3-2018

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Keith Hylton
Boston Univeristy School of Law

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Boston University School of Law
Law & Economics Paper No. 17-40

Forthcoming, *European Journal of Law and Economics*
(Symposium on Calabresi's *Future of Law and Economics*)

Keith N. Hylton
Boston University School of Law

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Abstract: I agree with Calabresi's general distinction between Economic Analysis of Law and Law and Economics. However, these broad categories may obscure important differences between types of law and economics scholarship. I would distinguish positive economic analysis from normative economic analysis, and positivist legal analysis from nonpositivist analysis. The four categories generated by these distinctions provide a more fine-grained map of the styles of reasoning in law and economics, and has implications for the future of law and economics.

Forthcoming in the *European Journal of Law and Economics* (Symposium on Calabresi's *Future of Law and Economics*).

Keywords: law and economics, economic analysis of law, legal positivism, positive economics, normative economics, transaction costs, norms, behavioral economics

* William Fairfield Warren Distinguished Professor, Boston University, knhylton@bu.edu. This paper was prepared the 2017 symposium on Calabresi's, *The Future of Law and Economics*. I thank Bob Bone and David Pozen for several helpful comments.

I. Introduction

In *The Future of Law and Economics*, Calabresi distinguishes Economic Analysis of Law and Law and Economics. Economic Analysis of Law, "uses economic theory to analyze the legal world… and, as a result of that examination, confirms, casts doubt upon, and often seeks reform of legal reality."[1] Law and Economics, by contrast, "begins with an agnostic acceptance of the world as it is," and "looks to whether economic theory can explain that world."[2] Calabresi expresses a preference for Law and Economics, and notes that practitioners of Economic Analysis of Law often reach conclusions on the social desirability of laws while ignoring "real-world" data.

In this essay, I will break these categories down further, distinguishing positive economic analysis from normative economic analysis, and positivist legal analysis from nonpositivist analysis. The four subcategories generated by these distinctions provide a more fine-grained map of the styles of reasoning in law and economics, helps identify important distinctive features of the schools identified by Calabresi, and reveals relationships between law and economics writing and the substantial body of jurisprudence viewed as unrelated to economic analysis. The subcategories provide a clearer picture of precisely where Calabresi's work, which spans several subcategories, is located in relation to the work of other writers who have greatly influenced law and economics, and legal theory generally.

II. Categories

Calabresi draws a line between Economic Analysis of Law and Law and Economics, pointing to Bentham as the original source of the former school of thought. He reminds us of Mill's description of Bentham as viewing "all ideas as strangers" and rejecting those that failed the test of utility as vague generalities. Mill further noted, as Calabresi reminds us, that those vague generalities contain the whole unanalyzed experience of humanity. It is difficult to imagine how one could take all ideas as strangers, but the most likely meaning this phrase implies is a readiness to reject any argument on the basis of tradition, convention, consensus, or general acceptance. That is a very difficult to position to take, especially in modern society, and likely to rupture many relationships. On the other hand, it is a valuable position to take as a researcher or thinker because it enables one to question accepted wisdom, and thereby uncover falsehoods or bad ideas accepted on the authority of convention. This absolute insistence on the right of the individual to question claims and to demand proof was shared by Bentham and Mill.

Bentham, it is well known, rejected many ideas accepted on the authority of convention. One famous idea he rejected was Blackstone's theory that the common law embodied reason.[3] Bentham subjected the common law to the test of utility and found it wanting. He described common law as "dog law" because the only way one could learn the common law was to violate a common law rule, and then be punished for it. In the same sense, Bentham noted, a dog would

[1] Guido Calabresi, The Future of Law and Economics: Essays in Reform and Recollection 2 (2016).
[2] *Id*. at 3.
[3] Jeremy Bentham, *A Comment on the Commentaries, in* A Comment on the Commentaries and A Fragment on Government (J.H. Burns & H.L.A. Hart eds., Oxford Univ. Press 2008) (1776).

learn the rules of his house by violating such a rule and then suffering a beating for it. Bentham thought that it would not be difficult to improve upon the common law by constructing a code that would give potential law violators notice regarding the rules of law.

Law and Economics, Calabresi explains, does not view the law as a stranger. Instead, it attempts to make sense of and to explain the law, or the legal system, as it is. If it cannot explain the legal system as it is, Calabresi continues, it asks whether we have misunderstood the legal system or whether economic analysis should be modified to incorporate features of the legal system that it has failed to incorporate. This is a broad objective and Calabresi states a strong preference for this approach over the Economic Analysis School. Calabresi would describe himself as belonging in the Law and Economics camp, though I think his work spans both categories, as does the work of Posner, who Calabresi puts within the Economic Analysis School.

I find it more useful to draw dividing lines in economic analysis and in legal analysis separately. First, economic analysis can be split into two camps: positive economic analysis and normative economic analysis. Positive economic analysis generally aims to explain or understand conventions or phenomena that exist; to explain the causes and the likely welfare consequences. Normative economic analysis, by contrast, sets out to design optimal institutions or to reform existing institutions toward optimality as defined by the analyst. A normative economic analysis of the tort system, for example, would set out an objective function for the tort system and attempt to discover the legal rules that would optimize the objective function.[4] It would make no attempt to first examine the legal rules to see if they could be justified on economic grounds.

Second, legal analysis can be split into positivist and nonpositivist camps. Legal positivism, as I will define it here, holds that the relevant law, or the only source of law, is provided by the state, which announces the law through statute books, case reports, and administrative agencies. This is an admittedly dated definition of positivism, associated with Austin,[5] Bentham,[6] and even earlier Hobbes.[7] However, this is the definition that best serves the distinctions I aim to draw. The modern post-Hart definition, which emphasizes law's association with morality,[8] offers little to a discussion of economic or utilitarian analysis of law.[9]

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[4] In another contribution to this symposium, Alain Marciano and Giovanni Ramello describe Calabresi's analysis as fundamentally positive in its application of economics. See Alain Marciano and Giovanni Ramello, Law, Economics, and Calabresi on *The Future of Law and Economics*, this symposium issue. In contrast, I describe some parts of Calabresi's work as positive and some parts as normative. The difference between our descriptions appears to be due to different emphases on the meaning of "positive economics". I emphasize the application of positive economics as a framework for understanding institutions or markets generally, while Marciano and Ramello emphasize the application of economics to explain the observable market behavior of *individuals*.

[5] Specifically, the "command" theory of law. *See* John Austin, The Province of Jurisprudence Determined (London, J. Murray 1832).

[6] Bentham related law to the will of the sovereign. *See* Jeremy Bentham, *An Introduction to the Principles of Morals and Legislation*, *in* 1 The Works of Jeremy Bentham 1 (John Bowring ed., Russell & Russell 1962) (1843).

[7] Hobbes asserted that the only laws that deserved the name were those backed by force. Thomas Hobbes, A Dialogue between a Philosopher and a Student of the Common Laws of England 59 (Joseph Cropsey ed., Univ. of Chi. Press 1971) (1681).

[8] H. L. A. Hart, The Concept of Law (3d ed. 2012).

[9] Henry Smith suggests that I use the sociological term "legal centralism" rather than positivism. I decided to remain with positivism, though my meaning would be recognized by many today (post-Hart) as centralism.

In the positivist model, religious norms, conventions of behavior, and moral systems cannot be viewed as sources of law. In the nonpositivist view (which complements my definition of positivism) such conventions or norms can be viewed as sources of law. One theory of the common law is that it is discovered by courts as they examine the norms and conventions adopted within a society (Blackstone, Leoni).[10] Bruno Leoni set out an explicitly nonpositivist economic theory of the common law. Much earlier, the nonpositivist economic approach was reflected in Hume's discussion of the emergence of property rights.[11]

These distinctions generate four categories: economic positivism and legal positivism, economic normativism and legal positivism, economic positivism and legal nonpositivism, economic normativism and legal nonpositivism. Probably more accurately one could say that these categories represent endpoints along a spectrum. The four categories I have just suggested could be represented in a two dimensional diagram, where the relationships between viewpoints could be mapped in a more detailed manner. In such a two-dimensional space, one could show that some normative economics writers share many attributes with positive economics writers, while others share fewer.

Consider the first category: economic positivism and legal positivism. What is in this box and who falls in it? The box assumes that the law consists of rules stated in the statute books and case reports, and also that the purpose of economic analysis is to explore the efficiency of the law as is. Such an exploration would lead the analyst to start with certain principles of the law, such as the distinction between strict liability and negligence, and seek to determine if the allocation of strict liability and negligence rules appears to be economically efficient or welfare maximizing. The approach is fundamentally different from normative economics because it starts with the law, in a ready-made or modular form, and tests whether the existing modules, so to speak, fit within the legal landscape in a manner that is economically justifiable – that is, justifiable in light of incentive effects.

Who falls within this box? Posner is the obvious candidate. Today, his name is almost synonymous with the common law efficiency hypothesis. He is a legal positivist because he takes the relevant law as that expressed in case reports and statutes. Posner has never suggested that the common law is "discovered" in the sense explicitly described by Leoni and suggested by Hume and later Hayek. In an early and sophisticated review of Posner's *Economic Analysis of Law*, James Buchanan criticized Posner's treatment of the common law for ignoring the earlier contribution of Leoni.[12]

It is something of a paradox that Posner has dismissed nonpositivist writing on the common law. The common law efficiency hypothesis assumes that common law courts design rules that are efficient in the sense that the rules would minimize costs if followed by actors *without resort to litigation*. If efficiency were instead defined in the operational sense offered by Calabresi in *The*

[10] William Blackstone, Commentaries on the Laws of England: A Facsimile of the First Edition of 1765 – 1769 (Univ. of Chicago Press 1979); Bruno Leoni, Freedom and the Law (1961).
[11] David Hume, Treatise of Human Nature 484-501 (Prometheus Books 1992) (1737).
[12] James M. Buchanan, Good Economics. Bad Law, 60 Virginia Law Review 483 (19740.

Costs of Accidents (hereafter *Costs*),[13] it would incorporate the costs of litigation and the effects those costs would have on incentives to comply with the law. It follows that the only sound argument for believing that the common law is efficient is that it generates rules that individuals internalize and follow as norms in ordinary social interaction. If those norms were never internalized – that is, if they are followed *solely* because of the threat of litigation – then the norms would fail to describe efficient conduct. In short, the common law efficiency hypothesis, to be valid, requires the internalization of common law rules as guidelines for conduct that would be followed even in the absence of the threat of litigation.

Before Posner, Holmes had occupied the legal positive and economic positivism category. Of course, Holmes does not use the term economic efficiency, so it may seem inappropriate because of this to refer to Holmes as a precursor to Posner. However, Holmes does use the term "convenience" and described the common law as conforming to convenience.[14] This is as close as one could expect a legal researcher to come to using the term efficiency in the year 1880. Holmes's framework is utilitarian, which is different from the "market surplus maximization" (or wealth maximization) thesis of Posner. However, the difference between the approaches is not great, and if, as Bentham argued, utility is strictly increasing in wealth, then it should not matter greatly whether you call yourself a utilitarian or a "wealth-maximizer". If utility increases linearly with wealth, there would be no differences between the wealth maximizer and the utilitarian. Like Posner, Holmes examines the law as it is, and argues that it maximizes welfare. Also, Holmes shows little interest, except in his chapter on the early development of the law, in the emergence of law from convention. And even his discussion of the emergence of law emphasizes the role of the state in imposing the law on its subjects.

Does Calabresi belong in the economic positivism and legal positivism category? If one focuses on *Costs*, the answer would be a resounding no. *Costs* is within the normative tradition of Bentham. However, Calabresi's article on "Property Rules" and "Liability Rules" (hereafter *Property Rules*) falls squarely in the economic positivism and legal positivism category.[15] Indeed, it is the most perfect example of the Law and Economics approach as described by Calabresi. In *Property Rules*, Calabresi rejects the normative framework of law enforcement proposed by Becker in 1968.[16] He proposes an alternative model that includes Becker's as a special case – where Becker's approach is efficient when transaction costs are high and is inefficient when transaction costs are low. Further, he shows that his model is consistent with the law as it is. Finally, by embedding transaction costs in the model, Calabresi and Melamed leave room for behavioral anomalies that the law takes into consideration but that economics still struggles to incorporate. Kaplow and Shavell suggest that if transaction costs are low (essentially zero), the Becker framework would still be efficient – in other words, the choice between property rules and liability rules is a matter of indifference to the social planner when

[13] Guido Calabresi, The Costs of Accidents: A Legal and Economic Analysis (1970).
[14] Oliver Wendell Holmes, Jr., The Common Law, 1-2 (1881).
[15] Guido Calabresi & A. Douglas Melamed, Property Rules, Liability Rules, and Inalienability: One View of the Cathedral, 85 Harv. L. Rev. 1089 (1972).
[16] Gary S. Becker, Crime and Punishment: An Economic Approach, Journal of Political Economy 76, no. 2 (1968): 169-217.

transaction costs are absent.[17] However, any model that takes human behavioral patterns seriously would treat transaction costs as significant in virtually all contexts – larger in some cases than others, but never zero. Given that transaction costs are never zero (or even close to zero), the property rule (in comparison to the liability rule) minimizes costs in settings where contracting over readily observable parameters is feasible and relatively cheap.[18]

To make the preceding defense of Calabresi-Melamed clearer, consider the bargaining process under both the property rule regime and the liability rule regime when transaction costs are sufficiently low to permit bargaining to occur. Under the property rule, a transaction will take place, whenever it would be efficient, at a price that both buyer and seller find acceptable – in the sense that the price is preferable to their reservation valuations. Under the liability rule, a transaction will still take place whenever efficient, but it will be under terms that favor the acquirer (buyer), who has the option to simply take and pay compensatory damages. Given this, the possessor ("seller") has an incentive to invest in defense or "self-help." Because of the costs of defense, the liability rule regime is inefficient relative to the property rule regime. And this is only one of the reasons why the property rule regime is socially preferable when transaction costs are sufficiently low to permit bargaining to occur.[19] There are other reasons, such as the likely inefficient investment incentives created by the liability rule.[20]

As a general matter, the problem of self-help boils down to one of transaction costs.[21] However, these costs are *primitive* and unavoidable. Lawful possession includes the right to protect property from a taking and to recapture stolen property, as long such actions are carried out with reasonable force and taken within a reasonable time period. In reality, there is no such thing as a transaction regime in which these primitive costs – of defense and of self-help – are not present.[22] Hence the claim that property rules and liability rules are equally efficient when transaction costs are zero is theoretically valid but empirically false because it requires the absence of primitive transaction costs.

In addition to helping us understand the law as it is, and showing how economics can be improved by incorporating salient features of the real world, *Property Rules* provides important

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[17] Louis Kaplow and Steven Shavell, Property Rules and Liability Rules: An Economic Analysis, 109 Harvard Law Review 713 (1996). The Kaplow-Shavell critique relies on the Coase Theorem, which holds that the ultimate allocation of resources will be efficient regardless of the assignment of property rights if transaction costs are zero. R. H. Coase, The Problem of Social Cost, 3 J. Law & Econ. 1 (1960).

[18] See, e.g., Keith N. Hylton, Property Rules and Defensive Conduct in Tort Law Theory, 4 J. Tort L. 1 (2011).

[19] Other reasons include cognitive dissonance (the difficulty of bargaining under the threat of a taking), incentives to develop a reputation for predation (since credibility as a taker enhances bargaining leverage under the liability rule). On these matters, see Keith N. Hylton, *Some Notes on Property Rules, Liability Rules, and Criminal Law*, *in* Research Handbook on the Economics of Criminal Law 67 (Alon Harel & Keith N. Hylton eds., 2012).

[20] *See* Keith N. Hylton, Property Rules and Liability Rules, Once Again, 2 Rev. L. & Econ. 137 (2006).

[21] *Id*. A possessor could promise not to engage in self-help or a potential acquirer could promise not to take, but neither promise would be credible. Put another way, the costs of gaining perfect credibility are likely to swamp the gains from contracting.

[22] Perhaps in the Platonic utopia in which individuals considered all others potentially to be family members, the costs of defense might not arise. In such a world, if someone demands you give him your property at an objectively determined price, or risk a taking, you would not seek to defend yourself from the taking, because he is your brother, or son, after all. But to describe the conditions under which such primitive costs as defense and self-help might not arise is also to demonstrate why the conditions will never be observed.

lessons on what the law says – lessons for both lawyers and economists. In comparison to traditional legal theory, Law and Economics is reductionist. Reductionism educates lawyers by scrapping unnecessary distinctions, which lawyers are prone to make. By setting up broad rule categories defined by associated remedies, *Property Rules* provides a simple model that captures a great deal of the complex reality of legal rules. Within these categories, lawyers can introduce many finer distinctions, but the categories help lawyers distinguish genus from species. On the other hand, economists tend to be overly reductionist, and *Property Rules* sets an important line beyond which economists should be careful about further reduction. An economic model that fails to distinguish the effects of property rules and liability rules could easily lead the economic analyst astray.[23]

Now consider the category of legal positivism combined with economic normativism. My earlier comments reveal much of what I will say about this category, which consists of writing that takes the law as emanating solely from official sources and also attempts to design an optimal system. The major pieces in this category are Bentham's lifelong critique of the common law, Calabresi's *Costs,* and Becker's *Crime and Punishment*. Each of these works presents an ambitious reform proposal based on a normative economic model of the legal system. The proposals have not been accepted, though they have led to minor changes here and there. They have greatly enriched the philosophy of law without having a substantial impact on its practice. It is fortunate, for the most part, that these reform proposals have had limited impact. Each of them gives too little weight, in my view, to the learning embedded in the common law.

The one feature Posner has in common with all of the works in this category is his legal positivism. Posner has not made broad contributions to this category on the level of the three aforementioned contributions, but he has written numerous pieces with specific reform proposals based on economic models of the legal system. His work in this category has been more of surgical nature rather than sweeping.

The next category to consider consists of work that reflects legal nonpositivism (natural law theory) and economic positivism. The writing in this area treats law as emerging from social conventions and at the same time relies on economic reasoning to justify the law as it is. Hume is probably the first contributor in this category. Leoni, building on Hayek, is a more recent contributor. Robert Cooter has contributed formal models of the norm creation process.[24] One

[23] One significant area of economic analysis of law where reductionism has been carried too far is the Hand Formula. Many analysts believe that the Hand Formula describes precisely how courts determine negligence. However, anyone who looks carefully at the negligence cases will see that informational constraints often prevent courts from applying the Hand Formula as commonly described in the academic literature. For example, some early papers in the economic analysis of causation adopt the Hand Formula analysis. Guido Calabresi recognized the inadequacies of such an approach to causation early on. See Guido Calabresi, Concerning Cause and the Law of Torts: An Essay for Harry Kalven, Jr., 43 U. Chi. L. Rev. 69 (1975). For a modern treatment consistent with Calabresi on causation, see Keith N. Hylton & Haizhen Lin, Negligence, Causation, and Incentives for Care, 35 Int. Rev. Law Econ. 80 (2013).

[24] Robert D. Cooter, Structural Adjudication and the New Law Merchant: A Model of Decentralized Law, 14 Int. Rev. Law Econ., June 1994, 215-31. More recent literature on law and social norms has tended to focus on norm creation more than the connection between norms and the common law. See Robert Ellickson, Order Without Law:

could even make the argument that Blackstone falls within this category. Blackstone believed that the law was discovered by judges and based on reasonable conduct norms. He does not present a consistent normative framework, but to the extent one emerges, it is utilitarian. His discussion of criminal law, an area admittedly less receptive than either torts or contracts to the theory of norms, draws heavily on Beccaria, a utilitarian.

The remaining box consists of writing that is nonpositivist in law and normative in economics. If any writing exists in this area, it would have to advance the position that social norms should be taken seriously as a source of law, and that there is an optimal set of norms that should govern. Describing the goals of an author in this category suggests immediately why it is so difficult to find any major writing that seems to fit the description. The author would have to believe that there is an optimal set of norms, not consistent with observed practices and not given to us by some other source such as established religion, and that this optimal set of norms should be the recognized source of law. I can think of no economic writing in this vein. The closest that comes to this is Immanuel Kant, who rejected utilitarian (and hence economic) thinking, but at the same time offered a rather complete moral system and believed that his moral system should be the basis of law.

As this review, summarized in Table 1, suggests, the major areas of writing in law and economics consist of work in the first two categories considered above: positivist law and positive economics, and positivist law coupled with normative economics. Holmes and Bentham are two historical figures that represent these opposing categories, with Holmes in the former and Bentham in the latter. However, they were both writing at a time when economic analysis was in its infancy. Today, Posner is commonly associated with the first category. Calabresi is commonly associated with the second category, but, as I have argued, that is mostly because of the influence of *Costs*. If we take *Property Rules* into consideration, then Calabresi spans both categories, having made fundamental contributions in each. *Costs* is in the tradition of normative utilitarian analysis associated with Bentham. However, *Costs* introduces a far more sophisticated treatment of economics and introduces an operational efficiency standard for law: the minimization of the costs of injures, injury avoidance, and administrative (including litigation) costs. As I have suggested, this operational efficiency standard is different from the common law efficiency standard emphasized by Posner. A great deal of modern work on the economics of litigation adopts the operational efficiency standard.

Given what I have said so far, and having accepted Calabresi's distinction between Law and Economics and Economic Analysis of Law, I would not point to Posner as the leading exemplar of the latter school. Bentham is a fair choice as the starting point for Economic Analysis of Law. After Bentham, the most plausible successor candidate is Becker, in his treatment of the law in his *Crime and Punishment* paper. Becker's article was a seminal contribution. Still, it suffers from the flaws Calabresi identifies. Becker proposes a shift in the goal of criminal punishment from elimination of gain, the standard objective of "classical deterrence theorists" beginning

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How Neighbors Settle Disputes (Cambridge: Harvard University Press, 1991); Richard H. McAdams, The Origin, Development, and Regulation of Norms, 96 Mich. L. Rev. 338 (1997); Eric A. Posner, Law and Social Norms (Cambridge: Harvard University Press, 2000).

with Beccaria, to internalization of cost. Becker's model is sufficiently general that it generates conditions under which elimination of gain would be the proper goal, but he concludes that internalization of cost would remain an appropriate approach even under these conditions. Becker fails to consider why the law adopts the gain elimination approach as a general rule in criminal law, and why the conditions under which it is used in criminal law sometimes deviate from the conditions suggested by his model. Calabresi addresses these issues in *Property Rules*, and at the same time points to features of the real contracting environment with which law consistently grapples that are absent from Becker's model.

Posner is not an exemplar of the Economic Analysis School because he is typically associated with the positive law and economics approach. In short, there is not a direct line from Bentham to Posner. They share utilitarianism as a framework, though Posner has quibbled over differences. But beyond the general framework, there is not a great overlap.

After Becker, the clearest exemplar of the Economic Analysis School is Calabresi's *Costs*. To be fair, Calabresi avoids many of the critiques that he levels at the Economic Analysis School. He delves deeply into the law and the problems of potentially irrational human behavior with which it necessarily grapples. Because of Calabresi's enlightening treatment of legal doctrine, his analysis shares many attributes associated with positive economic analysis. However, in terms of the final output, *Costs* is a radical reform project very much in the spirit of Bentham. It comes close to advocating a wholesale scrapping of much of the existing common law of torts. There is nothing inherently wrong with such a reform proposal, standing alone. The danger in such a proposal, a danger more obvious in Becker, is that the intricacies of tort law, at least some of them, reflect the accumulated wisdom of experience. The allocation of strict liability and negligence rules may be efficient, for example – though efficient in the doctrinal sense emphasized by Posner. Altering this allocation could have costs that would have to be considered in the operational efficiency test of Calabresi. But in order to understand the costs that would be generated by altering the allocation of strict liability and negligence rules, one must first understand thoroughly the potential efficiencies associated with the existing allocation under the common law.

		Legal Analysis	
		Positivist	Nonpositivist
Economic Analysis	Positive	Posner (*Economic Analysis of Law*) Holmes Calabresi-Melamed	Hume Leoni Hayek (related: Blackstone)
	Normative	Bentham Calabresi (*Costs*) Becker (*Crime*)	(related: Kant)

Table 1: Categories of Economic Analysis and of Legal Analysis

III. Behavioral Law and Economics

I have referred many times to the behavioral anomalies with which the law must continually grapple as an important factor that might distinguish Law and Economics from Economic Analysis of Law. Although Behavioral Economics is considered a relatively new discipline, it is new only in its application of experimental methodologies. The theory that human behavior may often appear to deviate from predictions based on the rationality assumption has been a feature of law and economics writing for a very long time. Bentham was a behavioralist. His theories of criminal punishment regularly took into consideration the possibility that potential offenders may not respond in the typical rational manner to punishments. He argued that punishments should have a *characteristic* quality to ensure that potential offenders were adequately deterred.[25] A typical characteristic punishment would remind the offender of the punishment he had received every time he considered returning to his earlier crime. A thief, under Bentham's plan, would have to have his hand severed, so that when he considered a future act of theft he would be reminded of the punishment waiting him. Such a theory of punishment, by rejecting the notion that a monetary fine could be sufficient as a deterrent, assumes some degree of irrationality on the part of the thief.

Calabresi adopts behavioralist premises in *Costs*. Although he appears to believe that humans are generally rational, he makes allowance for consistent deviations from rationality. For example, Calabresi notes that individuals may consistently make poor decisions when comparing short run gains to long-run costs.[26]

That Bentham and later Calabresi in *Costs* both adopted behavioralist assumptions suggests that consideration of behavioral limitations is not a feature absent from Economic Analysis of Law and observed only in the category Calabresi calls Law and Economics. Behavioral economics provides a set of tools which can be used with equal gain by both schools, and that have been used by both schools. Perhaps the deeper lesson to be drawn from Calabresi is the proposition that behavioral limitations *must* be taken into consideration by the analyst in Law and Economics. That appears to be an important lesson from Calabresi's *Property Rules*, when viewed in retrospect in light of later writing on the topic. To justify the use of property rules, some degree of departure from strong-form-rationality-zero-transaction-costs must be accepted, otherwise, property and liability rules are both efficient under the Coase Theorem. Indeed, while Calabresi and Melamed concluded that property rules are generally preferable, but transaction costs require society to use liability rules instead in some areas, the better argument appears to be that the choice between property rules and liability rules is a function of the magnitude of transaction costs, and that transaction costs are to some degree unavoidable given behavioral limitations.

I understand Calabresi to be saying that to do useful Law and Economics, in contradistinction to Economic Analysis of Law, one must do one or more of the following. First, a researcher must take behavioral limitations and other transaction costs into account. Legal rules cannot be

[25] *See* Bentham, *Principles of Morals and Legislation*, *supra* note 5, at 92.
[26] Calabresi, supra note 12, at 57.

explained, justified, or even understood under Coasean assumptions. It follows that to critique or to argue for reform of an area of the law on the basis of Coasean assumptions is a mostly useless exercise. Second, a researcher must take a close look at the law, attempt to understand what the courts are saying, and how the language of the law translates into tests governing incentives. It is not enough to take a simple economic model of the Hand Formula and assume that courts are implementing precisely the formula that economic analysis has developed. A close look at the law might reveal that courts are not applying the Hand Formula as in the standard analysis, or that information costs constrain or prevent the courts from applying the Hand Formula as understood in economics. If this is so, then a simple Hand Formula analysis will fail to explain the incentive effects created by the law of negligence in some scenarios.

This argument admittedly begs the question of what it means to do useful Law and Economics. I take it that useful Law and Economics helps us understand, critique, or to justify, on economic grounds, some part of the law or the legal system. Almost every part of the law throws up a puzzle for which economics might be useful in solving. For example, consider the doctrine governing punitive damages (ignoring, for the moment, the Supreme Court's recent constitutionalization of parts of it). Courts had developed intricate rules for determining the conditions under which a punitive damages verdict should be upheld by an appellate court. To understand the law on punitive damages, it follows from Calabresi, one should examine the law and the economic factors that might account for the doctrine.

IV. Conclusion

Calabresi is entirely correct to suggest that the future of law and economics research depends on the prevalence of Law and Economics relative to Economic Analysis of Law. Both schools provide helpful insights based on economic analysis. However, to the extent Law and Economics is inherently institutionalist, taking seriously the constraints imposed by and the information embedded in the law, it has an advantage in offering research that can advance the operation of the legal system.