE]

f_1 = *plaintiffs absorb the damage* function corresponding to d_1 ;

f_2 = *defendants absorb the damage* function corresponding to d_2 ;

f_3 = *the expected value* function corresponding to d_3 .¹⁴²

141 Trial expenses and other litigation costs are temporarily ignored for the sake of simplicity.

142 Kaye, *supra* n.33.

Another proof holds as follows:

In balanced cases, where $p_1=p_2=0.5$, the overall damage to be incurred by each of the available decisions appears to be the same. The disutilities generated by the three

(1) D_d and D_p (respectively) = the disutilities incurred by wrongly deciding *for* the defendant and *for* the plaintiff;

(2) P = the probability of the allegations brought by the plaintiff;

(3) $0 < P < 1$, because the case is factually uncertain;

(4) The plaintiff should consequently recover when:

$$PD_d > (1 - P)D_p;$$

(5) which can be reformulated as follows:

$$P > \frac{1}{1 + \frac{D_d}{D_p}};$$

(6) In a regular case, the plaintiff's and the defendant's wrongful losses should be regarded as equally harmful: $D_d = D_p$;

(7) Hence, plaintiffs should recover whenever $P > 0.5$ and defendants should win whenever $P < 0.5$;

(8) Balanced cases should be decided as stated in the text.

See John Kaplan, *Decision Theory and the Factfinding Process*, 20 STAN. L. REV. 1065, 1071-72 (1968). See also David Kaye, *Naked Statistical Evidence*, 89 YALE L. J. 601, 605n.19 (1980).

Under the diminishing utility of wealth assumption -- which would require the legal system to minimize *large errors* -- d_3 would arguably be the optimal decisional strategy. If it is assumed that bottom dollars are considerably more valuable than the top ones, so that the average large error equals (roughly) to D^2 , we will arrive at the following:

<i>DECISION</i>	<i>DAMAGE IF S₁</i>	<i>DAMAGE IF S₂</i>	<i>TOTAL DAMAGE</i>
d_1	p_1D^2	0	p_1D^2
d_2	0	p_2D^2	p_2D^2
d_3	$p_1(p_2D)^2$	$p_2(p_1D)^2$	$p_1p_2D^2$

See Neil Orloff & Jerry Stedinger, *A Framework for Evaluating the Preponderance-of-the-Evidence Standard*, 131 U. PA. L. REV. 1159 (1983).

This argument is problematic: see Stein, *supra* n.2 (arguing that allocation of the risk of error should subordinate itself to the "all-or-nothing" litigation framework, as determined by the substantive law).

decisions thus seem to be equal. This appearance, however, is misleading because it represents only the *direct* damage. Further analysis shows that the optimal decision rule for balanced cases would be d_1 . This rule would be optimal for three reasons. First, it would eliminate further enforcement costs, that would be incurred if plaintiffs be awarded recovery. Second, to allow plaintiffs to recover when $p_1=0.5$ would induce more unmeritorious claims, thus incurring greater litigation costs.¹⁴³ Third, *taking* is widely perceived as being more harmful than *not giving*, a perception justified by the diminishing utility of wealth.¹⁴⁴

Countervailing factors appearing in special cases may upset this analysis, which would require modification of the $P>0.5$ rule. When another rule can be shown to represent the optimal decisional strategy, it should be adopted. This may happen, for example, in tort cases involving multiple defendants and uncertain causation. Let it be assumed that defendants D_1 , D_2 and D_3 marketed, respectively, 51%, 29% and 20% of identical carcinogenic pills, that each pill was sold under its generic rather than brand name, and that it is therefore impossible to relate the pill consumed by the plaintiff to a particular defendant. Under the $P>0.5$ rule, the plaintiff should arguably¹⁴⁵ be allowed to recover from D_1 , but not from D_2 or D_3 . If so, any similarly situated plaintiff will also recover from D_1 only. This would produce overdeterrence in relation to D_1 (and similarly situated manufacturers) and underdeterrence in relation to D_2 and D_3 (and similarly situated manufacturers). The $P>0.5$ rule can thus be seen as both unduly weakening and inefficiently intensifying the tort law incentives. Losses emanating from this distortion

143 See, e.g., Ralph K. Winter, *The Jury and the Risk of Non-Persuasion*, 5 LAW & SOC'Y REV. 335, 337 (1971).

144 See RICHARD A. POSNER, *ECONOMIC ANALYSIS OF LAW* 552 (4th ed. 1992). This explanation is predicated upon taking the preferences of an abstract average litigant as a controlling standard, which leaves room for exceptions.

Empirical research has shown that giving away a psychologically "vested" right is perceived as more painful than not seizing upon an identically valuable, but psychologically "unvested" right. See Amos Tversky & Daniel Kahneman, *Rational Choice and the Framing of Decisions*, 59 J. BUS. S251, S260ff (1986). This may also explain the $P>0.5$ condition for allowing plaintiffs to recover from defendants.

would be enormous. Decisional strategy d_3 therefore becomes more suitable for such cases.

To have another example, take a statute that prohibits discrimination in employment, defining it as "using race or gender as a criterion for employment-related decision".¹⁴⁶ Because proof of discriminatory animus is not readily available, and because it is always open to an employer to invent a non-discriminatory *post hoc* justification for the contested decision, most cases of alleged discrimination would be (and, in fact, are) factually indeterminate. The $P > 0.5$ rule would give no redress to the employee in any such case. Sexist and racist employers would thus be left underdeterred. Because employment discrimination is not merely unfair but is also economically inefficient,¹⁴⁷ d_2 would appear to be the optimal decisional strategy for balanced cases.¹⁴⁸ Application of the $P > 0.5$ rule in such cases would generate administrative savings only: some judgment-enforcement costs will be saved, and some undeserving employees will refrain from suing their employers. Because the diminishing-utility-of-wealth justification would usually be alien to the *Employee v. Employer* cases, there would be no further significant savings. Furthermore, administrative costs savable under the $P > 0.5$ rule would be offset by the gains deriving from the deterred discrimination under d_2 . As in the previous example, no empirical research is needed for treating these gains, when juxtaposed with those generated by d_1 , as an offsetting factor.¹⁴⁹

Factors offsetting the savings deriving from the $P > 0.5$ rule would normally be associated with the policy underlying the relevant *substantive* law. In a rational fact-

145 We use this qualifier because not everyone would agree that naked statistical evidence is sufficiently probative. See Coote, *supra* n.33; Kaye, *supra* n.33.

146 This definition replicates the US Supreme Court's understanding of employment discrimination under Title VII of the Civil Rights Act, 1964. See *McDonnell Douglas Corp. v. Green*, 411 U.S. 792 (1973); *Texas Department of Community Affairs v. Burdine*, 450 U.S. 248 (1981); *Price Waterhouse v. Hopkins*, 490 U.S. 228 (1989).

147 See, e.g., Robert Brookins, *Mixed-Motives, Title VII, and Removing Sexism from Employment: The Reality and the Rhetoric*, 59 ALB. L. REV. 1, 33-57 (1995).

148 Professor Brookins's detailed study (*id.*) favors this view.

149 See Brookins, *supra* n.147, *passim* (demonstrating that factual indeterminacy systematically frustrates the egalitarian promise of Title VII).

finding environment, *procedural* policies facilitating ascertainment of the truth cannot outperform this rule economically. Procedural policies often thought of as justifying replacement of the $P > 0.5$ rule divide into two:

(1) counteracting a superior access to the evidence enjoyed by one of the litigants by shifting to him the persuasion burden;

(2) upholding the regular course of events, as evidenced by general experience, by shifting the persuasion burden to the party alleging the irregular.¹⁵⁰

Policy (1) does not rest on firm foundations. Under modern discovery systems, further strengthened by adverse inferences and other incentives to come forward with evidence, informationally advantaged litigants are unlikely to retain their advantage. When a litigant's informational advantage disappears, it can no longer mark him out as a bearer of the risk of error. Intentional withholding of evidence can mark him out as a bearer of that risk, but his past informational advantage is hardly a good reason for labeling him as a suppressor of evidence.

Furthermore, production of favorable evidence needs no special incentives. As for unfavorable evidence, would it be produced by an informationally advantaged defendant if balanced cases were controlled by d_2 ? This question can be answered only in the negative. Producing unambiguously unfavorable evidence entails a certain loss on the issue, whereby carrying the risk of non-persuasion entails only a probable loss. Decisional strategy d_2 will thus fail to impress Holmes's "Bad Man", who is not a truth-lover. Working against Bad Men and truth-lovers alike, strategy d_2 does not promise to produce more correct than incorrect verdicts. Lack of that promise is predicated on the fact that the ratio of Bad Men vs. Truth-Lovers is unknown and, indeed, unknowable. At the same time, this strategy will exert a chilling effect upon at least some truth-lovers, who will tend to suppress evidence not unambiguously supportive of their own allegations, which believe to be true. This chilling effect will result from these truth-lovers' apprehension that every factual ambiguity, justifiably or not, will benefit their opponents. Policy (1) thus cannot justify a shift from d_1 to d_2 in a balanced case.¹⁵¹

150 See, e.g., Jody S. Kraus, *Decoupling Sales Law from the Acceptance-Rejection Fulcrum*, 104 YALE L.J. 129, 135-152 (1994).

151 See Stein, *supra* n.140, 203-204.

Policy (2) is no better, for it involves an anomalous double-counting, warned against by Professor Vaughn Ball:

The risk of non-persuasion is allocated (a great part of the time, at least) upon the basis of the probability of the existence of the fact in the run of cases of the particular kind, absent any specific evidence. Since the evidence and the jury's consideration of it have come to naught, we will make the fewest mistakes if we let the case fall back into the general class, to be decided on those original probabilities. But the jury, unless it lacks the common knowledge we ascribe to it by definition, has begun its own deliberation with those probabilities in mind, and it is the combination of both those and the probabilities drawn from the specific evidence, that the jury says are at a balance. If we then use the initial probabilities to remove the balance, we are in some sense counting them twice.¹⁵²

This quotation and its clear implications call for no further comment.

Should the $P > 0.5$ rule be affected by a litigant's responsibility for evidential damage? Answering this question requires some preliminary clearing of the ground. First, evidential damage inflicted intentionally should be eliminated from consideration. Cases involving such damage justify adverse inferences against the spoliator. When prescribed routinely, as they should, those inferences would adequately compensate the afflicted litigants. Second, evidential damage inflicted without fault should not be counted against the inflicting party. Manifested not only by the unavailable sources of information, but also by their unavailable substitutes, such damage can normally be attributed to both parties. When fault is not a controlling factor, at least one of the missing sources of information can be linked to the plaintiff and the defendant alike. Liability for faultless evidential damage would also produce no gains that could offset the savings generated by the $P > 0.5$ rule. Evidential damage resulting from negligence will therefore be our only concern. Third, non-balanced cases, where the evidence favors one of the parties, should also be excluded from consideration. The losing party in such a case may still be a true victim of evidential damage. However, given the unintentional character of the damage

152 Vaughn C. Ball, *The Moment of Truth: Probability Theory and Standards of Proof*, 14 VAND. L. REV. 807, 817-818 (1961).

and the preponderance of the evidence favoring the other party, such an outcome is unlikely. Furthermore, the afflicted party would be allowed to sue the spoliator in torts, which would enable her to recover compensation for her lost chance to prevail in the evidentially damaged trial.¹⁵³ The *restitutio ad integrum* principle would thus be observed.

The question that opened the previous paragraph thus arises only in relation to *defendants negligently* causing evidential damage.¹⁵⁴ Do such cases justify a departure from the P>0.5 rule? We think they do, and will begin our explanation by stating the obvious. Defendants and plaintiffs alike have incentives not to destroy unfavorable evidence intentionally. Intentional destruction of evidence is penalized under the criminal law and by adverse inferences, and normally constitutes a tort.¹⁵⁵ Unintentional destruction of evidence or eradication of its probative value is not a crime. For obvious reasons, adverse inferences are not warranted by it epistemically. Usually, it does not constitute a tort. Even when it is actionable in torts, compensation afforded to the average plaintiff falls far below the amount litigated at an evidentially damaged trial.¹⁵⁶ The resulting deterrence will thus often be insufficient.¹⁵⁷

Missing evidence introduces indeterminacy into the case by posing counterfactual questions about its potential impact on the outcome of the trial. Under the P>0.5 rule, factual indeterminacy works in favor of the defendant. By working in the defendant's favor, the P>0.5 rule impels plaintiffs to exercise caution over evidence.

153 This would equate the spoliator's position with that of a stranger to the evidentially damaged litigation, as happened, *e.g.*, in *Bondu v. Gurvich*, 473 So. 2d 1307 (Fla. Dist. Ct. App. 1984) (plaintiff unable to prove medical malpractice can sue doctors for failure to comply with their record-retaining duties).

154 Because a balanced case will be lost by the plaintiff anyway, his responsibility for evidential damage would add nothing to the defendant. The P>0.5 rule should thus remain unchanged. This, of course, should not immunize the plaintiff from other measures: *see supra* n.139.

155 *See Gorelick et al., supra* n.3, chs. 2 & 4.

156 *See Gorelick et al., id.*, §4.23; Steffen Nolte, *The Spoliation Tort: An Approach to Underlying Principles*, 26 ST. MARY L. J. 351, 394-97 (1994) (both emphasizing the difficulties in determining damages in spoliation-of-evidence cases).

157 This may give rise to the controversial idea of awarding plaintiffs punitive damages. *Cf. Nolte, id.*, 397-98 (punitive damages justified only in cases involving intentional spoliation of evidence).

There is, however, no incentive *for defendants* to exercise caution over unfavorable evidence. Adoption of d_2 as a rule that would control balanced cases involving evidential damage inflicted by defendants would provide the required incentive. It would increase the amount of correctly decided cases, thus producing a social gain likely to offset the savings generated by the $P>0.5$ rule.

This conclusion is corroborated by three additional factors. First, savings generated by the $P>0.5$ rule in cases involving evidential damage inflicted by defendants will fall below their usual rate. Because there is always some likelihood that the damage will be regarded by the judges as intentional, thus activating adverse inferences against the defendant, the $P>0.5$ rule will not deter plaintiffs from filing insufficiently supported lawsuits. Hoping that adverse inferences will fill in the gap, plaintiffs will not consider the lack of positive proof as a serious obstacle. The possibility of such inferences is also likely to immunize plaintiffs from directed dismissals of their lawsuits.

As for the enforcement and other administrative costs, they may even be reduced by an increase in the rate of settlements, in comparison with the rate attainable under the $P>0.5$ rule. Decisional strategy d_2 is meant to control only balanced cases that remain unsettled. Some of those cases will be settled out of court without addressing the evidential damage issue. Under symmetrical information, attainable through aggressive discovery rules and other procedural and evidentiary devices, plaintiffs and defendants are likely to settle such cases by dividing the stakes equally. This, however, will not always happen. In many balanced cases, parties will fail to reach a settlement. The causes of this failure and the possibility of counteracting them by d_2 are best explained through a formal analysis of the settlement problem.¹⁵⁸ Under symmetrical information, if the parties are similarly averse toward risk and they expect to spend similar amounts on litigation and settlement negotiations, a settlement would be the only rational solution of the dispute. Litigation would only make sense when:

$$PJ-C+S-R > PJ+C-S+R.$$

The left side of this formula represents the plaintiff's expected gain from the litigation, as reduced by her litigation costs, by the risk-eliminating premium she is prepared to pay in order to avoid the uncertain litigation, and increased by her saved

158 See *supra* nn.108-110 and accompanying text.

*settlement costs. The right side represents the defendant's expected loss, aggravated by his litigation costs, by the risk-eliminating premium he is willing to pay in order to avoid the uncertain litigation, and mitigated by the saved settlement costs.*¹⁵⁹

It would thus make sense only when $2(C+R-S) < 0$ (or, theoretically, when $2(C+R-S) = 0$), which will never occur because litigation costs alone are substantially higher than settlement costs. The parties will therefore be better off agreeing on PJ as a settlement value, which will allow them to divide amongst themselves the surplus amount $2(C+R-S)$.

The parties may nonetheless fail to reach a settlement if one of them decides to behave strategically in order to enlarge her share in the settlement pie. Displaying stubbornness and other tough hold-out tactics, such strategic behavior may be misread by the other side as a no-settlement stance. Apart from that, when a party anticipates her adversary to behave strategically, she herself might resort to a preemptive display of intransigence. The parties may consequently end up litigating instead of expediently settling the case.

That strategic behavior is likely to take place in balanced cases is apparent. When the scales of justice can easily be tilted in either direction, an adversarial threat to tilt them against the opponent looks more credible and is therefore more tempting to make. In cases involving evidential damage negligently inflicted by defendants, such behavior is most likely to be resorted to by defendants. This estimation does not derive solely from the advantage bestowed upon defendants by the $P>0.5$ rule. That this advantage will make some defendants more optimistic about the case and consequently more prone to risk a good settlement by embarking upon strategic behavior, clearly supports our estimation. There is, however, a more compelling reason that makes our estimation more than intuitive guesswork. As already indicated, typical cases involving evidential damage inflicted by defendants are cases where defendants exercised superior power over relevant information, and not fortuitously.¹⁶⁰ Evidential damage is, in fact, never entirely

159 The possibility of cost-shifting is not accounted for by the formula because we suspect it to be unimportant in the present context. *See* Donohue, *supra* n.110.

160 *See supra* nn.69-74 and accompanying text.

accidental. Inflicted by those who had more opportunities to inflict it, this damage is sustained mostly by those who had the least power to resist it. The typical cases that we are to consider involve corporate and other institutional defendants (including professionals), litigating against individual plaintiffs who are considerably less powerful as litigants. These defendants are strong players, well-represented in the litigation game. They are also repeat players who care about their litigious image. Aware of their power and eager to maintain a "hard-to-sue" reputation, these defendants are likely to behave strategically.

Using d_2 as a decision-controlling rule in such cases would reduce the defendants' use of strategic tactics. Knowing that factual impasse will work against them, the defendants will be less optimistic about the litigation. More importantly, defendants contemplating strategic tactics will no longer count on the plaintiffs' fear of factual indeterminacy. To fully comprehend this point, we need to look more closely at the evidential damage doctrine promulgating d_2 as a rule of decision for cases involving factual impasse.¹⁶¹ This doctrine is not merely a pragmatically motivated tie-breaker. By relating d_2 to factual impasse, it will also tell the fact-finders that the impasse and the evidential damage may be causally related to each other. This possible causal relation will be considered as working in both directions. Fact-finders will thus be prompted to consider the damage as a proximate cause of the impasse; and they will also be directed to consider the possibility of an impasse when evidential damage is established. Threats displayed by defendants' strategic tactics will therefore be unlikely to be taken seriously by the plaintiffs. Knowing this, the defendants will become appreciably more inclined toward settlement.¹⁶²

161 This argument was inspired by Ronald J. Allen, *Presumptions in Civil Actions Reconsidered*, 66 IOWA L. REV. 843 (1981) (urging to reconceptualize presumptions and similar provisions into explicit rules of decision furthering their underlying policies directly).

162 In some cases, this inclination will be further strengthened by the collateral estoppel rules, through which the defendant's liability for evidential damage may be extended from one case to another. *See, e.g.,* Michael D. Green, *The Inability of Offensive Collateral Estoppel to Fulfill Its Promise: An Examination of Estoppel in Asbestos Litigation*, 70 IOWA L. REV. 141, 184-86 (1984).

163 See Lucian Bebchuk, "On the Difference Between Settlement Terms and the Expected Judgement"...

Because the defendant's negligence is likely to be contested, the plaintiff will have no guarantee that the new rule of decision will be activated in her particular case. The new rule will not therefore dispose the average plaintiff to adopt strategic tactics. Although strengthened by this rule, the average plaintiff would still feel pressurized by the uncertainty of the case.

Our argument may still face a possible critique that supports the $P > 0.5$ rule. According to this critique, the $P > 0.5$ rule impels evidentially damaged plaintiffs to accept low-pay settlements readily offered by defendants. The proposed burden-shifting rule would thus arguably bring the settlement rate down. This critique is misdirected. First, low-pay settlements entered into by evidentially damaged plaintiffs are likely to be both inefficient and unfair.¹⁶³ Furthermore, we doubt that they will be reached in a significant number of cases without the proposed shifting of the persuasion burden. In a typical case, the plaintiff will attempt to establish that the evidential damage inflicted upon her by the defendant was inflicted *intentionally*. True or not, this allegation will entail a non-negligible possibility of the plaintiff's victory, predicated upon adverse inferences that might be drawn against the defendant. Aware of this possibility, the plaintiff will be unlikely to settle the case for a nuisance value. To be sure, a more substantial offer may induce the plaintiff to settle, but, for reasons already given, the defendant will not be inclined to make such an offer under the $P > 0.5$ rule. The $P > 0.5$ rule would thus keep the parties' positions on settlement far apart.

Asymmetrical information is clearly an impediment to settlement. The proposed rule of decision would partially remove this impediment. By reversing the persuasion burden and by signalling to the fact-finders that the factual impasse and the evidential damage are interrelated, this rule undercuts the decisive power of information and evidence. It informs both the fact-finders and the parties that lack of information may bring the plaintiff a victory. Information held exclusively by the defendant, however supportive of his case, would consequently be less likely to dissuade him from negotiating a settlement. As for the plaintiff, knowing that his information is wanting and thus still facing uncertainty, he would not hesitate to join the negotiation table.

These implications of the proposed rule will materialize when the litigants are reasonably averse toward risk. Litigants uncommonly prone to risk-taking will not be

affected by this rule.¹⁶⁴ Subject to this reservation, it can safely be concluded that the proposed rule will facilitate efficient settlements.

Finally, the proposed rule would provide an important evidence-straightening incentive. Under the $P > 0.5$ rule, factual ambiguity that may lead to an impasse benefits defendants. When a defendant believes his case to be strong, he will put his evidence straight. This, however, is unlikely to happen when a defendant does not believe his case to be strong. This defendant may consider putting his evidence straight in order to make his argument more convincing. Ultimately, it would be more rational for him to resist this temptation because, the straighter the evidence the more falsifiable it is. Because the defendant's case is relatively weak, his evidence, if put straight, would be exposed to a potentially successful falsifying attack. There is therefore a clear incentive for such defendants to complicate the fact-finders' evidential base by introducing ambiguities into the evidence. Uncommitted to a tidy factual account, ambiguous evidence tends to be unamenable to falsification. Yet, despite this predicament to fact-ascertainment, the $P > 0.5$ rule is *generally* justified, because to reverse the persuasion burden would allow plaintiffs to create and benefit from evidential ambiguities.

Cases involving evidential damage inflicted by defendants should, however, be regarded as special. This view is supported by two reasons. A defendant seeking refuge in factual ambiguity will be likely to find it in virtually every such case. More importantly, a defendant will usually be in a much better position than the plaintiff to make good the evidential damage, or at least partially mitigate it through inquiries that may generate substitute evidence.¹⁶⁵ An average defendant will therefore always be the most efficient

164 As for litigants with extreme risk-aversion, they will nearly always reach settlements, bearing in mind Learned Hand's famous remark:

"After now some dozen years of experience I must say that as a litigant I should dread a lawsuit beyond almost anything else short of sickness and death".

See Learned Hand, *The Deficiencies of Trials to Reach the Heart of the Matter*, in *LECTURES ON LEGAL TOPICS*, 1921-1922, 89, 105 (1926).

165 A story underlying the path-breaking spoliation tort case in the U.S., *Smith v. Superior Court* (*supra* n.53) corroborates this observation. After the California Supreme Court's holding that the plaintiff could proceed with her spoliation tort action against Abbott Ford, the latter found the missing

avoider of factual impasse, which justifies shifting from d_1 to d_2 as a controlling rule of decision. The higher the likelihood of being held responsible for evidential damage, the greater the chance that the defendant will attempt to put his case straight, without seeking refuge in factual ambiguity. Committed to a tidy factual account, his evidence will unfold itself to scrutiny, thus either surviving or not surviving the plaintiff's falsifying attempts. The informational deficiency will consequently be compensated for, partially or even entirely.¹⁶⁷

The proposed rule seemingly motivates plaintiffs to create and benefit from factual ambiguities, but this is not really the case. Being evidentially damaged already, the average plaintiff would be reluctant to introduce ambiguities into the existing evidence because these can easily downgrade his case by placing it below the balance-of-probabilities threshold. This reluctance will be further intensified by the defendant's anticipated attempt to put his own defence straight and unambiguously substantiate it by the evidence. Plaintiffs will therefore also be likely to put their evidence straight, thus facilitating the fact-finding process.

Benefits deriving from the proposed rule can thus clearly be seen as outweighing the gains associated with the $P > 0.5$ rule.

(b) evidential damage from the fairness perspective

evidence and the case was settled out of court. See Pati Jo Pofahl, *Comment, Smith v. Superior Court: A New Tort of Intentional Spoliation of Evidence*, 69 MINN. L. REV. 961, 961n.4 (1985).

166 This observation will not hold true in cases not involving evidential damage, where evidence possessed by a party is obtainable through discovery, by instituting a threat of adverse inferences or by requiring the party to discharge the production burden. After producing the required evidence, the party can no longer be regarded as the most efficient avoider of factual impasse. The question whether there is factual impasse will arise only at the end of the trial, when the existing evidential resources were exhausted. At this stage, the party's former possession of some of the evidence will be irrelevant.

167 This is especially likely to happen in cases which involve institutional defendants, such as doctors and hospitals who failed to comply with their record-retaining duties, manufacturers producing hazardous substances, employers inadequately monitoring the procedures preceding their employment decisions, and so forth. Some casual tortfeasors will also be able to make good the evidential damage, but this, admittedly, will not happen in a typical case.

Unlike its efficiency-based alternative, the fairness perspective distributes the risk of error evenly over issues, rather than in a fashion that systematically favors defendants over plaintiffs. As such, it branches into two normatively sustainable principles that embody two different conceptions of "fairness". One of them is known as the "civility principle".¹⁶⁸ The other was promulgated under the name of equality.¹⁶⁹ We now turn to discuss these principles and their effect on the allocation of the risk of error in civil trials. We will demonstrate that each of these principles neatly accommodates the evidential damage doctrine and its risk-allocating rule.

(b1) evidential damage under the civility principle

According to the principal exponent of this principle, Professor Dale Nance, citizens should be presumed to be acting in compliance with the standards prescribed by the law. The state should be bound by this presumption not only in criminal trials, but also in adjudicating a private dispute. A person attributing a wrongdoing to another must therefore prove her allegation by a preponderance of the evidence.¹⁷⁰ Accordingly, in a breach-of-contract lawsuit, the breach and the consequent damage must be preponderantly established by the plaintiff; allegations like misrepresentation, bad faith and unreasonable non-mitigation of the damage must, in turn, be proved by the defendant. In a tort action, the defendant's negligence and the resulting damage must be established by the plaintiff; and it is incumbent upon the defendant to prove the existence of a contributory fault, or the facts activating the *volenti non fit injuria* doctrine, should she rely upon one of those defenses. The civility principle thus largely fits the prevalent legal doctrine that requires a plaintiff to preponderantly establish the facts underlying his cause of action, and shifts the same burden to the defendant in relation to any affirmative defense.¹⁷¹

168 See Dale A. Nance, *Civility and the Burden of Proof*, 17 HARV. J. LAW & PUB. POL'Y 647, 663-667 (1994).

169 See Stein, *supra* n.2.

170 Nance, *supra* n.167.

171 See McCormick, *supra* n.17, VOL. II, 427-28.

Professor Nance's analysis does not explicitly accommodate "excuses" that function as defenses not only in criminal, but also in civil actions. Take, for example, a unilateral mistake advanced as a ground for absolving the person who committed it from contractual liability. It is obvious that the facts underlying this affirmative defence must be established by this person.¹⁷² At the same time, this person cannot be described as attributing a wrongdoing to her adversary. On the contrary: a person entering into a contract upon her unilateral mistake will not squarely align with civility if she subsequently disavows any responsibility that derives from the contract. Yet, although the conduct in question falls below the general standard, the law makes concessions to human frailty by treating a mistake as a valid excuse.¹⁷³ This concession is conditioned upon the requirement that any excuse must be preponderantly established by its proponent, which would hardly strike anyone as counterintuitive.

The civility principle should therefore accommodate this requirement by removing its presumption from excuses.¹⁷⁴ At a more general level, it should prescribe that *any wrongdoing* pertaining to the disposition of the case should shift the persuasion burden to the wrongdoer.¹⁷⁵ Litigants violating the civility requirement would thus no longer benefit from the civility presumption. In a trial involving an evidential damage negligently inflicted by the defendant, it is the defendant, not the plaintiff, who would consequently bear the risk of error.¹⁷⁶

(b2) evidential damage under the equality principle

This principle holds that the state, acting through its judges as an arbiter of civil disputes, and ultimately forcing its dispute-resolving decisions upon litigants, ought to

172 See McCormick, *id.*

173 See Farnsworth, *supra* n.11, 677-78.

174 Application of this principle would still encounter problems in "dichotomous liability" cases, where liability for the litigated damage can be ascribed to either the plaintiff or the defendant. In a balanced case, by holding the defendant not responsible for the damage, judges will violate the civility presumption in relation to the plaintiff. See Stein, *supra* n.2.

175 See Stein, *supra* n.2.

176 The same outcome (*mutatis mutandis*) should be arrived at when a defendant evidentially damaged by the plaintiff seeks to establish an affirmative defence.

treat those litigants with equal concern and respect.¹⁷⁷ Hence, every dollar undeservedly lost, either by the plaintiff or by the defendant, ought to be regarded as equally regrettable. Risk of error in civil litigation should thus be allocated equally between the parties, which means that it should be allocated in a way that does not favor one party over another.¹⁷⁸

Virtually every substantive law structures judicial decisions by placing them within strictly dichotomous legal categories, such as "contract/no-contract", "tort/no-tort", "will/no-will", and so forth.¹⁷⁹ Such laws require judges to adjudicate cases in an all-or-nothing fashion. In a breach-of-contract lawsuit, judges thus have to determine that the contract had either been made or not; that it had either been breached or not; that it had either been frustrated or not; that its conditions are either illegal or not, and so forth. Risk of error involved in the determination of factual issues that pertain to a single legal category cannot therefore be divided equitably between the parties. If the equality principle were unrelated to the substantive law, it could prescribe equitable sharing of that risk by allowing a plaintiff to recover from the defendant in proportion to the probability of the plaintiff's case. Being part of the law of evidence and procedure, which combine into an *adjective* legal mechanism aimed at implementing the substantive law, the equality principle cannot, however, acquire such independence.¹⁸⁰ Unauthorized to divide risk of error as related to a single legal category, the equality principle therefore shifts the entire risk to a party whose factual allegations are supported by weaker reasons.

177 See RONALD DWORKIN, *TAKING RIGHTS SERIOUSLY* chs. 3 & 4 (1977); RONALD DWORKIN, *LAW'S EMPIRE* chs. 6 & 7 (1986).

178 This principle and its ramifications are discussed in detail in Stein, *supra* n.2. See also James Brook, *Inevitable Errors: The Preponderance of the Evidence Standard in Civil Litigation*, 18 *TULSA L.J.* 79, 85 (1982); Ronald J. Allen, *Burdens of Proof, Uncertainty and Ambiguity in Modern Legal Discourse*, 17 *HARV. J. L. & PUB. POL'Y* 627, 634 (1994) (both explaining allocation of the persuasion burden by the idea of equality).

179 Dworkin named such categories "dispositive concepts" because the law requires judges to dispose cases only through them. See RONALD DWORKIN, *A MATTER OF PRINCIPLE*, ch.5 (1986).

180 For discussion of the adjectivity notion see Postema, *supra* n.122. For possibilities of perceiving procedural and evidentiary principles as valuable *per se*, independently of their impact on the outcome of the trial, see Robert Summers, *Evaluating and Improving Legal Process - A Plea for "Process Values"*, 60 *CORNELL L. REV.* 1 (1974).

Consequently, a party will prevail when her case preponderates over that of her opponent on a balance of probabilities.

This, however, provides no tie-breaking rule for balanced cases. Because the utility-based $P > 0.5$ rule systematically favors defendants over plaintiffs, it cannot be followed by the equality principle even as a tie-breaker. The equality principle therefore allocates risk of error *also by dividing the discrete legal categories*, which pertain to specified classes of cases, between plaintiffs and defendants. As a result of this division, facts relevant to a legal category that benefits plaintiffs will have to be preponderantly established by the plaintiff. Facts pertaining to a category benefiting defendants will have to be established by the defendant at the same level of probability. Each litigant will consequently carry the risk of error in connection with *her own allegations*, *i.e.*, only in connection with those facts that will make out her case under the controlling substantive law. Risk of error will thus be allocated between the parties in roughly equal fashion.

The emerging doctrine thus becomes identical to the risk-allocating doctrine prescribed by the civility principle. Under each of these doctrines, facts constitutive of a plaintiff's cause of action will have to be preponderantly established by the plaintiff; and it will be incumbent upon the defendant to establish the facts underlying his defenses as being more probable than not. The equality principle therefore explains the conventional legal doctrine no less cogently than its civility-based counterpart, and perhaps even better.¹⁸¹

In a balanced case, where the conflicting allegations brought by the parties are equally supported by the evidence, information lost through one of the parties' fault should be considered as having a tie-breaking potential. To decide the case in favor of the party whose fault prevented the judges from considering this information would therefore clash with a widely shared intuition about justice holding that people should not be allowed to benefit from their own wrongs.

This intuition receives confirmation from the equality principle. The tie-breaking rule set by this principle is meant to control cases where everything else is equal, a premise that does not hold true when one of the parties is peculiarly responsible for the evidential gap. This factor should tilt the scales to the benefit of the faultless party. The

181 See Stein, *supra* n.2.

scales should be tilted in that direction because risk of error associated with the lost information should be borne by either the plaintiff or the defendant, and because a decision assigning this risk to its producer would be grounded upon better reasons than its alternative. If no evidential damage were inflicted, by bringing out and substantiating her allegations, each party would have exposed her adversary to a *reciprocal* risk of error.¹⁸² The same would hold true, if the damage were inflicted non-negligently: in the absence of fault, lack of evidence can be equally attributed to both parties. Risk of error existing in such cases cannot therefore be perceived as a non-reciprocal risk that deserves special treatment. The picture changes dramatically when a party to a proceeding negligently inflicts an evidential damage upon her opponent. Aggravated by the unilateral lack of care, the resulting risk of error would not be reciprocal. By transcending the accepted level of risk, this risk would disrupt the equilibrium protected by the equality principle. The evidential damage doctrine is therefore called upon to eliminate such disruptions by resolving factual impasse in favor of the party facing a non-reciprocal risk of error.¹⁸³ Equality in risk-allocation can properly be maintained only in this way.

(c) a caveat

A rule that resolves balanced cases against negligent producers of evidential damage can thus be seen as both fair and efficient. Its application, however, may become both inefficient and unfair if the rule is allowed to facilitate factually extravagant allegations. A revealing example of such misapplication of the rule was provided by a medical malpractice case, decided by the Israeli Supreme Court.¹⁸⁴

182 Predicated on the assumption that the parties' forensic opportunities are roughly equal, this point is at risk of being perceived as divorced from the socio-economic reality. It is not. We believe that evidentiary rules simply cannot help to resolve the social inequality problem. State-funded legal representation and counselling will do a far better job. *See, however, Alan Wertheimer, The Equalization of Legal Resources*, 17 PHIL. & PUB. AFF'S. 303 (1988) (a controversial proposal to set the maximal level for trial advocacy and even cut down the quality of judicial process as a means of counteracting forensic inequality).

183 This argument was inspired by Fletcher, *supra* n.81.

184 Nagar v. Vilensky, 43 (3) *PISKEY DIN* 284 (1985) (in Hebrew).

THE DOUBLE-SURGERY CASE

The plaintiff underwent a simple operation. Due to his preexisting psychiatric condition, this operation caused emotional depression. Because the operation had been essential for the plaintiff's health, the ensuing emotional damage was not compensable. During the plaintiff's presurgical treatment negligence occurred, which led to further surgery aggravating the plaintiff's depression. This compensable damage merged into the plaintiff's non-compensable damage.

Unable to unravel the entanglement, the Supreme Court rightly treated it as evidential damage for which the defendants are responsible. Consequently, it held that the risk of non-persuasion, as related to the magnitude of the plaintiff's compensable damage, should be borne by the defendants. This holding led the Court to decide that the defendants should compensate the plaintiff for his total damage.¹⁸⁵

Because it was clear that the defendants are responsible only for a fraction of that damage, the Court's decision did not break the tie between equally probable scenarios. Instead, it simply overcompensated the plaintiff by adopting the least probable scenario. Meant to apply only in adjudicating conflicting factual allegations that are equally probable, the proposed rule would not sanction such decisions.¹⁸⁶

185 It thus echoes the approach taken in *Armory* (*supra* n.16) and in *McGhee* (*supra* n.40).

186 The Court could have adopted the scenario most favorable to the plaintiff only if it found it to be at least as probable as not. Expert testimony obtained from psychiatrists could have assisted the Court in discharging this task. This way of resolving the problem was adopted by the Jerusalem District Court in *Sharvit v. Shaarey Zedek Hospital* (File 733/91, V. Zeiler, C.J.) (in Hebrew) (unpublished). In this case, the plaintiff was wrongly diagnosed by the defendant as *not* suffering from breast cancer. Her cancerous growth was consequently left without treatment until its belated discovery. When it was discovered, the plaintiff's condition left her only slim chances to survive. No evidence concerning the size of the plaintiff's tumor at her initial check-up was available. The court ruled that by misdiagnosing and thus making the plaintiff unaware of her previous condition, the defendant had inflicted upon her serious evidential damage. Experts' estimations as to the development of the plaintiff's cancer pointed to a variety of possibilities. The court ultimately chose the estimation pointing to the most rapid development of the cancer, justifying its decision by the defendant's liability for the evidential damage. Consequently, the court concluded that the plaintiff had an

VII. EPILOGUE

Customary in courts of law and in law reviews, summing-up is reputed to be an uneasy endeavor, especially when preceded by an extensive argument that integrates examples, digressions, and textual footnotes. This Article is no exception. Laconic reiteration of all its arguments will sound unduly repetitious, and not without reason. Their selective reiteration will avoid superficiality at a cost of installing artificial hierarchy between our ideas. Unable to resolve this dilemma, we decided simply to avoid it by pointing to a single and inevitably more abstract idea that hangs our arguments together.

This idea requires only one sentence: because uncertainty is detrimental to the allocation of liability, the law should impose *liability for uncertainty*. This liability will not be costless. It will place an additional burden of the law's shoulders by opening up new issues for adjudication, by creating new problems and by projecting new behavioral incentives which cannot be predicted with certainty. We nonetheless believe (and hopefully have persuaded our readers) that the benefits of the new liability doctrine will outweigh its costs. Unaided by this doctrine, the law may too easily be defeated.

excellent chance to recover at the time that she was misdiagnosed. This ruling increased the plaintiff's compensation most dramatically.

Another plausible solution of the problem would have been to allow the plaintiff to recover compensation for the lost chance to establish the magnitude of her damage. *See supra* Part IV. This solution would have granted the plaintiff smaller compensation.