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Victims as Cost Bearers

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Victims as Cost Bearers

Richard Adelstein*

I. MARKETS FOR CRIME

In a series of essays published some twenty years ago, I developed a qualitative model of the Anglo-American criminal process as an evolving but still highly imperfect system of “price exaction,” in which the attempt was made to confront every convicted offender with a punishment price that fully reflected the social cost, both material and “moral,” imposed by his offense.¹ Earlier scholarship dealing with the economics of criminal justice had largely been normative in character, contending that whatever public policy toward crime and punishment might once have been, it should henceforth be purposefully made, as the economist Gary Becker put it, on the basis of “a criterion that goes beyond catchy phrases and gives due weight to the damages from offenses, the costs of apprehending and convicting offenders, and the social cost of punishment. The social-welfare function of modern welfare economics is such a criterion.”² Accordingly, Becker argued that the punishments associated with specific offenses and the likelihood that those punishments will in

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1. Richard Adelstein, *The Negotiated Guilty Plea: A Framework for Analysis*, 53 N.Y.U. L. Rev. 783 (1978) [hereinafter Adelstein, *The Negotiated Guilty Plea*]; Richard Adelstein, *Informational Paradox and the Pricing of Crime: Capital Sentencing Standards in Economic Perspective*, 70 J. Crim. L. & Criminology 281 (1979) [hereinafter, Adelstein, *Informational Paradox*]; Richard Adelstein, *The Moral Costs of Crime: Prices, Information and Organization*, in *The Costs of Crime* 233 (Charles Gray ed., 1979); Richard Adelstein, *Institutional Function and Evolution in the Criminal Process*, 76 Nw. U. L. Rev. 1 (1981) [hereinafter Adelstein, *Institutional Function*]; Richard Adelstein, *The Plea Bargain in England and America: A Comparative Institutional View*, in *The Economic Approach to Law* 226 (Paul Burrows & Cento Veljanovski eds., 1981) [hereinafter, Adelstein, *The Plea Bargain in England and America*].

2. Gary Becker, *Crime and Punishment: An Economic Approach*, 76 J. Pol. Econ. 167, 181 (1968).

fact be imposed on the perpetrators, variables he saw as flexible instruments of policy fixed for the entire system by a central administrator, should be set so as to minimize the sum of the various costs to which he alluded, and in this way induce an economically efficient allocation of resources to crime and the state's efforts to control it. Recognizing that no real system of criminal justice can ever hope to convict more than a fraction of those who actually commit crimes, and that even small increases in the likelihood of punishment do not come cheaply, he made the probability scaling of punishments a key element of his prescriptive strategy. This means that where the probability of punishment is small, as it often must be, punishment prices for the few offenders who are actually brought to justice should be set far above the actual costs of their offenses, so that every potential offender is confronted with an expected punishment equal to the true costs of his offense. Attitudes toward risk aside, this Draconian sentencing policy will induce precisely the same number of rationally calculated offenses as would setting punishments exactly equal to costs in a world of perfect enforcement.³

In contrast, I maintained that, as a positive matter, systems of criminal justice that, like ours and those of continental Europe, are constrained by a general norm of proportionality cannot impose disproportional punishments of this sort *pour encourager les autres*. Instead, even where the probability of apprehension and conviction is small, sentencing authorities continue to seek the punishment that best "fits" the crime at hand in all of its circumstantial singularity, to exact an eye, but only that, for an eye, irrespective of the effects of this policy on the general deterrent effect of punishment on prospective offenders. Given the inevitable uncertainty of punishment, this attempt to equate the cost of every crime to the price exacted for it on a case-by-case basis means that resources will systematically be "misallocated" in the criminal

3. Id. at 183-85.

process, and more specifically that a persistently greater than “optimal” level of crime will be induced because the expected punishment actually facing every prospective offender is smaller than the costs of his crime. Where Becker postulated a centrally administered criminal process designed to allocate resources efficiently across the entire system, I described a highly decentralized network of institutions and decisionmakers that has evolved to facilitate, albeit very imperfectly, the identification and completion of *individually efficient offenses*, crimes in which the subjective benefits to the offender exceed the sum total of the subjective costs imposed by his particular offense upon the public at large, without regard to whether this results in a systemically efficient level of crime or not.

In this, I proceeded along a path broken by the robust and powerful insights of Guido Calabresi and A. Douglas Melamed.⁴ Expanding the familiar idea of property rights into a more general notion of “entitlement,” the right either to impose costs on others without compensation or to be free of such cost imposition, Calabresi and Melamed proposed a unified, positive theory of property and tort that distinguished between them on the basis of the legal structures each employed to enforce the relevant entitlements. Like the economist Ronald Coase before them,⁵ they saw the state’s first task as the initial placement of entitlements in various situations of conflict, decisions, they argued, that are generally responsive to efficiency considerations but often invoke distributional or other moral values as well. To the owner of a business forced into bankruptcy by the actions of a competitor, for example, it may make little difference whether this cost has been inflicted by the introduction of more efficient production technology or by the planting of a bomb on his factory floor, but the state has obvious reason to favor the first of these methods and condemn the second, and to allocate entitlements accordingly. But once the state has

4. Guido Calabresi & A. Douglas Melamed, Property Rules, Liability Rules, and Inalienability: One View of the Cathedral, 85 Harv. L. Rev. 1089 (1972).

5. Ronald Coase, The Problem of Social Cost, 3 J.L. & Econ. 1 (1960).

thrown its weight behind one or the other of the competing claims of cost imposers and cost bearers by initially assigning these rights, it must then decide how they are to be protected. Calabresi and Melamed's crucial insight was that the historical distinction between property and tort could be traced directly to differences in the entitlement transactions traditionally governed by each.

Where entitlement transfer takes place in an environment of low bargaining costs, they argued, entitlements to impose or be free of costs are protected by property rules in ordinary markets, which permit their transfer only with the consent of all sides, at a price freely negotiated by them. But sometimes, as in eminent domain, the costs of negotiating voluntary transfers are too great for them to proceed in the market or, as in cases of negligence or intentional torts, the transfer is effected without the consent of the original holder of the entitlement. If the state elects to permit such transfers despite the market's inability to organize them, it protects the entitlement by a liability rule, which requires that the taker of the entitlement pay its owner, after the fact, a price determined not by the consent of the owner but by an objective third party, such as a jury. Alternatively, as in the sale of votes or body parts, the state may try to forbid the transfer altogether, in which case the entitlement is protected, even against its owner's desire to sell it, by what Calabresi and Melamed called a rule of inalienability. And as in the initial placement of entitlements themselves, in general, a range of factors influences the state's selection of institutional arrangements: "the choice of a liability rule is often made because it facilitates a combination of efficiency and distributive results which would be difficult to achieve under a property rule."⁶

As Calabresi and Melamed made clear,⁷ the objective prices that govern entitlement transfers under liability rules can at best approximate the prices that would emerge

6. Calabresi & Melamed, *supra* note 4, at 1110.

7. *Id.* at 1108.

from consensual transactions under competitive conditions, and can thus distinguish only imperfectly between efficient and inefficient exchanges. In cases of eminent domain or pecuniary damages in tort, for example, where liability prices are determined by reference to the fair market value of the entitlements taken, competitive prices will, even in principle, systematically understate the value of these entitlements to their original owners, for otherwise these owners would already have sold them at the market price. And in practice, of course, the subjectivity of these values and the crudeness of the cumbersome procedures through which we must estimate them in the absence of competition cast a dense fog of uncertainty around any attempt to objectify and equate cost and price. This all but inevitable mismatch between the objective liability price established by the jury and the subjective costs imposed by the involuntary surrender of the entitlement means that the end result of these forced transfers can never be a truly efficient allocation, even if every such case ultimately results in an enforceable judgment against the cost imposer. But if exchange in entitlements is to be organized at all in environments hostile to explicit markets, especially where the participation of one party to the transaction is involuntary, there is little alternative to liability rules and the imperfect legal institutions that enforce them as a way to approximate the truly symmetrical imposition of costs that constitutes "an eye for an eye."

Nor, clearly is it the case that every involuntary transfer of entitlements is necessarily inefficient, or that the law's ultimate objective is the absolute deterrence of every involuntary transfer. Calabresi and Melamed's brief discussion of criminal law seems to suggest the opposite. In their view, criminal entitlements are presumptively inalienable, perhaps on the principle that no one may consent to a crime, perhaps in the belief that no rational person would ever commit a crime were he is certain that he would then have to bear the full weight of the suffering he had caused in the form of punishment, and thus that no

increase in social welfare could ever come from crime. So “we must add to each case an undefinable kicker which represents society’s need to keep all property rules from being changed at will into liability rules. In other words, we impose criminal sanctions as a means of deterring future attempts to convert property rules into liability rules.”⁸ But the only way that inalienability can be enforced is through the imposition of liability; when a thief seizes the entitlement of her victim, the law can do nothing more than impose a liability price in some form upon her, and then leave it to her to decide whether the satisfactions of the crime are worth the pain of the liability price. And where the norm of proportionality demands that this price be made to “fit the crime,” that is, to bear reasonable relation to the specific array of costs generated by this particular crime, the uncompromisingly harsh punishments for every class of offense that would be required even to approach the absolute deterrence of crime simply cannot be imposed. If disproportional punishments are forbidden, we can never set the “kicker” high enough to ensure that no prospective thief will ever find it, on balance, as in her interest to commit the crime and suffer the punishment.

Instead, like the law of tort, the criminal process is an institutional mechanism whose apparent purpose is not to deter every instance of involuntary entitlement transfer, or to allocate resources to crime and its control efficiently across the entire system, but to separate individually efficient transactions from inefficient ones through the necessarily imperfect imposition of a liability price in every case intended to reflect the costs imposed upon others by the offense, and thus effectively to tolerate (or encourage) efficient transfers at the same time that inefficient ones are blocked. But the transactions typically governed by tort law differ from those defined as crimes both in the nature of the costs imposed and in the number and identities of the cost bearers, distinctions that make different

8. *Id.* at 1126.

governance structures appropriate for torts and crimes. Torts ordinarily involve the involuntary transfer of entitlements from one or a very few individual bearers of direct cost to imposers, who must then compensate these direct victims through the payment of an objectively determined money price equal to the pecuniary value of the injuries sustained. But crimes have many victims; in addition to the often substantial costs suffered by the direct victim (or his survivors), which are generally compensable in tort, criminal acts create fear and moral outrage in members of the community not directly party to the act itself. Crimes can thus be characterized as involuntary transfers to the offender of a multitude of individually held entitlements to be free of these indirect costs, and it is to the compensation of the large class of indirect victims, not to the small number of direct victims, and not individually through money payments but collectively and in kind through the infliction of suffering proportioned to the moral costs of the act, that the criminal process is addressed.

But unlike the pecuniary costs imposed by torts, to which market values offer at least a reasonable guide, the moral costs of crime are experienced subjectively and vary considerably with the circumstances of the act and the specific identities of the offender and the direct victim, making them very hard to estimate or predict. In response to this difficulty, an imperfect but serviceable two-stage process for the determination of liability prices for crimes has evolved, in which legislatures establish a broad range of permissible prices for each type of offense *ex ante* and the courts, after the crime has been committed and its idiosyncratic costs actually been imposed, fix the exact price to be exacted from the offender. In the real criminal process, moreover, just as in the real world of market exchange, the existence of human and environmental imperfection breaks the logical chain that links individually efficient exchanges to systemically efficient allocation, and makes clear that it is the facilitation of efficient exchange on a case-by-case basis, not the achievement of an efficient allocation of resources through

central planning, that is the organizing principle of the system. Were law enforcement costless and free of error, and were every direct victim certain to win an appropriate judgment against the offender in tort, the setting of criminal punishment equal to the indirect costs of the crime at hand would in fact induce an efficient level of crime, in that the only crimes that would be committed would be those in which the subjective gain to the offender exceeded the sum of the direct and indirect costs imposed by the offense, as measured by the liability prices established in the parallel civil and criminal adjudications. But the norm of proportionality prohibits the probability scaling of punishment that systemic efficiency would require in the face of uncertain apprehension and conviction, so that given these inevitable uncertainties, even where every offender who is actually captured and convicted is punished to the full extent permitted by law, the expected punishments that result will induce more than the efficient number of crimes because they do not confront prospective offenders with the full costs of their acts. It is imperfections of just this kind that spur the evolution of the institutions of criminal justice, as participants and rulemakers continuously seek out less costly and more certain modes of adjudication and surer means of ascertaining costs and transmitting price information to potential offenders.

Seen in this light, the criminal process is not *like* an economic system, it *is* an economic system, an imperfect web of rules and procedures that has evolved alongside the institutions of market exchange and whose apparent function is to allow the completion of as many efficient transactions, and impede as many inefficient ones, as possible in an exchange environment unsuited to property rules and explicit markets. My purpose here is to elaborate this economic perspective on the criminal process, with special emphasis on the roles played in it by both direct and indirect victims of crime. Toward this end, the two sections that follow probe the striking structural similarity of markets to the criminal process, first by employing the

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vocabulary of criminal punishment to illustrate the operation of competitive markets, and then by drawing upon the language of price and cost to illuminate the nature of modern Anglo-American criminal justice. A brief concluding section focuses specifically on the model's implications for the participation of direct victims in the criminal process.

II. RETRIBUTION AND DETERRENCE IN MARKETS FOR GOODS

For half a century, American microeconomics has been in thrall to the idea of competitive general equilibrium. To the uninitiated, the phrase itself may seem an oxymoron. Equilibrium connotes balance and repose, a state of systemic rest hard to reconcile with the uncertain thrust and parry of economic rivals locked in struggle for survival and advantage in competitive markets. Like fighters in a ring or coaches pacing the sidelines, the economic competitors we see every day are constantly in action, experimenting with new products and strategies, learning from mistakes, planning their next move even as they carry out the last. Rest and repose come, if at all, at the end of the game, when the competition is over. But for the economist, the paradox is dissolved by definition, and a rather counterintuitive one at that. Competition is not, as everyday usage might suggest, an *activity* governed by rules and undertaken by individuals in pursuit of conflicting objectives, but a *state of affairs*, the economic environment within which these individuals act and whose particulars largely determine the normative quality of the outcomes of their rivalrous behavior.⁹ When competition in this sense is "perfect," buying and selling proceeds smoothly, without error or surprise, until the allocation of tradable resources brought about by these consensual exchanges is "efficient," that is, until every unit of every good is in the possession of its highest-valuing owner, the

9. Cf. Friedrich A. von Hayek, Competition as a Discovery Procedure, in *New Studies in Philosophy, Politics, Economics and the History of Ideas* 179, 182 (1978).

person who is able and willing to pay the most for it. It is precisely this quality of the resultant allocation that brings the system of exchange to equilibrium; because every good lies in the hands of the individual who values it the most, no one else has reason to offer what it would take to induce its owner to part with it voluntarily. Any reshuffling of resources away from this efficient allocation will necessarily be opposed by at least one affected individual, so that once efficiency is achieved, voluntary exchange simply ceases. In markets, efficient allocation means the end of economic activity itself.

In much the same way that the simple relationships of Newtonian mechanics hold only in a vacuum, the logic that links free exchange to efficient allocation applies only in the rarefied economic atmosphere of perfect competition, a laboratory environment entirely purged of the human fallibility and kaleidoscopic change that characterize the world of real men and women. Because traders must know what is theirs to trade and what is not, in perfect competition every property right to every valuable object is clearly defined and securely allocated to some individual before trading begins. Because traders must know which exchanges will further their interests and which will not, every person is able to reduce the uncertainties of the future to a distribution of known probabilities and is fully aware of her own preferences, the constraints that bind her choices and the prices at which all goods are traded. Because traders must be able to move resources freely from less to more valuable uses by consensual exchange, the costs borne by each side in identifying and completing these transactions are always smaller than the personal gains to be had from them. Because efficient allocation requires that the price of every good be equal to the costs imposed by the act of producing it, sellers are always able to compete with other sellers, and buyers with other buyers, by adjusting the prices at which they buy or sell until this equilibrium is reached. And this in turn requires that the essential qualities of every good be independent of the identity of the specific individuals who buy or sell it, so

that traders choose their trading partners solely on the basis of the price being bid or asked. When all these otherworldly conditions obtain, and only then, free exchange logically results in an efficient equilibrium that persists until some externally induced change in preferences, constraints, or the rules that govern the game of exchange itself make it necessary to play it again.

The normative significance of efficient allocation is ambiguous. On the one hand, because every consensual exchange increases the welfare of every participant without increasing the physical quantity of goods in the world, it is easy to prefer the ultimate result of such exchanges to the initially inefficient allocation that gives rise to them. All the better that this continuous squeezing of more human satisfaction from a fixed quantity of material resources is achieved through free exchange, a process that relies on individual initiative and responsibility and insists that every person's range of choice at every moment be as broad as possible. But on the other, insofar as the value of any good to an individual is determined in part by his ability to pay for it, the particulars of any efficient allocation, the list of who has what when the trading is done, depend crucially on the distribution of tradable resources that precedes the exchange process. In terms of the human welfare to be wrested from the material universe, free exchange is a tide that lifts the boats of both rich and poor, but it is blind to questions of distributional equity. Because free exchange proceeds only with the consent of all sides, unless the wealthy pursue the interests of the needy to the detriment of their own, it cannot change the general shape of the distribution of wealth by increasing the lot of the poor at the expense of the rich. So it is hard to argue for the moral superiority of any efficient allocation, even one produced by consensual exchange, that is grounded in an unjust or coercive initial distribution. Like the proverbial computer, in this important normative respect even perfectly competitive markets are subject to the maxim "garbage in, garbage out:" exchange can do no more than transform an initial distribution of resources that is inefficient and

unjust into one that is efficient and unjust. Averting their eyes from this complication, economists have increasingly turned their analytical energies in recent years to elaborating the mathematics of efficient allocation and, like their fellow travelers in the law schools, at times been prone to overstating its ethical virtues in their efforts to prescribe "optimal" rules or outcomes in economic systems.

But as positive scientists, concerned with "what is" rather than "what ought to be," economists have also become more alert to the consequences of the huge gulf that separates the ideal of perfect competition from the realities of the human condition. In the real world, existing property rights are continually rendered obsolete or uncertain, and new ones made necessary by legislation and the emergence of new technologies that alter the conditions of exchange or the menu of available goods.¹⁰ Constrained by strict limits on their powers of introspection and cognition and their ability to see into the future, real traders often lack the information they need even to identify beneficial transactions.¹¹ Or if they can see that a particular reallocation would serve their interests, the costs of locating a suitable trading partner, negotiating the terms of trade and carrying out the actual transfer of resources may still be so great as to prevent the transaction.¹² And as with unique objects of art or certain kinds of personal services, the essential qualities of a good, and thus

10. For example, in the area of intellectual property. See, *Williams & Wilkins Co. v. United States*, 487 F.2d 1345 (Ct. Cl. 1973); *Sony Corp. of America v. Universal City Studios*, 464 U.S. 417 (1984), discussed in Richard Adelstein & Steven Peretz, *The Competition of Technologies in Markets for Ideas: Copyright and Fair Use in Evolutionary Perspective*, 5 *Int'l Rev. L. Econ.* 209, 226-33 (1985).

11. In contrast to the perfect knowledge and unlimited powers of calculation that characterize "rational" actors in perfect competition, the economist Herbert Simon has incorporated these cognitive limits and developed their implications in his work on "bounded rationality." See, e.g., Herbert Simon, *Theories of Bounded Rationality*, in *Decision and Organization* 161 (C. B. McGuire & Roy Radner eds., 1972); Herbert Simon, *Rationality as Process and as Product of Thought*, 68 *Am. Econ. Rev.: Papers and Proceedings* 1 (1978).

12. And thus, for example, drive traders to shift their dealings from markets to contractual arrangements like business firms. Ronald Coase, *The Nature of the Firm*, 4 *Economica* 386 (1937).

its desirability to particular buyers, may depend closely on the identity of its seller, creating small islands of monopoly in the larger sea of competition on which prices are shielded from the competitive forces that would otherwise drive them to their efficient levels.¹³ The existence of any of these environmental imperfections will compromise the ability of free exchange to realize an efficient allocation; should any one of them be severe enough, or should they appear in combination in specific circumstances, markets may fail to exist at all. Beyond all this is the obvious artificiality of the constant preferences, unchanging technologies and fixed resource constraints of perfect competition. Even if we could imagine life in a perfectly competitive universe, frozen for a moment in efficient equilibrium, we could scarcely outlaw the change that free people would soon force on the parameters that define it. For they would surely begin to invent new interests and desires, new needs and new ways to satisfy them; and before the market could organize the innumerable transactions that would ultimately adjust the equilibrium to these changes, they would reinvent them, again and again. Real markets are never at rest; efficient equilibrium exists only in textbooks.

Yet economists insist on the analytic value of the mental constructs of perfect competition and efficient equilibrium; and rightly so for they enable us to see the hidden logic of exchange, the otherwise undiscernable systemic patterns and regularities that would emerge from perfectly operating mechanisms of exchange. In competitive equilibrium, for example, the price of every good is equal to the total cost of producing it, and the owner of every input resource is paid the full value it contributes to production. This means that every act of consumption at this price “pays for itself,” in that those who consume the good demonstrate by their willingness to pay this price that the value they derive from consuming the good exceeds the total value to their previous owners of all the resources

13. A condition firms strive to achieve through “product differentiation.”

needed to produce it, while the host of individual exchanges that have led to this price and placed the good at the consumer's disposal precisely divide the payment into a myriad of unequal shares, each representing the exact portion of the good's value attributable to a specific input resource, and ensure that every share is directed to the very person who has sacrificed it for the consumer's pleasure. Those for whom consumption is not justified in this sense are discouraged by the same requirement that the good's price be paid before it may be consumed from imposing the costs of production in the first place. In this way, efficient exchanges are facilitated and inefficient ones blocked, so that resources are continually and, by virtue of the compensation paid to cost bearers, consensually reallocated from lower to higher valuing owners until equilibrium is achieved.

As Adam Smith recognized long ago, the exchange process separates these (arguably beneficent) systemic consequences from the actual purposes and intentions of the individuals whose actions bring them about.¹⁴ No one need intend that resources in the system be allocated efficiently; no one need even be aware that it is happening. All that is required is that individuals act in their own interests as they see them, in accord with the general rule of behavior that governs their interaction: no one may take a good from another without that person's consent. In perfect competition, with preferences and technology held constant, universal adherence to this rule results in efficient equilibrium; under other conditions, it does not. But the ideal of efficient equilibrium allows us to see what real systems of exchange, operating in less than perfect conditions, but nonetheless governed by general adherence

14. Intending only his own gain through free exchange, the individual is "led by an invisible hand to promote an end which was no part of his intention. . . . By pursuing his own interest he frequently promotes that of the society more effectually than when he really intends to promote it." Adam Smith, *An Inquiry into the Nature and Cause of the Wealth of Nations* 423 (Edwin Cannan, ed., The Modern Library 1937) (1776). This phenomenon is illustrated in Smith's detailed discussion of the evolving division of labor. *Id.* at 3-21.

to the rule of consensual transfer, are “trying to do.” And this in turn enables us to measure their outcomes against the standard of allocative efficiency, and on that basis, with the normative caveats raised earlier in mind, to ask whether we ought to interfere with these outcomes (through the state or otherwise) and if so, whether we should try to make the exchange environment more “perfect,” or persuade individuals to behave differently, or adopt some other criterion by which to judge the system’s outcomes altogether.¹⁵

We can make all of this more concrete with an example. Suppose we were to ask how many oranges should be produced, whose resources should be used to produce them, and who should consume them, if resources everywhere in the economy are to be allocated efficiently. In theory, the answers to all these interrelated questions are straightforward. At the outset, efficiency requires that every orange be produced at the lowest possible cost in input resources, given existing methods of orange production (we could easily complicate the problem by asking how oranges ought to be produced as well). This means that the particular land, labor, raw materials and such that are actually used to produce oranges must be those that, relative to all the other similar resources that might conceivably be devoted to orange production, have the smallest value to their owners. Thus, for example, if an hour of labor picking oranges is worth \$3 to worker A, in the sense that A would prefer to devote that hour to orange picking in exchange for \$3 rather than to some other productive enterprise for less than \$3 or taking it as unpaid leisure, while an identical hour of labor is worth \$4 to worker B, efficiency demands that A’s labor, and not B’s, be employed to pick oranges. Once the initial owners of all these least-cost inputs have been identified and their resources committed to orange production, we can say just how much it costs to produce an orange efficiently. How

15. Cf. Peter Boettke, Where Did Economics Go Wrong? Modern Economics as a Flight From Reality, 11 *Critical Rev.* 11, 17-24 (1997).

many such oranges should be produced? Exactly that number such that for every orange produced, and only those oranges, there exists a consumer who attaches a value to consumption of that orange (represented by the price she is able and willing to pay for it) that exceeds the total value of all the resources that were actually used to produce the orange and make it available to her. And, of course, it is just these consumers, for whom the consumption of oranges pays for itself, who should receive the oranges.

Fair enough. But how can these general responses be made specific? What *is* the efficient output of oranges? Whose resources, exactly, should be employed to produce these oranges, and who, exactly, should consume them? And how should orange production be organized so as to ensure that these questions are actually answered correctly in practice? Consider two alternative solutions to this last problem, each an ideal type.¹⁶ In the first, exchange is strictly forbidden and all resources in the economy are allocated at the command of an omnipotent central planner. The planner has the power to direct all resources to whatever use he desires, to say who will perform every task in production and who will consume the products. But he does not yet have the enormous quantity of information he needs to solve the problem of efficient allocation. That information, the value placed by every individual in the economy on every one of the resources within it, does exist, but not in a single, central repository. Instead, it is dispersed in the minds of the thousands or millions of

16. The issues discussed here are the subject of the extraordinary Socialist Calculation Debate, a passionate and deeply philosophical conversation on the "feasibility" of large-scale economic planning initiated in 1920 by the Austrian individualist Ludwig von Mises, carried on through the 1930s and 40s by his successor Friedrich von Hayek on the one side and the democratic socialists Oskar Lange and Abba Lerner on the other, and only partially resolved by the collapse of Marxist socialism in Eastern Europe. On the debate, see Peter Murrell, *Did the Theory of Market Socialism Answer the Challenge of Ludwig von Mises?* 15 *Hist. Pol. Econ.* 92 (1983); Don Lavoie, *Rivalry and Central Planning: The Socialist Calculation Debate Reconsidered* (1985); Robert Heilbroner, *After Communism*, *The New Yorker*, Sept. 10, 1990, at 91; Boettke, *supra* note 15.

individuals who comprise the relevant society, often in the form of inchoate or unarticulated feelings and impressions that cannot easily be communicated in precise or objective terms. The planner's challenge is to extract this information from these individuals and then put it to use in determining what the efficient allocation of resources is and realizing that allocation entirely through a series of commands. So, we may suppose, he asks them for it, in an almost endless list of necessarily hypothetical questions designed to elicit the relative values every consumer places on every possible alternative. Would you rather work for an hour picking oranges in the sun or an hour tightening bolts on an assembly line? Two hours packing oranges into crates or four at a desk writing memos? Would you rather eat seven oranges or three pears? Three oranges or a mango? Such a survey would be a very costly enterprise in any case, but if the people share the planner's motives or objectives and trust him not to use the information they divulge against their interests, they may well answer his questions as best they can, allowing him to redirect the economy's resources to approach the objective of efficient allocation. But if the people are not inclined to cooperate with the planner in this way, if they see their own interests as inimical to his, the questioning will not go smoothly.

"Citizen, three oranges or a mango?"

"Why do you wish to know?"

"So I can reallocate resources to achieve efficiency."

"But if you do so, I may end up with less welfare than I enjoy now, because others may value the resources I currently possess more than I do, and you may not compensate me for the value I will lose when you take them from me."

"Quite so, and in full accord with the utilitarian principles that underlie income redistribution by means of progressive taxes. Efficient allocation requires only that the recipient of a forced transfer derive greater welfare from the good than its original owner does, not that compensation be paid to that owner. Compensation is merely a matter of 'equity,' of no concern to me. If, by

taking an orange or a mango from you and simply giving it to another who would derive greater satisfaction from it than you do, I can increase the sum of human welfare in our society, I will not hesitate to do so.”

At this, the citizen may simply refuse to answer the question, or purposely answer it untruthfully. The planner may respond by threatening the citizen with violence, but as in the case of confessions beaten out of suspects in the station house, even if this prompts the citizen to answer, the planner cannot be sure that the information he receives is the truth, or just a response that the citizen believes will satisfy the planner and forestall the violence. Even given the universal trust or sense of common interest that would induce citizens to reveal the actual subjective values the planner needs to know, the tasks of gathering the vast quantities of information needed to approximate an efficient allocation in even a moderately complex economy, and exercising the control over people and resources necessary to achieve it, in fact will be very difficult and very costly. Without them, they will be all but impossible.

Now consider a second, equally idealized organizational means to solving these problems, perfectly competitive markets. The institutional antithesis of our omnipotent central planner, competitive markets radically decentralize allocational decisionmaking by allowing every individual to use the idiosyncratic information in her possession and dispose of the miniscule portion of the economy's total resources under her control in pursuit of her own interests, not those of “society” or the planner. At every stage in the production process, from the acquisition of land, labor and raw materials in the orange grove, through the sale of freshly picked oranges to wholesalers and their distribution to retail outlets across the country, to the final purchase of oranges by consumers at the grocery store, input resources and intermediate products are moved under the pressure of competition from one person or firm to another at a price driven by competition to the lowest possible cost at which those goods can be made available for trade. And as the hundreds of goods and services that

ultimately combine to become oranges pass from one stage to the next, it is the key of self-interest that unlocks the personal information about their values and costs that is essential to allocative efficiency and puts it to work in the long chain of exchanges that direct every resource to its most valuable use.

Suppose, for example, that on the basis of his knowledge of local conditions and his estimates of the wholesale demand for oranges, the owner of an orange grove decides that he is able to pay as much as \$5 per hour for labor in the field, though he would certainly pay less than this if cheaper labor were available to him. At the same time, a laborer in the area determines that, in light of the options open to him, he would be willing to pick oranges for as little as \$4 per hour, though he would happily accept more were the opportunity to present itself. Neither party is concerned with the welfare of the other, and neither knows what we know about the price at which the other is ultimately willing to trade, prices that imply a mutually beneficial exchange at any price between \$4 and \$5 per hour. So, in an attempt to do the best they can for themselves as they dicker, they lie to one another, just as they might to a central planner: the owner offers \$2 and says it is the most he can afford to pay; the laborer replies that he won't work for a penny less than \$6. Both persist for a while in their lies, but the existence of active competitors on both sides, other employers for whom the laborer might work and other workers the owner might hire if the price is right, soon moves them to reconsider. Each realizes that if he continues to insist on the terms he is demanding, he may lose an opportunity to increase his welfare by engaging in an exchange at a price he knows it is in his interest to accept. So the owner raises his offer a bit, the worker lowers his, and as negotiations proceed, enough information to determine whether an efficient exchange can be made is gradually revealed to the bargainers themselves until, in equilibrium, every deal in this labor market is struck at a price between \$4 and \$5 per hour that incorporates not just the particular interests

and knowledge of this worker and this owner, but those of the other workers and owners whose competing offers provide the background for their bargaining as well.

At no stage of orange production is the information about subjective values and costs essential to efficient allocation ever concentrated in a single place or mind. Instead, it is encoded in competitive prices, which transmit concise signals to every potential buyer of the total value of the resources that have had to be employed to produce the good whose purchase she is contemplating. When production is at last complete and oranges are offered at retail to prospective consumers, their selling price represents the sum of all the costs (but not a penny more) that have had to be suffered by a legion of geographically dispersed men and women to produce the orange and make it available to them. This price does not tell the potential consumer a great deal, much less than the central planner would need to know. She knows nothing of the identities of those who have contributed to the production of oranges, when, where or how they have done so, the personal costs they have borne as a result, the quantity or value of the various resources involved in production, or the reasons why any of these values are what they are. But it does tell her everything *she* needs to know in order to do her small part in effectuating an efficient allocation of resources across the economy, that is, deciding whether consumption of the orange by her will pay for itself.¹⁷

The decentralization of decision-making in competitive markets means that this equilibrium price, like those that govern every other transaction at every stage of production, poses a question to prospective consumers. "Do you value your consumption of this orange more than others value the suffering they have had to bear in order to make it available to you?" If the answer is no, so that transfer of the orange would move it to a lower valuing owner, the requirement that the consumer actually pay the price

17. Friedrich A. von Hayek, *The Use of Knowledge in Society*, 35 *Am. Econ. Rev.* 519 (1945).

before she may consume the orange *deters* an inefficient exchange; the consumer herself decides to forego consumption of the orange (and thus, in principle, imposition of the costs of production on her behalf) and allows the orange to be allocated to someone else who would value it more. But if the answer is yes, the consumer is required to demonstrate the efficiency of the exchange by paying the price, and because that payment is itself apportioned by the chain of efficient exchanges that have preceded it and directed to the cost bearers in precise correspondence to the costs they have borne, for these consumers the price is an instrument of *retribution* rather than deterrence, as those who have sacrificed their resources to produce the orange are made whole by the compensation they have agreed to accept. At the end of the day, a host of related but independently taken decisions and actions by vast numbers of people have been coordinated by the process of free exchange to effect an efficient allocation. The enormous amount of individually held information needed to do this has been extracted and put to use by the power of self-interest, with no need for supervision or administration of any kind, save for the scaffolding of law and custom that protects private property and enforces voluntary contracts. The systemic result, created independently of the interests and purposes of any of the individuals whose actions have brought it about, is a set of equilibrium prices that simultaneously act as perfect instruments of deterrence in the case of inefficient exchanges and retribution in the case of efficient ones.

We might, as I have suggested, say that this is what the system of exchange is “trying to do.” But even in the laboratory conditions of perfect competition, the precise equation of cost and price that induces efficient allocation exists only in equilibrium; in the equilibrating period of trade that produces it, exchanges must necessarily be made at prices that do not accurately reflect the costs of production in order to engage the competitive forces that ultimately correct these very errors and drive prices and

costs to equality in equilibrium. And in the infinitely complex, rapidly changing world of real men and women, where equilibrium is just an abstraction, exchange and competition simply do not result in efficient allocation at all. Under the inescapable sway of bounded rationality and environmental imperfection, individuals may still pursue their own interests in light of the information they possess, and the rule that forbids taking resources without consent may still be universally respected, but the continuously changing allocation of resources that results from free exchange under the conditions of real life will nevertheless depart, often substantially, from the ideal of efficient equilibrium. Some will sell their labor or goods too cheaply; others invest in production for which there is no demand. Islands of circumstantial monopoly will keep some prices from rising or falling to meet costs. Beneficial trades will reveal themselves only when it is too late to make (or unmake) them. And nothing stays the same from one day to the next.

The uncertainty of property rights; the cognitive limits of the human mind; the dearth and unreliability of the information available to it; the practical obstacles to completing efficient transactions; and the constant, unforeseeable change in preferences, technologies and resource constraints that together represent business as usual inevitably combine to frustrate the abstract logic of exchange and make constantly shifting loci of error and inefficiency a permanent feature of real markets. As detached observers or policymakers, armed with the theory of competitive equilibrium, we may recognize these departures from the ideal and try to legislate them away by altering the incentives that individuals face or the conditions under which they act, but to the extent that these interventions are successful, they represent an efficiency that is imposed upon the system rather than one that is spontaneously created by it. No individual participant in the market economy intends that resources be allocated efficiently across it; every trader pursues his own purposes in exchange entirely indifferent to the effects

of his action on the realization of this larger consequence. In perfect competition, the logic of exchange links individual interest to systemic efficiency through the unassisted agency of the invisible hand. But in real markets, whatever imperfect attempts at efficiency a central planner might impose upon them, it is the individual pursuit of self-interest through exchange that is constant and certain, and the achievement of efficiency that is distant and ephemeral.

III. COST AND PRICE IN MARKETS FOR CRIME

In whatever trading environment it must be conducted then, and whether it ultimately leads to a systemically efficient allocation or not, it is the act of efficient exchange, the consensual transfer of resources between individuals who each see their welfare increased by the trade, that is the engine of market allocation. But the logic of utility maximization alone, the notion that, faced with a given set of alternatives and constraints, individuals will choose the specific course of action that returns the greatest personal satisfaction, is not enough to ensure that consensual exchange will take place. To become active traders, utility maximizers must first make themselves aware of the opportunities for beneficial exchange and then put themselves in a position to take advantage of them, behavior not necessarily implicit in the textbook image of atomistic, rational decision-makers passively choosing among the options placed before them. Adam Smith avoided this difficulty by making homo economicus an active, gregarious creature, postulating “a certain propensity in human nature” that, unlike the purely mental activity depicted by utility maximization, could actually be observed, “the propensity to truck, barter, and exchange one thing for another.”¹⁸ For Smith, it was this propensity to trade, and not simply the powers of reason and speech, that distinguished man from the other

18. Smith, *supra* note 14, at 13.

animals,¹⁹ and to the extent that it in fact represents a fundamental constituent of human behavior, there is no reason to suppose that the desire to exchange is confined to those particular trading environments that happen to be well suited to explicit markets. Indeed, it is everywhere that men and women play the game of tit for tat and see turnabout as fair play, and more specifically in the tort law's attempt to force those who impose costs involuntarily on others to compensate their victims for the harm they have suffered and in the ancient, cognate bargain of an eye for an eye that is the foundation of every system of criminal law based on the principle of proportional punishment.

This institutional convergence of market and law in the idea of efficient exchange is manifest in the early history of the common law of tort and crime. From its earliest beginnings, well before the Norman conquest, English law has recognized the right of an injured party to some form of personal compensation from the injurer in rough proportion to the harm done.²⁰ The distinction between tort and crime arose from the further recognition that while the damage resulting from certain kinds of acts was largely confined to the person of a single individual, other kinds of cost imposing behavior were qualitatively different in character, in that they imposed cognizable injury upon the community at large as well as upon the

19. "Nobody ever saw a dog make a fair and deliberate exchange of one bone for another with another dog. Nobody ever saw one animal by its gestures and natural cries signify to another, 'this is mine, that yours; I am willing to give this for that.'" *Id.*

20. Cf. Harold Potter, *Potter's Historical Introduction to English Law and its Institutions* 348 (Albert Kenneth & Roland Kiralfy eds., 1958):

[Blood feud] strikes us as crude, but it was an advance on indiscriminate slaughter by way of revenge. It was a form of self-redress governed by rules: a man could not choose what vengeance he would exact because this was decided by law. It might be an eye for an eye or a tooth for a tooth, but it could not be an eye for a tooth. This regulation of self-redress opened the way to imposing a form of compensation, or money price, to be exacted in the place of payment in blood. Even in our earliest law a price is set on life, and in Alfred's day (circa 890) it was unlawful to commence a blood feud until an attempt had been made to exact that sum.

See also John Briggs et al., *Crime and Punishment in England: An Introductory History* 5-6 (1996).

direct victim. The wrongs that in time came to be called torts called for payment of private compensation in the form of *wer* or *bot*, a set of graduated tariffs in which the amount due depended on the identity and status of the direct victim and the extent of the physical injury inflicted. But those acts that were also the source of more widespread injury became “breaches of the King’s Peace” and called for the additional penalty of *wite*, a further duty to the king himself or some other public authority set at their discretion and intended to compensate for this more general damage to the community as such.²¹

From the outset then, crime has been understood as a kind of “social tort” that calls for the exaction of a compensating price from the offender by the community that is proportioned to the injury he has inflicted. The historical distinction between crime and tort, moreover, is greatly clarified by the concept of moral cost; the kinds of damages accounted for by the *wite* and generally absent in torts are plainly nonmaterial in nature and borne by a large, dispersed group of cost bearers who are only indirectly party to the offense, as observers and sympathizers. Consider a natural reformulation of these points. Associated with every criminal act is a matrix of injury in which two distinct kinds of cost, economic and moral, are imposed upon two distinct classes of victims, direct and indirect. Economic costs, the category with which economists are most at home, measure personal welfare losses that are more or less easily translated into

21. Frederick W. Maitland & Sir Frederick Pollock, *The History of English Law Before the Time of Edward I* 103 (1895):

The deed of homicide is thus a deed that can be paid for by money. Outlawry and blood-feud alike have been retiring before a system of pecuniary compositions From the very beginning . . . some small offenses could be paid for; they were ‘emendable.’ The offender could buy back the peace he had broken. To do this, he had to settle not only with the injured person but also with the king. . . . A complicated tariff was elaborated. Every kind of blow or wound to every kind of person had its price, and much of the jurisprudence of the day must have consisted of a knowledge of the preappointed prices.

See also Potter, *supra* note 20, at 348-49.

material terms. These include not just the dollar value of the material possessions lost to a thief or vandal, but the monetized values that have traditionally, if somewhat controversially, been placed on human life and limb by courts in cases of personal injury and wrongful death. While economic costs are generally concentrated on the direct victims of crime, they may also be imposed upon indirect victims as a result of decreased personal and material security and diminished incentives toward socially acceptable ways of acquiring wealth.

Moral costs, in contrast, are the subjective decreases in individual welfare associated with the indignation or feeling of injustice that detached but sympathetic observers experience in the plight of the direct victim at the hands of the offender; diminutions in utility that need not move any particular bearer to action or manifest themselves in changes in the price of any good. Rooted in the individual's personal sense of right and wrong and grounded in the presumption of moral autonomy and responsibility on the part of the offender, they express the outrage generated by various kinds of acts and their accompanying states of mind that distinguishes criminally blameworthy behavior from other more innocent activity that might entail equal damage to property or injury to persons, and generate a cause of action in tort. It is the perceived reprehensibility of the offender's act and the quality of his intentions that are the source of moral costs, not necessarily the severity of the result or the actual harm done in economic or physical terms. Incompleted attempts and inchoate offenses are thus punished as criminal acts regardless of their ultimate outcome, and from this perspective, "victimless" crimes may be interpreted as behavior that entails only indirect moral cost rather than the combination of economic and moral cost that typically results from crimes in which there is an identifiable direct victim.

It is critically important to emphasize the positive nature of the concept of moral cost. These effects are postulated solely to capture a real social phenomenon whose existence has been reflected in Western attitudes

toward crime and punishment for hundreds of years.²² But to argue that moral costs exist and that they play a central role in shaping the institutions of criminal justice is not at all to imply approval or ethical justification of a given instance of them. A statutorily illegal act committed by a person of one race or nationality, for example, may well generate greater moral cost in a given community than an otherwise identical act by a person of another. That this may be true is not a justification for the bigotry or intolerance that make it so, but that it is true may help to explain the unequal punishments that may be observed in the two cases. More generally, it is clear that the positive magnitude of these moral costs varies greatly from case to case and is highly sensitive to the specific details of each criminal act; what Justice Harlan, asserting the impossibility of meaningful and comprehensive sentencing standards in cases of murder, called “the infinite variety of cases and facets to each case.”²³ The often vastly differing

22. Compare the views of Morris R. Cohen:

We may look upon punishment as a form of communal expression. An organized group, like an individual, needs to give vent to its feeling of horror, revulsion or disapproval. We turn away in disgust at certain uncleanly or unaesthetic traits of an individual and exclude him from our company without inquiring as to whether it is within his power to prevent being repulsive. . . . It is one of the functions of the criminal law to give expression of the collective feeling of revulsion toward certain acts, even when they are not very dangerous. . . . There are, of course, various forms and degrees of social disapproval and it is not always necessary to bring the legal machinery into operation. But at some point or other the collective feeling must be embodied in some objective communal act. By and large such expression of disapproval is a deterrent. But deterrence here is secondary. Expression is primary. Such disapproval need not be cruel or take extreme forms. An enlightened society will recognize the futility of severely punishing unavoidable retrogression in human dignity. But it is in vain to preach to any society that it must suppress its feelings. The reprobative theory will explain why it is difficult to repeal penal statutes where no one believes that the punishment will have any reformatory effect on the offender or any deterrent effect on others and consequent diminution of the number of offenses. . . . Yet people will not vote to repeal [such statutes]; for such repeal would look like removing the social disapproval.

Morris Cohen, *Moral Aspects of the Criminal Law*, 49 *Yale L.J.* 987, 1017 (1940).

23. *McGautha v. California*, 402 U.S. 183, 208 (1971).

punishments imposed for ostensibly identical offenses within a single jurisdiction leaves little doubt that the particular identities of the offender and his direct victim and the specific circumstances that surround the criminal act are, in practice, the principal determinants of the “gravity” or “seriousness” of the offense, and thus of the precise quantum of punishment imposed upon the offender.

But just as the normative quality of the efficient allocation that results from consensual exchange depends crucially on the distribution of wealth that precedes the market process, positive argument of this kind is a very different matter from prescriptive analysis to the effect that the achievement of an efficient allocation of criminal activity based on moral costs is a socially “optimal” state of affairs. On the basis of any given array of moral costs, it is certainly possible, as a positive matter, to identify a particular offense as efficient; it is simply one in which the subjective satisfaction derived by the offender from commission of the act exceeds the sum of moral and economic cost imposed upon others by it. When such an offense is committed and the offender is required to bear a cost in the form of criminal punishment equal to those generated by the crime, it is clear that, just as in the consensual purchase of an orange, the aggregate welfare of the community as perceived by its members themselves (including the offender, whose preferences are accorded equal weight) has indeed been increased. But to prescribe such an outcome as “optimal” or socially preferred is implicitly to accept as appropriate or desirable the existing set of social, political and economic factors that underlie the specific array of moral costs created by the acts of particular individuals at a given moment in time. If a system of criminal justice is itself grounded in injustice, there is little good in making its operation more efficient. Positive analysis of “markets for crime” necessarily and explicitly takes the economic and moral costs associated with various offenses as given and uses them solely as a means of understanding why the criminal process is organized as it is, what systemic functions its interrelated

rules and procedures appear to serve, and how this complex social system has evolved over time. If its credibility as scientific inquiry is to be preserved, it must be handled with care and sharply distinguished from prescription or normative evaluation of the phenomena with which it is concerned. But at the same time, what we want may be different from what we see, and our enthusiasm or distaste for what we see a system doing ought not to distort our perception of how it works.

The recognition that the criminal's duty to make his victims whole extends to a multitude of individuals with only an indirect relation to the offense and that the costs they bear depend as much on the circumstances of the act and the identities of the parties to it as on the abstract character of the act itself lends much explanatory power to the price exaction model, the portrayal of the criminal process as a system of entitlement protection by liability rule. Thus, for example, severe penalties for crimes that may impose little material or economic cost, such as rape or kidnapping, can be understood in terms of the substantial moral costs they clearly entail, just as the sensitivity of moral costs to circumstance helps to account for the "individualization" of sanctions that has long permeated the American criminal process and remains one of its most distinctive features.²⁴ The matrix of injury described above, moreover, with its two categories of cost and two classes of victims, also suggests a useful positive distinction between crimes and torts. While crimes typically fill all four cells of this matrix, imposing both economic and moral cost on both direct and indirect victims, neither indirect economic costs (apart from those which themselves create separate causes of action) nor indirect moral costs are ordinarily associated

24. On the individualization of sanctions generally, see, e.g., Donald Newman, *Conviction: The Determination of Guilt or Innocence Without Trial* (Frank J. Remington ed., 1966); Robert Dawson, *Sentencing: The Decision as to Type, Length and Conditions of Sentence* (Frank J. Remington ed., 1969). On the problems raised by individualization in the price exaction framework and the movement toward sentencing standards as an institutional response to them, see Adelstein, *Informational Paradox*, *supra* note 1.

with activity characterized as tortious. And save for the direct psychic or moral costs (“pain and suffering”) that occasionally arise in cases of personal injury or wrongful death, the costs of torts are all but exclusively economic in nature. Thus, while the substantial moral costs associated with crime do not lend themselves to easy monetary or objective expression and are borne by a large group of dispersed indirect victims, the costs of torts are much more clearly economic in character and generally concentrated upon a single cost bearer or a small group of similarly situated direct victims. From this perspective, tort judgments involving punitive or exemplary damages can be seen as an intermediate case, for the moral element that motivates the punitive measures in such situations endows the civil wrong with many of the attributes of a crime. But punitive damages are controversial (and relatively rare) precisely because they blur the distinction between tort and crime and require juries to assess their magnitude without formal guidance or the procedural safeguards afforded defendants in criminal cases.²⁵

As we saw in our discussion of central planning, systemically efficient allocation does not necessarily demand that compensation be paid to cost bearers. All that is required is that cost imposers be faced with prices that reflect the full costs of their actions, so that they have the information and the incentive that allow them to

25. The distinction between tort and crime is a subject that has attracted a great deal of scholarly attention in recent years. See, e.g., Richard Epstein, *Crime and Tort: Old Wine in New Bottles*, in *Assessing the Criminal: Restitution, Retribution and the Legal Process* 231 (Randy Barnett & John Hagel eds., 1977); John Coffee, *Does “Unlawful” Mean “Criminal?”: Reflections on the Disappearing Tort/Crime Distinction in American Law*, 71 *B.U.L. Rev.* 193 (1991); John Coffee, *Paradigms Lost: The Blurring of the Criminal and Civil Law Models—And What Can Be Done About It*, 101 *Yale L.J.* 1875 (1992); and the essays collected in two symposia, *Symposium, The Civil-Criminal Distinction*, 7 *Contemp. Legal Issues* 1 (1996); *Symposium, The Intersection of Tort and Criminal Law*, 76 *B.U.L. Rev.* 1 (1996). On punitive damages, see Kenneth Mann, *Punitive Civil Sanctions: The Middleground Between Criminal and Civil Law*, 101 *Yale L.J.* 1795 (1992); A. Mitchell Polinsky & Steven Shavell, *Punitive Damages: An Economic Analysis*, 111 *Harv. L. Rev.* 869 (1998) and sources cited therein.

distinguish efficient from inefficient cost imposition before the fact and adjust their behavior accordingly. Apart from whatever secondary effects the resulting distribution of wealth might have on the determination of competitive prices, it does not matter to whom, if anyone at all, these prices are paid, so long as the cost bearer feels the pain of paying them. But in both the perfect environment of competitive markets and the radically imperfect conditions of entitlement transfer under liability rules, true *exchange* involves not just the taking of an entitlement from its owner but also the taker's payment of compensation to the owner for the costs imposed by the taking. This means that whatever social system we rely upon to organize the exchange of entitlements must effectively perform two distinct but symmetrical tasks; determining the full extent of cost imposed by the taking, and imposing those costs back upon the taker in the form of compensation to the cost bearer. In competitive equilibrium, these tasks are, in principle, completed simultaneously, without the need for detailed oversight or administration; driven only by the self-interest of the participants, competition forces market prices into equality with costs before entitlements are taken from their owners, and the requirement of consensual transfer enforces the payment of satisfactory compensation at the moment the transfer is actually accomplished. But in cases of tort and crime, the absence of the cost bearer's consent at the moment the entitlement is taken and the involuntariness of the cost imposer's participation at the moment the compensatory liability price is determined and enforced separate the two halves of the transaction in time and, in concert with the uniqueness of the costs imposed by every offending act, deny the legal system the services of competition and consensuality in extracting the information necessary to determine the requisite prices and ensuring that they are paid.

How do the institutions of tort and criminal law address these problems and organize the exchange of entitlements? In tort, where the costs imposed are primarily economic in character and borne by one or a few

direct victims, the solutions are relatively simple. Much like the citizens interrogated by our central planner about the values they place on various resources, the victims of torts are simply asked to testify under oath and subject to cross-examination to the costs they have suffered, with their claims for compensation tested for reasonableness and translated into a monetary judgment against the cost imposer by the jury, the representative sample of the community whose job it is to specify liability prices in the absence of competitive forces. Economic costs are generally well approximated by market values, which also serve to objectify the payment due from the cost imposer and facilitate the compensatory transfer of value to the cost bearer, and the small number of direct victims ensures that the full extent of cost imposed can usually be ascertained with a minimum of costly litigation. The direct psychic and moral costs that comprise "pain and suffering," subjective and largely independent of market prices as they are, are a harder nut to crack, but their estimation and objectification too is committed to the discretion of the jury; the primacy of economic costs in the civil process and the narrow incidence of pain and suffering render the errors to which these estimates are inevitably prone more acceptable to the community at large than they might otherwise be.

Once again, the civil process offers an institution midway between tort and crime, here the class action suit. In these cases, the identical claims of a large class of individuals, each of whom has suffered in just the same way, an economic cost too small to justify bringing suit on their own, are litigated together, with the defendant's liability payment divided more or less equally among the members of the class. Where all the costs of torts can be reasonably accounted for in private suits or class actions, the achievement of both an efficient level of cost imposition and full compensation to those who bear it is impeded only by the costs inherent in organizing the cause of action and bringing suit. But the organizational problems created for the civil process by the pain and suffering of individuals and the imposition of small costs on large numbers of

victims pale before the problems of estimating the price due from offenders and ensuring the compensation of cost bearers that the indirect moral costs of crime pose for the criminal process. In criminal litigation, *all* the costs imposed by the offense are subjective, and the thousands or millions of individuals who bear them, not necessarily equally, clearly cannot all be deposed to determine just how much of the crime's full moral cost each has personally suffered. In such circumstances, how is the initial placement of criminal entitlements to be made? And once these entitlements have been assigned, how are their liability prices to be determined?

In the American criminal process, a complex institutional structure has evolved to perform these tasks in two separate, but closely interrelated stages. Initial decisions regarding both the placement of entitlements and the establishment of liability prices are made by legislatures every time a statute is passed that proscribes a particular act and fixes a range of punishments for its commission. These are presumably representative bodies composed of men and women sufficiently removed from the immediate effects of the activities they consider to make disinterested assessments, on the basis of their own values and those they impute to their constituents, of the moral costs these activities typically impose. If the legislature believes that, in the typical case, the activity in question (say, tossing a bomb in the factory of a competing business) will impose greater cost on its many victims than it returns in benefits to its perpetrator, it can minimize the number of transactions that will be needed to ensure that the relevant entitlements eventually gravitate to their highest valuing owners by declaring the activity illegal and authorizing the state to exact liability prices from those who engage in it. Contrarily, as in the destruction of competing businesses by the lawful production of better or cheaper products, it can achieve the same result where it sees the activity as producing net benefits by placing the entitlement in the cost imposer, forcing those who suffer the costs either to bear them or, if they can, remove their source by

purchasing the entitlement from the cost imposer.²⁶

Judgments of this kind always involve very problematic estimates of value based upon the *ex ante* perceptions of legislators of the subjective effects of various kinds of cost imposing behavior on their constituents, and like the evaluation of pain and suffering in tort or the central planner's quest for information about resource values in orange production, they are intrinsically prone to error. Amelioration of this error and uncertainty in the American criminal process is the task of the courts, whose officers are given broad discretion to apply the general mandates of the legislature regarding both the initial assignment of entitlements and the fixing of liability prices to specific offenses once they have been committed and the precise costs they entail have actually been imposed. At this second stage, legislative determinations are taken as tentative and subject to modification (or reversal) as individual cases are considered, and judicial outcomes themselves provide a continuous error-correcting input to the legislature to inform and occasionally redirect the judgments made there. In this way, the presumption of illegality in cases of net social cost may be overcome by costs involved in the process of price exaction itself. For example, the apprehension, conviction and punishment of offenders clearly entail substantial economic costs, and moral costs result as well whenever the particular procedures of price exaction employed by the state are perceived by the citizenry to be unfair or improper, as when rights of defendants embodied in the Constitution or widely shared communal values are endangered or inadequate safeguards exist to protect against false arrest or conviction. Where, in individual cases or in entire classes of criminal activity, the sum of these transaction costs of price exaction exceed the net costs of the activity itself, efficient exchange requires either that the behavior be made legal or laws against it be left unenforced, decisions

26. Cf. Coase, *supra* note 5, at 15-19; Richard A. Posner, *Economic Analysis of Law* 18 (1972).

often made on a case-by-case basis by actors in the judicial process, as in the sporadic enforcement of petty misdemeanors and drug laws.

The informational difficulties involved in these initial determinations are apparent, and similar problems arise in the fixing of liability prices for cost imposing activities designated as criminal. The information necessary to establish the moral cost created by the acts of specific individuals in particular circumstances is not available in useful form to anyone until the act itself has been committed, and thus lies beyond the *ex ante* reach of the legislature. The traditional American response to this problem has been proscription by the legislature of generically defined offenses accompanied by a range of liability prices statutorily bounded above and below; thus, for example, the crime of robbery may be defined in the abstract by statute and punished by a prison term of not less than X nor more than Y years. At the same time, responsibility for the case-by-case specification of cost and price *ex post* passes to the judicial system, with an implicit mandate to individualize the liability price in the least costly way possible. Through budgetary constraints on its decision-makers and the monitoring of the moral costs of price exaction by appellate courts, the judicial process itself fashions fact-finding procedures and searches for modes of conviction (such as plea bargaining) that elicit tolerable approximations of the requisite information at relatively low cost.²⁷ The key to implementation of this mandate is the pervasive discretion vested in officials everywhere in the criminal process to modify legislative commands and standards where they believe circumstances warrant. Police officers may focus their efforts on certain types of criminal activities to the exclusion of others or enforce the law selectively within offense categories, while prosecutors may frame charges as they see fit or elect not to pursue a given case at all.²⁸ At trial, the jury may refuse to convict

27. See, e.g., Adelstein, *The Negotiated Guilty Plea*, *supra* note 1; Adelstein, *The Plea Bargain in England and America*, *supra* note 1.

28. Compare the "legality principle" of European systems, which compels the

even where the facts show a clear violation of the law, and the trial judge or jury has great latitude in passing sentence once the defendant has been convicted. This discretion, moreover, plays an important informational role in the evolution of the criminal process itself, for judicial action consistently, at variance with legislative intent, is a clear signal to legislators that their *ex ante* assessments of cost in one situation or another may be in error.²⁹

With the indirect moral costs imposed by various offenses more or less satisfactorily evaluated in this way, the problem of organizing the offender's payment of compensation to his many victims still remains. In tort, as we have seen, compensation for the involuntary transfer of entitlements is achieved through a money payment by the cost imposer to the direct victim, and to the extent that the direct victims of crime experience either substantial economic costs or direct moral costs in the form of "pain and suffering," they too have, in principle, full recourse to the civil process, a point to which we shall soon return. But in general, no such right to direct compensation by cost imposers exists for the many individuals who suffer the indirect moral costs of crime. Instead, criminal entitlements are collectively assigned, with either the state or "the people," and not the individual bearers of moral cost, as the designated recipient of the liability price. Insofar as the cost information needed to establish efficient liability prices is embedded in the minds of the indirect victims, it might at first seem both natural and just that the criminal process follow the civil and employ these individuals directly as information sources by placing initial entitlements and their attendant incentives for cost revelation in them. But the multiplicity of indirect cost

prosecution to try every case that comes to its attention at the highest charge that can be supported by the evidence. See, e.g., John Langbein & Lloyd Weinreb, *Continental Criminal Procedure: "Myth" and Reality*, 87 *Yale L.J.* 1549, 1561-64 (1978).

29. On the problems for efficient liability pricing specifically created by the two-stage process of liability price determination, see Adelstein, *Informational Paradox*, *supra* note 1, at 289-96.

bearers makes this an unsatisfactory solution to the informational problem in the criminal context. As in class actions, while the aggregate moral cost of a given offense may be substantial, the number of individual cost bearers is also very large and the personal cost borne by each relatively small. As a result, for most such victims the costs of participating directly in the legal process by bringing suit to vindicate entitlements exceed the benefits to be realized from monetary compensation by offenders. The law's evolved response to this problem, already evident in the *wite*, has been to treat criminal litigation as a kind of class action organized by the state, in which a publicly visible punishment is visited upon offenders that forces them to bear a universally recognized form of suffering, proportioned to the moral costs imposed by their acts. In this way, punishment provides a public good to the dispersed class of indirect victims, the satisfaction of their individual desire for vengeance, that roughly compensates them "in kind" for the moral costs they have borne.

In principle, punishment by fine might serve this retributive purpose equally well and, as Gary Becker has argued, do so at far less cost than imprisonment.³⁰ But this mode of punishment greatly complicates the symmetrical exchange of cost between the offender and his indirect victims that comprises the criminal transaction. This is because monetary punishment requires that the amount of the fine be sensitive not only to the moral costs of the offense but to the income of the offender as well, for a fine of \$1000 certainly inflicts a different quantum of disutility upon a wealthy offender than a poor one. Two distinct rates of transformation must therefore be defined before efficient exchange in criminal entitlements can be conducted. The first would convert the subjective moral costs suffered by indirect victims into objective units of some sort, say dollars, whose quantity and value can meaningfully be communicated to potential offenders, enabling them to distinguish efficient from inefficient cost

30. Becker, *supra* note 2, at 193-98.

imposition before deciding whether or not to commit their crimes. But once this objectification of moral cost has been completed, the sentencing authority must attempt a second transformation at the moment the fine is imposed to determine a monetary liability price in each case that inflicts subjective suffering on the offender more or less equal to the subjective moral costs of his crime. Apart from the sense of unfairness such a scheme of unequal objective punishments might create, the cognitive and practical obstacles to actually performing these transformations in real cases are obviously great, and where the requisite exchange of cost for cost must twice be mediated in this way, the specification of efficient and intelligible liability prices becomes all but impossible. But the need for the second of these objectifying transformations (though not the first) would be eliminated, and the difficulty of effectively signaling liability prices to potential offenders correspondingly reduced, if a currency were employed in which an objective unit of punishment could confidently be assumed to impose an equal measure of subjective cost upon every offender, irrespective of wealth or social circumstance.

Certainly physical violence and the infliction of severe pain can be said to possess this element of universality, and can be accomplished with relatively small expenditure as well; indeed, one need not look far for evidence that such methods have not yet been entirely relegated to the past. But in societies where individual freedom and personal dignity are fundamental values, punishment by imprisonment or similar deprivation of personal liberty evinces a similar universality, for the quality of suffering felt by free men and women in these circumstances seems at best only peripherally related to income or personal condition. Despite its relative economic costliness, punishment by imprisonment effectively approximates the in kind exchange of costs implied by price exaction in a way that reduces some of the uncertainty that surrounds the completion of individually efficient criminal transactions. Serious informational problems still remain, for the

sentencing judge or jury must still tailor objective liability prices expressed as prison terms to their own perceptions of the subjective moral costs associated with the offenses before them. But in this light, the criminal process can nonetheless be seen as an operational network of institutions for effecting the transfer of criminal entitlements that provides a satisfactory measure of compensation in kind at far less expense than would be required if every bearer of moral cost were given enforceable individual entitlements like those granted on the civil side.

Still, for all of this, it need hardly be added that the ideal of organizing individually efficient exchange in criminal entitlements by liability rule diverges radically from the everyday reality of criminal justice. No real criminal process can reliably establish and impose liability prices in every case that accurately measure the broadly dispersed, idiosyncratic, subjective moral costs associated with criminal behavior. The cognitive limitations of human actors and the many practical obstacles to exchange that frustrate the identification and completion of efficient transactions in markets for ordinary goods are dramatically compounded in systems of liability pricing, where a substantial fraction of the transactions initiated by the imposition of cost on unwilling victims are never brought to completion at all and where, for the rest, the benefits of competition as a means of uncovering essential information about these costs are not available to decision-makers. Beyond this, rapid, disequilibrating change in the larger culture means not just that the social attitudes that determine the magnitude of moral costs are constantly in flux (witness the recent shift in attitudes toward homosexual behavior and the decreasing tolerance of drunken driving and sexual harassment observed in parts of the United States), but also that innovative forms of cost imposing activity (such as the intentional spreading of computer viruses) to which the criminal law is often slow to respond constantly emerge from the imaginations and technical expertise of malefactors. But in markets for crime, as

in markets for goods, not even the ceaseless change or the pervasive complexity and uncertainty of modern life can divert men and women from using the ancient, imperfect institutions at their disposal to pursue their interests through exchange. For it is neither the absolute deterrence of every involuntary transfer of entitlements nor the systematically efficient allocation of resources that animates the criminal process and propels its evolution, but the human propensity toward individually efficient exchange, the urge to exact an eye, but only that, for an eye.³¹

IV. DIRECT VICTIMS IN THE CRIMINAL PROCESS

With regard to the role of direct victims in the criminal process, the crucial point of this positive analysis is clear. It is that the “audience” of the Anglo-American criminal process, the class of individuals in whose interests it is maintained, in whose name it is initiated and who are the intended consumers of its outcomes, consists entirely of the public at large, the indirect victims of the criminal act. The purpose of the criminal trial (and its less costly alternative, the plea bargain) and the retributive punishment that follows it is to complete the complex transaction between the offender and the many bearers of indirect moral cost begun by the former’s seizure of the criminal entitlements initially assigned by the state to the latter. However substantial or poignant they might be, the economic and psychic costs suffered by the direct victim of the offense are not to be included in the liability price established at the trial and imposed back upon the offender. Were this criminal punishment the *only* liability price the offender was forced to bear, of course, the law’s apparent objective of facilitating the transfer of every relevant entitlement to its highest valuing owner and discouraging its taking by those who value it less than its initial holder would clearly be frustrated, even if every criminal act were ultimately to result in conviction and a punishment that completely

31. See generally Adelstein, Institutional Function, *supra* note 1.

captured the indirect moral costs of the crime, because the costs suffered by the direct victim would not have been represented in the liability price exacted from the offender. In such a case, not only would the direct victim remain uncompensated for the value of the entitlement she had involuntarily surrendered to the offender, but because the liability price paid by the offender would be less than the total cost imposed by his crime, the law would fail to distinguish accurately between efficient and inefficient transfers of entitlements, with the consequence that in some cases, entitlements would be seized by offenders who paid the full liability price demanded of them by the criminal process, but nonetheless placed a smaller value on these entitlements than did their original owners.

Preventing this allocational error in the criminal process is precisely the role played in it, in principle, by the civil law of tort. If efficient exchange in entitlements is to be effectively encouraged and inefficient transactions deterred, cost imposers must be made to bear the full costs of their acts. For this to occur, direct victims must be fully compensated in tort for the pecuniary damages and pain and suffering they have borne, and indirect victims must receive their due in kind through proportional retribution. Both the civil and the criminal processes, that is, must work perfectly and in tandem for the law's objective of organizing individually efficient exchange to be realized. But however obvious the shortcomings of the criminal process in performing its part of this task might be, it is clear that the failures of the tort system are far greater still. Offenders are frequently without the pecuniary resources to compensate their direct victims for even a small part of the damages they have suffered, and even if they do have the wherewithal to meet their obligations in tort, they may still succeed in hiding their wealth from the court or placing it beyond the plaintiff's reach by transferring it to others. And even where offenders are not "judgment proof" in this sense, direct victims may themselves lack the material or psychological resources to pursue their claims in a timely and effective way.

It is this manifest failure of the civil law of tort to perform its complementary function in the process of criminal price exaction, I believe, that has given life to the recent movement to integrate the claims and increase the participation of direct victims in the American system of criminal justice. But with the dangers of normative or prescriptive argument suggested in the previous section firmly in mind, the economic portrait of the criminal process sketched in this essay may nonetheless offer some useful guidelines for evaluating various measures to incorporate the interests of direct victims into its operations. The first of these might be to maintain the important distinction between the allocational and distributional aspects of economic exchange. It is easy to agree with the view that something ought to be done to ensure that direct victims are not forced to bear the often huge material and psychic costs imposed upon them by crime alone and without assistance. But as we have seen, simply making the unwilling victims of crime whole is largely a matter of distributional equity rather than allocative efficiency. To say that fairness or mercy demands that victims be compensated for their losses is not to say that this compensation must necessarily come from the cost imposer himself. State sponsored victim compensation plans thus need not be funded in whole or in part from fines or other revenues generated by offenders themselves, either as individuals meeting specific obligations to their victims or as a class held collectively responsible for the direct costs of crime; fair compensation for victims can equally well and certainly more reliably be achieved through an inclusive system of social insurance underwritten by taxpayers. But for individual efficiency to prevail in exchange, that is, to ensure that every prospective offender is confronted with incentives that will effectively deter the inefficient transfer of entitlements, the full costs of his crime must somehow be brought to bear upon him, regardless of the way in which the liability price is paid and who, if anyone, is its ultimate recipient. New institutional arrangements must thus be found not just to

organize the compensation of direct victims, but also to ensure that an equivalent measure of suffering, in one form or another, is visited upon offenders *in addition to* the punishment meted out by the criminal process and meant to compensate only the broad class of indirect victims. Only in this way can the related but conceptually distinct ends of personal retribution and efficient deterrence, objectives met simultaneously in the act of consensual exchange in markets, be achieved in the case of crime.

But the analysis suggests a second guideline as well: whatever new mechanisms might be put in place to organize the compensation of direct victims, they must not become part of the criminal process *per se*, or they will inevitably distort the system's attempt to equate liability prices to the indirect moral costs of crime by importing some or all of the costs borne by direct victims into the calculation of these prices. This does not mean that direct victims should not be given the opportunity to testify in regard to the costs they have suffered, either at the trial itself or in the form of victim impact statements at the moment sentence is passed. But it does mean that the relevance of this testimony must be limited to its influence on the extent of moral cost borne by the indirect victims of the offense. Knowing how much the direct victim has suffered at the offender's hands may well affect the "seriousness" of the crime, and thus its moral costs as they are perceived by its indirect victims, but to go beyond this by adding some or all of the direct victim's costs to the indirect costs borne by the public at large in establishing the criminal liability price is simply to introduce an element of confusion into the criminal process that makes the already formidable institutional task of separating efficient from inefficient cost imposition, the *raison d'être* of our complex system of civil and criminal justice itself, all the more daunting. Attempting to use the institutions of criminal law to vindicate the rights of direct victims or ameliorate their suffering through the payment of compensation can only make it still more so.