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Fair Precaution

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Abstract

This book chapter briefly sketches a general framework which explains why questions of fairness have a natural salience when the imposition of risks of harm by some on others is at issue, and it applies that conception to major aspects of negligence law. Fairness comes to the fore because risk impositions require us to compare what those who impose the risks stand to gain, and those upon whom they are imposed stand to lose. Determinations of due care reconcile competing claims of liberty and security, for a plurality of persons. Fairly reconciling liberty and security requires reconciling them on terms that are justifiable both to those who impose risks and to those upon whom they are imposed. This, in turn, requires comparing the benefits and burdens of risk impositions in terms of their objective urgency, assessing the burdens and benefits of risk impositions qualitatively, and assigning a certain priority to the avoidance of harm. The framework is used to explicate the concept of due care articulated by the Hand Formula, to illuminate the circumstance where risks are imposed with a "community of risk", and to situate subordinate doctrines of due care such as custom, statutory negligence, and jury adjudication. Brief contrasts are drawn with both law and economic approaches to justified precaution as efficient precaution, and with versions of corrective justice which see negligence liability falling out of a universe of conceptual possibilities where it holds the high ground of a golden mean.

Fair Precaution

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Gregory C. Keating[1]

Negligence liability holds injurers responsible only for those accidents that issue from their unreasonable risk impositions, only when they should have prevented those accidents from occurring. The question "When is a risk imposition reasonable, and when should we insist that a precaution be taken to reduce some risk?" is a fundamental one. Law and economics scholars generally suppose that tort liability should minimize the combined costs of accidents and their prevention.[2] The task of tort law, on this view, is to maximize the resources—the wealth—at society's disposal. Lives, limbs, and the resources we spend guarding them, must be put to prudent use, not wasted. Responsibility for preventing and paying for accidental injuries should therefore be assigned in a way which reduces their combined costs to as low a level as possible. Reasonable precaution is cost-justified precaution.

Influential corrective justice scholars reject the idea that reasonable precaution is efficient precaution, but their own account of negligence are strikingly conceptual. In Ernest Weinrib's framework, negligence liability itself tumbles out as a kind of golden mean from the tripartite division of possibilities among strict liability, subjective fault liability, and objective liability. Particular judgments of negligence aspire to do the same at lesser levels of generality.[3] In Arthur Ripstein's hands, for similar reasons fault liability is presented as the only plausible articulation of equal freedom.[4] The other possibilities reconcile the liberty of potential injurers and the security of potential victims in ways that are too one-sided. These scholars might be taken to be appealing to an idea of fairness, but they are themselves loath to say so, and more inclined to explicate their framework in terms of a formal equality between the parties to bipolar tort lawsuit.

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[1] Maurice Jones, Jr. — Class of 1925, Professor of Law and Philosophy USC Gould School of Law.

[2] "The normative efficiency goal of tort law most widely accepted in law and economics is that first proposed by Dean Calabresi: *that the rules of tort law should be structured so as to minimize the sum of precaution, accident, and administration costs.*" ROBERT COOTER & THOMAS ULEN, LAW AND ECONOMICS 347 (1988). The case for negligence as cost-justified precaution is made in Richard Posner's classic, *A Theory of Negligence*, 1 J. LEG. STUD. 29 (1972)

[3] ERNEST WEINRIB, THE IDEA OF PRIVATE LAW, 171-83 (1995).

[4] ARTHUR RIPSTEIN, PRIVATE WRONGS, 53-79 (2016).

Tort scholars ask if the terms of the tort law of accidents are fair much more rarely.[5] This slighting of fairness is surprising. The idea of fairness is central to our categories of moral and political criticism, and the rhetoric of fairness figures prominently in tort decisions.[6] My aim in this chapter is to bring the idea of fairness to bear on the articulation of the reasonable level of care. In an era when negligence in general, and the Hand Formula in particular, are widely identified with consequentialism, the fairness conception holds that both are better understood in terms of fair relations among those who impose and those who bear risks of physical harm. In an era when justice in tort law is widely taken to mean corrective justice, the fairness conception maintains that the primary norms of negligence liability are concerned with the fair reconciliation of liberty and security.

I. The Fairness Conception

We are each persons to be respected—self-governing agents with purposes to pursue and lives to lead—not resources to be put to our best and highest use. We each have the capacity to lead our lives in accordance with some conception of their point, and a deep interest in living under institutions that enable us to do so. To make our lives answer to our aspirations for them we need, among other things, a substantial measure of security—of freedom from accidental injury and death at the hands of others. "Security", John Stuart Mill remarked, "no human being can possibly do without; on it we depend for all our immunity from evil and the whole value of all and every good, beyond the passing moment, since nothing but the gratification of the instant could be of any worth to us if we could be deprived of everything the next instant . . ."[7]

Our need for security, however, is only half the story. We also need a substantial measure of liberty—of freedom to put others at risk of physical harm in pursuit of our own ends—if we are to lead our own lives in accordance with our aspirations for them. When we act we put others at peril, even if only very slightly and even when we act

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[5]Professor Kenneth Abraham's valuable "analytical primer" for first year tort students, for example, explicitly discusses economic and corrective justice justifications for tort rules, but not fairness ones. *See* KENNETH S. ABRAHAM, THE FORMS AND FUNCTIONS OF TORT LAW, 14-20 (3d ed., 1997). .

[6] As Jeremy Waldron notes in his *Moments of Carelessness and Massive Loss*, in PHILOSOPHICAL FOUNDATIONS OF TORT LAW, 387, 390 (David G. Owen, ed., 1995). One study found, for example, that fairness justifications were invoked by product liability decisions more often than efficiency ones, and that fairness arguments were given more weight. *See James A. Henderson, Jr. Judicial Reliance on Public Policy: An Empirical Analysis of Products Liability Decisions, 59* GEO. WASH. L. REV. 1570, 1595, 1597 (1991) ("Measured by what judges say in their published opinions . . . fairness norms, not efficiency norms" predominate, and their predominance increases when they conflict with efficiency norms).

[7] JOHN STUART MILL, UTILITARIANISM 53 (1979) (George Sher, ed.) (originally published in 1861)

with appropriate caution. If we cannot put others at peril—cannot endanger their security—we cannot act and so cannot pursue our ends and lead our lives. Maximal security extinguishes liberty and maximal liberty extinguishes security. Yet substantial measures of both liberty and security are essential if we are to have the chance to make our lives answer to our aspirations for them. This is the dilemma at the heart of negligence law.

When the law of accidents licenses the imposition of a risk it enhances the freedom of some and imperils the security of others. Those who impose the risk are set free to pursue ends and activities that they value, and their pursuit exposes others to risks of physical harm. When the law of negligence demands that risk be avoided, it does the reverse—it curbs the freedom of prospective injurers and enhances the security of potential victims. Risk impositions pit the liberty of injurers against the security of victims. Judgements of negligence set the terms on which these competing freedoms are reconciled. Negligence norms are tasked with reconciling liberty and security on terms that are both favorable and fair. Favorable terms enable people to pursue their aims and aspirations over the course of complete lives; fair terms reconcile the competing claims of liberty and security in ways that are justifiable to both potential injurers and potential victims, conceived abstractly as representative persons.

The question of how best to reconcile the pursuit of activities we value with the physical and psychological integrity that those activities can jeopardize is, of course, an issue that each of us must face individually. What ends are worth the risks they entail? Are the risks of death and disfigurement that are the price of scaling Mount Everest worth the sense of accomplishment that comes from standing on its summit? Are increased risks of cancer worth bearing as the price of performing path breaking medical research? Are increased risks of cancer worth bearing as the price of earning a living? This kind of individual choice is not, however, the chief concern of the law of negligence. It is concerned to reconcile the competing claims of liberty and security for a *plurality* of persons. The challenge is to reconcile the competing claims of liberty and security for a plurality of persons, each of whom is free, all of whom are equal, and among whom diverse and incommensurable conceptions of the good flourish.

Free persons govern their own lives. They are neither subordinate to others, nor mere vessels for the pursuit of collective ends. The terms of accidental risk imposition must, then, be terms that those subject to them might freely accept as legitimate for the governance of their lives in common. *Equal* persons have equal claims to liberty and security. These claims must be honored by the institutions that fix the terms of risk imposition among them. Diverse and incommensurable conceptions of the good flourish among free and equal people because the range of valuable activities and valuable ways of life is wide indeed. We value different things in life, and hold different hopes for our lives. Because people have distinct lives to lead, and because their aims and ends diverge, the principles of social choice differ markedly from the

principles of individual choice. Individually, it may be rational to expose ourselves to risks that it would be unreasonable—unfair—to impose on others.

The *rationality* of exposing oneself to a risk depends on the end furthered by the exposure, the importance that one attaches to furthering that end, and the efficacy with which the exposure will further those values. The canons of rationality thus give wide rein to individual subjectivity, and are naturally expressed in the language of efficiency. Individuals are free to value the burdens and benefits of risks by any metric they choose, and it is surely natural for them to value burdens and benefits by their own subjective criteria of well-being. It is also rational for individuals to run risks whenever, by their own lights, the expected benefits of so doing exceed the expected costs and to decline to run risks whenever the expected costs exceed the benefits. It is not, however, *reasonable* for people to expose others to risks whenever—by the potential injurer's own criteria of value—the benefits of imposing the risk exceed the burdens of whatever exposure it creates.

The circumstance where we voluntarily expose ourselves to risks in the pursuit of our own ends is very different from the circumstance where others involuntarily expose us to risks in the pursuit of their ends. The separate lives of different people cannot be collapsed into a single life that reaps both the burdens and the benefits of rational risk impositions. And the diverse aims and aspirations of a plurality of persons cannot be converted into a single scale so that we may make collectively the same kinds of judgments that we each make individually. Among separate persons, there is no reason to assume that those who are put at risk value the ends pursued through the relevant risk impositions in the way that those imposing the risks do. The fact that you are prepared to run enormous risks for the advancement of medical knowledge does not mean that I am prepared to do so. The difference between individual and social choice undermines the argument that a risk should be borne because it pursues a worthy end at an acceptable cost. Given the reasonable diversity of persons' final aims and aspirations, the justification for accepting risk impositions by others is not common acknowledgment of some shared final end, but mutuality of benefit. It is reasonable to expose other people to risks of serious injury and even death when it is fair to do so; and it is fair to do so, when they, too, stand to gain from the imposition of those risks.

Prospective victims may stand to benefit from the imposition of risks upon them in either of two ways. First, victims may stand to benefit because—*ex ante* and over a reasonable span of time—they stand to gain by receiving the reciprocal right to expose others to equal risks. The right to impose risks *on* others can justify the imposition of equal risks on us *by* others, because we may each gain more from the right to impose risks than we lose from having to bear exposure to risks. We may each gain more from the mundane freedom to take our cars on the road, for example, than we lose from have to bear the risks created by the presence of other cars on the road. This kind of mutual advantage is most fully present when a "community of risk" is present in its strongest

form. A "community of risk" is present in its strongest form when potential injurers are also potential victims, and equally so. In this circumstance, risk impositions are fair if and when they are to the advantage of a representative member of the community. They are to the advantage of a representative member of the group when the liberty that she gains from the right to impose the relevant risks is more valuable to her than the security she loses from having to bear exposure to equivalent risk impositions at the hands of others. Each member of the community then has her security compromised by having to bear risks imposed by others, but each also has her liberty enhanced by being able to impose risk on others. When the gains to freedom outweigh the losses to liberty, the imposition of a particular kind of risk makes each member of the community better off.

Second, prospective victims may stand to benefit from the imposition of risks upon them because the imposition of those risks works to the long run benefit of those endangered by them, even though these potential victims do not impose these risks, or benefit from being free to impose equal risks on others. For example, given the importance of driving to our daily lives (this from someone who lives in Los Angeles), we may all stand to benefit from the practice of transporting large quantities of gasoline over the roads, even though this method of transport creates risks of massive explosion, and even though most of us never expect to make use of the legal right to transport gasoline in this manner.[8] Residents of Manhattan, for example, generally gain nothing of value from the right to haul gasoline by tanker. Indeed, they may drive so infrequently that they gain far less than Angelenos do from this method of transporting gasoline.[9] But their life prospects may still be better by virtue of the prosperity created and sustained by the practice of transporting gasoline by tractor trailer. If so, the practice is to their advantage and the risks it imposes upon them, fair. The underlying criterion of fairness that justifies the imposition of risks in both cases is one of *ex ante* benefit over a reasonable period of time to those—potential victims—whose security is jeopardized by the practice of risk imposition in question.[10]

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[8]The transport of gasoline in this manner precipitated the death of the plaintiff in Siegler v. Kuhlman , 502 P.2d 1181, 1187 (Wash. 1972).

[9]It is tempting to think that they are also exposed to proportionately less risk from this practice of transporting gasoline so that their lesser benefit is matched by lesser burden. But it is not clear to me that they are at as much less risk from the practice. Tractor-trailers towing gasoline may create risks of especially great harm in the confined quarters and crowded spaces of Manhattan, even if there are fewer of them. The risks posed by tractor trailers hauling gasoline may not diminish in commensurately with the frequency of tractor trailer trips.

[10]Frank Michelman once proposed a similar criterion for determining when compensation should be granted for a "taking" under the just compensation clause. "A decision not compensate is not unfair as long as the disappointed claimant ought to be able to appreciate how such decisions might fit into a consistent practice which holds forth a lesser long-run risk to people like him than would any consistent practice which is naturally

Fairness takes center stage in the justification of risk impositions once we acknowledge the consequences of the facts that our lives are distinct and our ends diverse and incommensurable. Because our lives are distinct and our ends diverse we cannot treat questions of interpersonal risk imposition as matters of personal choice writ large. We cannot treat them as matters of rationality and must treat them as matters of reasonableness. We can no longer ask: "Do the expected benefits of this risk exceed its expected accident costs?" We must ask: "Is it fair for one person to put another's life, limbs and personal property in peril in this way?" "Is the imposition of this kind of risk to the long run expected advantage of the class of persons disadvantaged by it?" "Do they stand to gain more than they lose from the right to impose equivalent risks, or from the contribution that the imposition of this kind of risk makes to their well-being?"

With these ideas in hand, we are in a position to turn to the fundamental question of negligence law. When is it reasonable to insist that an actor take some precaution to reduce the peril her actions pose to potential victims? And when is it unreasonable to insist that some precaution be taken?

II. Duty and Breach: "Due Care as Reasonableness"

The basic issue at the heart of duty and breach law is how to strike a reasonable balance between liberty and security. That question arises as a question about conduct which imposes significant risk of harm. Instructively, the conduct in question is sometimes a widespread, standing practice. When we ask if the conduct of the American Association of Blood Banks in declining to recommend surrogate testing for AIDs in the early to mid-1980's was reasonable, we are asking about the reasonableness of the screening practices of several thousand blood banks.[11] When we proceed by supposing that certain classes of ends—the innumerable mundane ends that justify us in taking to the road, on one occasion or another, for instance—justify the imposition of certain classes of risk—the risks of ordinary driving—we thinking about the level of risk imposition appropriate to a general practice.[12] Ordinarily, though, negligence analysis of the reasonableness of a risk imposition is frequently more narrowly targeted. We ask about the particular reasonableness of putting one's own life in great peril to rescue another's[13], or about the reasonableness of moving a parked train without blowing its

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suggested by the opposite decision. " Frank Michelman, *Property, Utility and Fairness: Comments on the Ethical Foundations of "Just Compensation" Law*, 80 HARV. L. REV. 1165, 1223 (1967).

[11]Snyder v. American Association of Blood Banks, 659 A.2d 482 (Superior Court of New Jersey, Appellate Division 1995) *aff'd* 676 A.2d 1036 (1996).

[12]See RESTATEMENT OF TORTS, SECOND §291, *Comment e* (1965)

[13]*See e.g.*, Eckert v. Long Island R.R. 43 N.Y. 502 (1871), Wagner v. International Railway, 232 N.Y. 176, 133 N.E. 437 (1921).

whistle,[14] or about the reasonableness of stacking your hay at the edge of your property and in a particular manner.[15]

Judgments of due care pit the liberty that injurers gain from imposing risks against the security that victims lose by bearing those risks. Precautions that reduce risk benefit the property and physical integrity of victims, but burden the liberty of injurers. Precautions are reasonable when they benefit the security of victims more than they burden the liberty of injurers. Risk impositions are unreasonable when the burden of the precaution necessary to eliminate them is less than its benefit. Fair precaution, in short, is a matter of proportionality. But it is proportionality with several very important twist. First, harm and benefit are not symmetrically significant. In both morality and law our obligations to avoid harming others are stronger than our obligations to benefit them. In law, the asymmetry of harm and benefit is vivid and pervasive. We can be compelled to refrain from battering our neighbors, but we cannot be compelled either to love or to help them. Tort is robust whereas restitution is anemic. The Constitution contains a takings clause, but it does not contain a "givings" clause.[16]

Harms and benefits are asymmetrical because they stand in very different relation to autonomy. And they stand in very different relations to autonomy because they stand in very different relation to our wills. Harms compromise our autonomy by impairing our normal powers of human agency. Benefits enhance our lives only if they are congruent with our wills. To thrust an unsought benefit upon someone and demand compensation from them for the value conferred is to impose upon them.[17] Unsought benefits stand in the same relation to our wills as harms do. They subject us to conditions which we have not chosen; they sever the link between our wishes, our wills, and our lives and enlist us in other people's projects. If I play beautiful music outside your open bedroom window and then stick you with a bill for my services, I determine the use to which you must put some of your time and some of your money. You are presumptively entitled to determine those things and your ability to do so is an important aspect of your autonomy.

Two other twists are also important. Judgments of proportionality require judgments about benefits and burdens. Within the framework sketched here, those judgments are made not by appealing to subjective preferences but by making "objective" determinations of relative urgency.[18] Relatedly, qualitative evaluation of the

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[14]Davis v. Consolidated Rail Corp., 788 F.2d 1260 (7th. Cir. 1986)

[15]Vaughan v. Menlove, 3 Bing., N.C., 468 (Common Pleas, 1837).

[16] The claims made in this paragraph and the next are developed at greater length in Gregory C. Keating, *Is Cost-Benefit Analysis the Only Game in Town?* 91 SOUTHERN CALIFORNIA L. REV. 195, 214-30 (2018).

[17] *See, e.g.*, Lee Anne Fennell, *Forcings*, 114 COLUM. L. REV. 1297, 1300 (2014) (discussing forced ownership of property by the government).

[18] See T. M. Scanlon, *Preference and Urgency*, 72 JOURNAL OF PHILOSOPHY, 668 (1975).

interests at stake in risk impositions figures prominently in the framework. The ensuing discussion will, I hope, flesh on these abstract statements.

A. Precaution and Proportionality

The idea of proportionate precaution is nothing more than the natural (and, at least in the case law, dominant) non-economic interpretation of the Hand Formula. The extent of precaution should be commensurate with the magnitude and probability of the harm threatened by a particular risk imposition. The application of the idea, however, is not as straightforward as it might seem. For whatever reason, we tend to imagine that the relation between risks and precautions should be smooth and continuous: Very small risks should require very small precautions, modest risks should require modest precautions, grave risks should require great precautions, and so on. Upon closer examination, however, it turns out that very, very low probability risks—risks whose likelihood is so low their occurrence might be described as a "mere possibility", not as something "reasonably foreseeable" [19]—do not justify any precautions at all. These risks are "background risks", and background risks are the price of freedom to act. There is a level of mutually imposed, mutually beneficial, very low probability risks that we are all better off bearing than reducing.[20]

We leave the zone of background risks and enter the zone of risks to which duties of care attach, when risks are imposed whose probability is low—but not very, very low—and whose magnitude is significant. Indeed, once risks of harm cross above the threshold that fixes the upper bound of the inescapable background risks of living their magnitude normally is significant because serious physical harm significantly impairs basic powers of human agency. The risks created by having inspectors crawl underneath temporarily parked trains to inspect their undercarriages for cracks[21] are typical of such risks, as are the costs (slower operation of the trains, more disruptive

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[19]In *Van Skike v. Zussman* 318 N.E.2d 244 (Ill. App. Ct. 1974) a child set himself on fire after he won a toy lighter as a prize in a gumball machine, and tried to fill it with lighter fluid that he purchased from the store on whose premises the machine was located. He and his mother brought suit against Zussman, the operator of the gumball machine, among others claiming that "[Zussman] knew of or should have known that he had placed his cigarette lighter dispensing machines in a store that sold flammable fluids" and, by implication, that placing the machines in the store created a risk of harm against which precautions should be taken. The court concluded that these allegations failed to state a claim against Zussman on the ground that the "creation of a legal duty requires more than a mere possibility of occurrence." *Id.* at 247. *Compare Lugo v. LJN Toys* (holding that the use of a plastic toy action figure's detachable spinning blade being used by a child as a weapon was reasonably foreseeable).

[20]*See supra* note and accompanying text; Gregory C. Keating, *Reasonableness and Rationality in Negligence Theory*, 48 STANFORD L. REV. 311, 350-52 (1996) [henceforth cited as Keating, *Reasonableness and Rationality*]

[21]The train inspector in Davis v. Consolidated Rail Corp., *supra note* 14, lost one leg below the knee and most of the foot on his other leg when the train he was inspecting started without warning.

inspections, reduced income) of the precautions that would reduce or eliminate those risks (blowing a whistle or visually inspecting trains before moving them, discontinuing the practice of crawling beneath temporarily parked trains). What does the idea of fair precaution call for in these kinds of cases?

1. Qualitative Evaluation

One influential account of negligence holds that tradeoffs between precaution and accident costs should be made along a "razor's edge" where a penny's saving in precaution costs is equated with a penny's saving in losses of life and limb.[22] Proceeding in this way will minimize the combined costs of accidents and their prevention, thereby maximizing the wealth as society's disposal. Maximizing net value is the rational way for society to extract the most from the scarce resources at its disposal. Does this test of efficient precaution also fairly reconcile liberty and security, as many have thought? Not on the conception of fairness sketched in this paper. Evaluating the burdens and benefits of risks and precautions within a fairness framework requires us to appraise those burdens and benefits qualitatively, not quantitatively.

From a fairness perspective, the criterion of efficient precaution is blind to qualitative differences between the costs of the risk and the costs of reducing it. The risk imposed in *Davis* threatens—and, in the long run, inflicts—grievous injury. Over the long run, that risk will issue in injuries that are severe, irreparable and indivisible. Severe because they will either cut lives short or profoundly alter their course, as the severing of several limbs will profoundly alter the course of Davis' life. Injuries are severe when they materially impair health and normal functioning. Irreparable because, when risks issue in death, dismemberment and incurable disease, reparation cannot restore what injury has taken away. Injuries are irreparable when those who suffer them cannot be restored to the level of health or functioning that they experienced prior to the injury. Indivisible because the imposition of liability cannot redistribute the burden of severe injuries after the fact. Injuries are indivisible when they cannot be dispersed across large numbers of people. Unlike purely financial losses, death and permanent disability must remain concentrated on those who suffer them. We cannot divide Davis's loss of his limbs into small pieces and parcel those pieces out across all those who benefit from the enterprise that injured him, leaving Davis himself to bear only a tiny fraction of that loss.

The precaution necessary to prevent the injury that befell Davis—blowing the whistle before starting the train—is qualitatively less burdensome. Taking that precaution will not inflict severe, irreparable or indivisible injury upon the railroad. Taking that precaution decreases—ever so slightly—the speed of the railroad's

[22]Duckworth v. Franzen, 780 F.2d 645, 652 (7th Cir. 1985), *cert denied,* 479 U.S. 816 (1986) (Posner, J.).

operation, and it may marginally reduce the railroad's income. That reduction in income, however, will be spread across a large number of natural persons, none of whom will bear a noticeable burden. Quantifying these conflicting interests in dollar terms and adding the dollars up thus obscures the qualitative distinctions that are at the heart of the case. Risks of severe and irreparable injuries to life and limb stand on one side of the equation. At the limit, these injuries are total; victims are in peril of losing their very lives. On the other side of the equation are precaution costs that are trivial and divisible. The burden of precaution materializes—if, indeed, it is substantial enough to materialize at all—as a slight increase in the cost of operating the railroad. That cost can be distributed across all those—owners, employees, customers, suppliers—who benefit from the railroad's operation.

Negligence law generally is sensitive to the fact that life itself is at stake in its calculations. The circumscribed domain and inalienable character of accident law reflect in part the value of life itself.[23] So, too, the law distinguishes gross negligence, recklessness, and conduct egregious enough to justify the award of punitive damages, both from ordinary negligence and from each other at least partly by the degree of indifference to the value of human life that they exhibit.[24] The calculus of risk ought to be similarly sensitive. The fundamental interest that underlies both liberty and security is an interest in having favorable circumstances to form and pursue one's conception of a worthwhile human life. When injuries are severe and irreparable they profoundly impair the leading of a normal life and the pursuit of many conceptions of the good. When the chance of irreparable injury is significant, and when the costs of the precautions necessary to prevent irreparable injury are qualitatively modest, divisible, and readily distributed across a large class of persons, the qualitative balance between liberty and security interests is not close. Significant risks of serious injury are especially destructive of individual autonomy.

Severity, irreparability and indivisibility, are qualitative measures of a risk's magnitude. "Significance", by contrast, sounds like a quantitative measure—risks become "significant" when they cross some threshold of probability. Probability is, no doubt, part of what makes a risk significant in the relevant sense. But statistical probability is not all of what makes a risk significant. Consider the risk of gas tank explosions in car crashes—the subject of the famous Ford Pinto case.[25] Risks of gas tank explosions are prominent risks to begin with, because the dangers of fire and explosion stand out among the risks of automobile accidents. Gasoline is dangerous in a way that

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[23] *See* Keating, *Reasonableness and Rationality*, *supra* note 20, at 345.

[24] *E.g.*, H.L.A. HART & TONY HONORE, CAUSATION IN THE LAW 214 & n.46 (2d ed. 1985) (describing recklessness as "flying in the face of an apparent and apprehended risk" and gross negligence as merely failing to adhere to a low standard of care); PROSSER & KEETON, *supra* note , at 9 -10, 211-214.

[25] Grimshaw v. Ford Motor Company, 119 Cal. App. 3d 757 (1981).

no other substance normally present in a car is, and being burnt to death or disfigured by flames is an injury that most of us find particularly horrible. These are qualitative judgments, however. From a purely statistical perspective the risk of gasoline tank explosions may well be greater in motorcycles than in Ford Pintos, and the peril to passengers—to riders—may also be greater as well. Unlike automobile passengers, motorcyclists more or less sit on top of their gas tanks, and their gas tanks are not encased within the steel frame of an automobile. For the sake of argument, let us suppose that gas tank explosions are both more likely and more dangerous in motorcycles.

Even if this is true, however, the risk of gas tank explosion is qualitatively more significant in Pintos. The heightened risks associated with motorcycle gas tanks are inseparable from the characteristics that distinguish motorcycles from cars. These characteristics define the activity of motorcycling and are prized by most motorcyclists. For example, riskiness itself—the opportunity to put their physical safety at more than normal peril—may well be one of the things that motorcyclists enjoy. And, even if most motorcyclists are not risk-seekers in that sense, even if they only enjoy the sensual thrill of experiencing high speed travel, instead of being cut off from it in the comfort of a passenger compartment, that experience requires an extraordinarily unprotected gas tank. The greater safety of an encased passenger compartment separated from the gas tank comes at the price of killing the joy of the activity. Indeed, that precaution transforms the activity of motorcycling to the point where it is no longer the same activity. The qualitative costs of reducing the risks of gas tank explosion are thus high.

On the other side of the coin, the risks of gas tank explosion may not stand out as especially salient in comparison with other risks of riding motorcycles. The exposed character of motorcycle riding, and the relatively small size of motorcycles in comparisons with cars and trucks, exposes motorcyclists to a host of other significant risks—to greater than normal risks of being crushed by collisions with other vehicles, to greater than normal risks of being thrown from their cycles, and to greater than normal risks of severe head trauma, to name just three. Risks of gasoline tank explosion may not stand out in such grim company.

The heightened risks of gas tank explosion in Ford Pintos are, by contrast, salient, gratuitous and unexpected in just the way that the risks of gas tank explosion in motorcycles is not. Ford Pintos were family cars; children rode in their back seats. Pinto purchasers most likely sought the highest level of safety compatible with their budgetary constraints. The risk of gasoline tank explosion was one they sought to minimize, so far as possible. In this context, the risks of gas tank fires stand out, quite independent of any hidden flaw in the car. For people who are trying to keep their children safe, the risks of an automobile's gas tank are especially salient. Gasoline explosions threaten horrible deaths, horrible disfigurements and terrible psychological trauma. The specific facts of the Pinto's design made the failure of its gas tank even

more salient. In comparison with other subcompact cars, the design of the Pinto's gas tank stood out as singularly inferior, no functional necessity justified its inferiority, and that inferiority came as a shock and surprise to the owners and users of Pintos, who had no reason to think that they were purchasing a substandard subcompact.[26] These characteristics make the risks of gas tank explosion in Pintos qualitatively significant in a way that risks from motorcycle gas tanks are not, even if those risks are quantitatively much greater. The significance of a risk, then, depends not only on its statistical probability, but also on how prominent the risk is in comparison with other risks of an activity, how gratuitous it is, how expected it is, and so on.

2. When Risky Activities Benefit Those They Imperil

So far we have been talking as though the costs of a precaution were borne by one group of persons and its benefits reaped by another. This is not always the case, and it may not even be the usual case. Workers bear some of the costs of reducing the incidence of cotton dust or benzene in a workplace, consumers bear some of the costs of reducing the level of chemical residue on fresh produces, and the purchasers of Pintos bear some of the costs of improving the safety of their gas tanks. What difference, if any, does it make when prospective victims benefit from the risky activities that also endanger their safety? That it makes a difference in some cases is clear enough. We know that it is feasible to make knives safer by dulling their blades to the point where they can no longer cut. But we also know that this is absurd, because it deprives users of the principal benefit that they secure from knives.[27] Not all cases are so easy, alas. How should we evaluate the "level of precaution" appropriate for a subcompact car, for instance? Is a precaution worth taking if would increase the size of the car to the point where its classification would change? If its cost would price a substantial number of subcompact car consumers out of the market?

We cannot do justice to all of these questions here, but we can begin to explore them by considering the famous case of *Helling v. Carey*[28]. *Helling* both illustrates the circumstance where the (quantified, monetary) costs of a precaution may exceed its (quantified, monetary) benefits by a "hair's breadth" (or more) without making the precaution unreasonable, and sheds light on how a fairness approach conceives of the choice between mandatory precautions and warnings in a context where victims benefit from the activity that puts them at risk of physical injury. The plaintiff in *Helling* brought a malpractice suit against her ophthalmologists, alleging that her permanent visual damage resulted from their failure to diagnose and treat her glaucoma.[29]

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[26]*See* Gary Schwartz, *The Myth of the Ford Pinto Case*, 43 RUTGERS L. REV. 1013, 1031-32 (1991)

[27]The contrast is not between life and limb and purely monetary costs of precaution, but between life and limb and the activities that the product enables.

[28]519 P.2d 981 (Wash. 1974).

[29]*Id.* at 982.

Consistent with the custom of the profession, the defendants had not routinely tested the plaintiff for glaucoma because she was under forty, and the incidence of glaucoma for persons under forty was believed to be 1 in 25,000.[30] Setting aside the normal rule that, in medicine, customary care is due care,[31] the court ruled "as a matter of law, that the reasonable standard that should have been followed under the undisputed facts of this case was the timely giving of this simple, harmless pressure test to this plaintiff and that, in failing to do so, the defendants were negligent. . . ."[32]

In support of its ruling the court stated:

> The incidence of glaucoma . . . may appear quite minimal. However, that one person, the plaintiff in this instance, is entitled to the same protection, as afforded persons over 40, essential for timely detection of the evidence of glaucoma where it can be arrested to avoid the grave and devastating result of this disease. The test is a simple pressure test, relatively inexpensive. There is no judgment factor involved, and there is no doubt that by giving the test the evidence of glaucoma can be detected. The giving of the test is harmless if the physical condition of the eye permits.[33]

Put in Hand Formula terms, the high magnitude of the harm, the low cost of the precaution, and the high efficacy of the precaution, offset the low probability of the harm, and require the precaution to be taken.

In finding ophthalmological custom wanting as a matter of law, the *Helling* court stressed two features of the case. First, the issue did not involve special medical expertise.[34] The question, rather, was what due care required, given the probability and magnitude of the harm, and the costs of the precaution necessary to avert that harm. This, the opinion insists, is a matter for the court.[35] Second, the cost of the precaution was simply not commensurate with the magnitude of the harm it would prevent. The cost of the precaution is the increased time and expense borne by the 24,999 patients who do not have glaucoma but who must nonetheless submit to a harmless, relatively inexpensive test for it, and the harm that precaution prevents is "the grave and devastating result of this disease."[36]

The first argument is sound because questions of reasonable risk imposition are questions about the fair reconciliation of liberty and security for a plurality of persons.

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[30]*Id.* at 982- 83.

[31]*Id.* at 983. *Cf.* Gates v. Jensen, 92 Wn.2d 246, 595 P.2d 919 (1979).

[32]*Helling*, 519 P.2d at 983 (emphasis added).

[33]*Id.*

[34]*Helling,* 519 P.2d at 982. Questions of special medical expertise dropped out because the court supposed (rightly or not) that the choice of the pertinent precaution and its efficacy were beyond dispute. *Id.*

[35]*Id.* at 983.

[36]*Id.*

They are questions about how we should order our lives in common. Fundamental political questions of this sort cannot be wholly delegated to a single segment of society. The question of what care is owed, taking the facts as settled, is, therefore, a question for the court not for the medical profession. The medical profession has the authority to resolve technical medical questions, but it does not have the authority to fix the terms of reasonable risk imposition, pure and simple. The authority to set the terms of our lives in common belongs, in the end, to political institutions.

The second argument is also sound from a fairness perspective, but the reasons why it is sound are more complex. The court's conclusion that the pressure test must always be administered is open to the charge of paternalism. *Helling* is not an accident among strangers—an accident arising out of the involuntary exposure of some to risks imposed by injurers. It is an accident among participants in a joint enterprise. In a deep sense, the victims and injurers are the same people. Patients expose themselves —not others—to burdens and risks by taking and foregoing precautions. They suffer the permanent blindness of glaucoma when it occurs, and they bear the financial costs and the inconvenience of the pressure test.[37] These circumstances make contract a live alternative to tort: Instead of deciding what is best for patients, we might educate them about glaucoma and its prevention and let them decide whether to have the test administered. Why, in light of this possibility, should courts require a single course of action to be taken in every case? Is this mere paternalism?

Within a fairness framework, the case for insisting on the administration of the pressure test, rather than educating patients and letting them choose whether or not to take the test, is persuasive. Taking a representative normal patient as our touchstone, we can confidently say that the precaution at stake in *Helling* places a very modest burden on liberty while enhancing security substantially. Persons concerned with advancing conceptions of the good over complete lives would have strong reason to insist that the pressure tests be administered. Permanent blindness at a relatively early age has a devastating impact on a person's life, and on a person's pursuit of her aims and aspirations. Most reasonable people would, if fully informed, opt for the pressure test. Why not inform everyone anyway and let them choose whether or not to take the test? Because the burden that a regime of full disclosure places on patients, in terms of time, education, and concentration, is substantial.

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[37] It is virtually impossible to know whether *all* of the financial costs of the pressure test were passed through to the patients, though the patients necessarily bore the time and inconvenience of those tests. *See generally* Richard C. Craswell, *Passing on the Costs of Legal Rules 43 STAN. L. REV. 361* (1991). And even if the costs were passed through, they may have been covered by insurance, in at least some cases. There is no reason to criticize the practices that may result in some of the costs not being borne by the patients themselves. For our purposes, the critical point is that the relevant practice is mutually beneficial and voluntary.

Once we conclude that reasonable people have largely homogeneous interests and so reject a warning regime, the question becomes whether it is reasonable to require ophthalmologists to administer pressure tests to persons under forty. From a fairness perspective (if not, perhaps, from an efficiency one) the case for administering the pressure test is compelling. The magnitude of the harm that the precaution in *Helling* averts is great, and the costs of the precaution—the minor inconvenience and modest expense of a simple pressure test for 24,999 people—is slight. The precaution costs are dispersed across all those at risk from the disease and the impact on any single person's liberty is minimal. Whatever the total dollar cost of the pressure test, the costs borne by each patient are slight. The test should be administered because the cost of foregoing it is a small but significant risk of delayed detection and treatment of a devastating disease, a disease whose devastating effects can be wholly avoided when the disease is detected early. The cost of administering the test, by contrast, is minor inconvenience and modest expense.

The insisting that pressure tests be given, instead of leaving the choice of whether or not to take the test in the hands of patients, is not, then, a paternalistic one. And this is so even if it is true that some patients would prefer to forego the test and pocket the savings. Practices are not paternalistic simply because they fail to satisfy every idiosyncratic whim, or every eccentric taste. The market fails to satisfy every taste and that hardly makes it a paternalistic institution.[38] Both a warning a regime and a regime of mandatory precaution impose burdens, and the burdens of mandatory precaution are less than those of a warning regime. A regime of mandatory precaution burdens those who would prefer to forego the test (while visiting an ophthalmologist) by denying them the opportunity to do so. A warning regime burdens those who see no advantage in being given the choice of whether or not to take the test, and are burdened by being required to make that decision. The dispositive critical judgment is not that some people's irrational preferences for their own welfare should be overridden in the name of their own good, but that the burden of education and decision imposed by the warning regime is not worth the benefits of the choice it enables.

The case for a regime of mandatory precaution over a warning regime thus rests on a judgment about how the two possible regimes reconcile the competing claims of liberty and security for a plurality of persons. The case for a warning regime would be more compelling if the interests served by foregoing pressure tests were more urgent. It

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[38]See Alan Schwartz, *Proposals for Product Liability Reform: A Theoretical Synthesis*, 97 YALE L. J. 353, 372 (1988) ("Some consumers probably want planes with couches and amphibious cars, and are the victims of unequal bargaining power in the sense that too few such consumers exist to make serving them in these ways profitable. But unless one believes that every commercial preference should be satisfied, regardless of its cost" this is not an objection to the market's failure to satisfy these tastes.)

is unreasonable for the few who would prefer the freedom to decline the test to ask the many who would take it happily to bear the burdens of a warning regime. There are ways of taking foolish risks with one's eyesight that impose lesser burdens on others. Skipping eye exams entirely should be at least as effective as taking such exams while declining sensible tests. The marginal disadvantage of this strategy—that it denies the opportunity to take eye exams and forego pressure tests—is slight. It is paternalistic to tell people that they cannot gamble with their own eyesight, but it is not paternalistic to tell people that they cannot insist on an ophthalmological regime that best suits them, when such a regime imposes unreasonable burdens on others. The issue at hand is the choice of a social practice of risk regulation. It is fair to choose the less burdensome practice.

B. Subordinate Doctrines of Due Care

The fairness framework often leaves substantial room for reasonable disagreement over the choice of an appropriate precaution. Negligence law responds to the indeterminacy of the general canons of reasonableness through subordinate doctrines that specify the concrete duties of care. To determine concrete standards of reasonableness, we must look to custom, jury adjudication, and statutes. Each of these doctrines draws support not only from its capacity to specify the precise terms of reasonable precaution, but also from its own distinctive principle(s) of political morality. When general tests of fairness fail to single out a particular precaution as the most reasonable one, the general norms of reasonableness cannot do all the work of legitimating particular precautions.

Consider, for example, a victim who, hurrying to get out of the rain, injures herself by running into a plate glass door, which shatters when she collides with it. If the door is one-half inch thick and could be made thicker in one-twentieth of an inch increments, we have a case where modest and incremental safety improvements can be made almost indefinitely and could be expected to yield modest and incremental reductions in accident costs. Under these circumstances, the fairness framework does not single out a particular increment of precaution as uniquely fair.

In the case from which this example was drawn, the court permitted industry custom with respect to thickness to fix the appropriate standard of care.[39] Custom is an important measure of duty and it draws its support from several sources. First, the salience of customary precautions alone makes custom attractive. When no single precaution is obviously fairer than any of a number of others, the salience of one among many equally fair precautions is sufficient reason to settle upon it. Second, it is to

[39]Raim v. Ventura, 113 N.W.2d 827, 830 (Wis. 1962) ("[T]here was evidence that more than two thousand doors like the respondent's have been installed in the Kenosha area during the past eight years; 98% of all the glass doors in such area are like the one in question in that they employ 1/4 -inch plate glass.").

everyone's advantage for the law to adopt the shared understanding of reasonable care that customs embody when those customs are as fair as any alternative to them. Adopting customary precautions as the law's favored precautions respects settled patterns of cooperation instead of disrupting them. Other things equal, reasonable reliance should not be disappointed.

Third, customary conduct is normal conduct and what reasonable persons normally do is plainly relevant to, though not dispositive of, the question of what reasonable people should do. Fourth, customs are more rule-like than the general canons of reasonable care we have canvassed so far and this, too, is an advantage, other things equal. Injurers have good reason to want the boundaries of their responsibilities to be clear: Uncertainty frustrates planning, impairs the coordination of activities, and debilitates freedom of action. Less obviously, victims also have reason to favor clear specification of injurers' responsibilities. Knowledge of the precautions that injurers can be expected to take enables victims to plan their lives and coordinate their own precautions. Establishing an accepted, publicly known level of precaution is therefore desirable, and reliance on such a level is justified (or reasonable), so long as that level is one among a number of more or less equally fair precautions. The flip side of this coin is that, left to its own devices, the law of negligence has great difficulty resolving cases where coordinate precaution is required.[40]

Jury adjudication also serves to establish precautions in circumstances where the general canons of due care are indeterminate. Jury adjudication gathers support both from its capacity to identify salient precautions and from independent principles. Salience is contextual. It "depends on time and place and who the people are."[41] Insofar as juries presumably embody the culture and conventions of their communities, they are well suited to selecting contextually salient precautions. Salience is not the end of the matter, however. The practice of jury adjudication also has independent moral support. Juries bring the moral sense of the community to bear on controversial disputes, drawing authority from the claim that they articulate the sense of justice shared by a particular community.[42] By virtue of this claim, jury adjudication legitimizes controversial outcomes even in the face of persistent disagreement. Finally, negligence law determines concrete standards of due care by deference to statutes. Legislative specification of precautions as mandatory surely makes those precautions salient, and the power of statutory codes to specify coordinate precaution surpasses even the power of custom. Equally sure, the principle of legislative supremacy and the

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[40] See ABRAHAM HARARI, THE PLACE OF NEGLIGENCE IN THE LAW OF TORTS, 105-24 (1962).

[41] THOMAS C. SCHELLING, THE STRATEGY OF CONFLICT, 58 (1980).

[42] *See* Catherine Pierce Wells, *Tort Law As Corrective Justice: A Pragmatic Justification for Jury Adjudication*, 88 MICH. L. REV. -, 208 -10 (1990) (arguing that jury adjudication of tort disputes produces "local objectivity" in jury decisions).

duty to comply with just institutions[43] provide further — and independent — grounds for deferring to statutes.

These remarks, of course, only situate these aspects of due care law. Full consideration of custom, jury adjudication, and statutes would require a paper in itself. Among other things, these subordinate doctrines pull in different directions and their supporting principles stand in some tension with one another. For example, jury adjudication assigns less weight to certainty and more to community judgment than custom does. This brief discussion, however, may help to clarify the way in which the fairness framework approaches questions of due care in a sequential manner. Within a fairness framework we "work from a general framework for the whole to sharper and sharper determination of its parts."[44]

[43]For a discussion of this duty, see RAWLS, A THEORY OF JUSTICE, (rev. ed. 1999), at 350 - 55.

[44]RAWLS, A THEORY OF JUSTICE, *supra* note , at 566.