The Tort Entitlement to Physical Security as the Distributive Basis for Environmental, Health, and Safety Regulations

*Mark A. Geistfeld**

In a wide variety of contexts, individuals face a risk of being physically harmed by the conduct of others in the community. The extent to which the government protects individuals from such harmful behavior largely depends on the combined effect of administrative regulation, criminal law, and tort law. Unless these different departments are coordinated, the government cannot ensure that individuals are adequately secure from the cumulative threat of physical harm. What is adequate for this purpose depends on the underlying entitlement to physical security. What one has lost for purposes of legal analysis depends on what one what was entitled to in the first instance. Consequently, any mode of safety regulation that requires an assessment of losses or costs ultimately depends on a prior specification of entitlements. For reasons of history and federalism, the entitlement in the United States can be derived from the common law of torts. In addition to establishing how costs should be measured, the tort entitlement also quantifies any distributive inequities that would be created by a safety standard and shows how they can be redressed within the safety regulation. When applied in this manner, the tort entitlement to physical security promotes substantive consistency across the different departments of law by serving as the distributive basis for

* Sheila Lubetsky Birnbaum Professor of Civil Litigation, New York University School of Law. My presentation of this argument greatly benefited from Ronen Perry's insightful commentary and the ensuing discussion with other participants in the *New Approaches for a Safer and Healthier Society* conference at Tel Aviv University. This project was supported by the Filomen D'Agostino and Max E. Greenberg Research Fund of the New York University School of Law.

environmental, health, and safety regulations that operate entirely outside of the tort system.

Introduction

Different departments of law protect the health and safety of citizens. Protection was first afforded by the criminal justice system, complemented by the tort system. With the advent of the modern administrative state, the government has employed an array of other regulatory institutions. In the United States, for example, polluters are subject to a variety of statutory and regulatory requirements enforced by the Environmental Protection Agency; a different federal agency regulates workplace safety; another one regulates prescription drugs and medical devices; and other federal agencies regulate other matters of public health and safety.[1] The states also have regulatory agencies. The extent to which the government protects individuals from harmful behavior now largely depends on the combined effect of administrative regulation, criminal law, and tort law.

To ensure that individuals are adequately protected from the physical harms threatened by the risky behavior of others in the community, the government must coordinate these different bodies of law. From the individual's perspective, the extent to which the law protects against physical harm depends on how the government regulates risky behavior in its entirety. Even if individuals were adequately safe while traveling on the highway, their overall security would be unduly threatened if they then had to drink unsafe water upon arrival at their destination. In the absence of coordination across the different departments of law, the government cannot ensure that individuals are adequately secure from the overall threat of physical harm.

What is adequate for this purpose depends on the underlying safety norm that determines the protection that ought to be supplied by the government. What is the amount of safety to which one is entitled? The individual entitlement or right to physical security specifies the baseline for evaluating the efficacy of environmental, health, and safety regulations.

The extent to which individuals ought to be protected from physical harm turns on difficult normative issues, but there is also an associated problem of immense practical importance: what is the *legal* source of the individual entitlement to physical security? An underlying legal specification of the entitlement supplies both the legal baseline for evaluating the efficacy of any

---

1 *See* Robert L. Rabin, *Federal Regulation in Historical Perspective*, 38 Stan. L. Rev. 1189, 1279-95 (1986).

particular safety standard and the safety norm for coordinating the different bodies of law that collectively determine the extent to which the government protects individuals from harmful behavior.

As Part I explains, the entitlement in the United States can be derived from the common law of torts for reasons of history and federalism. This common-law entitlement could be displaced by statute due to the supremacy of legislative law, but Part II shows why a statutory safety standard ordinarily depends on a prior specification of the underlying entitlement to physical security. For purposes of legal analysis, the extent to which someone has been injured or burdened by a particular form of conduct depends on the extent to which that person is legally entitled to the good in question. Consequently, different specifications of the entitlement can substantially alter the measurement of costs within any safety standard that requires a comparison of, or balance between, injury costs and precautionary burdens, fundamentally altering the amount of safety required by the standard. Any safety standard that depends on cost ultimately depends on the underlying entitlements, which explains why federal environmental, health, and safety regulations do not ordinarily override or displace the tort entitlement to physical security.

Part III then analyzes the tort entitlement, concluding that tort law grants a compensatory right to those individuals threatened by the foreseeable risk of physical harm. Part IV shows how this compensatory entitlement can be used in the promulgation of federal regulations. By establishing how costs should be measured, the compensatory tort entitlement also quantifies any distributive inequities that would be created by a safety standard and shows how they can be redressed within the safety regulation. When applied in this manner, the common-law tort entitlement can serve as the distributive basis for statutory safety standards, thereby promoting substantive consistency across the varied forms of environmental, health, and safety regulations.

I. Locating the Entitlement to Physical Security

A legal entitlement or right determines the extent and type of force that the legal system will apply in order to protect an individual interest.[2] Like any other entitlement, the entitlement protecting the individual interest in physical security can take different forms. Do individuals have a right to be compensated for their physical harms, or must they instead pay to protect themselves from

---

2 *See generally* Madeline Morris, *The Structure of Entitlements*, 78 Cornell L. Rev. 822 (1993) (identifying components of entitlements giving force to the protection of individual interests).

injury? Do other conditions apply? Resolution of these questions depends on how the law has specified the individual entitlement to physical security.

But which body of law specifies this right? The issue has been largely unaddressed, presumably because the legal entitlement to physical security in any given case appears to be specific to the legal rule governing the safety question in that case. Whether the entitlement is limited in this manner, however, cannot be conclusively established without prior analysis of whether any single body of law plausibly determines the substantive content of the individual entitlement to physical security for other bodies of law. The law is hierarchical, with one body of law being supreme over other bodies of law. In the United States, the federal constitution is the first place to look for an individual entitlement to physical security.

The U.S. Constitution does not expressly recognize this entitlement. An express federal constitutional provision recognizing an individual right to physical security "ran the risk of falsely implying that Congress or the federal courts enjoyed the authority to enact a national body of common law."[3] The protection of health and safety instead is part of the "historic police powers of the States."[4] Consequently, if there is a federal constitutional right to physical security — an open question — it must be *implied* under the Fourteenth Amendment as an obligation for the federal government to ensure that the states adequately protect individuals from physical harm.[5] Even if there is not such a federal constitutional right, then by default, the "historic police powers of the States" would still be the most likely source of an individual right to physical security.

> Twenty-seven out of thirty-seven state constitutions in 1868 [when the Fourteenth Amendment was ratified] . . . declared as a matter of

---

3 John C.P. Goldberg, *The Constitutional Status of Tort Law: Due Process and the Right to a Law for the Redress of Wrongs*, 115 Yale L.J. 524, 562 (2005) (discussing "the exclusion of a right to remedy provision from the Bill of Rights") (footnote omitted).

4 Wyeth v. Levine, 555 U.S. 555, 565 (2009) (referring to the common-law regulation of product safety).

5 *See generally* Goldberg, *supra* note 3 (arguing that the Privileges and Immunities Clause along with the Due Process Clause of the Fourteenth Amendment requires the federal government to ensure that the states provide laws for redressing violations of individual rights to physical security and the like); *see also* John Harrison, *Reconstructing the Privileges and Immunities Clause*, 101 Yale L.J. 1385, 1416 (1992) ("The privileges and immunities of state citizenship . . . are private law rights of property ownership, contractual capacity, and personal security, and access to governmental mechanisms that protect those primary rights.").

> positive state constitutional law the existence of natural, inalienable, inviolable, or inherent rights. A typical such state constitutional provision read, "All men are by nature free and independent, and have certain inalienable rights, among which are those of enjoying and defending life and liberty, acquiring, possessing and protecting property: and pursuing and obtaining safety and happiness." Seventy-one percent of all Americans in 1868 lived in states whose positive state constitutional law acknowledged the existence of these kinds of natural, inalienable, inviolable, or inherent individual rights . . . .[6]

These state constitutional provisions "protected rights grounded in natural law" according to an exhaustive study of the case law running up to 1868, but the cases that expressly relied on these constitutional provisions did not involve the wide-ranging claims of bodily injury that presumably are governed by a right to physical security.[7] The reason can be inferred from another provision characteristic of state constitutions. Today "[o]ver thirty-five state constitutions contain provisions stating, more or less directly, that the courts of the state should be open to all and provide remedies for injury."[8] This constitutional right becomes relevant only if state law does not otherwise provide individuals with an adequate remedy for injuries to their legally protected interests.

Where, then, should one look within the "historic police powers of the States" to determine how the law fundamentally protects the individual interest in physical security? "Most jurisdictions have so-called 'common law reception' statutes, or constitutional provisions, which adopt the common law as the rule of decision for the state 'except as altered' by the legislature."[9] For noncriminal behavior threatening physical harm, the common law of torts quite plausibly supplies the baseline definition of the individual entitlement to physical security.

---

6 Steven G. Calabresi & Sarah E. Agudo, *Individual Rights Under State Constitutions When the Fourteenth Amendment Was Ratified in 1868: What Rights Are Deeply Rooted in American History and Tradition?*, 87 Tex. L. Rev. 8, 88 (2008) (quoting Cal. Const. of 1849, art. I, § 1).

7 Steven G. Calabresi & Sofia M. Vickery, *On Liberty and the Fourteenth Amendment: The Original Understanding of the Lockean Provisos* 7 (Nw. Univ. Sch. of Law, Pub. Law & Legal Theory Series No. 14-08, 2014), *available at* http://ssrn.com/abstract=2397564.

8 John H. Bauman, *Remedies Provisions in State Constitutions and the Proper Role of the State Courts*, 26 Wake Forest L. Rev. 237, 237 (1991) (footnote omitted).

9 *Id.* at 283.

II. Entitlements and the Measurement of Costs

Although the baseline entitlement to physical security can be located within the common law of torts, a statutory safety standard would seem to override this entitlement due to the supremacy of legislative law. After all, the extent to which legislation will protect an individual from harm is specified by its safety standard, suggesting that the statutory standard wholly defines the individual right to physical security for the class of cases governed by the statute. A cost-benefit safety standard, for example, requires any precaution that costs less than the safety benefit or amount by which the precaution reduces risk and decreases expected injury costs. This statute protects individuals from physical harm with the mandated safety precautions satisfying the cost-benefit test, and so the statutory safety standard would seem to fully define the individual entitlement to physical security in these cases, thereby displacing any baseline common-law entitlement.

To determine whether an entitlement can be formulated in this manner, we can consider the claim made by influential legal economists that legal entitlements can be derived by cost-benefit analysis. Richard Posner famously relied on cost-benefit analysis (under the guise of wealth maximization) as the sole criterion for specifying the content of legal entitlements.[10] Others rejected Posner's claim that the law is solely concerned about the maximization of wealth, but the resultant approach of "liberal law and economics" also relies on cost-benefit analysis to specify legal entitlements.[11] While disagreeing about whether legal entitlements ought to depend solely on the criterion of allocative efficiency, legal economists have often agreed that the substantive content of a legal entitlement can be fully specified by cost-benefit analysis. If this conclusion were valid, then a statutory safety standard based on any form of cost-benefit analysis could fully define the entitlement, thereby displacing the preexisting common-law entitlement.

As is now widely recognized, cost-benefit analysis is often unable to identify a unique allocatively efficient outcome. Different specifications of the entitlement can each be efficient, making it impossible to select one based solely on the cost-benefit criterion of efficiency. By identifying the source of this indeterminacy, we can see why an entitlement cannot be fully defined by a statutory safety standard that requires any assessment of cost or comparative harm.

---

10 *See, e.g.*, William M. Landes & Richard A. Posner, The Economic Structure of Tort Law (1987).

11 Duncan Kennedy, *Cost-Benefit Analysis of Entitlement Problems: A Critique*, 33 Stan. L. Rev. 387, 387-88 (1981).

The indeterminacy stems from the two different measures of price or cost employed by cost-benefit analysis. "The conventional welfare measures for price changes are the compensating . . . and equivalent . . . variations, which correspond to the maximum amount an individual would be willing to pay (WTP) to secure the change or the minimum amount she would be willing to accept (WTA) to forgo it."[12] Whether one who is threatened by a risk of injury must pay for protection or instead be compensated depends on the initial entitlement.[13] If the potential victim is not entitled to be protected from the risk of physical harm, then the associated injury cost depends on the maximum amount of money that the potential victim would be willing to pay (WTP) to eliminate the risk threatening such harm. If the potential victim instead is entitled to be protected from the risk, then the cost of physical harm depends on the minimum amount of money that the potential victim would be willing to accept (WTA) as compensation for facing the risk. Different specifications of the entitlement accordingly yield different levels of income for the individual, creating wealth effects that can cause a significant divergence between the WTP and WTA measures. Consequently, the "efficiency norm is incapable of uniquely assigning fundamental rights. Pure wealth effects make it possible to find that any existing allocation of rights will be efficient."[14]

Cost-benefit analysis is even less capable of identifying a unique allocatively efficient specification of initial entitlements for cases in which the interest protected by the right — such as bodily integrity — has few, if any, good substitutes that can be purchased with money. "[H]olding income effects constant, the smaller the substitution effect (i.e., the fewer substitutes available for the [legally protected interest]) the greater the disparity between WTP and WTA."[15] In the extreme case of certain death, for example, "WTP could equal the individual's entire (finite) income, while WTA could be infinite."[16] As is true in the case of income or wealth effects, substitution effects can cause these two measures of injury cost to differ significantly. Once again,

---

12 W. Michael Hanemann, *Willingness to Pay and Willingness to Accept: How Much Can They Differ?*, 81 Am. Econ. Rev. 635, 635 (1991).

13 *See, e.g.*, Robert Cameron Mitchell & Richard T. Carson, Using Surveys to Value Public Goods: The Contingent Valuation Method 30 (1989) ("The choice between the WTP or WTA formulation is a question of property rights: does the agent have the right to sell the good in question or, if he wants to enjoy it, does he have to buy it?").

14 Mario J. Rizzo, *The Mirage of Efficiency*, 8 Hofstra L. Rev. 641, 651 (1980); *see also* Kennedy, *supra* note 11, at 401-21 (relying on the "offer-asking problem" to reach this same conclusion).

15 Hanemann, *supra* note 12, at 635.

16 *Id.* at 635-36.

the two entitlements associated with these two measures could each pass a cost-benefit analysis and be deemed efficient.[17]

To address this problem, Richard Posner has argued that cost-benefit analysis can "value" physical harms in terms of either the WTP or WTA measure, "whichever is greater."[18] According to Posner, the two measures will be roughly comparable "in the more common tort situations" involving low levels of risk for which a "change in tort doctrine is unlikely to so alter the wealth distribution that . . . the efficiency of the two states of doctrine cannot be compared."[19] This claim has empirical support from labor-market studies.[20] Insofar as the magnitude of injury costs — defined by either the WTP or WTA measure — is unlikely to significantly differ in the typical case, then the efficiency conclusions rendered by cost-benefit analysis would be largely invariant to the choice of measure.[21]

Posner's proposed approach, however, does not solve the problem. The measure of any cost depends on the substantive components of the underlying entitlement. What one has lost for purposes of legal analysis depends on what one was legally entitled to in the first instance. Even in ordinary cases involving low levels of risk, different specifications of the entitlement can yield substantially different measures of cost for reasons that have not been adequately recognized by Posner and others.

---

17 *See* Charles Blackorby & David Donaldson, *Can Risk-Benefit Analysis Provide Consistent Policy Evaluations of Projects Involving Loss of Life?*, 96 Econ. J. 758 (1986) (proving that because the measure of fatal injury costs depends on the initial entitlement or baseline for measurement, cost-benefit analysis does not yield consistent answers to the question of whether one project threatening fatal risks is more efficient than another).

18 Richard A. Posner, *Wealth Maximization and Tort Law: A Philosophical Inquiry*, *in* Philosophical Foundations of Tort Law 99, 99 (David G. Owen ed., 1995).

19 *Id.* at 100.

20 *See* Thomas J. Kneiser, W. Kip Viscusi & James P. Ziliak, *Willingness to Accept Equals Willingness to Pay for Labor Market Estimates of the Value of Statistical Life* (Vanderbilt Law & Econ. Research Paper No. 13-06, 2012), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2221038 ("Given the assumptions of standard hedonic labor market models, the local rates of tradeoff for WTA and WTP are identical for very small changes in risk.").

21 For a similar defense of cost-benefit analysis as an instrument for specifying entitlements, see Richard S. Markovitz, *Duncan's Do Nots: Cost-Benefit Analysis and the Determination of Legal Entitlements*, 36 Stan. L. Rev. 1169, 1198 (1984) (concluding that cost-benefit analysis "will rarely lead to indeterminate predictions about allocative efficiency; and, most importantly, that it will normally provide extremely useful information to decisionmakers of varying ethical persuasions").

To see why, suppose individuals are entitled to be protected from physical harm, so that injury costs are determined by the minimum amount of money that the individual right-holder would be willing to accept as compensation for facing the risk of injury (the WTA measure). Consider how this entitlement applies to a risky interaction between an automobile driver and a pedestrian that would kill the pedestrian in the event of an accident. Suppose the pedestrian benefits from the trip but not from the driver's presence along the route, eliminating the risky interaction as a source of compensatory benefit for the pedestrian right-holder. Because the two parties have no preexisting relationship, the pedestrian cannot receive the compensatory payment (the WTA measure) from the driver prior to the risky interaction. In the event of a fatal accident, the (deceased) pedestrian would also be unable to receive compensation in the form of a damages remedy. In these circumstances, the WTA measure has compensatory value for the right-holder — it actually affects her welfare — only insofar as it reduces risk within the cost-benefit safety standard. To protect her welfare level — to be fully compensated by the WTA measure as per the entitlement — the pedestrian is entitled to set the WTA amount equal to infinity. The measure of infinite injury costs, when plugged into the cost-benefit safety standard, would produce a legal decision to require precautionary behavior that would eliminate the risk altogether (any precautionary cost of a finite amount, such as the cessation of driving, would be less than the safety benefit of eliminating an infinite injury cost). An entitlement requiring actual compensation as defined by the WTA measure, therefore, can ban risky behavior in order to protect the right-holder from facing the risk of uncompensated injury.

This measure of injury costs is amply supported by empirical studies (known as contingent valuation surveys) that seek to quantify the cost that individuals place on the loss of a good not traded in markets, such as the destruction of natural resources. "In contingent valuation surveys that put the valuation question in the 'willingness to accept' format — that is, how much money respondents would demand in order to allow the relevant natural resources to be despoiled — protest rates of 50 percent or more are common."[22] Most respondents to these surveys "protest" by providing "unrealistically high valuations" of the amount they would need to accept in order to allow natural resources to be despoiled.[23] Such a response is rational, however, insofar as the compensation would be hypothetical, unlike the degradation of the resources that would occur if the proposed project passed the cost-benefit analysis and

---

22 Frank Ackerman & Lisa Heinzerling, Priceless: On Knowing the Price of Everything and the Value of Nothing 164 (2004) (footnote omitted).

23 *Id.*

were then implemented. A "protest" valuation of unrealistically high injury costs would defeat the proposed project, thereby protecting the right-holder from the risk of suffering an uncompensated injury.

The opposite outcome occurs if the entitlement is given to the risky actor. Now the entitlement to impose the risk is held by the automobile driver, so that the pedestrian must pay the driver to be protected from the risk of physical harm (injury costs are determined by the WTP measure). Because the driver as right-holder must be compensated in order to give up that to which she is otherwise entitled, the cost of her precautionary behavior is defined by the WTA measure (the minimum amount of money the driver would be willing to accept in order to exercise the precaution in question). The two parties have no preexisting relationship, preventing the pedestrian from actually paying the driver to exercise the costly precaution. As before, any payment would be hypothetical and would have actual value for the right-holder driver only to the extent that it determines the precautionary requirements (and associated risk) mandated by the governing cost-benefit safety standard. The driver would accordingly demand an infinite (hypothetical) payment from the pedestrian in order to give up the right to impose the risk by instead exercising the costly (uncompensated) precaution in question. That measure would not require the driver to take any precautions whatsoever under the cost-benefit safety standard (the precautionary burden on the driver right-holder has a measure of infinity that would be less than the finite amount the pedestrian duty-holder can pay to eliminate the risk). In this case, the legal rule would not impose any restrictions on the risky behavior in order to ensure that the driver as right-holder does not incur any uncompensated precautionary costs that would protect the pedestrian from injury.

As this example shows, a cost-benefit safety standard could ban driving altogether or instead permit driving without any safety obligations whatsoever, depending on whether the pedestrian or driver holds the initial entitlement. Each rule, of course, is extreme, but that is precisely the point. In both instances, the rule is straightforwardly derived from a cost-benefit analysis that relies on an entitlement requiring actual compensation and not merely hypothetical compensation. In these "ordinary" cases, the choice of entitlement can produce fundamentally different types of safety requirements under a cost-benefit standard, contrary to Posner's claim.

In general, when a right-holder knows the legal outputs (levels of risk and associated safety precautions) that would be produced by the safety standard and is entitled to be compensated for giving up that to which she is entitled, she will quantify her costs as the amount, which, when plugged into the safety standard, would yield an adequately compensatory distribution of risks. In these cases, the right-holder's decision-making has the structure of

an extensive game in which the first stage specifies the initial entitlement; the second stage specifies the proposed risky interaction; the third stage permits the right-holder to measure costs for this proposed interaction; the fourth stage plugs those costs into the governing safety standard; and the final stage involves the risky behavior permitted by the safety standard. A rational right-holder makes the decision at each stage by considering the final stage.[24] The right-holder accordingly recognizes that her measure of costs (stage three) will determine the amount of risk permitted by the safety standard (stage five). In effect, the right-holder "sees through" the intermediate stages and instead measures her costs in terms of the amount of risk that would be adequately compensatory for her under the safety standard. *A compensatory right-holder will alter her measure of costs to ensure that the safety standard produces the compensatory amount of risk distribution*.

To be sure, the entitlement might not enable the right-holder to measure her costs in this manner. The entitlement, for example, could require the right-holder to provide measures that assume actual compensation even when the compensation is, in fact, hypothetical. Such a limitation, however, must be supplied by normative judgment (the specification of entitlements in stage one) that takes place both prior to and outside of cost-benefit analysis (in stage four). The legal valuation of the costs incurred by a right-holder cannot be determined without prior specification of the underlying entitlement.

This reasoning applies to any type of safety standard that compares the injuries threatened by the risky behavior with the precautionary burdens of eliminating those risks. Insofar as the right to life or physical security is conjoined with the right to liberty,[25] the safety standard must account for both the threat to life (or injury costs) and the associated burden on liberty (precautionary costs). Different types of safety standards rely on different methods for balancing or weighing these costs, but regardless of the particular form of comparison, these standards all recognize that both types of cost merit legal valuation because each one involves harm to a legally protected interest. For example, an allocatively efficient safety standard gives each harm equal value (on a dollar-per-dollar basis) within cost-benefit analysis,

---

24 The concept of subgame perfect Nash equilibrium requires the decision-maker to adopt a strategy that is Nash equilibrium for the entire game and for every subgame (played at each stage to the end). Eric Rasmusen, Games & Information: An Introduction to Game Theory 91 (3d ed. 2001).

25 *See supra* note 6 and accompanying text; *see also* The Declaration of Independence, para. 2 (U.S. 1776) ("We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty and the pursuit of Happiness.").

whereas other safety standards place greater normative weight on one type of harm relative to the other (a dollar of injury cost, for example, can have greater weight than a dollar of precautionary burdens in order to justify a feasibility standard). The measurement of these comparative harms depends on the specification of initial entitlements, even for those safety standards not defined by an efficiency-oriented cost-benefit analysis.[26]

III. The Tort Entitlement to Physical Security

Although legislation is supreme over the common law, statutory safety standards depend on initial entitlements that quite plausibly are based on the common law of torts.[27] Tort law, however, has not adopted an express definition of the individual entitlement to physical security. The nature of the entitlement must instead be derived from an interpretive exercise that seeks to determine which form of the entitlement provides the best "fit" with tort law and is otherwise normatively justified.[28]

As I have argued at length elsewhere, a compensatory tort entitlement persuasively explains and justifies the important tort doctrines governing physical harm.[29] The following discussion highlights the properties of the

---

26 *Cf.* Ronald Dworkin, Law's Empire 303 (1986) (defending a nonwelfarist principle of equal opportunity that justifies the formulation of legal rules to minimize the comparative harms — defined as lost opportunities — faced by two interacting parties with conflicting interests, which in turn requires a comparison of "financial costs, not because money is more important than anything else but because it is the most abstract and therefore the best standard to use in deciding which of us will lose more in resources by each of the decisions we might make").

27 *See supra* Part I.

28 William Lucy, *Method and Fit: Two Problems for Contemporary Philosophies of Tort Law*, 52 McGill L.J. 605, 648 (2007) ("It is a commonplace among most jurists that theoretical accounts of any area of the law, including tort, must fit some of the law's principal structural and doctrinal features. It is also often assumed that such accounts must, where possible, make those features both intelligible and normatively respectable."). For example, according to the highly influential interpretive theory of Ronald Dworkin, a constructive interpretation of law has two distinct dimensions of fit and justification, each of which provides a basis for evaluating the plausibility of different interpretations. *See* Dworkin, *supra* note 26, at 67-68.

29 *See* Mark A. Geistfeld, Tort Law: The Essentials (2008). The discussion in this Part is largely drawn from Mark A. Geistfeld, *Compensation as a Tort Norm*, *in* Philosophical Foundations of the Law of Torts 65 (John Oberdiek ed., 2014).

compensatory tort entitlement that are most relevant for extending the entitlement to the regulation of health and safety matters outside of the tort system.

A. The Substantive Content of a Compensatory Tort Right

According to the *Restatement (Second) of Torts*, an individual interest that "is protected against any form of invasion . . . becomes the subject matter of a 'right.'"[30] The specification of such a right necessarily prioritizes the protected interest of the right-holder over the conflicting interest of the duty-holder, making it possible for the tort rule to burden the subordinate interest of the duty-holder in order to protect the prioritized interest of the right-holder. A rule that protects the individual interest in physical security, for example, gives the security interest of the right-holder some sort of legal priority over the conflicting or invading liberty interest of the duty-holder. To do so, the tort rule must first distinguish these interests in a manner that justifies a priority for the security interest. The nature of the priority then defines the substantive content of the tort right and correlative duty. A tort entitlement, therefore, can be defined by an underlying priority that gives one set of interests legal protection over another set of conflicting or invading interests.

For reasons developed by leading justice theorists, tort law can prioritize the individual interest in physical security on the ground that an individual must first be adequately secure in order to fully exercise autonomy.[31] The exercise of liberty is also obviously essential for living a meaningful life, and so the requirement of equal treatment prevents the right-holder's security interest from having an absolute or lexical priority that fully negates the autonomy value of the duty-holder's conflicting liberty interest. When justified by a principle of equality that values individual autonomy or self-determination, a legal priority of the security interest must be relative to that overarching, general principle. This general principle holds that each person has an equal right to autonomy (or freedom or self-determination) and then assigns different values to the individual interests in physical security and liberty, depending on

---

30 Restatement (Second) of Torts § 1 cmt. b (1965).

31 *See* Liora Lazarus, *The Right to Security, in* The Philosophical Foundations of Human Rights (Rowan Cruft, Matthew Liao & Massimo Renzo eds., forthcoming 2014) (discussing the views of philosophers, including John Locke, who maintain that an adequate amount of security is essential for the meaningful exercise of liberty); Richard W. Wright, *Justice and Reasonable Care in Negligence Law*, 47 Am. J. Juris. 143, 170-94 (2002) (explaining why leading justice theorists reject the utilitarian approach of weighing all interests equally and instead maintain that rights-based tort rules can prioritize the individual interest in physical security over the conflicting liberty and economic interests of others).

their relative importance for the exercise of the general right. In this respect, a tort right of security is relative to the right of liberty, which explains why courts have long recognized that "[m]ost of the rights of property, as well as of person . . . are not absolute but relative."[32]

Based on a relative priority of the security interest, tort rules can be formulated "to give compensation, indemnity or restitution for harms" — the first purpose of liability according to the *Restatement (Second) of Torts*.[33] If a duty-holder's exercise of liberty foreseeably causes physical harm to a right-holder, a compensatory obligation burdens the duty-holder's subordinate liberty interest to compensate harms it caused to the prioritized security interest of the right-holder; neither legal fault nor an unreasonable liberty interest is required to justify the compensatory obligation. This duty permits individuals to engage in risky behavior by relying on compensation to protect the right-holder's security interest, the type of outcome required by a right to liberty that is relative to a right of security.

To be justifiable, a compensatory norm must address any normative problems created by the right-holder's lack of consent and the poor manner in which compensatory damages might otherwise protect the right-holder's autonomy. Most obviously, a tort duty limited to the payment of monetary compensation for a nonconsensual harm can be deeply corrosive of the right-holder's autonomy (consider rape). To ensure that a duty-holder does not behave in a manner that disvalues the right-holder's autonomy, a compensatory tort norm can prohibit behavior of this type, justifying extra-compensatory damages that punish the duty-holder for having engaged in such reprehensible behavior.[34] A compensatory tort norm can define the types of behavior for which a compensatory obligation adequately protects the right-holder's autonomy.

In most cases, however, risky behavior does not entail any disrespect for the autonomy of others; the risk is an unwanted byproduct of the activity. To establish liability in these cases, a compensatory norm does not require culpability or personal fault. For cases of accidental harm in which the interacting parties are blameless, "it is a fait accompli that *some* innocent party will be burdened . . . . Therefore, it cannot be a moral requirement that no party lose out as a consequence of his own blameless conduct. All that remains

---

32 Losee v. Buchanan, 6 N.Y. 476, 485 (1873).

33 Restatement (Second) of Torts § 901(a).

34 *See generally* Mark A. Geistfeld, *Punitive Damages, Retribution, and Due Process*, 81 S. Cal. L. Rev. 263 (2008) (discussing the role of punitive damages within a compensatory tort system and concluding that this role persuasively explains the relevant tort rules).

open for decision is how the loss is to be apportioned."[35] By prioritizing the right-holder's interest in physical security, the compensatory norm places the loss on the risky actor/duty-holder. The duty-holder's exercise of liberty establishes the requisite form of responsibility for the foreseeable outcomes of the autonomous choice.[36] The occurrence of foreseeable injury, not any moral shortcoming in the behavior itself, can then trigger the obligation to pay compensatory damages.

This form of outcome responsibility is clearly reflected in the common-law maxim *sic utere tuo ut alienum non lædas*, which for present purposes loosely translates into the principle to use your own so as not to injure another.[37] The maxim locates the compensatory duty in the injury-causing conduct rather than the unreasonableness of the injurer's behavior, and so it has frequently been invoked by courts and commentators to justify rules of strict liability.[38]

Such a compensatory norm can be used not only to justify rules of strict liability, but also to explain why the tort system relies on a default rule of negligence liability to govern cases of accidental physical harm. The reason involves the manner in which the compensatory properties of a tort rule depend on how it distributes risk.

---

35 Loren E. Lomasky, *Compensation and the Bounds of Rights*, *in* NOMOS XXXIII: COMPENSATORY JUSTICE 13, 34 (John W. Chapman ed., 1991) (discussing cases of necessity).

36 For more extended discussion of this conception of individual responsibility, see Stephen R. Perry, *Responsibility for Outcomes, Risk, and the Law of Torts*, *in* PHILOSOPHY AND THE LAW OF TORTS 72 (Gerald Postema ed., 2001).

37 The maxim means "[u]se your own property in such a manner as not to injure that of another." HENRY CAMPBELL BLACK, BLACK'S LAW DICTIONARY: DEFINITIONS OF THE TERMS AND PHRASES OF AMERICAN AND ENGLISH JURISPRUDENCE, ANCIENT AND MODERN 1238 (Joseph R. Nolan & Michael J. Connolly eds., 5th ed. 1979). As applied to risky behavior not involving the use of property, the maxim yields a principle that "under the common law a man acts at his peril." OLIVER WENDELL HOLMES, THE COMMON LAW 82 (Little, Brown & Co. 1881) (stating that "some of the greatest common law authorities" held this view); *see also* Commonwealth *ex rel.* Attorney Gen. v. Russell, 33 A. 709, 711 (Pa. 1896) ("'Sic utere tuo non alienum lædas' expresses a moral obligation that grows out of the mere fact of membership of civil society. In many instances it has been applied as a measure of civil obligation, enforceable at law among those whose interests are conflicting.").

38 *See, e.g.*, Perkins v. F.I.E. Corp., 762 F.2d 1250, 1254-56 (5th Cir. 1985) (noting that the *sic utere* maxim is the basis for the rule of strict liability governing ultrahazardous activities under Louisiana law).

B. Compensation as Risk Distribution

In a compensatory tort system, the appropriate formulation of liability rules critically depends on context. Different types of risky interactions create different types of compensatory problems. The different compensatory problems have different solutions, most of which do not include an entitlement to compensatory damages in all cases. Tort rules can instead distribute risk in a manner that fully satisfies the demands of a compensatory right-holder.

A compensatory tort right can be derived from a principle of equal autonomy that justifies a default priority of the right-holder's interest in physical security over conflicting liberty interests of the duty-holder. If that priority applies to an interaction between the two parties, it justifies the right-holder's entitlement to compensatory damages in the event of injury. Such an *interpersonal* conflict of interests, however, does not exist in two important classes of nonconsensual risky interactions. For cases in which the right-holder and duty-holder are engaged in reciprocally risky interactions or are otherwise in a direct or indirect contractual relationship, the tort rule governs an *intrapersonal* conflict of the right-holder's security and liberty interests. In these cases, the right-holder does not prioritize the security interest and instead has compensatory demands that are fully satisfied by a negligence rule requiring the duty-holder to exercise the cost-minimizing amount of reasonable care.

First, consider tort rules governing reciprocal risks. For example, as two automobiles go past one another on the road, each driver simultaneously imposes a risk of physical harm on the other. For perfectly reciprocal risks, the interacting individuals are identical in all relevant respects, including the degree of risk that each imposes on the other, the severity of injury threatened by the risk, and the liberty interests advanced by the risky behavior. Very few risky interactions will actually satisfy these conditions, but due to the requirement of equal treatment, tort law evaluates risky behavior under an objective standard that, in this instance, asks whether the activity is common in the community.[39] Automobile driving is such an activity, and so as an objective

---

39 *Compare* Geistfeld, *supra* note 29, at 93-95 (explaining why the autonomous choices made by a right-holder, such as the decision not to drive automobiles, would violate the principle of equal treatment if these choices were to determine unilaterally whether the duty-holder is subject to negligence or strict liability, thereby justifying a rule that evaluates reciprocity in the objective terms of whether the activity is common in the community), *with* Restatement (Third) of Torts: Liability for Physical and Emotional Harms § 20 cmt. j (2010) ("Whenever an activity is engaged in by a large fraction of the community, the absence of strict liability can be explained by considerations of reciprocity.").

matter, tort rules governing automobile accidents apply to reciprocal risks, even for cases in which the victim was walking or riding a bicycle.

Reciprocity eliminates any relevant differences between the interacting parties. For example, each automobile driver has the identical right against the other, and each owes an identical duty to the other. In these circumstances, neither party prioritizes the security interest over the liberty interest. Each interacting individual instead prefers a cost-minimizing duty of reasonable care that requires a safety precaution only if the benefit of risk reduction (fully accruing to the individual as reciprocal right-holder) exceeds the burden or cost of the precaution (also fully borne by the individual as reciprocal duty-holder).[40] By minimizing accident costs, the negligence rule maximizes the net benefit that each individual expects to gain by participating in common activities like driving.

A tort rule that rejected each individual's preference for a cost-minimizing negligence rule by instead prioritizing the security interest under a rule of strict liability would be unreasonable or contrary to the autonomy interests of both parties to the risky interaction. The priority of the security interest is only a default rule that can be modified by the underlying principle of autonomy. For this class of cases, the reasonable demands of the compensatory right-holder — those justified by the underlying principle of equal autonomy — are fully satisfied by a negligence rule that does not prioritize the security interest and instead requires the duty-holder to exercise the cost-minimizing amount of care.

In these cases, the duty-holder fully satisfies the compensatory obligation by exercising the amount of reasonable care required by the compensatory tort right. Doing so does not necessarily eliminate risk, creating the possibility that the interaction might accidentally injure the right-holder. In that event, however, the compensatory tort right does not entitle the victim to an award of compensatory damages — the duty-holder's exercise of reasonable care has already fully satisfied the right-holder's compensatory demands. A compensatory tort obligation does not entail the payment of compensatory damages in all cases of accidental harm.

The same outcome occurs for cases in which the right-holder and duty-holder are in a direct or indirect contractual relationship, as in product cases involving consumers and manufacturers.[41] A right-holder/consumer purchases or uses the

---

40 For more rigorous demonstration, see Mark Geistfeld, *Placing a Price on Pain and Suffering: A Method for Helping Juries Determine Tort Damages for Nonmonetary Injuries*, 83 Calif. L. Rev. 773, 851-52 (1995).

41 Unlike the manufacturer-consumer relationship discussed in the text, in other types of contractual relationships, the right-holder sells something to the duty-

product on the expectation that doing so, on balance, will be advantageous. By selling a product, the manufacturer creates a risk of physical harm to which the consumer is exposed. A tort rule that makes the manufacturer liable for these injuries will affect product costs, price, aggregate demand, and net profits. The distributive impact of tort liability, however, must be defined in relation to the normatively justified tort rule, which in turn is defined by the initial allocation of legal entitlements or property rights.[42] At this baseline, the consumer pays for the full cost of tort liability, as the equilibrium product price must cover all of the manufacturer's costs, including its liability costs. The manufacturer's interests are irrelevant to the distributive analysis required by the normatively justified tort rule, explaining 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."[43] For risks not threatening injury to bystanders, product cases only implicate an intrapersonal conflict of consumer interests, those involving physical security, liberty (regarding product use), and money (product price and other financial costs of product use).[44]

In comparing 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 (fully accruing to the consumer) exceeds the cost of the safety investment (also borne by the consumer via the

---

holder. The most important example is the employment relationship (the sale of labor), in which the employee must be compensated for facing work-related risks either by an increase of wages or receipt of compensation for work-related injuries. The employer minimizes this total compensatory obligation by adopting cost-effective safety measures and compensating employees for the residual risks. Employees currently receive both forms of compensation, albeit outside of the tort system (workplace injuries are governed by workers' compensation schemes that provide guaranteed compensation for work-related injuries). Workplace injuries accordingly provide further support for the conclusion that the law regulates accidental harms in a compensatory manner, with the different compensatory legal rule in these cases (one of strict liability) stemming from the different form of contractual relationship (the right-holder as seller rather than buyer).

42 *See supra* Part II (explaining why the measurement of costs for legal purposes depends on specification of the underlying entitlements).

43 Restatement (Third) of Torts: Products Liability § 2 cmt. f (1998).

44 For risks threatening injury to bystanders, the analysis involves the interpersonal mediation of security and liberty interest characteristic of more general forms of tort liability. *See* Mark A. Geistfeld, Principles of Products Liability 309-20 (2d ed. 2011).

associated price increase or decrease of product functionality). Consumers reasonably expect product-safety decisions to be governed by a cost-benefit calculus because that decisional rule maximizes consumer welfare. A product that does not satisfy reasonable consumer expectations is defective and subjects the seller to liability under the widely adopted rule of strict products liability.[45] This rule does not entitle consumers to compensatory damages in all cases. Due to the relatively high cost of tort compensation as compared to the other forms of insurance that they can purchase, consumers do not reasonably expect to receive tort compensation for injuries caused by nondefective products.[46] The reasonable compensatory demands of consumer right-holders are fully satisfied by cost-minimizing tort rules that limit liability to the physical harms caused by defective products.[47]

As in cases of reciprocal risks, the duty-holder in product cases fully satisfies the compensatory obligation by making the cost-minimizing investments in safety required by the compensatory tort right. Doing so does not necessarily eliminate risk, but the duty-holder (having fully satisfied the compensatory tort right) is not obligated to pay compensatory damages for injuries caused by the residual (or reasonable) risks inherent in most nondefective products. The demands of the compensatory right-holder, once again, are fully satisfied by a rule that does not require the duty-holder to pay compensatory damages in all cases.

C. Risk Distribution as Non-Ideal Compensation

In a wide range of cases, the negligence rule can attain the ideal compensatory outcome by distributing risk to maximize the net benefit that a right-holder expects to derive from the risky interaction, so the right-holder is not made worse off, *ex ante*, than she would otherwise be in a world without the risk (and the associated benefit to be gained from the risky activity). The only remaining cases involve right-holders who are not in a contractual relationship with a duty-holder who creates an objectively defined nonreciprocal risk of physical harm. In these cases, the negligence rule can still distribute risk in the manner reasonably required by the compensatory tort right, but the compensation is not ideal, even when supplemented by a rule of strict liability.

---

45 *See generally id.*

46 *See id.* at 61-67.

47 *See id.* at 256-66 (explaining why consumers do not reasonably expect to receive compensatory damages for standalone emotional harms and certain types of pure economic loss and caused by defective products).

These cases involve activities that are not common in the community and create risks above the ordinary level of background risk. A paradigmatic example involves the use of dynamite for construction purposes, although objectively defined nonreciprocal risks are also created in myriad other ways, including instances in which the duty-holder's lack of intelligence or skill creates dangers above the background level (defined by ordinary intelligence and skill).

For this class of cases, the tort rule must mediate an interpersonal conflict between the duty-holder's interest in liberty and the right-holder's interest in physical security. A compensatory tort rule can resolve these conflicts by prioritizing the right-holder's security interest, justifying a right to compensatory damages for these injuries — the same outcome attained by the rule of strict liability for abnormally dangerous activities and the pockets of strict liability within the objectively defined negligence standard of reasonable care.[48]

The compensation afforded by these forms of strict liability, however, does not fully satisfy the compensatory obligation. In the event of a fatal accident, the duty-holder is not obligated to pay for the decedent's loss of life's pleasures because the damages award cannot compensate a dead person, a problem that substantially reduces and potentially eliminates the compensatory damages award for wrongful death.[49] The most severe type of physical harm cannot be fully redressed by a rule of strict liability, a compensatory problem that generalizes to all forms of physical harm (bodily injury or damage to real or personal property).[50]

To solve the compensatory problem inherent in a rule of strict liability, the right-holder reasonably prefers to supplement this rule with a behavioral obligation of reasonable care that directly protects against the threat of uncompensated injury. Such a safety obligation must be derived from the compensatory duty, which can be defined by the total burden that a duty-

---

48 *See* Geistfeld, *supra* note 29, at 92-97.

49 *See* Romo v. Ford Motor Co., 6 Cal. Rptr. 3d 793, 811 (Ct. App. 2003) (ruling on a punitive damages award in a wrongful death case involving an award of zero compensatory damages); Edward A. Adams, *Venue Crucial to Tort Awards: Study: City Verdicts Depend on Counties*, N.Y.L.J., Apr. 4, 1994, at 1, 5 (reporting results of an empirical study finding, among other things, that the average tort award in New York City between 1984 and 1993 was three times higher for brain damage than for wrongful death, which was only twice as much as the average damage award for a herniated disc).

50 *See* Mark A. Geistfeld, *The Principle of Misalignment: Duty, Damages, and the Nature of Tort Liability*, 121 Yale L.J. 142, 159-64 (2011) (explaining why physical harms are irreparable injuries for which the compensatory damages remedy ordinarily is inadequate).

holder would incur under ideal conditions in which the right-holder is always fully compensated. Because the duty-holder does not bear this entire compensatory burden under a rule of strict liability, tort law can eliminate the compensatory shortfall by shifting that component of the compensatory obligation from the compensatory damages remedy into the duty to exercise reasonable care.[51] These safety expenditures, when added to the cost-minimizing precautions that the duty-holder would otherwise take under ideal compensatory conditions, further reduce risk or the likelihood that the right-holder will suffer uncompensated injury. The supplemental rule of strict liability then fulfills the compensatory obligation with respect to the remaining, residual risks that are not eliminated by the exercise of reasonable care. These abnormally dangerous or nonreciprocal risks are subject to strict liability, but the default rule of negligence liability continues to distribute risk in the manner reasonably required by the compensatory tort right.

Nonetheless, the risk distribution in these cases is not ideal for the right-holder, unlike the distribution that occurs in cases involving reciprocal risks or contractual relationships. As we have found, risk distribution can be fully compensatory for right-holders who (1) incur the burdens of the compensatory duty (as reciprocally situated duty-holder or consumer) and (2) benefit from the risky activity (such as by driving or using a product) engaged in by the duty-holder (another driver or a product manufacturer). For nonreciprocal risky interactions that occur outside of contractual relationships, neither condition applies. The right-holder does not bear the full burden of the compensatory duty or otherwise derive a sufficient benefit from the risky activity engaged in by the duty-holder, so it is not possible for tort law to distribute risk in a manner that would fully compensate the right-holder.

This compensatory problem, however, does not justify a ban of the risky behavior. The compensatory right is based on a relative priority of the security interest, not an absolute priority that negates or gives no value to conflicting liberty interests.[52] By exercising reasonable care and paying compensatory damages for the harms foreseeably caused by the residual nonreciprocal risks, the duty-holder fully satisfies the compensatory obligation. This exercise of liberty has normative value that is not negated simply because social conditions make it infeasible to attain the ideal compensatory outcome. The *reasonable* compensatory demands of the right-holder — those that give equal concern to the autonomy of the duty-holder — do not justify a ban of the duty-holder's

---

51 For more rigorous discussion of the argument in this paragraph, see Mark Geistfeld, *Reconciling Cost-Benefit Analysis with the Principle That Safety Matters More Than Money*, 76 N.Y.U. L. Rev. 114 (2001).

52 *See supra* Part III.A.

exercise of liberty. These interactions can leave the right-holder worse off than she would otherwise be, but tort law still distributes risk in the manner that fully satisfies the reasonable demands of the compensatory right-holder.

D. The Entitlement and the Safety Standard

Tort law shows why a safety standard does not fully specify the entitlement to physical security, providing further support for our earlier conclusion that a statutory safety standard depends on a prior specification of entitlements.[53] Within the tort of negligence, the safety standard of reasonable care is only one element or component of the rule. To determine which safety precautions are required as a matter of reasonable care, tort law must first determine the risks for which the actor is legally responsible and how those risks and the associated precautionary burdens should be measured. These issues are all resolved by the element of duty, the first element of a negligence claim.[54] In light of these risks and the associated costs, the standard of reasonable care then determines the type of safety obligations that would satisfy the correlative entitlement of the right-holder. Even when the duty-holder's exercise of reasonable care fully satisfies this safety obligation, the correlative entitlement is nevertheless defined both by the safety standard of reasonable care *and* the antecedent specification of (1) the risks for which the duty-holder is legally responsible and (2) how those risks and the associated precautionary burdens should be measured. The safety standard is only one component of the tort rule, which explains why the implementation of any safety standard, including one based on cost-benefit analysis, depends on a prior specification of the underlying entitlement to physical security.

IV. The Implementation of Environmental, Health, and Safety Regulations

To illustrate the relevance of the common-law tort entitlement for regulatory practice outside of the tort system, we can consider the role that it could play in the promulgation of federal environmental, health, and safety regulations.

---

53 *See supra* Part II.

54 *See* Geistfeld, *supra* note 50, at 148-72 (showing how the element of duty both defines and values the risks governed by the standard of reasonable care).

Since the 1980s, executive orders have required federal agencies to conduct a cost-benefit analysis of proposed major regulations.[55] The practice has continued under President Obama pursuant to Executive Order 13563,[56] which requires a federal agency to adopt a regulation "only if the benefits justify the costs and only if the chosen approach maximizes net benefits (unless the law requires otherwise)."[57] These Executive Orders express the continued endorsement of cost-benefit analysis over the past thirty years by presidents from both political parties, and so the debate over cost-benefit analysis is now "about how (not whether) to engage in cost-benefit analysis — how to value life and health, how to deal with the interests of future generations," and so on.[58] The debate today revolves around distributive issues, creating an important role for the common-law entitlement to physical security.

Under current practice, the regulatory cost-benefit analysis conducted by a federal agency "should provide a separate description of distributional effects" that "should be described quantitatively to the extent possible. . . . Examples of distributional effects that could potentially be quantified include . . . (transfer in economic activity from one business to another) . . . (transfer of well-being among consumers)."[59] Whether agencies can defensibly account for distributive concerns, however, is problematic because "there are no generally accepted principles for determining when one distribution of net benefits is more equitable than another."[60]

In principle, the equity of a distribution is determined by the underlying entitlements — whether one receives too little or too much depends on what one is legally entitled to in the first instance. Consequently, the common-law tort entitlement can provide a defensible basis for determining whether a regulatory safety standard equitably distributes risk.

As we have found,[61] the tort entitlement has the following important distributive properties. The entitlement in all contexts is held by the party

---

55 For an excellent political history of these executive orders, see Richard L. Revesz & Michael Livermore, Retaking Rationality 21-45 (2008).

56 Exec. Order 13,563, 76 Fed. Reg. 3821 (Jan. 18, 2011).

57 Cass R. Sunstein, *The Real World of Cost-Benefit Analysis: Thirty-Six Questions (and Almost as Many Answers)* 3 (Harv. Pub. Law, Working Paper No. 13-11, 2013), *available at* http://ssrn.com/abstract=2199112.

58 Cass R. Sunstein, *Cost-Benefit Default Principles*, 99 Mich. L. Rev. 1651, 1655-56 (2001) (footnote omitted).

59 Office of Info. & Regulatory Affairs, Regulatory Impact Analysis: A Primer (2011), *available at* http://www.whitehouse.gov/sites/default/files/omb/inforeg/regpol/circular-a-4_regulatory-impact-analysis-a-primer.pdf.

60 Exec. Order No. 12,866, 58 Fed. Reg. 51,735, § III.A.8 (Sept. 30, 1993).

61 *See supra* Part III.

facing the risk of physical harm (bodily injury or damage to real or tangible property). This entitlement to physical security gives individuals a right to actual and not merely hypothetical compensation. The compensatory entitlement, however, recognizes the social value of the duty-holder's risky behavior. The entitlement does not justify a ban of the risky behavior simply because the right-holder cannot, in fact, be fully compensated for all harms to the legally protected interest in physical security.

- Recall that two different measures can be employed for measuring injury costs — the WTP or WTA measures — with the choice depending on the underlying entitlement.[62] The compensatory entitlement relies on the WTA measure for evaluating injury costs threatened by objectively nonreciprocal risks that are created outside of contracting relationships or by contracting relationships in which the right-holder is a seller (as with the sale of labor).[63] In the event that the right-holder cannot actually receive monetary compensation for the injury, the entitlement does not permit her to value the injury costs by an infinite amount in order to eliminate the risk of suffering an uncompensated injury. In these cases, the common-law compensatory entitlement is reasonably satisfied if the remaining compensatory obligation still owed by the duty-holder is redirected towards precautionary expenditures, resulting in a safety standard requiring precautions in excess of the allocatively efficient cost-benefit amount.[64] This particular compensatory obligation — a distributive cost — reduces risk and actually compensates the right-holder by improving her welfare relative to a world in which she must face the (increased) risk and does not receive adequate compensation for doing so.

- The measure of injury costs changes across contexts, confirming our earlier conclusion that a compensatory right-holder will alter her measure of cost in order to ensure that the legal rule produces an adequately compensatory distribution of risk.[65] In cases involving objectively reciprocal risks or contractual settings in which the right-holder is a buyer, the right-holder actually benefits from the risky interaction and also incurs (via prices increases and the like) the precautionary burden. Under the compensatory entitlement, the

---

62 *See supra* notes 12-14 and accompanying text.

63 *See supra* note 41 (discussing the employment context).

64 *See supra* Section III.C.

65 *See supra* notes 21-25 and accompanying text.

> cost of injury in these cases is measured by the maximum amount the compensatory right-holder is willing to pay to eliminate the risk (the WTP measure). Reliance on the WTP measure does not create any right to compensation for those parties who must exercise costly precautions in order to reduce risk; the entitlement is still held by the party facing the risk of physical harm. However, the cost-minimizing safety standard distributes risk in a fully compensatory manner, and so compliance with this safety obligation fully satisfies the compensatory entitlement and absolves the duty-holder of any further obligation to pay compensatory damages in the event of injury.

The relevance of these distributive properties for federal regulatory practice begins with the threshold inquiry for determining the types of harms encompassed by the regulatory cost-benefit analysis. The common law relies on a compensatory norm to protect against physical harms threatened by only those forms of risky behavior that do not disvalue the autonomy of the right-holder, as would occur when the risky actor is a sadist who enjoys threatening others.[66] Consistent with this component of the common-law entitlement, "[a]gencies routinely ignore sadistic preferences" or "preferences for discrimination, suffering, and other morally bad outcomes."[67] Agencies place no value on risky behavior that disvalues the autonomy of others, an approach justified by the common-law compensatory entitlement.

The next step of the regulatory process involves the measurement of injury costs for those harms encompassed by the cost-benefit analysis. Under current regulatory practice, the WTP measure is "the standard value that is given to risk-reducing regulation."[68] This measure of injury costs can be justified by the common-law compensatory entitlement in two categories of cases: (1) those involving objectively reciprocal risky interactions (like automobile driving) that comprise the ordinary level of background risk within the community; and (2) those involving risks created by contractual relationships in which the right-holder is a buyer (like the relationship between a product manufacturer and consumer). In these cases, the right-holder receives a net benefit from the risky interaction with the duty-holder (by driving or from product use). This net benefit satisfies the compensatory demands of the right-holder, who then reasonably prefers to maximize the benefit by paying to reduce the risk of injury in a cost-effective manner. The resultant liability rule is based on a cost-benefit analysis with injury costs determined by the WTP measure, the

---

66 *See supra* notes 33-35 and accompanying text.

67 Matthew D. Adler & Eric A. Posner, New Foundations of Cost-Benefit Analysis 129-30 (2006).

68 Revesz & Livermore, *supra* note 55, at 76.

same approach commonly used by federal agencies. Once again, the common-law compensatory entitlement can justify the federal regulatory practice.

For reasons provided by the compensatory entitlement, the cost-benefit analysis in these cases does not have to account for any distributive costs. By complying with the regulatory standard, a risky actor has fully satisfied her compensatory obligations to those who could be foreseeably harmed by the risky behavior. Those who might be injured by these regulated risks could still be disadvantaged within society, but that disadvantage stems from more general social inequalities and not from the risky behavior itself. Anything still owing to the class of potential victims is a societal obligation. Unless there is some justification for placing that entire burden on the particular segment of society comprised of the risky actors, there is no equitable reason for modifying the cost-benefit analysis to account for this distributive concern. Lacking such justification, the distributive concern is more equitably addressed by tax or transfer programs that redirect social resources to the disadvantaged class of potential victims.

In the remaining category of cases, the compensatory entitlement relies on the WTA measure, and so a statutory safety standard that employs the WTP measure will create an identifiable distributive inequity. Because the WTA measure is required for compensatory purposes, safety standards based on the WTP measure will necessarily undercompensate those threatened by the risky behavior. In general, the WTA measure exceeds the WTP measure.[69] More fundamentally, the common-law entitlement relies on a WTA measure that requires actual compensation and not merely hypothetical compensation, unlike the WTP measure, which requires no compensation whatsoever (the right-holder must pay rather than be paid). A safety standard based on the WTP measure, therefore, will necessarily undercompensate the class of potential victims in this category of cases.

This undercompensation is an adverse distributive effect of the cost-benefit analysis, and so federal agencies can remedy the problem by quantifying the distributive cost and incorporating it into the cost-benefit analysis. The method for doing so can be justified by the tort entitlement, further illustrating how the entitlement can serve as the distributive basis for environmental, health, and safety regulations.

To see why, suppose the regulators find that individuals are willing to accept $79 to face a 1-in-100,000 chance of dying, yielding an implicit cost

---

69 *See supra* notes 13-17 and accompanying text (discussing influence of income and substitution effects).

of $7,900,000 for any premature death caused by the risk in question.[70] The WTA proceeds of $79 need not be hypothetical for the potential victim/right-holder, as the safety regulation can require the risky actor to expend those resources on the further reduction of risk. The compensatory entitlement minimally requires the risky actor to exercise the cost-minimizing amount of care, and so those precautions can then be supplemented by an additional expenditure of $79 to satisfy the remaining compensatory obligation, resulting in precautions above the initial cost-benefit amount. The risky actor no longer gets a windfall based on hypothetical compensation, and the potential victim/right-holder receives some benefit from the WTA compensatory proceeds due to the manner in which the additional $79 safety expenditure reduces the likelihood of uncompensated injury.

To be sure, the class of potential victims might still be disadvantaged within society, but that inequity is not created by the risky actors who have fully satisfied their compensatory obligations by complying with such a statutory safety standard. Unless there is some justification for burdening this particular segment of society with a general societal obligation, there is no equitable reason for incorporating these distributive costs into the cost-benefit exercise.

In the event that a risky actor violates any of these regulatory safety standards, she has not satisfied the compensatory entitlement and would incur a compensatory obligation if that violation proximately caused physical harm to a right-holder. The right-holder can obtain these compensatory damages from the risky actor as duty-holder within the tort system under the doctrine

---

70 Because the $79 (the WTA measure) would fully compensate the individual prior to facing the risk, it must fully offset the individual's expected cost of injury. The WTA measure accordingly includes the cost of risk aversion, making the individual risk-neutral with respect to the receipt of the (certain) ex ante WTA compensation or the (uncertain) ex post compensatory damages award. A comparison of these two forms of compensation does not depend on the individual's utility function for injuries that do not alter the marginal utility of wealth. Under these conditions, the expected cost of injury is simply the financial magnitude of the injury or loss (denoted L) discounted by the likelihood or probability of its occurrence (P). Consequently,

$\$79 = P \bullet L$

$\$79 = (1/100{,}000) \bullet L$

$\$7{,}900{,}000 = L$

This reasoning does not apply to injuries that reduce the marginal utility of wealth (premature death being the extreme example), creating a difficult compensatory problem that requires a second-best analysis of the type discussed in the text that redirects the WTA measure to the prevention of injury.

of negligence per se, further establishing the complementary relation between the regulatory and tort systems.[71]

Injury compensation would be unavailable for regulatory violations if the statutory scheme preempts such a tort claim, but in that event, the legislation has directly modified the baseline tort entitlement. Absent preemption or some other statutory alteration of the common-law entitlement, regulators can use the tort entitlement as the distributive basis for determining the conditions under which it is appropriate to use an unadorned cost-benefit analysis or otherwise modify the analysis to account for distributional concerns.

Conclusion

The different departments of the law ought to be substantively consistent with one another. If the government, for example, wants to minimize the social cost of accidents, then it should adopt cost-minimizing rules for the full range of risky behaviors, not merely those governed by one department of the law. Efforts to minimize accident costs through environmental, health, and safety regulations would be blunted by tort rules that reject cost minimization as a norm of liability. So, too, if the law is supposed to protect the individual right to physical security, then doing so within the tort system would be undermined if individuals were then subject to excessively high risks under environmental, health, and safety regulations. Risky behavior spans different departments of the law, requiring substantive consistency across the law if the government wants to implement a particular substantive objective, be it one of wealth maximization or protection of individual rights.

This approach requires each department of the law to rely on the same underlying entitlement to physical security. Institutional capacities then determine how the different departments protect the entitlement. The criminal justice system provides protection different from the tort system, which in turn differs from the administrative regulation of environmental hazards and so on, with each body of law finding normative coherence in their efforts to protect the same underlying entitlement.[72]

---

71 *See* Mark A. Geistfeld, *Tort Law in the Age of Statutes*, 99 Iowa L. Rev. 957, 967-91, 1020 (2014) (discussing the tort doctrine of negligence per se and demonstrating more generally that "the tort system has opted to be a complementary component of the modern administrative state").

72 *Cf.* Dworkin, *supra* note 26, at 176 (arguing for "two principles of political integrity: a legislative principle, which asks lawmakers to try to make the total set of laws morally coherent, and an adjudicative principle, which instructs that the law be seen as coherent in that way, so far as possible").

For reasons of history and federalism, the entitlement in the United States can be derived from the common law of torts. Reliance on the common-law entitlement promotes substantive consistency across different bodies of law and makes it possible to answer the hard distributive questions involved in the promulgation of any safety standard, including those defined by cost-benefit analysis. The individual entitlement to physical security was first specified by the common law in a world quite different from our own, but this legal principle has ongoing significance that extends far beyond the tort system.