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Efficiency and Fairness in Tort Law

by

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Abstract: The controversy regarding the appropriate purpose of tort law continues to rage. Some advocate that tort rules should minimize accident costs as an instrument for maximizing social welfare and wealth. Others argue that tort rules should fairly protect the individual right to physical security. Although these two conceptions of tort law are fundamentally incompatible, it is a separate question whether the requirements of welfare economics can be satisfied by rights-based tort rules. This article identifies a class of rights-based tort rules that conforms to existing tort practice and satisfies the distributional requirements of welfare economics. These fair tort rules protect the individual right to physical security for reasons of individual autonomy, a justification that rules out the maximization of social welfare as a reason for compromising the right-holder’s autonomy. The tort right, however, does not constrain social welfare in all possible states of the world. The right only protects the autonomy of the right-holder and does not bar the right-holder from exercising her autonomy. The right-holder can exercise her autonomy to promote her welfare, eliminating any conflict between the tort right and the Pareto principle. In addition to being consistent with the Pareto principle, this class of rights-based tort rules satisfies the equity-efficiency criterion. These rights-based tort rules therefore satisfy the two requirements of welfare economics that are relevant for evaluating distributional rules. The substantive compatibility of rights-based tort rules and welfare economics is further confirmed by analyses showing that any rights-based tort system is likely to provide an important role for economic analysis, one that operates within the constrained space of individual welfare. As a distributional matter, there is no conflict between efficiency and fairness in tort law.

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Throughout its history, the economic analysis of tort law has been largely limited to one question. How should tort rules be formulated so as to minimize the social cost of accidents? Throughout its history, the economic analysis of tort law has also been controversial. The two phenomenon are related. It is highly controversial whether tort law should minimize accident costs to the exclusion of fairness concerns, which in turn has fostered the belief that the economic analysis of tort law is controversial.

The controversy associated with the economic analysis of tort law was initially stirred up by the provocative work of Richard Posner. Although he was not the first to apply economic analysis to tort law, Posner strongly influenced the newly developing field by forcefully propounding the claim that tort law should maximize wealth by minimizing accident costs. The approach ultimately foundered as scholars, including Posner, recognized that cost-benefit analysis cannot determine initial entitlements, the basic architecture of any legal rule.

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This limitation of economic analysis was then addressed by Louis Kaplow and Steven Shavell, who have constructed a proof showing that a "fair" tort rule can make everyone worse off as compared to the welfare-maximizing tort rule. By showing how a principle of fairness can block a change in liability rules that would make everyone better off, Kaplow and Shavell provide a reason for rejecting a fair tort system in favor of one that maximizes welfare. This reason also provides a justification for the conventional economic analysis of tort law. A welfare-maximizing tort system ordinarily relies upon cost-minimizing liability rules, thereby reestablishing the single role for economic analysis in tort law. All issues of concern to the tort system ought to be resolved in the cost-minimizing manner, the general method for maximizing social welfare and wealth.

Not surprisingly, the claim that tort law should be nothing more than an exercise of cost minimization has provoked an equally extreme response from critics. The most forceful critique has come from those who maintain that tort liability is best justified by the principle of corrective justice. The principle is grounded in a conception of individual rights and obligations, giving one who is responsible for the wrongful losses of another a duty to repair those losses. This rights-based principle of fairness "rules out the economic analysis of [tort] law."

Such sweeping claims about the irrelevancy of "economic analysis" must be understood in context. The claims are addressing the relative merits of fairness and allocative efficiency as norms of tort liability. If the appropriate norm is a
rights-based principle of fairness such as corrective justice, then the underlying justification for tort law will not depend on whether liability minimizes accident costs in an allocatively efficient manner. This form of economic analysis is “ruled out” for being irrelevant to the normative justification. The economic analysis of tort law, however, does not necessarily depend upon cost minimization. It is an open question whether a rights-based tort system relies upon economic analysis, and if so, how.\(^9\)

No doubt, many believe that this question has been ignored for good reasons. Economic analysis tends to be forward-looking. The conventional economic analysis of tort law, for example, addresses the question of whether a liability rule would minimize accident costs by deterring accidents in the future. That inquiry seems to be utterly irrelevant to the backward-looking normative question: Is compensation in this case warranted because the defendant was responsible for violating the plaintiff’s right?

Despite superficial appearances, the idea that economic analysis is incompatible with or irrelevant to a rights-based principle of fairness is mistaken. A rights-based torts system can be fully compatible with the relevant requirements of welfare economics, contrary to the understanding one can easily gain from contemporary torts scholarship.

Part I locates the antinomy that divides the norm of allocative efficiency from a rights-based fairness norm. In an effort to guide the choice between these competing norms, Kaplow and Shavell have constructed a proof showing that all “fair” legal rules can make everyone in society worse off in violation of the Pareto principle, a conclusion they claim is applicable to any class of plausible rights-based tort rules. As is true of any valid proof, the conclusion necessarily applies only when the assumptions of the proof also apply. So far, only one class of rights-based legal has been identified that does not satisfy the assumptions of the proof, but Kaplow and Shavell have persuasively argued that this class of rules depends upon a highly problematic principle of fairness. These rules also do not conform to tort practice. No one has shown that there is a class of plausible rights-based tort rules that satisfies the Pareto principle.

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\(^9\) The issue has been explored, though not systematically. See Robert Cooter, Torts as the Union of Liberty and Efficiency: An Essay on Causation, 63 Chi.-Kent L. Rev. 523 (1987); Mark Geistfeld, Economics, Moral Philosophy, and the Positive Analysis of Tort Law, in PHILOSOPHY AND THE LAW OF TORTS 250, 267-69 (Gerald Postema ed. 2001) (hereinafter “Positive Analysis”); Schwartz, supra note __, at 1824-28. A similar, though different approach seeks to ascertain the extent to which efficiency and fairness justifications coincide or overlap. See Geistfeld, supra, at 265-67; Schwartz, supra note __, at 1815-23.
Part II accordingly specifies the attributes for a class of rights-based tort rules that plausibly describes tort practice, and then evaluates this class of rules in terms of the requirements of welfare economics. These rights-based tort rules do not minimize accident costs and are not allocatively efficient, but welfare economists do not evaluate distributional rules on this basis. Welfare economists evaluate distributional rules in terms of Pareto principle and the efficiency-equity criterion, which asks whether the rule attains the distributional objective at the lowest total cost. Part II shows that the rights-based tort rules are fully consistent with the Pareto principle, whereas cost-minimizing tort rules are only formally but not substantively consistent with the Pareto principle. Contrary to the claims of Kaplow and Shavell, the Pareto principle can favor a class of plausible rights-based tort rules over those that minimize costs. Part II concludes by showing that the normatively required distributions are effectuated at lower cost by the tort system than by other feasible transfer mechanisms such as the income-tax system, thereby satisfying the efficiency-equity criterion.

A rights-based tort system is not merely formally consistent with the requirements of welfare economics. Part III shows why economic analysis is likely to have an important role in any tort system designed to protect the individual right to physical security. A rights-based principle of fairness constrains the ability of the tort system to promote social welfare at the expense of the individual right to physical security. The constraint does not make irrelevant the right-holder’s individual welfare. In a wide range of cases, the tort rule can protect the right only by protecting the right-holder’s welfare. The right becomes concrete or determinate once considerations of individual welfare are incorporated into the fairness analysis, eliminating the problem of vagueness that can otherwise plague fair tort rules. Even for a fairness norm that is substantively incompatible with a norm of allocative efficiency, economic analysis is still integral to the rights-based conception of tort law.

I. Efficiency v. Fairness?

The need for tort law arises because the social interactions between individuals often create a conflict of interests resulting in physical harm. An allocatively efficient tort system mediates these interests in a fundamentally different manner than a rights-based tort system.

Consider a tort rule governing the interactions between an automobile driver and a pedestrian. The transportation enables the driver to pursue various liberty interests, including economic interests. As an unwanted byproduct of that
activity, the driver exposes pedestrians to a risk of bodily injury. A pedestrian is also acting in furtherance of her liberty interests, including economic interests. In the event of a crash that physically harms the pedestrian, by definition, her interest in physical security has been injured. The pedestrian also suffers emotional harm (pain and suffering) and economic harm (like medical expenses). If the driver were obligated to compensate any of these harms, the monetary damages would be detrimental to her economic interests. Any precautionary obligations that tort law imposes on the driver, such as a duty to drive slowly, are detrimental to her other liberty interests. Similarly, any precautionary obligations that tort law imposes on the pedestrian (no jaywalking) restrict her liberty. The way in which tort law regulates the risky interaction therefore means at least one party’s interests will be burdened or harmed: Either the pedestrian’s interests in liberty and physical security; the driver’s liberty interests, including the economic interest; or the interests of both parties. The appropriate mediation of these conflicting interests is the basic question of policy or fairness that must be addressed by tort law.  

This conception of the tort problem explains why tort law traditionally has given “peculiar importance” to the nature of individual interests and their social value. The various types of interests need to be distinguished only if there is some reason for prioritizing among them. Tort law traditionally has given one’s interest in physical security priority over a conflicting liberty interest of another.

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10 See, e.g., Oliver Wendell Holmes, The Common Law 144 (1881) (concluding that tort law “is intended to reconcile the policy of letting accidents lie where they fall, and the reasonable freedom of others with the protection of the individual from injury”). Throughout the analysis, I will use rather simplistic notions of the relevant interests, such as “liberty” and “security” interests. The philosophical explication of these interests is much more nuanced. See Stephen Perry, Harm, History, and Counterfactuals, 40 San Diego L. Rev. 1283 (2003) (differentiating core interests from secondary or recursive interests).

11 Restatement (Second) of Torts § 77 cmt. i (1965). See also, e.g., W. Page Keeton et al., Prosser and Keeton on the Law of Torts § 3, at 16-17 (5th ed. 1984) (observing that “weighing the interests [of security and liberty] is by no means peculiar to the law of torts, but it has been carried to its greatest lengths and has received its most general conscious recognition in this field”).

12 The priority of security over the liberty interest is the express justification for the various defenses to intentional torts involving property. See, e.g., Restatement (Second) of Torts § 77 (1965). The priority also determines the issue of “reasonableness” regarding the conduct. Id. cmt. i. The question of reasonableness, which addresses the mediation of normatively acceptable, competing interests, is central to negligence law. Hence the priority applies to accidental harms. Cf. id. § 1 cmt. d (“[T]he interest in bodily security is protected against not only intentional invasion but against negligent invasion or invasion by the mischances inseparable from an abnormally dangerous activity.”); id. ch. 2, introductory note, at 22 (stating that “interest in freedom from bodily harm is given the greatest protection” by various intentional torts and also by tort rules concerning negligence and strict liability); id. § 281 cmt. b (stating that one element of
As a leading torts treatise states, “the law has always placed a higher value upon human safety than upon mere rights in property.”\(^\text{13}\)

Having prioritized the two types of interests, tort law must then decide upon the nature of the priority. An absolute or lexical priority of the pedestrian’s security interest would justify tort rules that eliminate any risk of physical injury, effectively requiring the cessation of driving and negation of the driver’s (absolutely subordinate) liberty interest in most circumstances. That outcome has been rejected by the tort system, implying that tort law is predicated upon a relative priority of interests. Unlike an absolute priority, a relative priority permits some sort of balancing of the conflicting interests. A balancing of interests can justify tort rules that permit automobile driving while requiring drivers to act in conformance with the relative priority of the pedestrian’s security interest.

Merely identifying a relative priority of the security interest over a conflicting liberty interest does not answer a fundamental question. How is the balancing to be conducted? How much more weight should be given to the security interest relative to the liberty interest?

This important question has not been clearly answered by tort law, creating ample room for disagreement. A relative priority of the security interest over the liberty interest is consistent with both an allocatively efficient tort rule and a rights-based tort rule. Each type of rule, however, fundamentally differs with respect to the relative weight given to these conflicting, interpersonal interests. Herein lies the source of the ongoing efficiency versus fairness debate that continues to rage in torts scholarship.

The economic analysis of tort law distinguishes between security and liberty interests for a basic reason. The properties of the cost-minimizing tort rule governing drivers and pedestrians can be derived from a transaction between the two parties.\(^\text{14}\) As in any transaction, there must be a buyer and seller. Must the pedestrian purchase the protection of her physical security from the driver, or must the driver purchase from the pedestrian the right to impose the risk? The question cannot be answered unless there is a distinction between and prioritization of the security and liberty interests.

\(^{13}\) Prosser and Keeton on Torts, supra note __, at 132.

\(^{14}\) See infra notes ___ and accompanying text (analyzing the transaction and showing how it yields the allocatively efficient outcome). [Part II.B]
Consider a tort rule that gives the entitlement to the pedestrian and makes her the seller. By forcing the driver to purchase the right to impose the risk, the rule burdens her economic or other liberty interests. By requiring that the pedestrian be paid for facing the risk, the rule prioritizes her interest in physical security. A tort rule that gives the entitlement to the pedestrian prioritizes her security interest over the relatively subordinate economic and liberty interests of the driver.

Economic analysis cannot determine whether the driver or pedestrian should hold the initial entitlement.\textsuperscript{15} For this reason, economic analysis relies upon the determination already been made by tort law, which gives the security interest a relative, interpersonal priority over the liberty interest. The conventional economic analysis of tort law accordingly proceeds from the premise that the pedestrian holds the entitlement, or, more generally, that the holder of the entitlement is the party facing a threat to her physical security.\textsuperscript{16}

Given the set of initial entitlements, economic analysis assumes that individuals rationally maximize their welfare. For this analytic purpose, a particular interest matters only as an input to individual welfare. Whatever interests the individual chooses to promote, doing so at the least cost would enhance her welfare as compared to more costly methods, all else being equal. Cost minimization promotes individual welfare while increasing individual (and social) wealth. The economic analysis of tort law, therefore, formulates tort rules so as to minimize the social cost of accidents.

Pursuant to this approach, the probability of injury, the injury itself, safety precautions and administrative expenses are all components of the social cost of accidents to be minimized by the tort system. The individual interest in physical security must be burdened if doing so would decrease the social cost of accidents. This feature of a cost-minimizing tort system makes it fundamentally different than a rights-based tort system.

Rights-based theories of tort law, including those based upon the principle of corrective justice, protect morally fundamental individual interests from incurring burdens justified solely on grounds of social expediency, such as the

\textsuperscript{15} See supra note 3 and accompanying text.

\textsuperscript{16} Economists have not explicitly relied upon this reasoning, although they commonly assume such an entitlement. See Jennifer H. Arlen, Reconsidering Efficient Tort Rules for Personal Injury: The Case of Single Activity Accidents, 32 Wm. & Mary L. Rev. 41, 43 n.9 (1990) (providing citations to law-and-economic analyses based upon this priority).
pursuit of social welfare via the minimization of accident costs. The principle of corrective justice “states that individuals who are responsible for the wrongful losses of others have a duty to repair those losses.” The duty to repair follows from one’s responsibility for the infringement of another’s right. According to most corrective-justice theorists, the individual right involves security of the person and tangible property. To be treated as a right, an individual’s interest in physical security must have priority over the competing liberty and economic interests of someone else. The right-holder’s physical security cannot be compromised merely because doing so would confer greater wealth or welfare on others. As Stephen Perry describes the position, “At least within nonconsequentialist moral theory, it makes sense to think of this [security] interest as morally fundamental, and hence as falling outside the purview of distributive justice; our physical persons belong to us from the outset, and are accordingly not subject to a social distribution of any kind.”

The security interest has this moral attribute for reasons of autonomy. As Perry elaborates: “The main reason that personal injury constitutes harm [that may require redress as a matter of corrective justice] is that it interferes with personal autonomy. It interferes, that is to say, with the set of opportunities and options from which one is able to choose what to do in one’s life.” Or as Jules Coleman puts it: “The capacity to live a life, and not merely to have a life happen to one, depends on being able to express one’s autonomy and on being protected

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17 COLEMAN, THE PRACTICE OF PRINCIPLE, supra note __, at 15.
18 See RONALD DWORKIN, TAKING RIGHTS SERIOUSLY 194 (1977) (explaining why the “‘rights’ of the majority as such” “cannot count as a justification for overruling individual rights”).
19 Stephen R. Perry, On the Relationship Between Corrective Justice and Distributive Justice in OXFORD ESSAYS ON JURISPRUDENCE, FOURTH SERIES 237, 239 (Jeremy Horder ed.) [hereinafter “Relationship”]; see also WEINRIB, PRIVATE LAW, supra note __, at 202 n. 73 (“Under Kantian right, bodily integrity is an innate right and thus prior to acquired rights of property”).
20 See, e.g., Ernest J. Weinrib, Correlativity, Personality, and the Emerging Consensus on Corrective Justice, 2 THEORETICAL INQUIRIES IN LAW (Online Edition) 13-20 (Jan. 2001), at http://www.bepress.com/ti/default/Vol2/iss1/art4 (arguing that “personality,” which “signifies the capacity for purposiveness without regard to particular purposes,” is the content of the correlative right and duty under the juridical conception of corrective justice in tort law) [hereinafter “Consensus”]; see also Gregory C. Keating, A Social Contract Conception of the Law of Accidents in PHILOSOPHY AND THE LAW OF Torts 22, 34 (Gerald Postema ed. 2001) (arguing that under a Kantian conception of reasonableness, our “interest in security is entitled to more protection than our interest in liberty” for risks threatening severe physical injury, because such risks “threaten the premature end, or the severe crippling, of our agency” whereas the curtailment of liberty has less of a burden on “our capacities to pursue our ends over the course of complete lives”); ARTHUR RIPSTEIN, EQUALITY, RESPONSIBILITY, AND LAW 55 (developing a conception of reasonableness according to which “specific liberty interests and security interests are protected, based on a conception of their importance for leading an autonomous life”).
21 Perry, supra note __, at 256.
against persons who are unprepared to mitigate their action in light of the interests of others.”

The difference between cost-minimizing tort rules and rights-based tort rules therefore can be traced to the different relative weights that these rules give to interpersonally conflicting liberty and security interests. Each type of tort rule gives relative priority to the security interest. The priority is embodied in the initial entitlements underlying cost-minimizing tort rules. But once the entitlement has been allocated to the security interest, cost-minimizing tort rules give equal weight to liberty and security interests. Rights-based tort rules further prioritize the security interest for reasons of individual autonomy.

A tort entitlement can be specified in various ways, including one that permits cost minimization and another that protects the individual right to individual security. The specification of an entitlement requires normative justification, and so the choice between a cost-minimizing tort rule and a rights-based tort rule is necessarily normative.

The normative decision can rely upon the Pareto principle, which maintains that if every individual in society prefers an alternative state of affairs to the status quo, then the alternative state is socially preferable to the status quo. The principle, in other words, gives higher social welfare to a unanimously preferred alternative state than to the status quo. Economists routinely assume that “any reasonable notion of social welfare would conform to the Pareto principle.” “It is no exaggeration to say that the entire modern microeconomic theory of government policy intervention in the economy (including cost-benefit analysis) is predicated on this idea.”

23 *Cf.* Richard W. Wright, *Justice and Reasonable Care in Negligence Law*, 47 AMER. J. JURIS. 143, 145 (2002) (showing that “all of the leading justice theorists by now have recognized [that] the aggregate-risk-utility test [which gives equal weight to security and liberty interests] cannot be reconciled with the principles of justice”).
24 *See supra* note 3 and accompanying text.
25 *See, e.g.*, Chang, *supra* note __, at 175-76. Another version of the Pareto principle maintains that social welfare must increase in the alternative state if at least one individual prefers that state to the status quo and no one prefers otherwise. *Id.* at 176. The version of the principle described in text is the one employed by Kaplow and Shavell in their proof. *See* Kaplow & Shavell, *Conflict, supra* note __; Kaplow & Shavell, *Policy Assessment, supra* note __.
26 Chang, *supra* note __, at 175.
According to a proof established by Louis Kaplow and Steven Shavell, a “fair” tort rule—that is, a tort rule satisfying certain analytic conditions to be discussed below—can violate the Pareto principle.\(^{28}\) Of the varied “fair” rules that can violate the Pareto principle, Kaplow and Shavell claim that rights-based tort rules are among them.\(^{29}\) The possibility that a rights-based tort rule can make everyone worse off seems unacceptable, leading Kaplow and Shavell to conclude that tort rules should be formulated for the exclusive purpose of promoting individual welfare—an objective that ordinarily involves the minimization of accident costs.\(^{30}\)

For purposes of the proof, a “fair” tort rule gives evaluative weight to some factor that is not solely dependent upon individual well-being or welfare.\(^{31}\) This condition is satisfied by rights-based tort rules that prioritize or give weight to the security interest for reasons of individual autonomy that are not based exclusively on a concern for individual welfare. The proof then assumes that in the evaluation of tort rules, the rights-based principle of fairness has a constant, significant weight that is independent of welfare. The proof also assumes that the (constantly weighted) principle of fairness can be continuously traded off against some component of welfare. Due to the tradeoff between fairness and welfare, there will be situations in which the choice of a “fair” tort rule comes at the expense of some positive welfare gain that would be created by an unfair, cost-minimizing rule. If the savings produced by the unfair, cost-minimizing tort rule could be costlessly redistributed to all members of society, each person would prefer to adopt the cost-minimizing rule. Even though this outcome seems desirable, the adoption of the unfair, cost-minimizing tort rule would be barred by the principle of fairness. In these circumstances, the “fair” rule violates the Pareto principle by blocking the adoption of the unanimously preferred cost-minimizing tort rule.

The Kaplow and Shavell proof seems to establish an incontrovertible conflict between the protection of individual rights and both forms of economic efficiency—allocative efficiency and Pareto optimality. A rights-based tort rule is not designed to minimize accident costs, and clearly conflicts with allocative efficiency. The additional conflict between a rights-based tort rule and the Pareto principle, therefore, would establish that a rights-based tort rule violates both

\(^{28}\) E.g., **KAPLOW & SHAVELL, FAIRNESS, supra** note __.

\(^{29}\) *Id.* at 26, n.18.

\(^{30}\) *Id.* at 87-154.

conceptions of economic efficiency. In that event, the tort system must choose between a rights-based conception of fairness and economic efficiency writ large.

Numerous scholars, including lawyer economists, are skeptical of the proof and the claims Kaplow and Shavell have made on the basis of the proof.\(^\text{32}\) Most importantly for our purposes, Howard Chang has shown that the proof relies upon an assumption about continuity that is not valid for all rights-based legal rules.\(^\text{33}\) As described earlier, the proof assumes that the principle of fairness has a constant weight, independent of welfare, that can be continuously traded off against some component of welfare. As Chang and others have pointed out, the continuity assumption entails important restrictions on the principle of fairness.\(^\text{34}\) To illustrate this point, Chang proposes a method for evaluating legal rules that makes the weight for fairness dependent on welfare considerations. The principle of fairness, in other words, has a *variable* evaluative weight rather than a *constant* weight. When fairness has a variable weight with respect to welfare, the concern for fairness does not have to be given any weight for cases in which a legal rule would increase the welfare of all individuals. Such a principle of fairness is not continuous in any component of welfare—it ceases to have any weight whenever a legal rule would make everyone better off—and does not satisfy the assumptions in the Kaplow and Shavell proof. The principle of fairness also does not violate the Pareto principle. It has no weight whenever a legal rule would make everyone better off, eliminating the possibility that the concern for fairness would ever block implementation of a rule unanimously preferred by everyone. By identifying a rights-based legal rule that does not violate the Pareto principle, Chang conclusively shows that the implications of the Kaplow and Shavell proof critically depend on the continuity assumption.

In response, Kaplow and Shavell defend the continuity assumption by rejecting the type of fairness principle relied upon by Chang. In their view, a principle of fairness that operates in the manner described by Chang is a “hybrid” theory that modifies the principle of fairness “by assuming it to be inapplicable

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\(^{34}\) For a highly accessible description, see Craswell, *supra* note __, at 249-57.
whenever it would conflict with the Pareto principle.”

Because a hybrid theory violates the continuity assumption, Kaplow and Shavell find such a theory to be indefensible:

[The continuity assumption] is one that we imagined would be endorsed by anyone who believed that a notion of fairness was worth taking seriously…. Formally, our argument only requires that the principle of fairness be continuous in something. (Hence, corrective justice should not be given infinitesimal weight with respect to administrative cost savings, trivial aesthetic pleasures, or the consumption of some good—in other words, to some factor that is unrelated to the notion of fairness.)

Kaplow and Shavell make a compelling point. If the concern for fairness vanishes whenever the cost savings produced by an unfair rule can be distributed so as to make everyone better off, then “no matter how much unfairness is involved, it can be outweighed by the tiniest amount of administrative cost savings [shared per capita].” Any theory that allows the fairness concern to become infinitesimally small under these conditions does not seem to be “worth taking seriously.”

Kaplow and Shavell also argue that a hybrid theory of fairness lacks consistency:

[S]uppose that there are three regimes, A, B, and C. Under a posited notion of fairness, A is perfectly fair, B is moderately fair (say five individuals are treated somewhat unfairly), and C is significantly unfair (an additional ten individuals are treated quite unfairly). Under a pure version of the notion of fairness, the regimes would be ranked A best, B second, C worst. But now suppose that the welfare of every individual in regime C is somewhat greater than it is in regime A (because some other aspect of the regime sufficiently benefits those treated unfairly in C). Under the hybrid approach, one is therefore compelled to hold that regime C is definitely morally superior to A. The problem, however, is that the same hybrid theory insists that regime A is definitely morally superior to … regime C.

35 Kaplow & Shavell, Conflict, supra note __, at 63, 72 n.20.
36 Kaplow & Shavell, Consistency, supra note __, at 243.
37 Id. at 242.
38 Kaplow & Shavell, Notes, supra note __, at 346.
Once again, Kaplow and Shavell have identified an apparent problem with a hybrid theory of fairness. The theory can justify rights-based legal rules that do not violate the Pareto principle as Chang has established, but the hybrid theory is based upon a problematic principle of fairness. As Leo Katz concludes, “[t]he moral precepts that underlie our most basic legal doctrines, or at least those of criminal and tort law, are not like the “blended” fairness theories Chang shows us how to construct by his algorithm.”

To avoid the conflict with the Pareto principle, “Chang is driven to construct doctrines that no longer resemble our basic moral ideas.”

Although Chang has shown there is no necessary conflict between efficient and rights-based tort rules, there may be such a conflict between efficient tort rules and the type of fair tort rules that plausibly conform to tort practice. It is an open question whether there is a set of plausible rights-based tort rules that satisfy the Pareto principle and the requirements of welfare economics writ large.

II. RIGHTS-BASED TORT RULES AND WELFARE ECONOMICS

A liability rule must have certain attributes in order to promote individual autonomy within a rights-based conception of tort law. At least one class of such rules plausibly describes torts practice. These rights-based tort rules do not violate the Pareto principle, contrary to the claim of Kaplow and Shavell. Their proof makes assumptions about the characteristics of a “fair” legal rule that do not apply to the class of rights-based tort rules under consideration. The result of the proof, therefore, does not necessarily apply to these rules. Given the conditions otherwise assumed by the proof, straightforward analysis shows that these rules do not violate the Pareto principle. Further analysis shows why the Pareto principle favors these rights-based tort rules over cost-minimizing tort rules. The rights-based tort rules also satisfy the efficiency-equity criterion, establishing the existence of a plausible rights-based tort system that satisfies the relevant requirements of welfare economics.

A. Individual Autonomy and the Attributes of a Rights-Based Tort Rule

Under a rights-based conception of tort law, the tort right held by an individual both creates and corresponds to an individual duty incurred by

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40 Id.
another. By breaching this duty, the duty-holder becomes responsible to the right-holder for the resultant injury. The content of the right-duty nexus can be formulated in terms of various conceptions of responsibility, including those based upon individual autonomy. Other features of the right-duty nexus can also be formulated in different ways.

According to Ronald Dworkin’s formulation, individual rights are “trumps over some background justification for political decisions that states a goal for the community as a whole.” The individual right, in other words, places limits or constraints on the reasons that can justify governmental actions such the enforcement of tort rules. When formulated in this manner, the autonomy-promoting individual right excludes any justification for tort liability that is inconsistent with the concern for autonomy.

This attribute of the tort right rules out cost-minimizing liability rules finding exclusive justification in the maximization of social wealth or welfare. These liability rules do not give any consideration to autonomy; a liability rule can compromise autonomy whenever doing so would reduce the social cost of accidents. Due to this potential conflict, an autonomy-promoting individual right does not minimize accident costs in order to maximize social welfare.

The concern for individual autonomy justifies liability rules based upon an interpersonal priority of the security interest over the liberty interest. For nonconsensual risky interactions, the exercise of the duty-holder’s autonomy (the liberty interest) conflicts with the right-holder’s autonomy (the security interest) in a manner requiring mediation by tort law. As a matter of autonomy, the security interest is prior or more fundamental, justifying liability rules that give the security interest interpersonal priority over the liberty interest.

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41 The form or nature of the right for tort purposes, more precisely, is a “claim right” within Hohfeld’s analytic scheme. See Wesley N. Hohfeld, Fundamental Legal Conceptions as Applied in Judicial Reasoning (1919). This type of right has been adopted by tort law. See, e.g., Palsgraf v. Long Island R. Co., 162 N.E. 99, 100 (N.Y. 1928) (holding that a tort plaintiff can recover only by showing that the defendant’s breach of duty constitutes “a wrong to herself; i.e., a violation of her own right, and not merely a wrong to someone else, nor conduct ‘wrongful’ because unsocial”).

42 See Peter Jones, Rights 120-35 (1994).

43 See generally Theories of Rights (Jeremy Waldron ed. 1984).

44 Ronald N. Dworkin, Rights as Trumps, in id. at 153.


46 See supra notes __ and accompanying text. [Part I]

47 See supra notes __ and accompanying text. [Part I]
The liability rule must equally respect the autonomy of the right-holder and duty-holder, a requirement that cannot be satisfied by an absolute or lexical priority of the security interest. An absolute priority protects the right to physical security by prohibiting the duty-holder from engaging in conduct that might physically injure the right-holder. An absolute priority, for example, would justify the ban of automobile driving whenever there is some possibility that the activity would cause physical injury to pedestrians or other right-holders. An absolute priority protects the security interest of the right-holder by negating the absolutely subordinate liberty interest of the duty-holder, thereby violating the requirement of equality by denying duty-holders of any opportunity to exercise their autonomy in these circumstances.

The concern for autonomy requires liability rules formulated in terms of a relative priority of the right-holder’s security interest over the liberty interest of the duty-holder. A relative priority involves some sort of balancing of these conflicting interests, thereby accounting for the liberty interest of the duty-holder. The balancing must be conducted in a manner that equally respects the autonomy of both the right-holder and duty-holder.

An individual right justified on grounds of autonomy must also be limited to the consequences for which the duty-holder is responsible by virtue of exercising her autonomy. The exercise of autonomy entails responsibility for the foreseeable consequences of one’s voluntary choices.\(^48\) Consequently, the duty can be limited to voluntary actions creating foreseeable risks of harm to the right-holder.\(^49\)

As I have argued at length elsewhere, these attributes of the right can persuasively explain both the important doctrines of tort law and the practice of tort law.\(^50\) Having specified the substantive requirements of a set of plausible


\(^{49}\) Weinrib, *Consensus*, supra note __, at 4.

\(^{50}\) Of the attributes described in the text, the only one requiring further specification is the nature of the relative interpersonal priority of the security interest over the liberty interest. The specification providing the greatest protection for the security interest gives it a relative, interpersonal priority over both reasonable and unreasonable liberty interests. This priority, when coupled with the other attributes described in the text, is sufficient for deriving the important doctrines of tort law, including the important limitations of liability. See generally Mark Geistfeld, *Negligence, Compensation, and the Coherence of Tort Law*, 91 GEO. L.J. 585 (2003); see also MARK A. GEISTFELD, *PRINCIPLES OF PRODUCTS LIABILITY* (2006) (showing how the interpersonal priority of the security interest can explain the important doctrines of products liability in terms of consumer choice); Mark A. Geistfeld, *Necessity and the Logic of Strict Liability*, ISSUES IN LEGAL SCHOLARSHIP (2005), available at http://www.bepress.com/ils
rights-based tort rules, we can now determine whether this class of rules conflicts with the Pareto principle and the requirements of welfare economics writ large.

B. Rights-Based Tort Rules and the Pareto Principle

The fair tort rule protects the individual right to physical security for reasons of individual autonomy, a justification that rules out the maximization of social welfare as a reason for compromising the right-holder’s autonomy. In this important sense, the individual right constrains social welfare.

The tort right, however, does not constrain social welfare in all possible states of the world—a condition that would necessarily produce a violation of the Pareto principle. The right only protects the autonomy of the right-holder; it does not bar the right-holder from exercising her autonomy. The right-holder’s

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(Showing how the autonomy-based interpersonal priority of the security interest can explain the rules of strict liability, including the doctrine of necessity); Mark Geistfeld, The Analytics of Duty: Medical Monitoring and Related Forms of Economic Loss, 88 VA. L. REV. 1921 (2002) (showing how the interpersonal priority of the security interest can explain the important limitations of duty regarding economic loss and emotional distress); Mark Geistfeld, Reconciling Cost-Benefit Analysis with the Principle that Safety Matters More than Money, 76 N.Y.U. L. REV. 114 (2001) (showing how a relative interpersonal priority of the security interest justifies the general rule of negligence with a standard of care above the cost-benefit amount for important classes of cases).

A tort right based upon this priority corresponds to the compensatory conception of tort liability embodied in the historical tort maxim sic utere tuo ut alienum non laedas, or “Use your own property in such a manner as not to injure that of another.” BLACK’S LAW DICTIONARY 1238 (5th ed. 1979). As applied to risky behavior not involving the use of property, the maxim yields a common-law principle, as described by Oliver Wendall Holmes, that “under the common law a man acts at his peril.” HOLMES, THE COMMON LAW, supra note __, at 82 (stating that some of the “greatest common law authorities held this view”). This duty does not require the elimination of all risk, for that type of duty would involve an absolute priority of the security interest. Instead, the duty-holder must compensate any harms he has caused to the security interest of the right-holder, whether by the exercise of reasonable or unreasonable liberty interests. “For when one person in managing his affairs causes, however innocently, damage to another, it is obviously only just that he should be the party to suffer. He is bound [sic utere].” HERBERT BROOK, A SELECTION OF LEGAL MAXIMS, CLASSIFIED AND ILLUSTRATED 367 (8th ed. 1882). In order for there to be such a compensatory obligation, the tort rule must give the right-holder’s security interest a relative priority over the duty-holder’s liberty interest. Cf. Commonwealth ex rel. Attorney General v. Russell, 33 A. 709, 711 (Pa. 1896) (“Sic utere tuo non alienum laedas’ expresses a moral obligation that grows out of the mere fact of membership in civil society. In many instances it has been applied as a measure of civil obligation, enforceable at law among those whose interests are conflicting.”).

If the individual right constrained the pursuit of social welfare in all circumstances, then there would always be some state of the world in which the tradeoff between the right and social welfare would produce the Pareto violation identified by Kaplow and Shavell. Cf. supra notes __ and accompanying text (describing logic of proof). [Part I]
exercise of autonomy also promotes welfare, eliminating any conflict between the
tort right and the Pareto principle.

To see why, we need to consider the circumstances in which the Kaplow
and Shavell proof operates. The proof assumes a world in which “individuals
understand fully how various situations affect their well-being.”52 The proof also
assumes that transaction costs are sufficiently low to allow for any form of
mutually advantageous redistribution.53

Mutually advantageous redistributions can be attained by informed
agreements between the right-holders and duty-holders. For purposes of
autonomy, the ideal outcome involves the fully informed consent of these parties.
Each individual is able to decide how to conduct herself based upon a well-
informed deliberation of all relevant issues. The tort right protects the
pedestrian’s interest in physical security, and so the driver must get her consent
prior to the risky interaction.

In the absence of transaction costs, the pedestrian and driver will agree to
structure the risky interaction so as to minimize costs and maximize the gains
from contracting with one another, yielding the allocatively efficient outcome.
This conclusion directly follows from the Coase theorem.54

To illustrate, suppose an automobile accident would always kill the
pedestrian. Suppose further that the amount of care exercised by the driver is

52 Kaplow & Shavell, Conflict, supra note __, at 65.
53 Kaplow and Shavell have two proofs. One involves individuals who are symmetric in all
relevant respects, making distributional considerations (and distributional costs) irrelevant.
Kaplow & Shavell, Conflict, supra note __. The other proof allows for individual differences.
For the differences to be meaningful, the welfare gain in moving from (fair) state-f to (welfaristic)
state-w must be unequally distributed across the individuals. Some individuals may be harmed by
the move to state-w, so state-w need not involve a Pareto improvement over state-f. Kaplow and
Shavell construct a new (redistributed) state-r with the same total welfare as state-w, in which the
total welfare gain in moving from state-f to state-w is redistributed across all individuals so as to
make each one better off in state-r than in state-f. Each person now prefers state-r over state-f, so
adhering to state-f for fairness reasons would violate the Pareto principle. Kaplow & Shavell,
Policy Assessment, supra note __. Clearly, state-r can be compared to state-f only if the
redistribution of the total welfare gain in moving from state-f to state-w is costless (as in the
proof), or more generally, if the per capita welfare cost of redistribution is less than the per capita
welfare gain.
54 See Ronald Coase, The Problem of Social Cost, 3 J. L. & Econ. 1 (1960) (showing that any
allocation of entitlements does not block efficient outcomes in a world without transaction costs);
see also STEVEN SHAVELL, FOUNDATIONS OF ECONOMIC ANALYSIS OF LAW 83-87 (2004)
(explaining how social welfare is maximized under conditions when “bargains are made whenever
a mutually beneficial agreement exists”).
continuous in the probability of accident, so that incrementally greater care incrementally reduces the probability of a fatal accident. Let $B$ denote the total cost or burden of care incurred by the driver. For any given probability of suffering the fatal injury, the monetary cost of the risk is determined by the pedestrian’s willingness to accept money in exchange for facing the risk. This amount makes the pedestrian indifferent between (1) the state of the world in which she does not face the risk and is not compensated, and (2) the state of the world in which she faces the risk and receives compensation. The amount of compensation, which is defined as the willingness-to-accept or WTA risk measure, is the monetary benefit that exactly offsets the cost of the risk or welfare loss for the pedestrian as right-holder.

The pedestrian’s security interest has priority over the driver’s liberty interest, giving the pedestrian a right to receive compensation from the driver. The appropriate compensation is determined by the WTA measure, which in turn depends on the probability of injury. The pedestrian would not accept any money to face the certainty of a fatal accident (the WTA measure equals infinity), although she would accept some finite amount of compensation to face lower level risks.\(^{55}\) The driver, therefore, can reduce the total WTA payment by reducing the risk. The driver’s total cost—the cost of precaution $B$ and the WTA payment to the pedestrian—is minimized if the driver takes precautions costing less than the associated reduction in the WTA measure. This amount of precaution $B^*$ minimizes accident costs and is allocatively efficient. At the efficient level of care, the pedestrian still faces a positive probability of being killed in an accident and requires compensation $WTA^*$ for facing that risk. By definition, the pedestrian’s receipt of the $WTA^*$ compensation equals her welfare level as compared to a world in which she does not receive the compensation and does not interact with the driver.

The allocatively efficient agreement satisfies the Pareto principle according to the First Fundamental Theorem of Welfare Economics.\(^{56}\) Under the conditions assumed by the Kaplow and Shavell proof—perfectly informed individuals in a world of costless redistribution—the right-holder and duty-holder will always reach mutually advantageous agreements that satisfy Pareto principle.\(^{57}\)

\(^{55}\) For more formal specification, see Geistfeld, Safety Principle, supra note __, at 188-89.
\(^{56}\) According to the First Fundamental Theorem of Welfare Economics, an allocatively efficient outcome is also Pareto efficient. HAL R. VARIAN, MICROECONOMIC ANALYSIS 326 (3d ed. 1992).
\(^{57}\) Mutually advantageous redistributions can be achieved by other means as well, but to satisfy the Pareto principle, these redistributions require the actual consent of all affected parties. That
The tort right could violate the Pareto principle only if it deemed such an agreement to be invalid or unenforceable. The relevant tort doctrine is assumption of risk. Pursuant to this doctrine, the agreement between the driver and pedestrian would absolve the driver of liability for the risk.\textsuperscript{58} A right-holder’s fully informed, voluntary choice to exercise or waive the right by assuming the risk expresses her agency, enabling her to pursue the life plan of her choosing. Any tort rule that blocked such choices would undermine the right-holder’s autonomy, explaining why rights-based conceptions of tort law permit the right-holder to assume the risk.\textsuperscript{59} The tort right would not bar enforcement of the agreement and could not violate the Pareto principle.\textsuperscript{60}

Thus, an autonomy-based principle of fairness satisfies the Pareto principle whenever transaction costs do not prevent the right-holder and duty-holder from structuring the risky interaction in a mutually advantageous manner. In these circumstances, the right-holder exercises her autonomy by assuming the risk in a manner that promotes social welfare. For example, the duty-holder would always choose to drive whenever she incurs total tort obligations ($B^* + WTA^*$) less than the total benefits she would get from driving. Such a risky requirement is always satisfied by informed agreements between right-holders and duty-holders, making these agreements the appropriate reference point for analysis.

\textsuperscript{58} RESTATEMENT OF THE LAW, TORTS: APPORTIONMENT OF LIABILITY § 2 (2000).

\textsuperscript{59} See, e.g., RIPSTEIN, supra note __, at 202 (“The person who in fact secures consent before acting does no wrong. If the victim believes himself or herself to have consented, no wrong is done.”); WEINRIB, PRIVATE LAW, supra note __, at 169 n. 53 (explaining why voluntary assumption of risk is part of the juridical conception of corrective justice); id. at 136-40 (explaining why the principle of corrective justice supports the enforcement of contractual obligations); see also RUSSELL HARDIN, MORALITY WITHIN THE LIMITS OF REASON 109 (1988) (“it is obvious that among the most important of all rights in the liberal canon are the right of exchange and the correlative right of contract”).

\textsuperscript{60} One might question whether the tort doctrine of assumption of risk actually operates in the manner assumed by the analysis in text. Cf. Katz, supra note __ (arguing that criminal law and tort law limit the role of consent in order to prevent inconsistent cycling). Tort law, however, would not block the express agreement. RESTATEMENT OF THE LAW, TORTS: APPORTIONMENT OF LIABILITY § 2. Moreover, tort law does not have to rely expressly on the doctrine of assumption of risk in order to limit liability on the basis of informed choice. In product cases, for example, tort law treats assumption of risk as a form of contributory negligence, but the best explanation for this practice involves the evidentiary difficulties of reliably establishing assumption of risk rather than a rejection of informed consumer choice as a reason for limiting liability. See GEISTFELD, PRINCIPLES OF PRODUCTS LIABILITY, supra note __, at 230-38. Products liability law in general is quite sensitive to the way in which informed consumer choice limits tort liability. See generally id. In this respect, products liability is not distinctive. See, e.g., Largey v. Rothman, 540 A.2d 504 (N.J. 1988) (“Anglo-American law starts with the premise of thorough self-determination) (quoting Natanson v. Kline, 350 P.2d 1093, modified on other grounds, 354 P.2d 670 (Kan. 1960)).
interaction promotes the duty-holder’s welfare (the total benefit the driver gets from the activity) by more than the amount required to protect the welfare of the right-holder ($B^* + WTA^*$), thereby increasing social welfare under conditions unanimously preferred by everyone. The tort right satisfies the Pareto principle.61

Of course, transaction costs usually prevent contracting between pedestrians and drivers. The rights-based tort rule now yields allocatively inefficient outcomes. No violation of the Pareto principle occurs, however, because any shift from the rights-based rule would make some pedestrians or other right-holders worse off.62 These individuals cannot be adequately compensated for the change in tort rules given that transaction costs prevent contracting and other forms of mutually advantageous redistribution. The rights-based tort rule does not make everyone worse off as compared to the welfare-maximizing rule, so it does not violate the Pareto principle in these circumstances as well.63

This class of plausible rights-based tort rules does not violate the Pareto principle, contrary to the claim by Kaplow and Shavell. They may have proven that all “fair” tort rules necessarily suffer from this problem, but their definition of a “fair” tort rule is inapplicable to the rights-based tort rules under consideration.

Recall that the proof defines a “fair” rule as one justified by a principle of fairness having a constant weight, independent of welfare, which can be continuously traded off against some component of welfare.64 This definition of a “fair” rule excludes a principle of fairness having a variable weight that depends on welfare, although such a hybrid principle poses a number of problems

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61 As described, the transaction would leave the pedestrian indifferent, and so perhaps she would not affirmatively prefer the risky interaction. In that event, the driver could induce the affirmative preference by sharing some of the gains of trade with the pedestrian. (Due to the assumption of costless redistribution, there are no strategic bargaining costs that might otherwise block any mutually advantageous redistribution.) This agreement would still induce the allocatively efficient amount of care and necessarily satisfy the Pareto principle.

62 The rights-based tort rule is the appropriate baseline, given that the specification of initial entitlements is a normative question. See supra note 3 and accompanying text. In the event that everyone is identical in all relevant respects, the context involves costless redistributions and is governed by that analysis. See supra note ___ (explaining why the assumption of identically situated individuals is tantamount to an assumption of costless redistribution).

63 See also Guido Calabresi, The Pointlessness of Pareto: Carrying Coase Further, 100 Yale L.J. 1211 (1991) (concluding that regardless of the initial assignment of entitlements or specification of legal rights, the existence of transaction costs implies that any actual outcome is Pareto optimal).

64 See supra notes ___ and accompanying text. [Part I].
identified by Kaplow and Shavell. Whatever the merits of a hybrid principle may otherwise be, it does not justify the rights-based tort rules under consideration. These rules are justified by a principle of fairness that constrains the tort system from maximizing social welfare at the expense of individual autonomy. A constraint need not be binding in each and every case, as clearly revealed by the mathematics of constrained optimization. For reasons previously discussed, the constraint is not binding when the right-holder assumes the risk. In these states of the world, fairness (autonomy) is not continuously traded off against welfare. There simply is no tradeoff. When the constraint is binding, the right protects the autonomy of the right-holder from being compromised merely to increase social welfare. In these states of the world, the right does not give autonomy a variable weight that can be overridden by social welfare; the right makes autonomy independent of social welfare. This fairness principle, therefore, does not give autonomy a constant weight that is continuously traded off against some component of welfare in all states of the world—the condition assumed by the Kaplow and Shavell proof—nor does the principle give variable weight to autonomy in some manner that depends upon social welfare—the condition characteristic of a hybrid principle of fairness. This class of rights-based tort rules is not governed by the Kaplow and Shavell proof or subject to their criticisms concerning a hybrid rule of fairness.

For example, Kaplow and Shavell criticize the hybrid principle of fairness because “no matter how much unfairness is involved, it can be outweighed by the tiniest amount of administrative cost savings [shared per capita]” in order to satisfy the Pareto principle. This criticism is not applicable to the rights-based tort rules under consideration. The pedestrian assumes the risk because she receives adequate compensation for doing so. The compensation could be infinitesimally small to assume an infinitesimal risk. As long as the right-holder has made a voluntary, informed choice, the principle of fairness is satisfied. The right-holder’s autonomy is not being compromised to promote social welfare, and so the constraint imposed by the individual right is not binding. In these circumstances, autonomy is not given infinitesimal weight with respect to a penny or any factor unrelated to the individual right, even though the pedestrian right-holder’s choice to assume the risk for a penny satisfies the Pareto principle.

The duty-holder’s behavior does not affect this reasoning. As the duty-holder’s conduct becomes more and more egregious, it may seem that the principle of fairness should become more important rather than less important. How, then, could the principle of fairness be satisfied by the right-holder’s

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65 See supra notes ____ and accompanying text. [Part I].
66 Kaplow & Shavell, Consistency, supra note ____, at 242.
acceptance of one penny when considered in relation to such morally egregious misconduct? The answer is that the principle of fairness is interested in the defendant’s behavior only insofar as it affects the plaintiff’s tort right.\textsuperscript{67} If the plaintiff exercises or waives her right by accepting a penny from the defendant, the defendant’s behavior is irrelevant. There is no great unfairness that has been outweighed by the one penny that induced the consent. The right-holder’s well-informed, voluntary choice satisfies the concern for autonomy, eliminating the rationale for the rights-based constraint that would otherwise govern the duty-holder’s behavior.

A rights-based constraint also avoids the problem of inconsistency that might plague a hybrid principle. In identifying this problem, Kaplow and Shavell consider regime A that is perfectly “fair” as compared to a “very unfair” regime C that satisfies the Pareto principle, and show how a hybrid theory yields inconsistent decisions as to the desirability of the two regimes.\textsuperscript{68} This comparison is not applicable to the rights-based tort rules under consideration. For regime A to be perfectly fair, it must perfectly implement the principle of fairness. The ideal instantiation of autonomy involves situations in which the right-holder and duty-holder give fully informed consent to the choice in question. If all right-holders and duty-holders are given the opportunity to make an informed choice between regimes A and C, everyone will choose C under conditions in which that regime makes everyone better off as compared to the alternative regimes. Regime C, therefore, is “perfectly fair,” contrary to the condition posited by Kaplow and Shavell. The principle of fairness creates no inconsistency regarding the normative desirability of regimes A and C. Inconsistency might plague a hybrid principle that trades off fairness and welfare concerns in a variable manner, but the rights-based tort rules under consideration do not have this property.

As an analytic matter, any rights-based tort rule designed to promote individual autonomy can yield outcomes that maximize social welfare. The individual right constrains the ability of the tort system to maximize social welfare when doing so would undermine autonomy. If the right-holder exercises or waives the right in a manner that promotes autonomy, the rationale for the constraint is inapplicable. Social welfare is not being increased at the expense of autonomy; the rights-based constraint is not binding. When all individuals exercise their autonomy in a manner that increases their individual welfare, the right allows for an increase social welfare as required by the Pareto principle. In these circumstances, the concern for individual autonomy coincides with the

\textsuperscript{67} See, e.g., WEINRIB, PRIVATE LAW, supra note __, at 155.
\textsuperscript{68} See supra notes __ and accompanying text. [Part I].
promotion of social welfare, explaining why this class of rights-based tort rules does not violate the Pareto principle.

C. The Pareto Principle and the Choice of Tort Rules

The Pareto principle is not violated by all rights-based tort rules, nor is it violated by cost-minimizing tort rules. But insofar as it is a principle rather than a mechanistic decision rule, the Pareto principle must have normative content. That content can provide a substantive reason for choosing between rights-based and cost-minimizing tort rules.

As Richard Posner has argued, the normative appeal of the Pareto principle lies in the way that it promotes individual autonomy. When everyone would prefer some alternative to the status quo, a move to the alternative is required by the Pareto principle. Individuals who prefer this move from the status quo would consent to the change. Individual consent promotes individual autonomy. A change required by the Pareto principle therefore is one that promotes the individual autonomy of everyone and is normatively desirable for that reason.

So understood, the Pareto principle is substantively incompatible with cost-minimizing tort rules. In a tort system that minimizes accident costs in order to maximize social welfare, the total amount of social welfare is the only relevant concern for purposes of policy evaluation. (Otherwise one could easily construct a social welfare function that satisfies the principle of corrective justice or any other rights-based version of tort liability.) This form of policy evaluation is known as “welfarism,” which evaluates social policy exclusively in terms of total welfare rather than its source. In a welfarist tort system, autonomy and unanimity are irrelevant. Such a tort system effectively denies the normative appeal of the Pareto principle, making the two substantively incompatible.

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70 Geistfeld, Positive Analysis, supra note __, at 267-69 (explaining how a corrective-justice tort rule could be translated into social welfare function based on the source of individual utilities).

For example, suppose there are 100 individuals in a community that is considering two tort rules. Rule-1 would make each person in the community better off by one unit of welfare, satisfying the Pareto principle. Rule-2 would make 99 people better off by 1.10 units of welfare, while making one person worse off by 8 units of welfare. Suppose the social welfare function is utilitarian (a form of welfarism), so that the social planner gives equal weight to each individual’s welfare. The planner will choose Rule-2, which has a total welfare gain of 100.9 units, whereas Rule-1 has a total welfare gain of 100 units. The unanimous approval of Rule-1 is irrelevant to the utilitarian planner. Welfarism in general, like utilitarianism in particular, merely compares total welfare under the two rules and places no weight on the fact that one rule is unanimously approved whereas the other is not.

As a formal matter, the planner’s disregard of unanimity does not violate the Pareto principle. The Pareto principle requires a pair-wise comparison of the status quo with a proposed change. The principle does not apply to a comparison of Rule-1 and Rule-2 when evaluated from the perspective of the status quo, as in the example above. The pair-wise restriction of the Pareto principle makes it formally consistent with welfarism. Any change from the status quo satisfying the Pareto principle, as would occur with the move from the status quo to Rule-1, necessarily increases total welfare and satisfies the requirements of welfarism.

Despite the formal consistency between the Pareto principle and welfarism, the two are not substantively compatible. An exclusive focus on total welfare excludes any consideration of the source of welfare. All that matters is whether total welfare has been increased or decreased. It is irrelevant whether the change in total welfare is brought about by actions that promote or undermine individual autonomy. By excluding consideration of autonomy or unanimity, welfarism eliminates the normative appeal of the Pareto principle.

Ultimately, the Pareto principle provides no compelling reason for choosing tort rules formulated to maximize social welfare by minimizing costs. The consistency between the Pareto principle and cost-minimizing tort rules is only formal rather than substantive. Insofar as the normative appeal of the Pareto principle is based on individual autonomy, it decisively favors tort rules that protect the individual right to physical security for reasons of autonomy.
D. *The Efficiency-Equity Criterion*

Welfare economists evaluate distributive issues in terms of the efficiency-equity criterion. To understand adequately the rationale for this criterion and its implications for rights-based tort rules, a bit of history is helpful.

Traditional welfare economics of the late nineteenth and early twentieth centuries compared alternative situations by assuming that individual utilities can be measured (cardinal utility) and then compared across individuals. This decision rule selects utility-maximizing outcomes, making its normative justification dependant on utilitarianism. 72

The need to make interpersonal utility comparisons troubled welfare economists. In the late 1930s, prominent economists rejected the utilitarian decision rule in favor of the new welfare economics, which posits that interpersonal utility comparisons are impossible or otherwise outside the scope of economic analysis. The new welfare economics compares alternative economic situations by relying on the Pareto principle, which evaluates policies in terms of unanimous preferences rather than interpersonal utility comparisons.

The new welfare economics recognizes that few policies satisfy the Pareto principle, so it relies on potential Pareto improvements to compare alternative economic situations. This decision rule, widely known as the compensation or Kaldor-Hicks criterion, deems one state of the world to be better than another if those who would gain from the change could compensate the losers for their losses and still be no worse off than in the original state. The compensation criterion selects policies with benefits (the gains of the winners) in excess of costs (the losses of the losers) and forms the basis of cost-benefit analysis.

Any normative justification for cost-benefit analysis based exclusively on hypothetical compensation is troubling.73 Consequently, welfare economists maintain that economic analysis can defensibly ignore distributive questions only if the government can redistribute income via costless or lump-sum transfers between households.74 A lump-sum transfer does not involve administrative or

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other costs and does not affect the behavior of anyone who pays or receives benefits. By relying on such transfers, the government can convert hypothetical compensation into real compensation, turning the potential Pareto improvement identified by cost-benefit analysis into an actual Pareto improvement. No one loses under a cost-benefit rule, and some people gain. The equity of this distributional outcome gives welfare economics a broader normative appeal than the “old” welfare economics with its exclusive reliance on utilitarian forms of justification.

Today, welfare economists no longer assume that questions of distribution can be separated from those of allocative efficiency. The “new” new welfare economics recognizes that the government often does not have the information required to make lump-sum tax redistributions. “It is this limitation on the information of the government which results in taxation being distortionary, and which gives rise to the trade-off between efficiency and equity.”75

For example, suppose that principles of distributive justice require a redistribution from more able to less able individuals. To effectuate such transfers, the government must determine whether someone is of high or low ability. The government cannot rely on self-reporting, because anyone who says she is of high ability would be submitting voluntarily to a higher level of taxation used exclusively for the benefit of someone else. Everyone has an incentive to identify herself as being of low ability, so the government cannot costlessly observe whether someone is of high or low ability. To address this problem, the government must base the tax structure on observable characteristics having some relationship to individual ability. Typically, the government relies on income measures as such a proxy. These measures are imperfect, as higher incomes can be associated with higher levels of ability, effort, or greater luck. Moreover, taxation based on income influences individual incentives to earn income. Efforts to distribute income from an allocatively efficient outcome are likely to distort individual behavior, yielding allocatively inefficient outcomes. Hence the tradeoff between allocative efficiency and equity.

Due to the efficiency-equity tradeoff, welfare economists no longer evaluate transfer mechanisms, such as income taxes, solely in terms of allocative efficiency. According to the current welfare criterion, any given transfer is economically optimal if it is the least costly method for satisfying a given

distributional need.\textsuperscript{76} This criterion minimizes the loss of allocative efficiency for any given distributive or equitable requirement, which is why it can be called the efficiency-equity criterion.\textsuperscript{77}

Any rights-based tort rule is a transfer mechanism between the right-holder and duty-holder, making these rules subject to the efficiency-equity criterion. In order for the analysis to proceed, the desired distributional or equitable outcome must be specified. The rights-based tort rules must be evaluated in relation to the principle of distributive justice that determines the appropriate distribution of wealth and welfare across society as a whole.

This analytic requirement does not turn rights-based tort rules into an instrument of distributive justice. The individual right to physical security, after all, protects the right-holder’s interest in physical security from social redistributions that might otherwise be required by the distributive principle.\textsuperscript{78} But since rights-based tort rules necessarily operate within a broader system of distributive justice, the rules must be compatible with the principle of distributive justice.\textsuperscript{79} Without such compatibility or complementarity, rights-based tort rules will violate the efficiency-equity criterion.

To see why, consider a principle of distributive justice patterned on some simple formula like “to each in equal shares.” To implement this principle, the tax system could determine the wealth of each individual in the community, much like it determines individual income, and then redistribute via individualized taxes and transfers to equalize wealth across the community. As a complement to the tax system, the tort system would minimize accidents costs, thereby increasing social wealth and the total amount to be distributed by the tax system. When used in this manner, a cost-minimizing tort system can probably attain the desired

\textsuperscript{76} Tresch, supra note __, at 13-14.
\textsuperscript{77} The criterion is often called the “efficiency-equity tradeoff,” which is misleading because it suggests that equitable advances necessarily come at the expense of efficiency. As illustrated by the prior analysis of assumption of risk, equitable outcomes can also be allocatively efficient. See also Louis Putterman, John E. Roemer & Joaquim Silvestre, Does Egalitarianism Have a Future?, 36 J. ECON. LITERATURE 861, 862-65 (1998) (explaining why the general problem that makes lump-sum transfers impossible may also make it impossible to achieve allocatively efficient outcomes, creating the possibility that regulations can yield outcomes that are more efficient and equitable than unregulated outcomes).
\textsuperscript{78} See supra notes __ and accompanying text (describing how the right operates against the demands of social welfare). [Part II.A]
\textsuperscript{79} See Perry, Relationship, supra note __, at 257-61 (making this point with respect to “the harm-based understanding of corrective justice” in relation to dynamic and static conceptions of distributive justice).
distributive objective at less cost than a rights-based tort system. For this type of distributive principle, a rights-based tort rule does not satisfy the efficiency-equity criterion.

The violation occurs because the principle of distributive justice is not compatible with the individual right to physical security. When the principle of distributive justice depends exclusively on the total amount of individual wealth or welfare, such as “to each in equal shares,” all that matters is the fact of inequality. The source or reason for the inequality is irrelevant. Everyone is entitled to the same distribution, regardless of their behavior or any other reason for the inequality. The distributive entitlement, therefore, is not affected by inequalities generated by rights-violations, eliminating any reason to incur the allocative inefficiency created by a rights-based tort system. Consequently, rights-based tort rules can violate the efficiency-equity criterion whenever the rationale for the right is not compatible with the principle of distributive justice.

Other principles of distributive justice depend upon the source of inequality, justifying distributive outcomes that do not depend solely upon differences in individual wealth or welfare. The basic idea is that once everyone has the same, just starting point, each can pursue her conception of the good life. Different pursuits typically generate different levels of individual wealth or welfare. For these distributive principles, only certain types of inequalities should be eliminated, depending on the source of the inequality in question. As Thomas Nagel puts it, “The essence of this moral conception is equality of treatment rather than impartial concern for well-being. It applies to inequalities generated by the social system, rather than to inequalities in general.” To use Ronald Dworkin’s terminology, allowing for inequalities based on choice means that a distributive principle should be “endowment-insensitive” and “ambition-sensitive.” One’s position in life should reflect ambitions and choices rather

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81 THOMAS NAGEL, EQUALITY AND PARTIALITY 106 (1991). Nagel identifies five sources of inequality that can be morally distinguished: discrimination; class; talent; effort; and luck. Id. at 103.

than the arbitrary circumstances of endowment beyond one’s control. For this class of distributive principles, fair outcomes depend on individual choice and the source of inequality.\footnote{See generally Kymlicka, supra note __, at 40-41, 73-77 (surveying different theories of distributive justice).}

When operating within this class of distributive principles, cost-minimizing tort rules no longer satisfy the efficiency-equity criterion. The desired overall distributive outcome is attained at lowest cost by rights-based tort rules as required by the efficiency-equity criterion.

Consider the following distribution of wealth that is deemed to be fair because the inequalities stem from individual choices and not endowments.

**Fair Pre-Accident Distribution of Wealth**

<table>
<thead>
<tr>
<th></th>
<th>Brad</th>
<th>Others</th>
<th>Peter</th>
</tr>
</thead>
<tbody>
<tr>
<td>$2</td>
<td>$2 million</td>
<td>$200,000</td>
<td>$110,000</td>
</tr>
</tbody>
</table>

Suppose Peter negligently injures Brad while driving, causing Brad $50,000 of damages. Without a tort system, the accident would result in the following distribution of wealth:

**Actual Post-Accident Distribution of Wealth**

<table>
<thead>
<tr>
<th></th>
<th>Brad</th>
<th>Others</th>
<th>Peter</th>
</tr>
</thead>
<tbody>
<tr>
<td>$1.95</td>
<td>$1.95 million</td>
<td>$200,000</td>
<td>$110,000</td>
</tr>
</tbody>
</table>

The $50,000 reduction in Brad’s wealth occurs only because he had the misfortune of being injured in the crash. But what if that injury is Peter’s responsibility, because the exercise of Peter’s autonomy violated Brad’s right to physical security? In that event, the principle of fairness would deem Peter to be the “owner” of the injury costs, making him responsible for the loss suffered by Brad.\footnote{Cf. Jules L. Coleman & Arthur Ripstein, Mischief and Misfortune, 41 McGill L. Rev. 91 (1995) (arguing that the ownership of accident costs is a normative question). Although the example assumes an antecedently just distribution of wealth, that assumption is not critical. The initial distribution can be distributively unfair, requiring further distributions as a matter of distributive justice. Those distributions, however, are distinct from the $50,000 transfer between Peter and Brad required by the tort right.} Peter would incur a compensatory duty to Brad for the losses caused by the infringement of Brad’s right. This compensatory obligation is not retributive and can be satisfied by consensual arrangements like insurance contracts.\footnote{“Corrective justice goes to the nature of the obligation; it does not prescribe the mechanism by which the obligation is discharged…. Nothing about corrective justice precludes the defendant}
Assuming Peter has no insurance, the compensatory duty he owes to Brad would require the following distribution of wealth:

<table>
<thead>
<tr>
<th>Brad</th>
<th>Others</th>
<th>Peter</th>
</tr>
</thead>
<tbody>
<tr>
<td>$2 million</td>
<td>$200,000</td>
<td>$60,000</td>
</tr>
</tbody>
</table>

The movement from the actual post-accident distribution of wealth to the fair distribution requires a transfer of $50,000 from Peter to Brad. To implement this transfer, all that matters is the risky interaction between Peter and Brad; the wealth held by Others is irrelevant. Peter and Brad are the two parties to the tort suit. By enforcing the rights-based tort rule, the tort system would determine that Peter violated a duty owed to Brad, giving Brad the right to receive $50,000 from Peter as compensation for the injury. *A rights-based tort rule defines the appropriate transfer rule.*

Under these conditions, it makes no sense to separate the tort inquiry from the appropriate transfer inquiry, the type of separation that would otherwise occur if tort rules were designed to minimize accident costs. A tort regime that first determined liability on grounds of cost minimization would then require the tax system to make a separate, costly inquiry regarding the appropriate tax redistribution between Peter and Brad. That tax transfer would yield the same outcome which could have been attained more directly by the rights-based tort rule requiring a transfer of $50,000 from Peter to Brad. The separate tort inquiry on cost minimization would create no social benefit, because the parties would ignore that rule and instead make their decisions by reference to the final tax-transfer rule. The tort inquiry concerning cost minimization would be unnecessary and wasteful. To reduce the total costs of attaining the desired distributive outcome, the tort system could directly implement the appropriate

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86 The problem can be modeled as an extensive game in which the first stage involves care decisions; the second stage involves the risky interaction; the third stage involves enforcement of the cost-minimizing tort rule; and the final stage involves the tax transfers. The concept of subgame perfect Nash equilibrium requires a strategy that is Nash equilibrium for the entire game and for every subgame (played at each stage to the end). *ERIC RASMUSSEN, GAMES & INFORMATION: AN INTRODUCTION TO GAME THEORY* 91 (3d ed. 2001). This concept of rationality requires each actor to consider the decision at each stage by reference to the final stage. Each actor makes the care decisions in stage one by reference to the final stage involving the tax transfers. In effect, each actor “sees through” the intermediate stage involving the cost-minimizing tort rule and instead considers the care decision in terms of the ultimate tax transfers.
transfer rule based upon Peter’s violation of Brad’s right.\textsuperscript{87} A rights-based tort system, therefore, satisfies the efficiency-equity criterion whenever it operates within a broader system of distributive justice that depends upon the source of one’s wealth or welfare.

E. \textit{Distributive Justice and the Pareto Principle}

In finding that rights-based tort rules satisfy the Pareto principle, we only considered those rules in isolation. To satisfy the efficiency-equity criterion, these rules must operate within a broader system of distributive justice that depends upon the source of one’s wealth or welfare. If that type of distributive principle necessarily violates the Pareto principle, then rights-based tort rules would effectively do so as well. A complete analysis of rights-based tort rules requires consideration of whether the complementary principle of distributive justice can satisfy the Pareto principle.

For distributive principles of this type, “Treating people with equal concern requires that people pay for the costs of their own choices.”\textsuperscript{88} The meaning of this requirement is debatable, but for present purposes the only issue is whether there is some such principle of distributive justice that satisfies the Pareto principle.

Consider a distributive principle that apportions social resources in a manner designed to promote equally the individual autonomy of everyone in society. Any social distribution or redistribution is constrained by this requirement. This principle of distributive justice complements the rights-based tort rules under consideration. Each constrains the maximization of social welfare in order to protect individual autonomy. The constraint posed by rights-based tort rules does not violate the Pareto principle, nor does the constraint posed by the principle of distributive justice. When social welfare is not being promoted at the expense of individual autonomy, the two constraints are not binding. When all individuals exercise their autonomy in a manner that increases their individual welfare, the two constraints are not binding and social welfare necessarily increases. In these circumstances, the concern for individual autonomy coincides with the promotion of social welfare, eliminating any potential violation of the Pareto principle. For the same reasons that a rights-based tort system satisfies the

\textsuperscript{87} For more extensive argument of this point, see Mark Geistfeld, \textit{Reconciling Cost-Benefit Analysis With the Principle that Safety Matters More Than Money}, 76 N.Y.U. L. REV. 114, 155-58 (2001)[hereinafter “Safety Principle”].

\textsuperscript{88} KYMLICKA, supra note __, at 75.
Pareto principle, the complementary principle of distributive justice does so as well.\textsuperscript{89}

A rights-based tort system based upon individual autonomy satisfies the efficiency-equity criterion when operating within a broader distributive system that makes the fair allocation of wealth or welfare dependent upon individual choice and responsibility. Due to the shared concern for individual autonomy, the system as a whole also satisfies the Pareto principle. Under these conditions, the rights-based tort rules satisfy the two criteria employed by welfare economists for evaluating distributive policies.

III. Economic Analysis in a Rights-Based Conception of Tort Law

Rights-based tort rules satisfy the distributional requirements of welfare economics for a basic reason—the promotion of autonomy is consistent with the important value judgments underlying modern welfare economics. The concept of autonomy is contested, but the underlying idea is not: “Put most simply, to be autonomous is to be one’s own person, to be directed by considerations, desires, conditions, and characteristics that are not simply imposed externally upon one, but are part of what can somehow be considered one’s authentic self.”\textsuperscript{90} Consequently, “[t]o have the ability to create and dispel rights and duties is what it means to be an autonomous moral agent.”\textsuperscript{91} An autonomy-based tort rule lets the right-holder assume the risk whenever doing so would promote her desires or welfare, an outcome that eliminates any potential conflict between the rights-based tort rule and the Pareto principle. In addition to the Pareto principle, the “main value judgment” involved in modern welfare economics “is called individualism” which maintains that “social ordering ought to be based on individual orderings of alternative states, that is, on individual preferences, where it is implicitly assumed that each individual is the best judge of his or her own

\textsuperscript{89} More formally, the Pareto principle requires a social welfare function that gives higher social welfare to a unanimously preferred alternative state than to the status quo. See supra note ___ and accompanying text. [Part I]. Under conditions of unanimity, all individuals will choose to depart from the status quo. That choice is acceptable as a matter of autonomy, eliminating the constraints that both the tort right and distributive principle would otherwise impose on the promotion of social welfare. Lacking any constraint, social welfare necessarily increases due to the way in which each individual choice increases that individual’s welfare. The social welfare function accordingly gives higher social welfare to a unanimously preferred alternative state than to the status quo as required by the Pareto principle. For a different argument showing that distributive principles of this type do not violate the Pareto principle, see Chang, supra note ___.


preferences. Like autonomy, individualism rests on the normative judgment that the individual is the best person for deciding how to pursue her own good. By promoting autonomy, rights-based tort rules necessarily promote the value of individualism embraced by modern welfare economics.

To be sure, the normative concern for autonomy is not ordinarily justified as a means for satisfying preferences and increasing welfare, unlike the value judgment made by welfare economics. This important difference, though, does not sever the connection between autonomy and individual welfare. As Jules Coleman has persuasively argued, the concern for autonomy ultimately explains why we care about welfare:

Of course, any plausible theory of what is valuable to a person would include the ability to act on the basis of one’s preferences and desires. But that is because autonomous action is valuable to persons understood as planning agents who bear a special relationship of ownership and responsibility to how their life goes, and not because people have a taste for welfare.

Due to the important relationship between autonomy and individual welfare, rights-based tort rules are not merely formally consistent with welfare economics, unlike the formal consistency between cost-minimizing tort rules and the Pareto principle. The best protection of autonomy often will involve protecting the right-holder’s welfare with damages compensation and risk reduction. The best protection of autonomy can even require cost-benefit analysis under certain conditions. For these reasons, the substantive content of rights-based tort rules importantly depends upon economic analysis, even for a tort right justified exclusively by the intrinsic value of autonomy and not the welfare or any other consequence produced by the exercise of autonomy.

A. Individual Welfare and Rights-Based Tort Rules

If the normative value of autonomy resides in the consequences produced by the exercise of autonomy, then individual welfare will be relevant in formulating the rights-based tort rule. A right-holder ordinarily exercises her autonomy by making choices that increase her welfare. The way in which autonomy enhances individual welfare, therefore, will be of central importance.

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93 Coleman, Grounds of Welfare, supra note __, at 1542.
94 See supra Part II.C.
for any consequentialist justification of an autonomy-based tort right, making welfare considerations relevant to the formulation of the tort rule.

The harder question is whether individual welfare has normative significance for autonomy-based tort rules that are not justified by consequentialist reasoning. Individual autonomy can be worth protecting, regardless of the consequences produced by autonomy. Such a conception of autonomy underlies an important class of corrective-justice theories. Since these theories “resolutely insist on a non-consequentialist understanding of the aims they propose for the tort system,” they might not “have a substantial consequentialist component.” 95 A rights-based tort system that implements such a theory of corrective justice could formulate liability rules in a manner that wholly disregards the consequences produced by the rules. The consequences of liability for welfare would be irrelevant, making welfare economics entirely irrelevant as well.

To evaluate this issue, we can consider the theory of corrective justice propounded by Ernest Weinrib. His theory is particularly instructive for our purposes because of its formalist nature that eschews any functionalist understanding of tort law: “Private law … is to be grasped only from within and not as the juridical manifestation of a set of extrinsic purposes. If we must express this intelligibility in terms of purpose, the only thing to be said is that the purpose of private law is to be private law.” 96 Based wholly upon the internal structure of tort law, Weinrib argues that the content of tort law is based on the “self-determining agency” of individuals. 97 The tort right is formulated exclusively in terms of a nonconsequentialist conception of autonomy that focuses “not on an action’s goodness but on its consistency with the freedom of all persons.” 98

In addressing the requirements of reasonable care for purposes of negligence liability, Weinrib rejects the utilitarian balancing of costs and benefits on the ground that it specifies the content of the liability rule in terms of considerations extrinsic to the right-holder and duty-holder. 99 He then argues that

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96 *WEINRIB, PRIVATE LAW*, supra note __, at 5.
97 Weinrib formulates the substantive content of the right in Kantian terms. *Id.* at 84-113.
98 *Id.* at 94.
99 *Id.* at 148.
reasonable care does not depend upon cost considerations for substantial or real risks. Wehrnrib seems to reject any role for the economic analysis of tort law.

But as Robert Rabin has pointed out, the case law establishes that the standard of reasonable care is sensitive to the cost of precautions, and nothing Weinrib says excludes the possibility that “cost consciousness can be incorporated without friction into a corrective justice model.” This leaves the test of reasonable care indeterminate, as long as it meets the formalist constraint of correlative rights and duties” that are internal to the structure of tort law.

For many scholars, indeterminacy fatally undermines a rights-based conception of tort law. A few years ago, Gary Schwartz observed that “in any number of private encounters I’ve had with economically minded scholars, I have heard them dismiss corrective justice writings as out of date, empirically unverifiable, and inherently ‘mush.’” Overly vague liability rules are problematic for a number of reasons, including the problem they pose for autonomy. Mushy tort rules threaten the autonomy of duty-holders by subjecting them to indeterminate liability, undermining their ability to pursue their conception of the good life. As a matter of equality, the principle of corrective justice is concerned about the autonomy of both the right-holder and duty-holder. Overly vague rules can violate the principle of corrective justice.

The problem of vagueness can be solved by incorporating welfare considerations into the fairness analysis. Even within Weinrib’s resolutely nonconsequentialist conception of tort law, welfare matters. To be sure, he argues that the tort “right is not synonymous with welfare, nor wrong with the deprivation of it.” “The reason that rights matter for tort law lies elsewhere.” Nevertheless, Weinrib also recognizes that welfare plays an important role in

100 Id. at 151-52.
102 Rabin, supra note __, at 2276.
103 See, e.g., Craswell, supra note __, at 273 (concluding that the “most serious challenges raised by Kaplow and Shavell” involve the need to specify more completely the justifications for and nature of rights-based legal rules); Kornhauser, Preference, supra note __, at 305 n.3 (rejecting the Kaplow and Shavell claim regarding the appropriateness of resolving all legal question in terms of individual welfare preferences, but finding “broad agreement with their dissatisfaction with the imprecision and poor specification of these [fairness] claims”).
104 Schwartz, supra note __, at 1808.
105 WEINRIB, PRIVATE LAW, supra note __, at 131.
106 Weinrib, Consensus, supra note __, at 14.
formulating the tort rule by serving “the secondary function of concretizing rights and making them quantifiable in particular cases.”\textsuperscript{107}

To illustrate how welfare can concretize the tort right, we can reconsider the tort rule governing risky interactions between drivers and pedestrians. Due to the importance of automobile driving for the exercise of autonomy, the tort rule cannot ban the activity merely because it might injure pedestrians. Such a ban would violate the requirement that the fair tort rule must equally respect the autonomy of the right-holder and duty-holder. The fair tort rule must instead be formulated in a manner that permits the activity despite the risk that pedestrians will be physically injured.

The tort rule of negligence dictates how safely one should drive and the obligations one incurs in the event that a pedestrian is injured in a car accident. With respect to these issues, the best protection for the pedestrian’s autonomy must reside in protecting her welfare—that is the only way to protect the interests governed by the individual right to physical security. A liability rule that adequately protects the right-holder’s welfare must also equally respect the welfare of the duty-holder. The fairness inquiry, therefore, must formulate the negligence rule in a manner giving equal consideration to the welfare levels of the right-holder and duty-holder.

This formulation requires what I call \textit{distributive economic analysis}, a type of economic analysis that identifies the way in which liability rules affect the distribution of welfare between the right-holder and duty-holder. By limiting the inquiry to the right-holder and duty-holder, distributive economic analysis relies upon considerations that are intrinsic to the tort suit and apply correlatively to the two parties as required by corrective justice.

When evaluated in this manner, a cost-benefit negligence standard is problematic as Weinrib has concluded, but not for the reasons he provides. Recall that under ideal conditions, the driver incurs total tort obligations equal to the burden of precautions $B^*$ and the compensatory payment to the pedestrian for facing the residual risk captured by the WTA* measure.\textsuperscript{108} The compensatory payment of the WTA* measure can take the form of a damages payment for the injury caused by the risk, a damages measure that eliminates the severe problem of indeterminacy now plaguing tort damages for nonmonetary injuries like pain.

\begin{flushleft}
\textsuperscript{107} \textit{Id.} \\
\textsuperscript{108} See supra notes __ and accompanying text. [Part II.B]
\end{flushleft}
and suffering. In the context under consideration, the accident would kill the pedestrian. For fatal accidents—the most severe harm to the individual interest in physical security—the pedestrian cannot be compensated by tort damages. What does it mean to have a right to physical security in such a case? The problem is starkly posed by nonconsensual risks threatening fatal injury, although a significant compensatory problem also exists for any nonconsensual risk threatening severe physical injury. For these risks, the right is not adequately protected by a negligence standard requiring cost-benefit precaution, because that amount of precaution is required of the driver under ideal conditions when the pedestrian can be fully compensated for the injury. For contexts in which the driver does not incur a fully compensatory damages obligation, the cost-benefit negligence standard gives the driver a windfall—she incurs tort obligations consisting only of the cost-benefit amount of care $B^*$, even though the ideal compensatory outcome involves a more demanding tort obligation of $(B^* + 1)$.

Consider an injury does not alter the pedestrian’s utility function when the risk of injury is 1 in 10,000 and the pedestrian has a WTA risk measure of $500. The WTA measure includes the cost of risk aversion, making the pedestrian risk neutral with respect to any decision concerning her receipt of the WTA measure. A risk-neutral person whose utility function is not altered by the gamble in question is indifferent between “a certainty consequence [and] any risky prospect whose mathematical expectation of consequences equals that certainty.” Jack Hirshleifer & John G. Riley, The Analytics of Uncertainty and Information 23 (1992). Consequently, the pedestrian would be indifferent between a tort rule giving her a guaranteed receipt of the $500 WTA compensatory proceeds prior to each risky interaction and a tort rule giving her damages of $5,000,000 in the uncertain event of injury (the mathematical expectation of the uncertain damages award, $1/10,000 \times 5,000,000$, equals the $500 certainty provided by the WTA proceeds). The right-holder, therefore, can receive the WTA compensation by a damages remedy equal to the WTA measure multiplied by the reciprocal of the risk of injury ($500 \times 10,000$). Not only does this damages remedy satisfy the requirements of tort law with respect to damages, it also protects the tort right in a manner that eliminates the constitutional problem of due process which quite plausibly plagues the existing damages practice of providing juries with no guidance on how to compute pain-and-suffering damages. See Mark A. Geistfeld, Due Process and the Determination of Pain-and-Suffering Tort Damages, 55 DePaul L. Rev. 439 (forthcoming 2006).

When the right-holder suffers severe physical injury, her utility function can be altered so that the satisfaction she gets from a range of activities is changed from the pre-injury state. More formally, the injury can alter the victim’s marginal utility of income or wealth. These injuries frequently reduce the victim’s marginal utility of income—a comatose victim being the most obvious example—and so the right-holder would prefer to receive the WTA risk proceeds prior to the risky interaction rather than being provided with a damages remedy formulated in terms of the WTA measure. See supra note ___ (explaining that the WTA measure produces fully compensatory damages only when the right-holder’s utility is the same in the pre-accident and post-accident states of the world). [Immediately preceding note]. A damages remedy formulated in terms of the WTA measure no longer implements the compensatory ideal, an outcome consistent with the tort rule that damages for the loss of life’s pleasures—a form of damages for pain and suffering—are not supposed to “restore the person to his previous position,” but should instead only “give the injured person some pecuniary return for what he has suffered and is likely to suffer.” Restatement (Second) of Torts § 903 cmt. a (1977).
WTA*). When evaluated in terms of the fair distribution of welfare, a cost-benefit negligence standard unfairly disadvantages the right-holder and gives the duty-holder a windfall.

This distributional problem can be ameliorated by the standard of care. Since the driver cannot pay the WTA* amount to the pedestrian in the form of tort damages for a fatal accident, the negligence standard of care can instead require the driver to make the WTA* payment in the form of safety precautions. A negligence standard requiring the driver to take precautions costing \((B^* + WTA^*)\) imposes the same total burden on the driver as she would incur under ideal conditions. As compared to the efficient standard of care \(B^*\) that is appropriate under ideal conditions, the more exacting standard \((B^* + WTA^*)\) reduces risk. The risk reduction directly protects the security interest and increases the welfare of the pedestrian by making it less likely that she will be seriously injured or killed. A more exacting negligence standard more closely approximates the distribution of welfare that would obtain under ideal compensatory conditions, producing a more fair distribution of welfare between the right-holder and duty-holder as required by the individual right to physical security.  

111 On one view, negligence liability cannot reduce risk below the cost-benefit amount, because the duty-holder would treat any negligence standard requiring more than the cost-benefit amount of care as a form of strict liability. Under strict liability, the duty-holder chooses the cost-benefit amount of care, as care beyond that point will cost more than the expected reduction in liability costs. By this same reasoning, if the negligence standard requires more than the cost-benefit amount of care, the duty-holder will choose to be negligent, as the expected liability costs are less than the cost of the required care in excess of the cost-benefit amount. When the prospect of paying damages for injury is merely the “price” that the duty-holder must pay for being negligent, the actor will pay the price when it is cost-effective to do so. Under these conditions, negligence liability can reduce risk only to the cost-benefit amount.

Contrary to this reasoning, one cannot choose to be negligent in exchange for paying the “price” of compensatory damages. A duty-holder who chooses to act unreasonably in conscious disregard of the duty of care is subject to punitive damages and criminal liability. See, e.g., DOBBS, supra note __, § 381, p. 1065 (“A deliberate policy of corporate misconduct may suffice” for punitive damages); WAYNE R. LAFAVE, SUBSTANTIVE CRIMINAL LAW § 5.4(b) (2d ed. 2003) (explaining that criminal negligence requires either a subjective awareness of the unreasonable risk or a risk significantly greater than an unreasonable risk); see also Robert D. Cooter, Punitive Damages for Deterrence: When and How Much?, 40 ALA. L. REV. 1143 (1989) (showing that duty-holders who choose to be negligent will ordinarily find it most profitable to deviate substantially from the requirements of reasonable care). The prospect of punitive damages and criminal liability is sufficient to give the duty-holder an incentive to comply with negligence rule requiring more than the cost-benefit amount of care. Consequently, such a negligence rule can reduce risk below the cost-benefit amount. See also Geistfeld, Compensation, supra note __, at 604 n.52 (providing other reasons in support of this conclusion).

112 For expositional simplicity, I am assuming that the risky interaction involves one driver and one pedestrian. When numerous individuals are exposed to the risk governed by the tort duty, the
Once the fair distribution of welfare is incorporated into the analysis, it becomes apparent why the negligence standard should require more than the cost-benefit amount of safety for risky interactions between drivers and pedestrians. In addition to supporting Weinrib’s rejection of the cost-benefit negligence standard, the welfare analysis supports Rabin’s claim that “cost consciousness can be incorporated without friction into a corrective justice model,” a necessary feature of any rights-based negligence rule that conforms to the case law.

By “quantifying” or “concretizing” the right in welfare terms, the fairness inquiry can produce well-defined liability rules. One can specify the standard of care for a rights-based negligence rule with the same degree of precision as the cost-minimizing rule, thereby solving the problem of indeterminate or mushy tort rules protecting the individual right to physical security. For this reason alone, welfare considerations are likely to be of great significance in any rights-based tort system.

B. Deterrence and Rights-Based Tort Rules

The impact of a liability rule upon individual welfare importantly depends upon deterrence considerations. Many of the leading rights-based theories of tort law seemingly reject the relevance of deterrence in formulating the liability rule. Once again, the corrective justice theory of Ernest Weinrib illustrates this point:

[D]eterrence [is not] a component in the justification of particular tort norms … because the corrective justice approach to justification intrinsically links the parties to each other as the doer and sufferer of an injustice, whereas deterrence can be applied independently to each of the parties. Corrective justice and deterrence thus represent incompatible modes of understanding the justification for particular tort doctrines.

As Weinrib further explains, for purposes of corrective justice “the only normative factors to be considered significant are those that apply correlative to

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rights-based tort rule no longer necessarily diverges from the cost-benefit tort rule. See Geistfeld, Safety Principle, supra note __, at 149-51.
113 Rabin, supra note __, at 2275-76.
114 See Schwartz, supra note __, at 1807 (stating that the corrective-justice theories of Jules Coleman and Ernest Weinrib each “refute[e] any idea of deterrence as an appropriate tort goal”).
115 Weinrib, Deterrence, supra note __, at 624.
both parties.” 116 This requirement rules out considerations of general deterrence, which is commonly defined as “the tendency of people who have not yet been sanctioned to be deterred by the prospect of sanctions for committing an illegal act.” 117 By depending only upon the threat of sanction, general deterrence makes irrelevant the identity of the party seeking the sanction, such as a particular individual who seeks to vindicate her tort right to physical security. Considerations of general deterrence apply independently to the defendant rather than correlative to both parties, leading Weinrib to conclude that corrective justice and deterrence are incompatible modes of justification.

This reasoning does not establish the incompatibility between corrective justice and all forms of deterrence, however. Even if rights-based tort rules cannot depend upon considerations of general deterrence, the rules can rely upon considerations of individual or specific deterrence. General deterrence refers to the way in which the liability rule affects behavior in general, whereas individual deterrence refers to the way in which a liability rule specifically affects the behavior of the individual duty-holder. Individual deterrence can be relevant to the formulation of a tort rule for a variety of reasons, including the desire to minimize the social cost of accidents. 118 Some of these reasons will not satisfy the requirements of corrective justice. But as long as the reasons are limited to factors that apply correlative to both parties, considerations of individual deterrence can be incorporated into a liability rule in the manner required by corrective justice.

Once again, this conclusion can be illustrated by the tort rule governing the risky interaction between a driver and pedestrian. Recall that the fair negligence standard requires precautions in excess of the cost-benefit amount in order to reduce risk and protect the pedestrian’s right to physical security, protection not otherwise adequately afforded by the damages remedy. 119 In this context, the tort rule relies on deterrence considerations that are wholly internal to the tort suit and apply correlative to both parties as required by corrective justice.

A rights-based tort system that relies upon considerations of individual deterrence is capable of explaining actual torts practice. The most widespread understanding of tort law, developed by the work of a large number of the most influential tort scholars in the Twentieth Century, maintains that the purpose of

116 Id. at 626-27.
118 See, e.g., SHAVELL, FOUNDATIONS, supra note __ , at 516-18.
119 See supra notes __ and accompanying text. [Immediately preceding subsection]
tort law is to compensate and deter.120 This understanding of tort law has been adopted by the Restatement (Third) of Torts, which justifies negligence liability both on the ground that it “remedies an injustice done by the defendant to the plaintiff” and gives “actors appropriate incentives to engage in safe conduct,” thereby improving “social welfare” and advancing “broad economic goals.”121 Negligence liability necessarily gives all duty-holders the incentive to act safely, even when formulated in terms of individual deterrence. The fact that individual deterrence also helps to improve social welfare surely counts in its favor, even if that particular rationale is irrelevant for protecting the right. To persuasively explain existing torts practice, a rights-based theory of tort law must account for individual deterrence.

C. Cost-Benefit Analysis in a Rights-Based Torts System

In addition to relying upon considerations of individual welfare and individual deterrence, a rights-based torts system can also rely upon cost-benefit analysis in the appropriate conditions. The tort rule gives the right-holder’s interest in physical security a relative legal priority over the competing liberty interests of the duty-holder, including the economic interest. Due to the interpersonal priority of the security interest over the economic interest, the individual tort right has no objective monetary equivalent. The “victim’s right not to be harmed” is not “commensurate with money,” since the right-holder’s interest in physical security and the duty-holder’s interest in money “are not conceptually equated as fungible commodities.”122 But even though the tort right is not commensurate with money, the appropriate protection of that right can depend upon cost-benefit analysis. The right governs the interpersonal conflict of interests between the right-holder and duty-holder, and such a conflict does not arise in most product cases—those involving product sellers and consumers. These cases involve an intrapersonal conflict of the right-holder’s security and economic interests, a conflict that is fairly mediated by cost-benefit analysis.

By selling a product, the manufacturer creates the risk of physical injury to which the consumer is exposed. Any tort burdens incurred by the manufacturer—the cost of safety precautions and injury compensation—are passed onto the consumer in the form of higher prices. Tort liability will increase product costs, which then affects price, aggregate demand, and the net profits of product sellers. These impacts on the interests of product sellers are not relevant to the normative

analysis, however. The equilibrium price must cover all of the seller’s costs, including liability costs. At this baseline, the consumer pays for the full cost of tort liability. Another baseline could alter the conclusion by producing outcomes in which the cost of liability is shared between the consumer and manufacturer.\textsuperscript{123} The appropriate baseline accordingly determines whether or not consumers incur the full cost of tort liability. The appropriate baseline cannot be determined by economic analysis, because cost-benefit analysis depends on prices which in turn depend on the initial allocation of legal entitlements or property rights.\textsuperscript{124} The initial allocation must instead depend upon normative justification, and so the normatively justified tort rule defines the appropriate baseline for evaluating the distributive impact of tort liability. At this baseline, the consumer pays for the full cost of tort liability, since the equilibrium price must cover all of the seller’s costs, including its liability costs. The normatively justified tort rule depends only upon consideration of these consumer interests.

This reasoning explains why products liability law recognizes that “it is not a factor . . . that the imposition of liability would have a negative effect on corporate earnings or would reduce employment in a given industry.”\textsuperscript{125} Product cases only implicate an intrapersonal conflict of the consumer’s interests in physical security and liberty or money.

In comparing his or her own security and liberty interests, the consumer gives no special priority to either one. The consumer prefers to pay for product safety only if the benefit of risk reduction (borne by the consumer) exceeds the cost of the safety investment (also borne by the consumer via the associated price increase). Consumers reasonably expect product safety decisions to be governed by a cost-benefit calculus because that decisional rule maximizes consumer well-being or welfare.\textsuperscript{126} The adequate protection of a consumer’s tort right, therefore, depends upon cost-benefit analysis, even though the tort right is not commensurate with money.

\textsuperscript{123} Given a baseline of no liability, the adoption of tort liability would increase cost and price, which in turn could decrease aggregate demand and thereby reduce price. Due to the price reduction, as compared to a baseline of no liability, consumers need not bear the full cost of tort liability, depending on the relevant elasticities. See Richard Craswell, \textit{Passing On the Costs of Legal Rules: Efficiency and Distribution in Buyer-Seller Relationships}, 43 STAN. L. REV. 361 (1991).

\textsuperscript{124} See supra note 3 and accompanying text.

\textsuperscript{125} \textsc{Restatement (Third) of Torts: Prod. Liab.} § 2 cmt. f (1998).

\textsuperscript{126} See generally \textsc{Geistfeld, Principles of Products Liability, supra note }\_\_\_ (explaining why the consumer reasonably expects the amount of product safety required by cost-benefit analysis and showing how this principle explains the important substantive doctrines of products liability).
The fair distribution of welfare is an important consideration in a rights-based tort system. For risky interactions like those between drivers and pedestrians, the rights-based rule does not minimize costs. For risky interactions in contractual settings like those involving product sellers and consumers, the fair rule is no different than the cost-minimizing rule. As these cases illustrate, the demands of fairness can coincide with the demands of allocative efficiency.

CONCLUSION

The conventional economic analysis of tort law formulates liability rules to minimize the social cost of accidents. This single role does not seem limiting, because the conventional approach claims that the tort system should only minimize costs.

The claim, of course, is normative. For economists, “the modern interpretation of ‘common good’ typically involves Pareto optimality.”127 Not surprisingly, the proponents of cost-minimizing tort rules have tried to justify the rules with the Pareto principle.

Richard Posner was the first to justify cost-minimizing tort rules in these terms.128 The Pareto principle requires any change in liability rules that would make at least one person better off and no one worse off. Everyone presumably would consent to such a change, so Posner concluded that each person, if given the opportunity, would give ex ante consent to cost-minimizing tort rules, providing an autonomy-based justification for a cost-minimizing tort system.

Posner’s argument ultimately fails. It relies on hypothetical consent, undermining its normative force.129 The argument also does not justify a cost-minimizing tort system. Cost-benefit analysis cannot specify initial entitlements. Any change from the status quo—the set of initial entitlements—will create winners and losers. A cost-reducing change, therefore, is not required by the Pareto principle unless the losers are adequately compensated for the change. Lacking such compensation, a cost-minimizing tort system promotes allocative efficiency rather than Pareto efficiency, contrary to Posner’s claim.

A different tack to the problem was subsequently taken by Louis Kaplow and Steven Shavell, who rely upon violations of the Pareto principle as the mode

127 Id.
for justification. They have proven that any “fair” tort rule can violate the Pareto principle by blocking a change in the rule that would be preferred by everyone. Insofar as this outcome is undesirable, the Pareto principle provides a reason for rejecting such “fair” tort rules in favor of the welfare-maximizing rules that satisfy the Pareto principle. The welfare-maximizing rule tends to be allocatively efficient, thereby justifying cost-minimizing tort rules.

This argument also founders. Kaplow and Shavell assume that any plausible rights-based tort rule satisfies their analytic definition of “fairness” and is governed by their proof. Not all rights-based tort rules satisfy this analytic definition. A rights-based rule can constrain the ability of the tort system to promote social welfare at the expense of autonomy. Such a constraint on social welfare does not make irrelevant the welfare levels of the individual right-holder and duty-holder. The constraint is not binding when the right-holder exercises her autonomy by waiving the right when doing so is in her interest. In these circumstances, the right-holder’s exercise of autonomy also promotes social welfare and satisfies the Pareto principle. This class of rights-based tort rules also persuasively explains tort practice and thus refutes the Kaplow and Shavell claim that any set of plausible rights-based tort rules violates the Pareto principle.

This class of rights-based tort rules is not merely formally consistent with the requirements of welfare economics. The exercise of autonomy ordinarily promotes individual welfare. In many circumstances, the only way to protect adequately the right involves protecting the right-holder’s welfare in some manner that does not unfairly burden the welfare of the duty-holder. The way in which tort liability affects the distribution of welfare requires distributive economic analysis, which in turn eliminates the vagueness that otherwise seems to be characteristic of fair tort rules. Even for the class of tort rules justified entirely by a nonconsequentialist concern for autonomy, economic analysis will be integral to the formulation of liability rules.

Applied in this way, the economic analysis of tort law can operate in the manner envisioned by one of its founders, Guido Calabresi. Although Calabresi was one of the first scholars to analyze how tort liability affects accident costs, he did not make the stronger claim that tort law should minimize the social cost of accidents. For Calabresi, justice or fairness is not “a goal of the same type as cost reduction but … a veto or constraint on what can be done to achieve cost reduction.” To the principle of fairness is more than a constraint, however. “[F]airness is the final test which any system of accident law must pass.”

Just as economic analysis must be guided by a principle of fairness, the principle of fairness also depends upon economic analysis at the stage of implementation. This symbiotic relationship has been almost entirely ignored in the ongoing debate about the appropriate purpose of tort law, resulting in the mistaken impression that tort law requires either a fairness inquiry that excludes economic analysis, or an economic inquiry that excludes any concern for fairness. A rights-based tort system can satisfy the distributional requirements of welfare economics and importantly depend upon economic analysis. As a distributional matter, there is no conflict between efficiency and fairness in tort law.

*Anything About Them?*, 69 Iowa L. Rev. 833, 847 (1984) (observing that economic analysis “certainly does not tell us what weight to give to other distributional goals that the society seems to value…. It does, however, give us an analytical structure that allows us to see far better what is at stake in the choice of systems [governing accidents].”

131 CALABRESI, *supra* note __, at 24 n.1.