Hugh Gibbons Franklin Pierce Law Center, Concord NH

The purpose of law¹ is to protect and expand freedom² *

1. A framework for law

This article aims to establish a framework for discussions of law and public policy. To do that it is necessary to understand their purpose, for it is against that purpose that the debate over good and bad law, good and bad policy will range. The current debate is based upon "interests" and "rights.³" It treats interests as the purpose of public policy, so that good policy is policy that responds to and delivers on the interests of groups and organizations. A policy that does that is said to be "responsive."

The trouble is that it isn't clear why public power should respond to private interests. Is the choice between interests simply a matter of economic and electoral power? Is the "public interest" simply some accumulation of private interests? If so, which ones? Some interests must be preferred over others but without a sense of purpose there is no framework for preferring one set of interests over another. We might assume, for example, that if one group had an interest in destroying the interests of another group, the first group's interest would not become public policy. But often it does. Why is that?

Interests are bounded by rights. So those who would build a highway must compensate the people whose land is taken for the project—the owners have a "right" in their land. But how about the neighboring residents, whose lives will be disrupted by the construction? Don't the neighbors have a right to the quiet enjoyment of their land? If they do, it is only a sentimental right, for they will not be compensated for the disturbance. Why should that be so? How do we know what rights to recognize? Where do rights begin and end? Are rights simply interests that are more widely accepted by the public?

2. The experience of freedom

On its face, freedom² does not offer much promise for grounding law and policy. Variously defined as "the condition of being free of restraints" or "the capacity to exercise choice," the concept seems hopelessly vague and circular. To act as a framework for the public discussion of law and policy, freedom must have a concrete meaning that allows us to identify it with specificity and to determine the conditions that expand and contract it.

The purpose of this article is to supply that concrete meaning and to see how it could provide the fulcrum for defining interests and rights³. On a strictly sentimental level, freedom is clearly a central part of the rights and interests that animate political debate—rights and interests are important parts of a free society. But that sentimental notion has not generated a framework that makes it possible to distinguish interests that should be implemented from those that should not or to distinguish rights that exist from those that are dreams.

^{*} Superscript numbers point to endnotes with definitions of terms. See page 24.

Freedom is a universal experience, the experience that each one of us has as we consider the alternative actions that we may take. Its magnitude depends upon the number, range and value of those actions. A person whose choices amount to seven different ways to carry a pile of rocks from here to there does not experience freedom. That person's freedom will likely be improved by the addition of a few other alternatives, such as the opportunity to confront the person who assigned him the duty⁴ to move the rocks.

It follows from this that good law expands the number, range and value of alternatives facing the people covered by the law, as those people perceive the alternatives. A political process designed to respond to interests can approximate good law, but only if the public debate over interests recognizes that freedom is the point. Interests unbounded will otherwise institutionalize differences in power rather than the common interest in freedom.

The first step in the explication of freedom is to discern what it means to the individual. Then we will move to its meaning in public decisions.

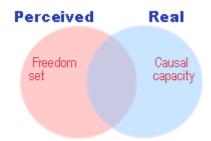
3. The freedom set

The experience of freedom² can be thought of as a collection of alternatives that a person perceives at any given time—the freedom set.⁵

Ted's freedom set

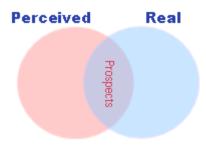
Playtennis Visit grandchildren Watch pro football ... and so on Consider Ted, who has finished the Sunday paper and is thinking over his alternatives for the afternoon. Three alternatives present themselves. Each one is attractive. He can set up a game of tennis with a friend, get into his car and visit his daughter and her children, or watch an NFL game. There are probably thousands of other things that Ted could do with his afternoon—a trip to the local art museum is a likely possibility. But they are either things that he has no interest in doing or things that he doesn't realize are a possibility.

Ted can only do one of these three things. When he chooses one, he must give up all of the others. The "cost⁶" of his choice is measured by what he had to give up—the value of the alternative he had to forego. If he chooses wisely, he will perceive that the value of the choice he made exceeds the value of any of the other things that he could have done. His afternoon will not have been wasted.



The freedom set is only half of the story of Ted's freedom. It is the subjective part, the part that exists solely within Ted's mind⁷. The other part, the "real set," lives in the world Ted inhabits. The real set represents those alternatives Ted has the capacity to bring about, those for which Ted has the "causal capacity⁸." Ted, for example, may decide to visit his grandchildren, yet when he reaches their home it turns out that his daughter has taken them somewhere. He may wait for them,

but if they do not return his visit will be a failure. In that situation Ted would have lacked the causal capacity to bring about the event that he desired. He was simply unable to produce the visit that he wanted, given his ignorance of their location. Lack of causal capacity can be caused by lack of skill or knowledge, lack of physical resources, or lack of strength or health.



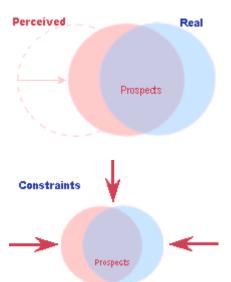
The union of subjective and objective, of the freedom set and the real set, is the person's prospects⁹—the list of alternative actions that the person can actually produce. That part of the real set that lies outside the freedom set consists of alternatives the person is unaware of or is not interested in.

As he sits at his kitchen table considering his alternatives, for example, Ted may not know there is a pickup touch football game forming in the park two blocks away. If he knew,

he might well choose to join it. Until he finds out about it, it is not one of his prospects. Or he may know of it, but have no interest in playing football—not at his age. It is not, for him, one of his prospects.

Prospects are particularly important in law, for they provide a coherent basis for compensation. Were Ted to suffer a serious personal injury¹⁰, for example, he would experiences a drastic reduction in his prospects, in the real portion of his freedom set. He might be able to watch the football game on Sunday afternoon, but the tennis game and the visit to his grandchildren would have been removed from his list of alternatives. And the income he lost while recovering would reduce his resources, erasing any alternatives that required those resources and adding a series of actions necessary to recover from the injury.

The concept of prospects provides an objective framework for compensating for the non-monetary losses to the victim's freedom. Rather than basing compensation on the inherently unknowable value of the pain that he had suffered, a jury could objectively assess the impact of the injury on Ted's causal capacity. If the injury prevented him from playing tennis, that would be counted as part of his losses. Where pain and suffering is irreducibly subjective, making it a deeply problematic basis for compensation, prospects have an objective dimension that makes assessing and valuing them a meaningful activity.



Prospects are highly variable. With maturation generally comes a better match between the freedom set and the real set. The person learns what he is capable of and what is impossible. The impossible drops, sometimes painfully, out of his freedom set, but his horizons expand as he realizes that things that once seemed impossible are now within his grasp. Desires develop into undreamed of new territory as the person learns to take his real causal capacity very seriously.

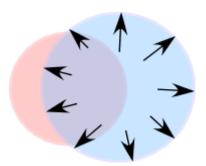
Life may collapse the person's freedom set, harming his perception of himself as an effective actor or diminishing his causal capacity, perhaps through injury or disease. Constraint¹¹ is the general term for reductions in freedom, whether real (e.g., loss of a limb) or imagined (e.g., paranoia). Constraints come in two flavors that have vastly different implications in the law. "Willed" constraints are the result of the actions of other people. They are produced by intel-

ligence, and they can be reduced or eliminated by responsible behavior. Willed constraints¹², in the form of injuries, lies, breaches of promise, monopolizing, abuse of office, and so on, are the primary subject matter of law.

"Natural" constraints are the constraints¹¹ that are not driven by will¹³—gravity, disease, ignorance, decay, and so on. Natural constraints¹⁴ are not legally significant. Viruses, droughts, and gravity are not moral actors; no legal action can be brought against them. But natural constraints that are under the control of a willed actor do support a cause of action, say, against the logger who carelessly felled the tree onto your car.

4. The cause of freedom

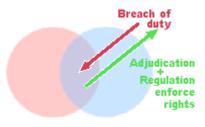
To say that freedom² is caused is simply to say that changes in the world are causally related to the person's subjective experience of alternatives. It is enhanced by the invention of activities once unimagined, by new medical procedures that preserve capabilities once lost, by education that expands the person's range of effective action. The person learns to enjoy through exposure to the enjoyment of others, learns to have confidence in her own causal capacity by the guidance of others, learns to seek new ideas and skills.



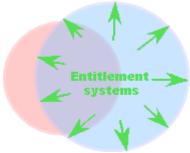
A person's causal capacity is expanded—the person is "empowered"—by changes in the world. The internet generates an explosive increase in individual prospects, making actions that were unimagined minutes before a realistic part of the person's repertoire. Were Ted to go online on that Sunday afternoon, for example, he would discover countless activities that he might well find more interesting than the ones he was considering.

5. Producing freedom

Law uses two very different methods to increase freedom². Protecting and expanding freedom are the purpose of each one.



First, law controls willed constraints¹¹ by enforcing rights³. Where a breach of duty¹⁵ threatens to, or actually does, diminish the prospects⁹ of a person, law uses regulatory and adjudicatory methods to redress¹⁶ the rights thus created. We will take up this method first.

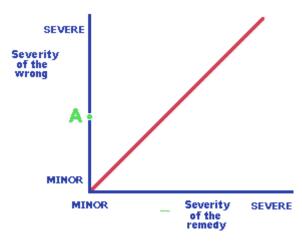


Second, law addresses natural constraints¹⁴ by creating entitlement¹⁷ systems. Creating a property law system, for example, lets people establish an authoritative relationship with the resources that constitute an essential part of their causal capacity. The person who is protected by copyright law has a way of turning the tunes in his head or sketches on a pad of paper into an economic resource.

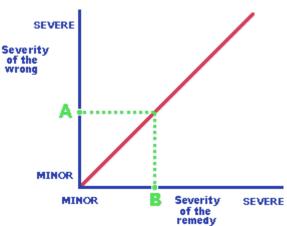
The binary nature of law—the fact that it operates in two quite different ways to enhance free-dom—increases the complexity of the story. In what follows I will take up each one and then address the confusion that arises when they are confused with each other.

6. Enforcing rights

The rights-enforcement role of law is entirely familiar. Rights³, as has been explained elsewhere in this theory, are caused by breaches of duty that either diminish or threaten to diminish the causal capacity of another person. When it enforces rights, the court uses coercion against the wrongdoer on behalf of the victim. The obvious question is, how much coercion is the court justified in using? The wrongdoer has diminished the prospects⁹ of the victim. In return, the court will diminish the prospects of the wrongdoer.



Consider the case of a thief who, by stealing a car, has committed a wrong of moderate severity. The actual severity of the wrong will be dependent in part on objective factors, like the market value of the car, and part on the subjective impact it has on the victim's causal capacity. She may testify convincingly that the car was of crucial importance to her business, which has suffered badly without it. The court will assess the wrong to be at some level, call it level A.



What is the court justified in doing in response to that wrong? It must exact a remedy that is proportional to the wrong that was done. In this illustration the court sets the remedy at level B, which is proportional to the severity of the wrong, at level A.

The red line is the line of perfect proportionality¹⁸ at which a wrong is matched to its proportional level of coercion. To establish the correct level of remedy the court may take into account the reasons for the thief's actions and the effect of the penalty. A rich thief, for example, will deserve a greater fine than a poor one if the

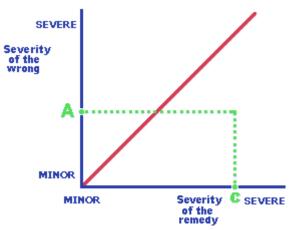
severity of the penalty is to be perceived to be equivalent. And a thief who shows every sign of being willing to steal again deserves a penalty that will cause him to rethink his impulses.

But why must the court respond proportionally to the wrong? The answer to that question is buried deep within human biology, but its basis can be sensed in the fact that the experience of freedom is the same for all. Whether the constraints¹¹ are caused by a wrongdoer or a judge, they diminish the experience of freedom. We can think of the requirement of proportionality as the law of conservation of human freedom², where the freedom of the wrongdoer stands on the same level of respect with the freedom of the victim. Because of his action, the wrongdoer subject to an appropriate reduction in his freedom, but his capacity for freedom itself is entitled to respect, so only what he yields by his actions should be taken from him.

In the Biological Basis of Law the imperative of proportionality is set out as a principle, the principle of greatest liberty¹⁹: Each person is entitled to the greatest liberty consistent with the same entitlement¹⁷ in all people. The wrongdoer breaches that principle, reducing the liberty²⁰ by diminishing the prospects of another. That justifies the proportional reduction in the wrongdoers prospects. But that action by law itself creates a risk²¹ that the law will breach the principle. Its actions reduce liberty as surely as the wrongdoer's.

Liberty is a subset of the larger concept of freedom. The experience of freedom is the experience of being without constraints¹¹, either willed constraints¹² and unwilled, or natural, constraints. Liberty is freedom from willed constraints. One is "at liberty" to the extent that one's freedom set⁵ is not constrained by the will actions or threatened actions of others.

The principle of greatest liberty applies to everyone, most definitely to those who use the law to intentionally dim the prospects of wrongdoers. If it is fundamental that no person may diminish the liberty of another, it is doubly fundamental that those whose business it is to diminish the liberty of others are deeply constrained as they do it. To act within the principle, law must render to the wrongdoer what is due him, and what is due him is a diminution in prospects proportional to the diminution he caused.



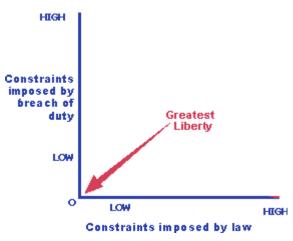
Were the court to assess a penalty at level C, the court would violate the principle of greatest liberty. Penalty C is far too severe a response to wrong A.

Both victim and violator are entitled to the greatest liberty. One is favored by law while the other is punished. But that is because of what they have brought upon themselves by their behavior, not because one is more worthy than the other.

7. Proportionality in law enforcement

It is easy enough to see what proportionality¹⁸ requires in sentencing, but it is not so clear what it means in the larger context of law enforcement as a whole. How large is a "proportional" police force? How much power does it have? What limitations is it under? To answer these questions we can compare the constraints¹¹ imposed by law enforcement—their cost⁶ in dollars and in the risk²¹ they create of breaching their own duties—against the constraints by wrongdoers that those law enforcement activities are designed to control.

To be consistent with the liberty²⁰ principle, the constraints imposed by law enforcement must be no greater than the constraints that law enforcement eliminates. Put another way, there must be a proportion between the constraints imposed by law enforcement and the violations that it eliminates. We can represent that in this way.



This is a different version of the proportionality diagram. If we rank the severity of a given breach of duty¹⁵, or of a class of threatened breaches of duty, on the vertical axis, from no violation at the bottom to high at the top, we can then ranking the measures designed to control them on the horizontal axis.

The point where both types of constraints¹¹ are at a minimum is the point of greatest liberty¹⁹.

I am using the concept of liberty here rather than freedom² because it is more precise. Later I will expand the analysis to include freedom in

general, but now I want to deal with that aspect of freedom that is diminished by the constraints imposed by the actions of others, by the behavior that creates rights³. That is the aspect of freedom that is relevant to rights³ enforcement, for rights are created by the willing undertakings of people.

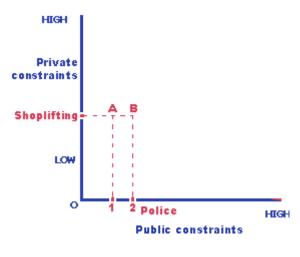
8. Minimizing willed constraints

Constraints differ enormously in magnitude—having the fender of your car crumpled is altogether different from having a limb traumatically amputated. But they are identical in type: All constraints diminish the experience of freedom by diminishing causal capacity. The constraints may come in the form of being incarcerated, being cheated, or being injured, they may operate by damaging one's resources, health, or reputation, but all of them remove choices that once existed or make more costly the choices that remain. Each person is entitled to the greatest liberty the minimum set of willed constraints consistent with the same entitlement in every person.

To show how the principle applies in the context of law enforcement I'll use the example of shoplifting.

9. Controlling shoplifting

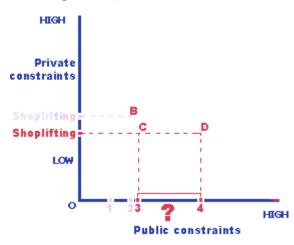
Consider this scenario. Shoplifting has become a serious problem in the downtown shopping area of a major city. Shoplifting creates no risk²¹ of physical injury¹⁰, but the losses it causes have many shopkeepers thinking about moving out of the area when their leases are up.



This diagram shows the relationship between police action in the area and the shoplifting rate. Existing police surveillance, at point 1, has resulted the current level of shoplifting. Total constraints in the area are at A, with a low level of constraint from the law, but a substantial constraint from criminal behavior. This leads the government to increase police presence by doubling the number of foot patrols, bringing the level of public constraints²² to point 2. This apparently has no effect on shoplifting, which continues at the same level as before. The net effect has simply been an increase in total constraints from A to B. Shopkeepers are beginning

to get complaints about suspicious-looking people who seem to be lurking and following them. The police are becoming a presence, but not one that is apparently doing any good. The move from level 1 to 2 has produced a gratuitous increase in constraint that violates the principle of greatest liberty¹⁹. Point B is further from the point of no willed constraints¹² than point A.

Shoplifting is a "private constraint,²³" an act that diminishes someone's causal capacity and is not covered by any claim of right. A public constraint, such as an arrest by a police officer, also diminishes someone's causal capacity, but it is done under a claim of right. The right derives from the wrong done by the criminal. The law is enforcing a right that has been created by the shoplifter.



The failure of the police force has caused the city government to look for a more effective enforcement mechanism. City officials are considering a scheme in which video cameras are installed to cover all public areas, an approach that has been successful in London. The system is likely to reduce shoplifting by 25%.

That seems to satisfy the principle of greatest liberty, since it is a move toward the point of no constraints¹¹. But the analysis is not yet complete. What is the cost⁶ of the reduction in shoplifting? "Cost" here refers to the effect of the plan on the freedom sets⁵ of the shoppers and

shopkeepers who will be affected. From the diagram there seems to be a great debate on that point. Some people, particularly the shopkeepers, consider video monitoring a minor increase in public constraint, say from point 2 to point 3. To them, the system is clearly justified, for a 25% reduction in shoplifting at minimal cost⁶ is clearly an improvement. On the diagram, if the shopkeepers are right the city would have moved from point B to C, which is clearly a move toward the point of greatest liberty.

Others don't see it that way. They view the surveillance system as a huge increase in public constraint, from point 2 to point 4. It represents the evils of "Big Brother," a big loss of "privacy," call it what you will. To this group it will cause a move from level 2 to level 4 in public constraints, which is clearly a diminution in the liberty²⁰ of most every person.

10. Putting a value on constraints

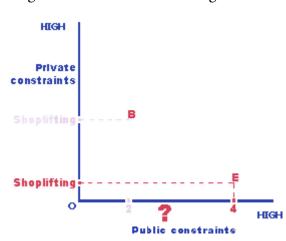
Most of the great disagreements in public policy result from differences in the way citizens value private constraints²³ on the one hand and public constraints on the other. Constraints¹¹ only have meaning to a person. People will differ based upon the perceptions that everyone has of their prospects⁹ and the risks²¹ they are under. Shopkeepers, as in the example above, will see shoplifters as a deadly threat, while customers see them as no physical threat and may be completely ignorant of their financial cost⁶.

How does this square with the principle that each person is entitled to the greatest liberty¹⁹? If people differ systematically in the way they evaluate constraints, how is it possible for all to have the greatest liberty? The answer is that individuals are entitled to the greatest liberty consistent with the same entitlement¹⁷ in every other person. No person is entitled to the level of constraint he views as ideal, as that would mean that others have no entitlement at all. It does mean that the pursuit of equal liberty²⁰ requires three strategies.

- 1. Equal respect for all persons in the process of setting the level of public constraints²².
- 2. A lively process for evaluating and revising the level of public constraints. Once set, public constraints create advantages for some, who will defend them with vigor. When they are shown to be wrong and threatened with elimination, those who benefit from the public constraints tend to force a violation of the principle of greatest liberty by keeping constraints at too high a level.
- 3. A variety of different "constraint packages," that is, of political subdivisions offering different risk profiles, so people can find the profile that fits their sense of constraint¹¹. Parents of small children will not be stuck, then, with an environment that is ideal for young adults, while young adults need not put up with the coddling appropriate for children.

11. The law's duty of care

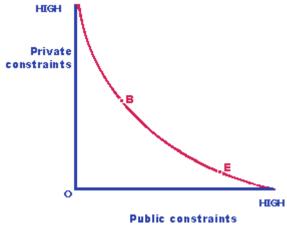
No state²⁴ is perfect. No package of public constraints²² is ideal. But those who make the law do have a duty of care²⁵ like anyone else. Their decision, to continue with the shoplifting example, creates a risk that citizens, threatened by the prospect of constant surveillance, will avoid the shopping area and will exert unjustified effort to protect themselves from public scrutiny altogether. Imagine, for instance, that after it goes into effect the surveillance system has the following effect.



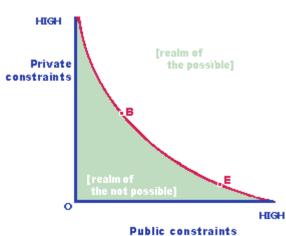
Video surveillance has been wildly successful! With the area at point E, shoplifting has virtually disappeared, but that is because shopping itself has virtually disappeared. Shoppers, put off by video surveillance, have headed for other areas. The shopkeepers have been howling in protest. They want the video system turned off, hoping to return from point E to point B, which, despite all the shoplifting, was far more consistent with their freedom². At point E the law is far more of a constraint¹¹ than shoplifting ever was.

A just regime will respond quickly at the first sign that this is happening. Mistakes are one thing, but intransigence in the face of mistakes is another. Regimes are not necessarily just. The firm hired to provide the video surveillance will have a powerful incentive to influence those in authority to retain the system. The company's financial interest is the source of its power, a power that can thwart the operation of the liberty²⁰ principle. From every violation of the principle of proportionality¹⁸, someone will benefit. That person will have an incentive to retain the system. If the person is "connected," the fact that a public measure has diminished liberty will not be enough to eliminate the measure. Law is "sticky rightward;" that is, once public constraints have been put in place it is difficult to remove them. Putting public constraints in place creates an instant vested interest in their continuation—people whose own freedom is grounded on limiting the freedom of others.

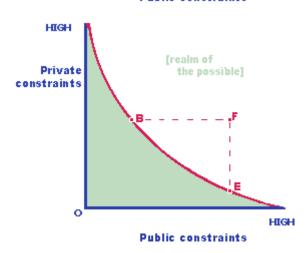
12. The liberty frontier



Points B and E are simply two of the innumerable possible choices open to this regime of law enforcement. With police enforcement only, the downtown suffers the shoplifting rate at level B, while the video surveillance system moves it to point E. Many other types of public constraints are possible, such as allowing random searches, having uniformed patrols, and the like, which would result in different levels of shoplifting. The curving line represents the alternatives that are open in choices about law enforcement.



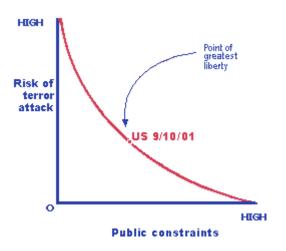
That line is a "frontier," a border between that which is possible and that which is not possible. Any regime would presumably elect to be at the point where private and public constraints are zero. That would, however, require measures beyond what law is capable of delivering, such as producing a populace so imbued with duty⁴ that they never violate it, or a populace in which shoplifting was such an ugly idea that no one, including criminals, would deign to do it.



While it is not possible to be inside the frontier, it is entirely possible to wind up at a position far outside the it, say at point F. Point F represents a world in which the video surveillance system has been installed, but the shoplifting rate is the same as it was at point B. This result, a complete violation of the principle of greatest liberty¹⁹, could be caused by the city's failures to pay for adequate training for the officers who would run the system or by poorly supervised officers who were not paying attention to the video equipment.

13. Charting a catastrophe

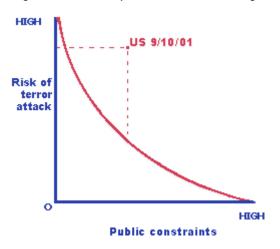
The liberty frontier²⁶—the set of choices open to a people as it decides on the level of rights enforcement—changes as the result of forces outside law. Consider the impact of the attack on the World Trade Center in New York.



On the day before the attack the United States was presumably on its liberty frontier at the point of greatest liberty (marked "US 9/10/01)—that is, at the point where further increases in public constraints²² would diminish liberty²⁰ more than they would improve matters. This is the point that satisfies the greatest liberty requirement of the principle.

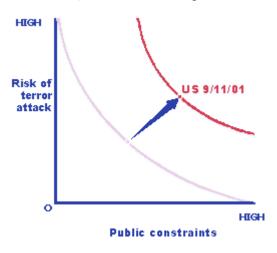
Notice that at that point the risk²¹ of terror attack is not minimized. It is still substantially above zero. To reduce that risk further, however, would require levels of state²⁴ power far in excess of the risks that it would eliminate. Abolishing

all risk of terrorism would vastly diminish freedom², possibly requiring constant surveillance and frequent searches by officials who are as prone to error as the general run of citizens.

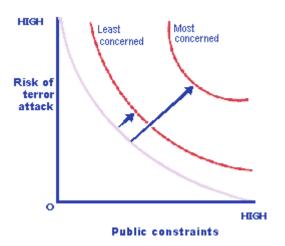


In retrospect there is some evidence that the United States was not at the point of greatest liberty on September 10. Some argue that, if it had operated properly, the enormous security apparatus that was in place might have been able to head off disaster, but through bad luck and ineptitude it failed to do so. If true, that would place the situation on 9/10/01 far outside the liberty frontier²⁶, leaving the nation facing a high risk of attack despite resources in place that could have reduced or eliminated that risk. If true, the high level of public constraints in place on that day would not have been justified.

We will assume that was not the case, that the rights-enforcement system was, though not perfect, functioning as well as could be expected. It is important to realize that, even at the ideal point on the liberty frontier, there is great risk.

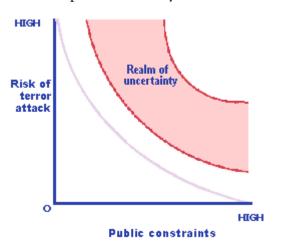


The attack erased the old liberty frontier. The comfortable set of choices that we felt we had prior to the attack was obliterated, replaced by a world that was far more threatening. Not only were the private constraints²³—the probability and likely severity of attack—far worse than we thought, but the public constraints were far less competent than we hoped, meaning it would take a hefty new dose of public constraints to cope with the threat, and even then we were unlikely to return to our prior level of confidence anytime soon.



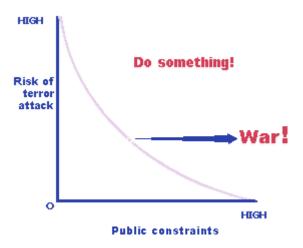
But picturing the frontier as a single line is very misleading. Following September 11 the perceptions of millions of people made up the liberty frontier and they differed enormously in their perception of its impact. Some, pictured here as the least concerned, felt that a serious, but by no means categorical change had occurred. Upon reflection, they would have argued for some increase in public constraint to deal with the new threat level.

At the opposite extreme were those for whom the world had changed fundamentally from benign to threatening. These are the people who demanded to be protected, for whom any level of intrusion upon their lives by law enforcement was justified.



Most opinions fell somewhere between these two extremes, creating a band of uncertainty. The collective liberty frontier is somewhere in this region, but it is not at all clear where it is. Clarity will come with time as greater experience with terrorism provides a more accurate assessment of the risk and better tools to reduce it. Central to the policy-maker's duty of care²⁵ is to read the "mood of the people" accurately, to get a picture of the communal sense of the liberty frontier.

But at this stage the policy makers have a great deal of power, to the limit of declaring a virtual "war." In the heat of the moment the focus is on the private constraint—the horror of the event—and the demand is for protection. Action alone will calm the fears.



Like the person who, confronted with a fire on his stove, gropes blindly for anything that will put it out, the instant response is for action. Instant reprisal is all that will satisfy.

The pressure on law to act will be enormous; the pressure to expand public constraints extreme. To understand the dynamics at work we will need to expand the our view of law from the context of the way that it enforces rights to the entire picture of the way that law operates. We will need to expand the paradigm

14. Delivering the goods.

The other method used by law to deliver freedom² does not address injustice at all. Law establishes the ground rules that guide cooperation and delivers those goods that cannot be provided by private interactions. Here, law is responding to human desires, delivering what it is that people want. Its mode of operation is to define and manage entitlements¹⁷. It does that in two ways.

First, law enables human cooperation by establishing the "rules of the game." Cars are to drive on the right side of the road. In some countries they must drive on the left—the choice is arbitrary. But in either case drivers are not free to choose which side they drive on.

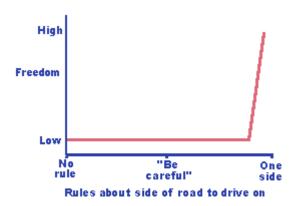
Second, law delivers particular ends that could not be achieved without the coercion. Where voluntary interaction cannot achieve the ends that are desired, the end can sometimes be achieved through the law's use of coercion. Roads, for example, are not possible, at least not at an efficient level, without the use of coercion. Public funding of roads through law enables desires that would be frustrated without it.

A third set of entitlements, called "civil rights," constrain those who control law by giving citizens the power to select their rulers, bring legal action, run for office, and so on.

Having generated beings who see themselves as causes, but impact others as they cause what they want, biology sets the stage for the emergence²⁷ of a law that has a single purpose—the expansion of freedom. That purpose has two domains—the right and the good. Each domain has its own modes of operation. The functions of the domains can be summarized in this way.

Domain:	The right	The good
Law responds to:	Rights	Interests (desires)
Legal action:	1. Enforces rights	1. Creates entitlement systems
	2. Regulates risky behavior	2. Delivers entitlements
		3. Enforces "civil rights"
Justice concept:	Restorative justice	Distributive justice
Legal personnel:	Judges, jurors, advocates, officers, regulators	Legislators, administrators, lobbyists
Legal principle:	Greatest liberty	Greatest freedom
Legal reasoning:	Principle-based reasoning	Consequentialist reasoning
Proper mental state:	Reflective equilibrium	Representation

15. Setting the rules of the game



Consider the rules mentioned above that govern the side of the road to drive on. Were the state²⁴ to provide the roads and let people drive where they want—that is the "No rule" point in this diagram—the risk²¹ of collision would eliminate auto travel from the freedom sets⁵ of a great many people. Adding a law requiring drivers to "be careful" would be unlikely to improve matters. Requiring all drivers to stay to the right (or left) decreases the risk of driving.

A small sacrifice in freedom²—the freedom to drive wherever one wants, without supervision—causes a great increase in freedom. Just as with the enforcement of rights, where freedom was increased by diminishing the freedom of wrongdoers, freedom can be increased through a reduction in freedom, even though the reduction in freedom falls upon those who have done no wrong.

16. Consider the speed limit

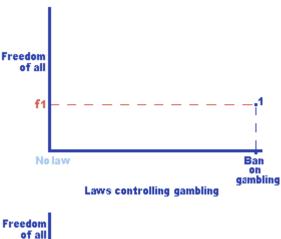
Speed limits increase freedom by reducing the frequency of accidents. At a speed limit of zero, there would be no accidents, but there is no question that if speed limits were universally set to zero the effect on freedom would be catastrophic.

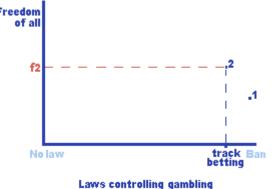


The freedom function²⁸ for speed limits follows the general shape for entitlements¹⁷. At very low levels of control, say with speed limits of one hundred miles per hour and up, the risks²¹ associated with driving would create a heavy burden on freedom, as people would avoid driving for anything but very important reasons. At high levels of constraint¹¹, that is, at low speed limits, freedom² is constrained because the opportunity cost⁶ of driving increases—driving at 25 mph chews up more than twice as much time as driving at 60 mph, requiring the sacrifice of far more

elements of the freedom set⁵. Of course, the particular shape of the freedom function for roads depends upon the particulars of the road in question. But this general relationship—some constraint improves freedom, but after a point further constraints diminishes it—holds for all roads.

17. Consider gambling

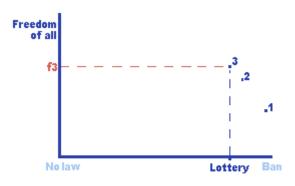




Not long ago it was common for states to declare all forms of gambling illegal. One state, Nevada, welcomed gambling, but most of the others prohibited it. This diagram represents one of those states. Its ban on gambling has resulted in a state²⁴ that is at point "1" on its freedom function²⁸. Exactly where point 1 is located need not concern us. We simply need a place to begin our analysis and since the ban on gambling was widely supported by the citizens we must assume the ban produced some level of freedom². We will call that level "f1"—the level of freedom associated with this state's ban on gambling.

Perhaps because it carried the veneer of sportsmanship, racing dodged the ban. The track provided little to support the fears of those who foresaw social disintegration, abandoned families, and gangsterism. Adding off-track betting made gambling a realistic element of the freedom set of millions of gamblers.

But off-track gambling, combined with the occasional trip to Las Vegas, hardly satiated the appetite for gambling. There was enormous unsatisfied demand, suggesting that further relief from the ban would be justified.



The states took advantage of that excess demand, creating lotteries that supplied enough money to relax the need to raise taxes. The lottery is such a bad bet—state lotteries on average retain half or more of the money that is bet, while casinos typically retain less than 5%—that one suspects that there is still a lot of leftover demand, a lot of people who would gamble if they could if they could get a better deal than the lottery.



This suggests that gambling laws are still too restrictive. If the purpose of law¹ is to protect and expand freedom, we can confidently expect them to continue to erode, perhaps to disappear altogether.

We can expect that, unless it is true that there really is something wrong with gambling. If gambling actually harms people, reducing their freedom, we would predict that protective laws limiting gambling would be durable.

18. The gambling disorder

Gambling addiction has been categorized as a brain disease. In a small minority of people a brain condition predisposes them to exaggerated excitement from the act of gambling, a feeling they become dependent upon. The feeling is produced by losing as well as by winning, so where losing causes those without the condition to control their gambling, it seems to excite those who are victims of it. Good money follows bad as a curious logic emerges which suggests the losses are building toward a huge win. What are we to make of this disorder?



We could say so what? One's brain state is one's own business. If you've got a tendency toward gambling addition, deal with it. Under this view we would eliminate all laws governing gambling (moving to point 1 in the diagram) and simply let the addictions fall where they will. The millions who enjoy gambling could add it, in all its forms, to their freedom sets⁵ and the addicted would make out however they could.

It seems clear, however, that if there were addiction treatments that actually worked, the law could provide for free clinics, expanding the prospects⁹ of the addicted along with everyone

else and raising the freedom² of the society from f1 to f2. That would depend upon the cost⁶ of the clinics—the funds to support them would presumably be raised by a tax on the profits of gambling establishments, which would make gambling a worse deal by reducing the payouts, reducing the liveliness of the gambling alternative—and upon their effectiveness. If the clinics were not effective, or if the addicted did not use them, they would not increase freedom. Assuming the best, the clinics would increase freedom.

But addiction presents another problem, one that would lead us to suspect that both points 1 and 2 are not realistic. Because of their addiction, compulsive gamblers are easy prey to those who would cheat them, dominate them, make them accomplices to wrongdoing. The result of uncontrolled gambling is an environment that is dangerous for everyone, addicted and non-addicted alike. Using the "profits" earned from the addicts, gambling predators can set traps for unwary non-addicted gambler. The addict fuels a "degenerate" environment within which wrongdoing is good business. That danger could make points 1 and 2 an illusion. Without some way to control the wrongdoers, all gamblers would become prey. At least that seems a reasonable concern.



Licensing of both gamblers and those who provide the service seems like a measure that would avoid the dangers of unrestricted gambling without imposing gratuitous constraints¹¹.

Gamblers could be tested for the presence of the brain trait that creates the risk²¹ of addiction. Those who had the trait would receive a license limiting them in an appropriate way. Gambling operators who failed to respect the licenses would be denied operating licenses. Perhaps licenses could be made contingent on passing a test in the calculation of basic probabilities.

19. The freedom function

No state²⁴ licenses gamblers, which provides evidence that it would not expand freedom² to do so. But that is not definitive evidence, for there are many states that allow only the public lottery, which is itself deeply suspect from a freedom point of view. Supported by some residual moralizing about the evils of gambling, the state lottery presents the gambler with a very limited alternative that carries an astonishingly bad payout, while it shields state legislators from the discipline that attends funding their programs with tax money.



It seems likely that, relative to gambling, the greatest freedom lies somewhere between wideopen licensed gambling and the state monopoly of the lottery.

The freedom function²⁸ establishes the policy-maker's duty of care²⁵. When the policy-maker establishes a set of rules, on gambling for example, the policy-makers make a direct impact upon the causal capacity of those governed by the law. By declaring something illegal, the rules increase the cost⁶ of that alternative to anyone who has it as an element in his freedom set⁵.

The policy-maker has done nothing less than create a risk²¹ that freedom will be needlessly reduced—reduced without a corresponding increase in freedom. The policy-maker has violated the principle of the greatest freedom.

Policy-making is an undertaking exactly like any other. When they create risks, policy-makers like anyone else, have a duty⁴ to take reasonable steps to minimize that risk. They must make an accurate prediction of the effect of their action, eliminate needlessly coercive aspects of it, anticipate conditions under which it would not enhance freedom, and monitor it to see that it conforms to their intention.

20. Civil entitlements ("rights")

It is odd to speak of the policy-maker's duty of care²⁵ because it is not easy to imagine how one would bring a policy-maker to court for doing a careless job and breaching its duty. Policy-making, at least legislating, is legitimately a collegial undertaking, given the nature of the job that must be done. Rights-based prosecutions are notoriously difficult in collegial situations, since it is very difficult to place individual responsibility. The collegial process blunts causal responsibility.

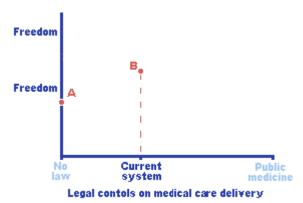
Instead, the risks²¹ posed by policy-makers and administrators are addressed structurally, often in a formal constitution. Policy-makers are surrounded with limitations on their powers, with complex procedural requirements, and with the fact that they are easily replaced by the electoral process.

These limitations are operationalized through the endowment of "civil rights" upon citizens. Within the definitions of the Biological Basis of Law, these are not rights but rather entitlements ¹⁷. They are socially defined expectations that create duties, which, when breached, produce rights. The entitlement to vote for one's representatives means, for example, that a specific set of officials has a duty to record and tally your vote. No right is created until they fail to do that. If they refuse to let you vote, the breach of that duty creates a right in you to compel them to act.

There are two situations in which current law takes a more active role to protect civil entitlements. First are those situations in which people use the guise of public power to commit torts. The other is a direct attack upon a piece of legislation for its "constitutionality." The court does not recognize lack of freedom² maximization as the basis for a claim of unconsitutionality, but it comes very very close. Where there is a less restrictive alternative to a piece of legislation, the court may declare it needlessly or gratuitously constraining. The court does not maintain that it knows where the peak of the freedom function²⁸ lies, just that from the legislation itself it is clear that causal capacity has been needlessly diminished.

We might expect that the court's ability to scrutinize legislation and to evaluate public breaches of duty will expand as the framework underlying law becomes clearer.

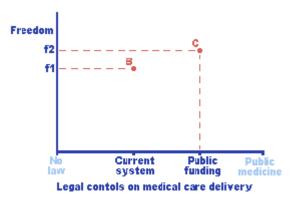
21. Consider universal health insurance



The system of medical care is covered by any number of legal programs that provide funding, oversee safety and redress¹⁶ breaches of duty. Let's assume that the current system of legal controls increases the freedom that the medical care system delivers from level A, where it would be without controls, to level B. We could debate that point endlessly, but if we assume it is true arguendo we can ask the interesting question: Would an increase or a decrease in legal control of medicine increase freedom? Clearly there is

room for improvement. Many measures of medical well-being in the United States consistently run behind less prosperous countries. Could we do better?

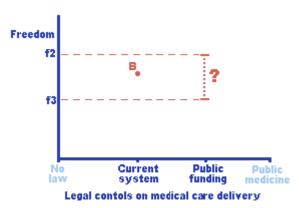




If we could do better, in which direction would improvement lie? Certain features of the current situation are no doubt worthy of obliteration. That would suggest a move in a leftward direction toward relaxing the controls on medicine. There are countless layers of medical regulatory superstructure as each new policy has added law without doing away with the law in place before it. But rationalizing the regulatory law would not likely improve freedom² much. It would eliminate some bureaucrat salaries, but it is not likely that it would increase care delivery.

On the other hand, many vigorously maintain that public funding of medical care—a dramatic increase in legal control of the system—would result in a huge increase in the delivery of medical services. For the sake of argument, let's assume this increase would be to point C. This would be a dramatic increase in access to services, particularly to those who are left out under the current funding scheme. Public funding would shift spending from private to public, eliminating ability to pay as a criterion for receiving medical care.

On the face of it, it would seem axiomatic that if some are not receiving medical care because they cannot afford it and public funding could eliminate it, freedom would be expanded non-trivially—a little ill health can wipe out virtually all choices.



The fact that universal health insurance has not followed hard upon the heels of Medicare and Medicaid in the United States, though it has been repeatedly proposed, suggests that the various proposals offered thus far raise serious freedom questions of their own. Would universal coverage increase frivolous demands for care that would shunt aside people who are currently being served? Or would we increase the percentage of the gross national product spent on medical care—and what effect would that have? Is there reason to believe the governmen-

tal employees who would make health care delivery decisions would be better than their counterparts in HMOs? What would universal health insurance do to the recruitment of talented medical care professionals? The implications stretch into the distance, with everyone's freedom involved in the answer.

22. The greatest freedom

Even if a satisfactory funding scheme can be devised, it will likely diminish the freedom² of some who have done no wrong. The principle of greatest freedom provides that each person have the greatest liberty¹⁹ consistent with the breach of no duty. How could public funding of medical care possibly be consistent with such a principle? If those who now pay for their own care and make their own decisions must relinquish those decisions to the managers of the public system and spend their health care dollars on support of the system rather than on their own care, their freedom has been diminished without any breach of duty¹⁵ on their part.

To make such a change legitimate under the principle, it must be, in essence, a willing gift from those who will lose freedom under the act to those who will benefit. Majoritarian democracy is not well suited to the resolution of this question, for majority support in a representative system falls far short of willing acquiescence²⁹. Requiring unanimity, on the other hand, would foreclose the decision before it ever was raised for public discussion. Perhaps a sloppy representational system in which there are numerous hurdles is as close as anything to a functional way of reaching a decision that a substantial majority would accept as legitimate. Perhaps such a system would buy time for the public to discuss the matter and come to a considered judgment.

23. The insanity defense

The two domains of law, the right and the good, are easily confused. The insanity defense is a constant source of confusion. The logic of it is very simple. A person who is unable to tell the difference between actions that are right and wrong is not a willed actor. That person is not free to choose a less risky²¹ path or to avoid intentional injury¹⁰, because the person senses no duty⁴ to do so. This person is the protoplasmic equivalent of a lightening bolt—capable of delivering mayhem but incapable of understanding that he is doing so. Such a person creates misfortune, but not rights.



The law is, of course, free to respond to such a person, but must do so as a matter of the good, as a matter of public health or care for the incompetent, not as a matter of the right. Separating the two domains is difficult in practice. First, the victim and his sympathizers are unlikely to be satisfied. The damage, if done by anyone else, would give rise to a right and to penalties. Treating it as a medical problem appears to confer a benefit on a wrongdoer. Victims and victim sympathizers have

difficulty distinguishing between their sense of outrage, which is entirely appropriate, and the dictates of a sense of justice³⁰, which holds that those who are incapable of responsible behavior are not in any sense "guilty."

The second problem is how to justify treating the ill person against his will. If his will cannot be determined or if there is reason to believe that it is dominated by a disorder, treating him without his willing acquiescence²⁹ can be justified by the greatest freedom². The person currently has no elements in his freedom set⁵—he is acting out the dictates of the disorder. By giving treatment, the law is making it most likely that he will return to control under his will and refurbish his prospects⁹. If the insanity was temporary, however, this justification will not work. It makes no sense to treat someone who was only episodically ill. In such cases, the insanity defense would let the person off without penalty or treatment.

24. The logic of right and good

The logic of right and good are, in a sense, mirror images of one another. Rights logic applies a pre-existing normative principle, say, "act with reasonable care for the safety of others," to a situation, evaluating what happened in the situation against what should have happened had the principle been followed.

```
Preexisting Duty
Act with reasonable care
Occurrance:
Brakes failed, causing collision
Conclusion:
Well . . .
```

Confronted with a case in which a driver's car had struck the rear end of another car at a traffic signal, we would ask what caused it. If the driver could prove that his brakes had failed as he applied them, and that he had applied them early enough to have stopped without hitting the car if the brakes worked, we would be tempted to say that the driver had acted consistently with the principle of reasonable care. The matter is not settled, however, until we ask further to determine whether

there were warning signs that would have induced a reasonable person to have his brakes checked out. If there were, we would be tempted to conclude that he had breached his duty⁴ and created a right in the victim.

Rights logic is based upon preexisting, or *a priori*, principles. Exercising principle-based logic, the conclusion falls wherever the facts lead it. The status of the victim and the wrongdoer make no difference to the logic—at least in principle. A prince is a wrongdoer if he fails to look after his car, whether the person he runs into is another prince or a pauper.

Where rights logic has no concern for the conclusion that is reached, only that it follow fairly from the principles and the facts, goods logic is concerned with nothing else. Goods logic starts with the conclusion and reasons backward.

```
Law:
    Education subsidy appropriation

Action:
    Subsidize medical education

Desired outcome:
    Increased medical services
```

The first step is to set the "policy," the outcome that one wants to see happen. Policy is desire-based, which is to say that one's desires are the bedrock, the foundation upon which the law lies. Once that is clear, it is a technical matter to determine the actions needed to produce the outcome, then a drafting problem to write the law that will mandate the desired action. This is the process by which entitlements¹⁷, as radically distinguished from rights, are created. Rights emerge from a situa-

tion. Entitlements deliver the goods, as the policy-makers see it. The recipient of the subsidized medical education in this example receives an entitlement, not a right.

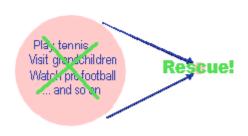
Confusing rights logic with goods logic would clearly violate the principle of greatest freedom². Consider the auto accident example, where the driver rear-ended a car at an intersection. If it turned out that the driver was the member of an ethnic group that we wanted to protect (that is the "good"), we would rule in his favor whether or not he breached his duty of care²⁵. We would have accorded the driver a greater freedom than the victim, who was left to lick his wounds without adjudication³¹ of his right.

Similarly, if we think of the question of subsidized education as if it were a rights question, we will quickly become lost. Who has a right to have their education subsidized? How could we ever tell? Isn't it a matter of opinion? Would it be children, because they cannot afford it? Or people with no employment prospects⁹ because they will have no future earnings to use to pay of education loans? Or is it people who have the greatest promise, so that they will be assured of getting the finest education? There is no universal *a priori* principle that will support a right of this sort.

25. The duty to rescue

It would clearly be a better world if we could count on everyone to come to our aid if we got into danger. This is precisely the kind of desired outcome (i.e., "reduce injuries") that will support public funding for emergency services, lifeguards, and the like. But we need to pay for those services, which means that they will always be in short supply. We could avoid much of that if we simply included a duty⁴ to rescue as part of the duty of care. And if it were effective.

Were the duty of care conventional—something like the duty to pay taxes—adding the duty to rescue to it would present no problem: Simply declare it a universal duty and it exists. But the duty of care is an emergent feature of biology and, if the duty to rescue is not on the biological agenda, it is going to be a devil of a job to place it there. In spite of hundreds of cases over the past two centuries, several stillborn pieces of legislation, and entire belief systems that hold the duty of rescue dear, it is not a feature of the duty of care and shows no signs of becoming such.



A duty to rescue would in fact be completely inconsistent with the duty of care. Where the duty of care applies to the undertakings that the person is planning, the duty to rescue would obliterate the person's entire freedom set⁵ and replace it with a single activity, the rescue. Worse, the activity would not be one the person had willingly chosen. In fact, the duty would eliminate the requirement of an undertaking. The law would simply have stipu-

lated a general undertaking that depended only on the context: When a rescue opportunity presents itself, take it.

Rescue is a benefit. In a species in which each person experiences him or herself as a cause, acquiring a benefit requires a willing contribution from the benefitter. Only then does the concept of an undertaking, from which liability flows, have any power. Attempts to create a duty to rescue looks to the wrong domain of law. Rescue is a matter of desire, not a matter of right.

26. The significance of law's biological basis

Isn't it the worst sort of biological determinism to bow before the fact that the duty to rescue is not an emergent feature of human biology? There is, after all, some pretty strong biological force behind the impulse to murder, to rape, to favor one's relatives, to lie, to cheat, and to steal. But law does not bow before those forces because they are "natural." In fact law brings coercion to bear against them. Why should the duty of care be any different? Why shouldn't we make it into whatever we want it to be?

To some extent, of course, we can. We do invent new duties, make new rules, identify new legal principles, create governments based upon agreement. But the deep structures of law, like the duty of care, like the freedom² principle, like the principle of proportionality¹⁸, like the domains or right and good, are not so mutable. In fact, the law, at least in this view, is simply a way of implementing a process based in biology. When we declared that murder, however natural, was wrong we were simply putting words to something that people had known long before there were words to put to it.

27. Rights in entitlements

Rights have such rhetorical power, suggesting that the law is bound to enforce them, that it is understandable that all desires are couched in terms of rights, right to this, that, and the other thing. One has a right to clean air, a right to vote, and right to drive. The last is particularly irritating, for the law is clear that no one has a right to drive, that driving is a "privilege." Of course, all of these supposed rights are privileges, or, to use the more general term, "entitlements." They are based upon conventional arrangements between people, in this case the privilege to drive, conventions created by the legislature that involve taxation, the highway building department, and the driver licensing system. To say that "I have a right to drive," means that "I really want to drive," or, in economic terms, "I have a highly inelastic demand to drive." To say that I am allowed to drive is to say that it is now convenient for the officials charged with enforcing this entitlement not to interfere with my driving.

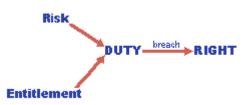


Given the rhetorical power of rights, it is not surprising that recipients of welfare benefit programs have claimed a right to receive them that would defeat the ability of the state²⁴ to diminish or abolish the benefit program. Benefit programs are archetypical entitlement programs, creating a set of qualifications to which is appended a stream of benefits to those who qualify. The administrator of the program has a duty⁴ to act according to the dictates of the law that creates the program. If she fails to do so, a right is created in the person who is a defined beneficiary of the program.

But the entitlement creates no right to the benefit itself. The recipient has an entitlement to the proper administration of the benefit by its administrator, and a right emerges from a breach of the duty. But the recipient has no right to the benefit.

28. The source of duties

Duties are of two sorts. One type, the duty of care²⁵, arises out of the action of creating a risk²¹. One cannot avoid creating risks for others, but one must do so carefully. Where an action cannot be done with reasonable safety, it cannot legitimately be done at all. All other duties are undertaken by agreement, broadly speaking. The administrator of the benefit program in the last example, undertook to administer the law impartially as part of her job. Breach of the duty creates a right in the victim. The right makes it legitimate for the victim to use coercion to vindicate the right.



Entitlements¹⁷ and entitlement systems act by creating duties. The "business end" of the public education entitlement is the duty⁴ that it imposes upon the administrators of the public educational schools and upon the student and her parents. The student is entitled to an education, which is to say that others have a duty to

provide her education. She has no right to enforce that entitlement until the duty toward her is breached. Her right arises out of a breach of their duty toward her.

Entitlement systems, such as the private property ownership³² system and the contract system, allow individuals and organizations to create entitlements. The signal feature of these systems is the provision of law to address any breach of the duties created by the entitlement.

29. Rewarding the wrongdoer.

What are we to make of the situation where a person breaches a duty, but in the process accidentally improves the lot of the victim? Consider the case of the driver who is seriously injured when his car is struck broadside at an intersection by a driver who entered the intersection on the red light. The thing that makes this case interesting is that, as the victim was being treated for his injuries, the doctors discovered a medical condition that would have killed him within months. Because they discovered it in time, the condition was cured and the driver had 30 years of life expectancy, rather than three months.

Should the wrongdoer be credited with the fact that the victim's life was saved? Answering that question in the affirmative confuses the good with the right. It is clear that the victim is better off as a result of the accident. It is also clear that the wrongdoer was the cause. It is generally true that when someone causes good things to happen, one can expect some kind of benefit. But implicit in our concept of causation is intentionality, and the negligent³³ driver did not intend to do anything good. She may be the physical cause of the benefit, but she was simply acting unintentionally as the agent of fate.

This situation makes us parse out the logical difference between the right and the good. Her breach of duty¹⁵ was a wrong. It caused a serious injury¹⁰. She is responsible for that injury. On balance, the victim was far better off. But for her actions he would have died within months. That is good, but it was not her undertaking that produced that result, rather it was the mindless operation of chance. She must pay in full, though in practice one would expect it would be the rare jury that did not reduce the cost⁶ they levied upon her for her actions, given the outcome.

30. The greatest freedom ...

Freedom² is, so to speak, the *lingua franca* of law. Whether law acts as an instrument of the tyrant or of an enlightened majority, it is in the service of the freedom sets⁵ of those who control it. All actions of law print on the freedom sets—upon the experience of freedom—of one or more people. Whether it is managing public works, extending the duration of copyright protection or prosecuting terrorists, the point of law is expanding the experience of freedom. Even something as mundane as adding a lane to an existing highway expands the freedom sets of thousands of commuters by reducing the opportunity cost⁶ of travel, opening up new alternatives to them in the process.

31. ... for all

Recognition of the biological basis of law gives both an objective and a universal foundation upon which to base law. Objectively, every person experiences his or her own freedom set, so that diminishing his or her prospects⁹ is felt as a diminution in her prospects. Biology provides no basis for preferring the freedom² of one person over that of another. The person who would diminish the freedom of another person is simply breaching the duty of care²⁵. If he uses the law to prefer his own freedom over others, he is using the law itself as the medium for breaching the duty, unless it is the case that the other has brought it upon herself by breaching a duty.

The fact that law has emerged in the context of the nation-state means that it evinces the artifact of the citizen: Citizens are entitled to respect in law, but non-citizens are not. That is an artifact, one that is under pressure from the general observation that human biology is universal. Biology may have instilled a preference among people for those nearest to them, making an escape from insularity difficult. But biology sewed the seeds for the demise of that attitude by endowing mind⁷ with the experience of itself as a cause of what it perceived. That fact is the seed from which law emerged, a law that itself becomes the tool for its own universalization.

Endnotes

- **1 Law:** The purpose of any institution is derived from the purposes that the participants in it have for it. The particular purposes that people have in law run an enormous gamut from using it to dominate others, to using it favor one's class or interest group, to using it to provide services for all. In every case, however, law is being used as an instrument to increase the causal capacity of those whose purposes drive it—which is to say that the purpose that is driving it is freedom, albeit the freedom of the ones in charge. The real question about law is, then, not what it is for—it is for freedom—but rather who it is for—whose freedom is going to count as a driver of law.
- **2 Freedom:** The subjective experience of having a rich and realistic set of alternative actions that one may undertake.
- **3 Right:** A right is a formal, legal mechanism that claims that a breach of duty must be redressed. The claim may be set out in a complaint, which, upon presentation to court, triggers the coercive power of the law to bring the one charged with the violation into court to justify his behavior.
- **4 Duty:** A duty is an obligation to behave in a certain way. Duties are of two sorts: duties that have been undertaken willingly and the duty of care, which is a universal feature of the human mind.
- **5 Freedom set:** The collection of alternative actions that a person perceives himself to have at a particular point in time. The Freedom Set may contain actions that the person has no chance of actually undertaking—in which case the person is loosely connected to reality. The Freedom Set is unlikely to contain all of the actions that an objective observer would conclude the person could achieve either because the person does not value some of those alternatives or is unaware that they are lively possibilities.
- **6 Cost:** A cost is the value of an alternative that cannot be pursued because of some event—the event that caused the cost. If undertaking one action requires that another cannot be undertaken, the cost of the action is the value of the action that has been sacrificed. This is sometimes referred to as "opportunity cost"—cost measured by the opportunity that has been foreclosed. The more familiar "dollar cost" is a particular instance of opportunity cost in which the dollars foregone by a purchase represent the value of the other things that could have been purchased with the money. Such a cost is "monetized," represented in the objective reality of money. Most costs cannot be monetized by a market transaction, though they may be estimated by one or another procedures designed to objectify costs.
- 7 **Mind:** Mind is the consciousness that originates in the brain and directs mental and physical behavior. (Source: American Heritage Dictionary)
- **8 Causal capacity:** The objective measure of the changes in the world that a person is able to bring about. A person's causal capacity is increased by any measure that expands the number of actions that a person may undertake or reduces the cost of an action.
- **9 Prospects:** The set of potential actions that the person is objectively able to undertake and subjectively considers attractive.
- **10 Injury:** An injury is any diminution in the person's prospects, or, more precisely, a diminution in the person's causal capacity, minus those alternatives that the person has no desire to undertake. The younger the person, the smaller this reduction because the person has had less opportunity to thoughtfully reject alternatives. Injuries are "actionable"—that is, they are evidence of rights—if they are caused by breaches of duty.
- 11 Constraint: A constraint is any limitation upon a person's prospects. They are of two sorts: natural constraints, which are caused by natural law, such as the laws of gravity, entropy, or scarcity, and willed constraints, those which are the result of another's undertaking, such as a physical attack or an embezzlement. Willed constraints are themselves of two types: private constraints, which are caused by breaches of duty, and public constraints, which are caused by the actions of law to redress breaches of duty.

- **12 Willed constraint:** Willed constraints are those that stem from the willed undertakings of others. Willed constraints may be "public," done under color of law, or "private," simply the result of individual action. Private constraints create rights. Public constraints address private constraints and are justified so long as the public constraints employed do not exceed the private constraints that are eliminated.
- 13 Will: Will refers to the experience that people have of themselves as the cause of their actions. Will is the foundation of the normative, or "moral," aspect of existence. It is only meaningful to establish norms where the objects of those norms are willed, where they perceive themselves as having a choice between alternatives. Without that power, norms are irrelevant.
- **14 Natural constraint:** A constraint upon one's causal capacity that is caused by a law of nature, undirected by human choice. One who falls from a cliff to his death is the victim of a natural constraint, the law of gravity, unless he was pushed off the cliff by another person.
- **15 Breach of duty:** Failure to behave in conformity with the requirements of a duty where one could have conformed to the duty. If it is not possible, through no fault of one's own, to conform to the duty, there is no breach.
- **16 Redress:** To set right, remedy or rectify. To make amends for. (Source: American Heritage Dictionary)
- 17 Entitlement: An entitlement is a value created in favor of one person by some conventional process (i.e. contract, citizenship) that is backed by a duty upon another to deliver or to facilitate the delivery of that value. Breach of that duty, so that the entitlement is not delivered, creates a right in the entitled person. Where one agrees to buy a car for \$20,000, for example, the buyer is entitled to the delivery of the car as soon as he pays the price. Failure of the seller to deliver is a breach of duty and endows the buyer with an enforceable right.
- **18 Proportionality:** The requirement, rooted in biology, that coercion visited upon a wrongdoer be justified by—or proportional to—the level of that person's breach of duty.
- **19 Greatest liberty:** The greatest liberty is the standard for the duty of care owed by those who would enforce rights, undertaken by them when they don the mantle of rights enforcement. It compels them to justify the coercion they apply by the reduction in coercion that their enforcement will achieve. As they do so, the society moves toward the point of greatest liberty, toward the point at which the constraints imposed by those who breach duties is equal to the constraints imposed by those who enforce rights.
- **20 Liberty:** The state of being free from willed constraints, constraints created by other people. A person who is "at liberty" may nonetheless have no freedom, such as the convict who has been released from prison because he is in the final stages of a terminal disease.
- **21 Risk:** The risk created by the actions of one person is the chance that the causal capacity will be diminished as a result. The risk triggers the duty of care.
- **22 Public constraint:** A diminution in the causal capacity of a person brought about by someone acting under the color of law. A court order assessing a fine is a public constraint, as is an administrative order, a denial of a license, a tax increase, and so on.
- **23 Private constraint:** Diminutions in a person's (the victim's) prospects caused by the wrongdoer's breach of duty. Contrasted with "public constraints," which also diminish the prospects of one or more people, but are caused by legal attempts to redress rights, that is, to diminish private constraints.
- **24 State:** That organization within a society that is regarded as entitled to use coercion. The state may consist of a legally empowered bureaucracy, a self-appointed dictator, a religious oligarchy, whatever. The only requirement is that it claims to be entitled to use coercion. That claim can be justified under a number of different theories that justify the state. The Biological Basis of Law is one of those theories. Whether justified or not, states have proved very good at exercising coercion.

- **25 Duty of care:** The duty of care emerges with the development of the human mind. Its operation is context dependent, so that the particular content of the duty depends upon the risks that the person creates. The duty compels the person to (1) anticipate the risks that a planned undertaking will create, and either (2) gain the willing acquiescence of those who are put at risk, or (3) take those risk reduction steps that a reasonably prudent person would undertake. The driver who notices that his brakes are screeching is duty-bound to take the car for service if it is the case that he plans on driving the vehicle in the vicinity of others and if a reasonable person, similarly situated, would take
- **26 Liberty frontier:** The set of choices open to a society that represents the best set of choices between private and public constraints. No combination of private and public constraints inside the frontier (i.e. less constraining than those on the frontier) is possible. The liberty frontier may improve (i.e. move toward the origin) or worsen over time.
- **27 Emergence:** A specific form of causation in which behavior that was not previously observable is observed, without any obvious cause for the new behavior. Sexual behavior, for example, is said to emerge during adolescence. In emergent causation some condition in the environment activates a process that was waiting for that condition.
- **28 Freedom function:** The freedom function is the relationship between the level of coercion used in law (the independent variable) and the freedom that it creates for those subject to it (the dependent variable). The purpose of law is to increase freedom. The freedom function is a conceptual framework for measuring its success.
- **29 Aquiescence:** Where one's actions will affect another, the duty of care requires the actor to inform the other and gain his acquiescence. This is an altogether ubiquitous process as people buy and sell goods and services, using monetary compensation as the way to get the other party to acquiesce. The duty of care does not require one to gain the enthusiastic support of the other, only their willing (knowledgeable) agreement.
- **30 Sense of justice:** The sense of justice is postulated as that mental capacity that allows humans to know, without formal thought, when they are the victims of injustice. This sense accounts for the dramatic difference that people perceive between a misfortune, such as discovering cancer, and an injustice, such as discovering cancer too late because of the negligence of the examining doctor. Violation of one's sense of justice triggers intense emotional demands for redress, apparently without calculation in the one experiencing the injustice. This is behavior reminiscent of other senses, where humans simply experience something without conscious cognitive processing.
- **31 Adjudication:** A method of dispute resolution in which the matter is resolved by a judge, with or without the aid of a jury. Other methods of dispute resolution include negotiation, in which the parties deal with each other, and arbitration, in which they agree to be bound by the decision of a third party. Adjudication requires no agreement between the parties; the defendant is compelled to participate in the process.
- **32 Private property ownership:** An entitlement system that allows the creation of a connection between the person and a non-person thing that instantly creates a duty in all others to treat the thing with care. Breach of that duty creates a right in the owner to redress the breach. Each person is entitled create an ownership relationship, demanding only that the rules for doing so are satisfied.
- **33 Negligence:** Any action that breaches the duty of reasonable care. It that breach causes an injury, the victim is able to initiate action to redress the breach. If there is no victim, the only remedy possible is for the state to take the initiative by instituting a regulatory regime.