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THE COASE THEOREM AND THE PSYCHOLOGY OF COMMON-LAW THOUGHT

DONALD H. GJERDINGEN*

The Coase Theorem is a simple proposition—in the absence of transaction costs, a Pareto optimal result will occur regardless of the initial placement of legal liability. Despite this apparent simplicity, however, Coase's economic parable has provoked intense debate in the legal community. Why does the theorem grate on the hardened intuitions of so many lawyers? The thesis of this Article is that a connection exists between the adoption or rejection of a given school of legal thought and the use of certain psychological constructs. Specifically, this Article argues that the constructs underlying the Coase Theorem are incompatible with those underlying common-law thought, and that the uneasiness that lawyers have about the Coase Theorem reflects this incompatibility.

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1. Pareto optimality is attained when the quantum of goods existing in society is allocated so that "no reallocation can yield improvement for some without injuring others." D. ORR, PROPERTY, MARKETS AND GOVERNMENT INTERVENTION 100 (1976). For a general discussion of Pareto optimality, see J. HADAR, ELEMENTARY THEORY OF ECONOMIC BEHAVIOR 278-302 (1967).


3. One of the premises of this Article is that "commonsense" or intuitionistic thought has predictable and coherent structures. See infra note 90. A second premise is that traditional legal analysis is a sophisticated form of intuitionistic thought, which, although ultimately grounded in the intuitionistic thought of laypersons, takes on certain refinements because of particular political or cultural influences. See infra notes 91, 186. See also infra text accompanying notes 212-17. Thus, the term "common-law thought" is used in this Article in two different senses. The first and broadest sense is simply to denote the general intuitions of the majority of society—the general intuitionistic thought of laypersons. See infra notes 187-211 and accompanying text. The second and more specific sense is to denote conventional legal analysis. See infra text accompanying notes 19-85, 138-86. See also infra note 186.

4. Generally, the Coase Theorem is seen as the foundation of the method of analysis known as economic analysis of the law. It is true that Coase's article has been extensively relied upon by the leading exponents of this approach, such as Fosner and Calabresi. However, it is not clear that the theorem's significance should be limited to this mode of legal analysis. See infra
Coase used a rather simple fact situation to illustrate his now classic theorem. A rancher who raises cows and a farmer who raises corn own adjoining land. The cows wander onto the farmer's land and destroy some of the corn. Who should bear the loss, the rancher or the farmer? For Coase, the starting point of the analysis is that both activities are "reciprocal." The presence of both ranching and farming is a prerequisite to any damage to either, so that avoiding harm to one party necessarily harms the other. Once this point is accepted, the remaining analysis is straightforward. Coase shows that in the absence of transaction costs, an economically efficient allocation of resources will result whether the initial legal liability is placed on the farmer or on the rancher. If the liability is placed on the rancher, the damage done by his cows to the farmer's corn (or a bribe to the farmer to decrease production) becomes a cost added to the other costs of the production of meat. The rancher will seek to produce up to the point where his marginal costs equal his marginal benefits. On the other hand, if the liability is placed on the farmer, he also will produce up to the point where his marginal costs equal his marginal benefits. In this case, the damage to the corn (or a bribe to the rancher to reduce the number of cows) will be a cost to the farmer. In either case, a Pareto optimal result occurs through bargaining. The initial placement of legal liability will affect the distribution of wealth, but not the attainment of an

note 205. Thus, while the conclusions reached in this Article can be applied to the relationship of economic analysis and the common law, they do not necessarily have to be so limited.

5. Coase, supra note 2, at 2. Coase defined reciprocity in the following manner:

The question is commonly thought of as one in which A inflicts harm on B and what has to be decided is: how should we restrain A? But this is wrong. We are dealing with a problem of a reciprocal nature. To avoid the harm to B would inflict harm on A. The real question that has to be decided is: should A be allowed to harm B or should B be allowed to harm A? The problem is to avoid the more serious harm.

[An example is afforded by the problem of straying cattle which destroy crops on neighbouring land. If it is inevitable that some cattle will stray, an increase in the supply of meat can only be obtained at the expense of a decrease in the supply of crops. The nature of the choice is clear: meat or crops.]

Id.

6. Id. at 2-6.

7. Id.

8. Id. at 6-8.

9. Id. at 8.

10. Although this point was merely implicit in Coase's original article, it has been developed in subsequent commentary on the Coase Theorem. As one commentator has phrased it:

The traditional understanding of Coase's theorem might be summarized as follows: allocative efficiency, or the maximum productive use of resources, does not depend on the initial assignment of entitlements. The initial assignment is only the starting point from which negotiations begin. The point at which negotiations cease represents the efficient allocation of resources. The initial assignment of entitlements, however, does affect the relative wealth of the competing parties simply because the assignment determin-
efficient allocation of resources.\textsuperscript{11}

As noted above, the critical step in Coase’s argument is the assumption of reciprocity; once reciprocity is accepted, the economic conclusions logically follow.\textsuperscript{12} Only in recent years have the implications of the reciprocity argument begun to be developed. To date, the critiques of the Coase Theorem have focused on the economic\textsuperscript{13} or political
decides which party has to do the purchasing (or what economists misleadingly call “bribing”).


12. The main contribution of Coase’s analysis was, first, the reciprocity assumption, and, second, its application to legal thought. The particular economic principles he used, on their own, were not that significant, for once the reciprocity assumption is made, the economic principles applied are commonly accepted as standard fare. As expressed in one of the first important treatments of the Coase Theorem and its relation to legal theory:

\textit{[If] one assumes rationality, no transaction costs, and no legal impediments to bargaining, \textit{all} misallocations of resources would be fully cured in the market by bargains. Far from being surprising, this statement is tautological, at least if one accepts any of the various classic definitions of misallocation. These ultimately come down to a statement akin to the following: A misallocation exists when there is available a possible reallocation in which all those who would lose from the reallocation could be fully compensated by those who would gain, and, at the end of this compensation process, there would still be some who would be better off than before.

This and other similar definitions of resource misallocation merely mean that there is a misallocation when a situation can be improved by bargains. If people are rational, bargains are costless, and there are no legal impediments to bargains, transactions will \textit{ex hypothesis} occur to the point where bargains can no longer improve the situation; to the point, in short, of optimal resource allocation. We can, therefore, state as an axiom the proposition that all externalities can be internalized and all misallocations, even those created by legal structures, can be remedied by the market, except to the extent that transactions cost money or the structure itself creates some impediments to bargaining.

It may be that this welfare economics analogue to Say’s law has always been quite obvious to economists, although if it has its relevance has too frequently been ignored. In any event, lawyers who use economics have in virtually every case been hopelessly confused on the subject.


13. \textit{See, e.g.}, Cooter, \textit{The Cost of Coase}, 11 J. LEGAL STUD. 1, 28 (1982) (the final obstacle to efficient outcomes is not transaction costs, but noncooperative bargaining); Nutter, \textit{The Coase Theorem on Social Cost: A Footnote}, 11 J. L. \& Econ. 503, 504 (1968) (Coase Theorem applies to long-run allocations of resources as well as short-run allocations); Regan, \textit{The Problem of Social Cost Revisited}, 15 J. L. \& Econ. 427, 427 (1972) (Coase Theorem cannot be deduced from the traditional assumptions about individual economic behavior). For an excellent summary of the
icsal implications of the theorem. Rarely, however, have critiques centered on the psychological foundations of the theorem. These foundations, however, merit attention, for they hold the promise of explaining the reluctance of such a large percentage of the legal community to accept the rationale behind the theorem.

As a first step in the analysis, section I of this Article compares the two different psychological perspectives on the Coase Theorem found in the current debate between the moralist and economic analysis schools of tort theory. A comparison of the moralist theory as expressed by Richard Epstein and the economic analysis theory as expressed by Guido Calabresi aptly demonstrates the dichotomy between the two different psychological perspectives. Epstein builds his theory of strict liability on the rejection of the Coase Theorem as a normative legal concept. In contrast, Calabresi develops an extensive economic theory of torts based on the Coase Theorem. More importantly, however, their respective rejection and acceptance of the theorem correlate with the implicit use of contrasting sets of psychological constructs. The different psychological structures inherent in the perception each has of the Coase Theorem are coherent and structured, yet ultimately incompatible.

Section II explores the underlying bases for these psychological constructs, using some of the work of Jean Piaget in developmental current economic literature on the Coase Theorem, see Hoffman & Spitzer, The Coase Theorem: Some Experimental Tests, 25 J. L. & Econ. 73, 73-77 & n.3 (1982).

14. See, e.g., C. FRIED, RIGHT AND WRONG 81-107 (1978) (describing economic analysis as an instrumental view that diminishes the concept of person); Baker, supra note 10, at 12 (initial assignment of rights has a wealth effect that alters resource allocation); Horwitz, Law and Economics: Science or Politics?, 8 Hofstra L. Rev. 905, 911-12 (1980) (economic analysis has an inherently conservative bias); Kennedy, supra note 10, at 388 (the use of efficiency as a criterion for policy-making provides indeterminate solutions); Tribe, Technology Assessment and the Fourth Discontinuity: The Limits of Instrumental Rationality, 46 S. Cal. L. Rev. 617, 628-30 (1973) (Coase overlooks the structural complexity implicit in the assignment of rights).

15. The psychological arguments discussed in this Article appear to animate the discussion of the reciprocity assumption of the Coase Theorem in Coleman, supra note 10, at 235-36. For another treatment of the psychological structure of legal thought that draws conclusions different from those developed in this Article, see Hermann, A Structuralist Approach to Legal Reasoning, 48 S. Cal. L. Rev. 1131, 1159 (1975) (developing a structuralist theory to explain legal reasoning that assigns equal weight to all cultural and psychological constructs, whereas this Article focuses on reification, causation, and moral responsibility to explain the psychological structures of common-law thought).

16. This dichotomy was first suggested in the work of Harper and James. In their torts casebook, they argued that rules in certain areas of tort law may be explained in economic rather than moral terms. F. HARPER & F. JAMES, THE LAW OF TORTS 759-84 (1956) (loss distribution and insurance are goals of accident law). For further discussion of Harper & James' treatment of accident law, see Heuston, Book Review, 9 Stan. L. Rev. 840, 841 (1957); Keeton, Book Review, 45 Calif. L. Rev. 230, 232 (1957).

17. See infra text accompanying notes 19-33.

18. See infra text accompanying notes 54-65.
psychology. Piaget's description of the development of human thought suggests that the psychological constructs used by Epstein and Calabresi correlate with a larger set of contrasting psychological constructs that both perform an important role in the development of thought in children and remain influential in the thinking of adults.

Section III expands the analysis beyond the Epstein/Calabresi dispute to two other developments in legal theory. The first is the delineation by Bruce Ackerman of ordinary observing and scientific policymaking as distinct modes of thought in the present legal culture. The second is the debate between Mark Kelman and Matthew Spitzer/Elizabeth Hoffman over the existence of empirical proof of the Coase Theorem. The analysis of these two areas confirms the importance of the present psychological dichotomy regarding the Coase Theorem, and also suggests that this dichotomy is mirrored in larger developments in legal thought such as the psychology of common-law thought and the construction of reality by lawyers. This leads to the conclusion of the Article that the Coase Theorem is controversial in part because its psychological assumptions are incompatible with those of traditional legal training.

I. AN INTRODUCTION TO THE PSYCHOLOGY OF THE COASE THEOREM—THE EPSTEIN/CALABRESI DEBATE

The disagreement between Richard Epstein and Guido Calabresi over the role of torts in society is ultimately a disagreement over the Coase Theorem's reciprocity assumption. Their acceptance or rejection of the reciprocity assumption, however, is grounded in their implicit adherences to different psychological constructs. This section considers how the psychological constructs used by Epstein to support his theory lead to the rejection of the reciprocity argument, and how, on the other hand, the different constructs used by Calabresi lead to the adoption of reciprocity.

A. THE PSYCHOLOGY OF EPSTEIN'S STRICT LIABILITY

1. Epstein's Theory of Strict Liability

Epstein's tort theory is dominated by two characteristics. The first is

his characterization of "tort law as a system not of resource allocation but of corrective justice." Correspondingly, he adopts a historical
rather than end-state theory of justice. For Epstein, tort law as a sub-
stantive matter "looks to the conduct, broadly defined, of the parties to
the case with a view toward the protection of individual liberty and
private property." The first step in the development of his historical
theory is to identify the rights that should be protected. The second
step is "to give an account of the permissible 'moves' that allow private
parties to switch from one set of entitlements to another." The second
characteristic of Epstein's theory is that the source of corrective
justice standards is the common sense or everyday notions of
ordinary people. In one of his first articles, he noted that "[t]here is a
need for a systematic inquiry which refines, but which does not aban-
don, the shared impressions of everyday life." He maintains that the
"task [of torts] is to develop a normative theory of torts that takes into
account common sense notions of individual responsibility." Based
on this analysis, Epstein argues that the concept of strict liability rather
than negligence "provides a suitable justification for the imposition
of liability in tort." A prima facie case "rests on causal notions alone,

[hereinafter cited as Causation and Corrective Justice]. Additional articles relevant to the present
analysis are Epstein, The Static Conception of the Common Law, 9 J. LEGAL STUD. 253 (1980);
Epstein, Possession as the Root of Title, 13 GA. L. REV. 1221 (1979) [hereinafter cited as Pos-
session]; Epstein, Nuisance Law: Corrective Justice and Its Utilitarian Constraints, 8 J. LEGAL STUD.
49 (1979) [hereinafter cited as Nuisance Law].

20. Defenses and Subsequent Pleas, supra note 19, at 215.

21. Intentional Harms, supra note 19, at 441-42. In a footnote, Epstein states that his theory
is consistent with that developed by Nozick. Id. at 441 n.129. See generally R. NOZICK, ANAR-
CHY, STATE, AND UTOPIA 149-231 (1974) (advocating the historical, or process, theory of justice).

22. Intentional Harms, supra note 19, at 441.

23. Nuisance Law, supra note 19, at 50-53; Intentional Harms, supra note 19, at 441.

24. Intentional Harms, supra note 19, at 441.


26. Id. at 151.

27. Id.

28. Id. at 152. The political implications of reification are a perennial issue in property law.
An excellent recent treatment of the topic is Radin, Property and Personhood, 34 STAN. L. REV.
957 (1982). Radin starts with the intuition prominent in "liberal property theory that focuses on
personal embodiment or self-constitution in terms of 'things.'" Id. at 958. She then notes that
"[i]n most people possess certain objects they feel are almost part of themselves." Id. at 959; see id.
at 959-61. From this, she concludes that these intuitions are best treated by a political foundation
for claims to personal property grounded in the concept of "personhood." While developing this
concept of property and personhood, however, Radin also recognizes that other criteria for under-
standing the appeal of this intuitive concept "might be sought [as well] by appeal to extrinsic
moral reality [or] to scientific truths of psychology." Id. at 962. The theories developed in this
Article can be viewed in part as an attempt to treat from a psychological perspective many of the
same intuitive tensions in the nature of property that Radin treats from a political perspective.
subject to a series of defenses, replies, and the like, which are designed to reduce the gap between notions of causation and those of responsibility."  

Epstein's assessment of liability on the facts of the Coase Theorem is straightforward. In the normal conversation of ordinary persons, the happenings would be described in the simple declarative sentence, "The cows ate the corn," an obvious case of prima facie liability and a special case of the general declaration, "A caused harm to B." Epstein strongly and unequivocally rejects the Coase Theorem by taking issue with the Coasean reciprocity assumption. Epstein agrees with Coase's economic analysis. However, using the proposition "A caused harm to B," Epstein argues that when the party harmed (B) seeks redress in court, reciprocity no longer exists. Since A has harmed or threatened to harm B, B is now justified in invoking judicial authority to protect his interests, although in so doing Coase would argue that B has harmed A. This harm is justified by the prior and unjustified harm imposed upon B by A. Whereas Coase's reciprocity assumption is premised upon simultaneous harms, Epstein argues that the harms are distinct, and that the second harm is warranted by the first. Thus, to Epstein the Coasean reciprocity assumption is flawed, because "[t]he proposition that 'A hit B' cannot be treated as synonymous with the proposition that 'B hit A.'" Thus, Epstein does not quarrel with Coase's assertion that, assuming reciprocity, a Pareto optimal result will occur regardless of the initial placement of legal liability. Instead, Epstein argues that the theorem is incorrect as a normative basis for

30. See *Strict Liability*, supra note 19, at 164-69.
31. *Id.* at 165-68. Epstein posits four paradigmatic cases which best capture the ordinary use of the causal language "A caused B harm"—force, fright, compulsion, and dangerous condition. *Id.* at 166-89. As Epstein explains:

The first of these rests on the simple notion of the use of force and is captured in the proposition, A hit B, with its simple transitive structure. The second paradigm, A frightened B, has much the same grammatical structure as the first, but requires us to take into account B's response to A's actions in order to complete the causal chain. The third paradigm, A made B hit C, states a connection between A and C only through the acts of B which A compelled, and thus requires us to take into account the behavior of a third party. The last of these paradigms, A created a dangerous condition that resulted in B's harm, demands a detailed analysis of, first, the kinds of conditions that should be regarded as dangerous, and, second, the impact of the actions or events that intervened between A's conduct and B's harm. For all of their internal differences, each of these paradigms reveals a domination of A, the author of the action, over B, its object that prima facie calls for redress by the law of torts.

*Defenses and Subsequent Pleas*, supra note 19, at 168. Epstein posits that the "simplest instance of causation [is] the application of force to a person or thing." *Strict Liability*, supra note 19, at 166.
33. *Id.* at 167.
tort theory because of his objection to the reciprocity assumption. Based on this rejection of the Coase Theorem as the foundation of a normative theory of tort law, Epstein develops his moral theory that society should prevent $A$ from unjustifiably harming $B$.

2. The Psychology of Strict Liability

Epstein's rejection of the Coase Theorem reflects the use of at least three basic psychological constructs: reification, causation, and moral responsibility. Each is discussed in turn.

   a. Reification: Epstein's rejection of the reciprocity assumption is compelled, at least in part, by his use of reification. His theory of strict liability is premised on a desire to protect private property and individual rights. What is property or what is a right, however, is in turn defined by reification. When reification is used, rights are treated as if they exist in things. In particular, two concepts are used together. The first is that a real or imagined thing must be damaged before a tort can occur. If a tangible thing such as an object or one's own body is involved, no particular problem exists. If, however, a tangible thing does not exist to define the property, one will be imagined to exist; it will be reified. For example, while real property is defined in part by a tangible thing (the land itself), the total property rights protected are defined in part by reification of abstract rights. Additional spatio-temporal dimensions are presumed to exist. Thus, in Epstein's theory, real property "boundary lines have the same hard-edged quality as foul lines in baseball, while the ad coelum rule defines (within limits) the interest in the subsoil below and the airspace above. Within these boundaries the owner has exclusive possession and control."37

The second concept, used in conjunction with the first, is that these

34. The general discussion in this and the next paragraph deals with implicit assumptions in Epstein's work as a whole. Particularly strong evidence of such views, however, may be found in Possession, supra note 19, at 1238-43; Nuisance Law, supra note 19, at 50-73; Causation and Corrective Justice, supra note 19, at 499-502; Intentional Harms, supra note 19, at 423-41.

35. A general definition of reification is the transformation of an abstract concept into something concrete. Bruce Ackerman has used the term to mean "misplaced concreteness." B. ACKERMAN, PRIVATE PROPERTY AND THE CONSTITUTION 27 (1977). See also Fuller, American Legal Realism, 82 U. PA. L. REV. 429, 443 (1934) (legal realists argue against undue reliance in indeterminate rules that classical thinkers reify into concrete facts); Leff, Contract As Thing, 19 Am. U. L. REV. 131, 147 (1970) (a contract should not be treated as a negotiation process, but as a reified "thing" that is part of the bundle of things that is purchased).

36. The ad coelum rule grants the owner of land ownership rights "up to the heavens and down to the depths." Nuisance Law, supra note 19, at 53 n.12.

37. Id. at 53 (footnote omitted).
things must be owned by a person. For Epstein, “[p]rivate property is an external manifestation of the principle of personal autonomy.”38 The ownership is one of absolute dominion. The right of property gives to its owners the exclusive possession or use of the subject matter in question.39 For property rights, people have rights in things; for personal rights, people have rights in their own bodies. In each case, a corresponding relationship exists between the object and the person—rights exist in things that in turn are owned by people. The distinction Epstein draws between personal and property rights is that with personal rights the thing and the person are united, while with property rights they are separated.

b. **Causation:** A second psychological construct that Epstein relies on is cause.40 Reification defines what is protected by transforming an abstract right into a concrete object. An act without harm to these rights, however, is not actionable; for Epstein, neither is harm without an act.41 The concept of cause links together an act and a harm. For Epstein, cause defines, prima facie, acts that invade the rights of another.42 Commonsense notions of cause are stressed.43 For Epstein, “[cause] is dominant in the law because it is dominant in the language that people, including lawyers, use to describe conduct and to determine responsibility.”44 Invasions of the rights of another describe “a natural state of affairs which in itself serves as a justification for imposing legal responsibility.”45 Within this framework of corrective justice, particular importance is placed on force, movement, and irreversibility

38. *Id.* at 63.

39. *Causation and Corrective Justice, supra* note 19, at 500-01; *Nuisance Law, supra* note 19, at 53. Consistent with this idea of absolute dominion, trespass by the plaintiff is made a defense to a prima facie tort case. *Defenses and Subsequent Pleas, supra* note 19, at 201-13.

40. This general description is drawn from *Causation and Corrective Justice, supra* note 19, at 477-99; *Nuisance Law, supra* note 19, at 53-65; *Intentional Harms, supra* note 19, at 428-33; *Defenses and Subsequent Pleas, supra* note 19, at 167-85; *Strict Liability, supra* note 19, at 160-89.

41. *See infra* note 52.

42. *Strict Liability, supra* note 19, at 168-69. *See generally id.* at 168-213 (applying potential defenses to the prima facie case in which plaintiff has harmed defendant).


44. *Strict Liability, supra* note 19, at 164.

45. *Nuisance Law, supra* note 19, at 53 (emphasis omitted).
of action. For example, Epstein posits that the "simplest instance of causation [is] the application of force to a person or thing." Moreover, the consequences of acts rather than the intent of the action are dominant.

c. Moral responsibility: The third and final psychological construct implicit in Epstein's theory is a link between cause and moral responsibility for the act. Moral responsibility posits that social or moral standards of behavior exist in the world, so that individual responsibility for a wrongful act always exists. By combining reification, which determines what is protected, and causation, which determines which acts violate those rights, with the construct of moral responsibility, a clear determination of who is liable for the invasions of those rights can be found. As Epstein explains:

The choice is plaintiff or defendant, and the analysis of causation is the tool which, prima facie, fastens responsibility upon the defendant. Indeed for most persons, the difficult question is often not whether these causal assertions create the presumption, but whether there are in fact any means to distinguish between causation and responsibility, so close is the connection between what man does and what he is answerable for.

Thus, for Epstein, the norm is individual responsibility, discoverable by combining reification and causation.

3. Epstein's Tort Theory and the Coordinated Use of Reification, Causation, and Moral Responsibility

Epstein's objection to the Coase Theorem is that its reciprocity assumption fails to satisfy at least one of his three psychological constructs.

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46. See Defenses and Subsequent Pleas, supra note 19, at 174-80; Strict Liability, supra note 19, at 165-84.
47. Strict Liability, supra note 19, at 166.
48. See Intentional Harms, supra note 19, at 391-408; Defenses and Subsequent Pleas, supra note 19, at 169-85; Strict Liability, supra note 19, at 165-84, 195-97.
49. See Nuisance Law, supra note 19, at 53-54; Strict Liability, supra note 19, at 168-69.
50. The term "moral responsibility" conforms with Piaget's concept of "moral realism." See infra text accompanying notes 134-36.
51. Strict Liability, supra note 19, at 169. All persons are deemed equally responsible for their acts. For example, no initial distinction is made between the adult and the child, the intelligent and the insane, or the healthy and the infirm. See Defenses and Subsequent Pleas, supra note 19, at 169-74.
52. Epstein also believes that this responsibility follows only from the act of a person, not from omissions or natural conditions. Compare, e.g., Strict Liability, supra note 19, at 166-67 (need for human act) with id. at 189-95 (omissions) and Nuisance Law, supra note 19, at 54-55 (natural conditions of land).
Although Epstein's response to the reciprocity argument is directed only to the causation element, he implicitly requires that all three of his constructs, not just causation, be used simultaneously. The reciprocity assumption, for example, could be premised on an acceptance of causation and individual responsibility, but a rejection of a preexisting right in the farmer to the exclusive dominion of his property. Alternatively, it could be premised on a rejection of individual responsibility, even assuming causation and reified property rights. Epstein's response to the reciprocity assumption, however, is consistent with his combined reliance on intuitive concepts of reification, causation, and responsibility. Having presupposed the validity of using such constructs in legal argument, Epstein, when presented with the facts of the Coase Theorem, can only conclude: first, that the farmer has complete dominion over the space defined by the boundaries of his land; second, that the actions of the rancher's cows caused damage to the farmer since they invaded the boundaries which marked out the imagined extent of his right to absolute dominion; and, third, that the rancher is personally responsible for such actions.\(^5\) Epstein's rejection of the Coase Theorem thus is deeper than a simple disagreement about causation. While

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5. See Nuisance Law, supra note 19, at 58-60 & n.31; Defenses and Subsequent Pleas, supra note 19, at 197-201.

The linking of these three qualities was not immediately evident in Epstein's work simply because he chose to focus initially on the cause aspect of the Coase Theorem. Strict Liability, supra note 19, at 164-67. In his early articles on strict liability, Epstein made a few passing remarks about the need to identify the class of rights protected. E.g., Intentional Harms, supra note 19, at 441. He did not begin to define the types of rights protected, however, until Nuisance Law, supra note 19. In that article he recognized that "[t]ort law . . . presupposes some prior, independent method for defining and recognizing property rights both in the person and in external objects," id. at 52, and that "[t]he first step [in a corrective justice system of nuisance] . . . is the identification of the plaintiff's protected interest," id. at 50. Only after such interest is identified is it appropriate to turn to causal principles to specify the person whose act was responsible for the damage. See id. at 53-54. An article by Richard Posner attacked this aspect of Epstein's theory. Posner, Epstein's Tort Theory: A Critique, 8 J. LEGAL STUD. 457, 465-71 (1979). In response, Epstein made explicit his dual reliance on ownership and causation. Causation and Corrective Justice, supra note 19, at 498-502. According to Epstein:

Ownership and tort flow from a single conception of autonomy and inviolability. The only thing that separates them is that ownership rules concentrate upon the organization of rights before any violation occurs or is threatened, while tort law concentrates upon those same rights after one person separates himself from the mass by violating or threatening to violate the rights of another.

Id. at 501. Epstein's theory of property rights is further developed in Possession, supra note 19; Privacy, Property Rights, and Misrepresentations, 12 GA. L. REV. 455, 455-65 (1978).

For another article recognizing the inherent incompatibility of conventional legal reasoning and economic analysis, and also the connection between notions of fault, causation, and responsibility, see Fried, The Artificial Reason of the Law or: What Lawyers Know, 60 TEX. L. REV. 35, 44-49 (1981). As Fried notes, "concepts such as entitlement, fault, property, and responsibility make legal concepts insoluble in the medium of economic discourse." Id. at 46.
the reciprocity assumption serves as a convenient focus for his attack, Epstein’s disagreement with the Coase Theorem is actually a disagreement over: (1) Coase’s failure to rely primarily upon the coordinated use of reification, causation, and individual responsibility in the construction of reality and (2) Coase’s failure to use these concepts in legal argument.

B. THE PSYCHOLOGY OF COASEAN TORT THEORY

1. Calabresi’s Theory of Torts

In contrast to Epstein, Guido Calabresi accepts the Coase Theorem as a normative basis for a theory of tort liability. Thus, Calabresi accepts the reciprocity assumption’s application to tort cases, as well as Coase’s conclusion that in a world of perfect information and no transaction costs, the initial placement of legal liability does not affect the ultimate attainment of an efficient allocation of resources. However, Calabresi recognizes that these two conditions are rarely, if ever, met, so that in the imperfect market that characterizes virtually all transactions, the initial placement of liability is frequently the final placement of liability. Because of the presence of costs in determining which party should bear legal liability, especially in the long run, Calabresi develops a theory for the determination of legal entitlements and obligations.

From these premises, Calabresi structures a theory of tort law in which he “takes it as axiomatic that the principle function of accident law is to reduce the sum of the costs of accidents and the costs of avoid-


55. Calabresi initially had criticized the Coase Theorem as not holding true in the long run. The Decision for Accidents, supra note 54, at 730 n.28, 731 n.30. However, he later withdrew his criticism in Transaction Costs, supra note 12, at 67-68. This change is also evident in COSTS OF ACCIDENTS, supra note 54, at 138-39 & n.7; Optimal Deterrence, supra note 54, at 657 n.5.


57. COSTS OF ACCIDENTS, supra note 54, at 135-38; Optimal Deterrence, supra note 54, at 657 n.5.
From the standpoint of economic efficiency this means setting entitlements on the basis of the following principles:

(1) that economic efficiency standing alone would dictate that set of entitlements which favors knowledgeable choices between social benefits and the social costs of obtaining them, and between social costs and the social costs of avoiding them; (2) that this implies, in the absence of certainty as to whether a benefit is worth its costs to society, that the cost should be put on the party or activity best located to make such a cost-benefit analysis; (3) that in particular contexts like accidents or pollution this suggests putting costs on the party or activity which can most cheaply avoid them; (4) that in the absence of certainty as to who that party or activity is, the costs should be put on the party or activity which can with the lowest transaction costs act in the market to correct an error in entitlements by inducing the party who can avoid social costs most cheaply to do so; and (5) that since we are in an area where by hypothesis markets do not work perfectly—there are transaction costs—a decision will often have to be made on whether market transactions or collective fiat is most likely to bring us closer to the Pareto optimal result the "perfect" market would reach.

Other end-state goals, such as distribution of wealth or other "justice" concerns, are also considered in setting entitlements.

Since Calabresi's tort theory is in part based on the Coase Theorem, it diverges from Epstein's theory in several significant respects. First, commonsense intuitions are no longer used as normative standards. Rather, the method of analysis shifts to an empirical study of the availability of information and cost considerations. Calabresi's analysis also looks to end-state considerations such as overt political

60. See Costs of Accidents, supra note 54, at 24-26 (describing the concept of "justice"); Concerning Cause, supra note 54, at 73-91 (explaining compensation and deterrence goals); Property Rules, supra note 10, at 1098-1105 (discussing distributional goals).
61. On several occasions Calabresi specifically contrasts the issues significant to a Coasean analysis with those associated with conventional intuitionistic notions about torts. See Costs of Accidents, supra note 54, 17-23 (describing some common areas of confusion in traditional tort analysis); id. at 244-87 (comparing the fault system of conventional tort analysis with accident cost reduction); Optimal Deterrence, supra note 54, at 657-60 (clarifying confusion in "the fault system" and strict liability); Some Thoughts on Risk Distribution, supra note 54, passim (criticizing the ambiguity in the use of the term "risk distribution" in traditional tort analysis).
62. See Costs of Accidents, supra note 54, passim (developing a theory of torts based on empirical data); Property Rules, supra note 10, at 1115-24 (discussing the economic effect of using different entitlement rules); Transaction Costs, supra note 12, at 69-70 (discussing the problems of misallocation of resources).
Epstein's theory, on the other hand, focuses more on the particular goal of reducing harms. Second, the substantive issues change dramatically under a Coasean analysis, in that both property rights and causation—the linchpins of Epstein's theory—take on radically different forms. The underlying basis of these differences is that the Coase Theorem, and thus work derived from it, such as Calabresi's work in torts, takes a different position with respect to each of Epstein's three principal psychological assumptions.

2. The Psychology of the Coase Theorem

a. Reification: Reification is not used in Calabresi's work to define what is protected by tort law. Instead of property rights and personal rights, Calabresi's theory protects "entitlements." This analysis implicitly rejects the notion that rights exist in people with respect to things in several ways. First, the type of right protected is no longer defined solely by reference to particular things; rather, the Coase Theorem presupposes a psychological framework that allows rights to exist between people with respect to things, not in things. The relevant focus is on the rights of one person vis-à-vis another. The decision as to the person to favor does not follow from any physical or spacio-temporal conditions, but rather by reference to some larger normative or societal structure. Rights are defined by reference to what their holders may do as compared to other people, and entitlements designate what action

63. See, e.g., Property Rules, supra note 10, at 1122 n.62 (discussing the administration of various rules through political institutions). See also infra note 79 (Calabresi's four goals for torts).
64. See supra text accompanying note 22.
65. See Costs of Accidents, supra note 54, at 174-97 (using specific deterrence to allocate liability for accidents by collective decisions regarding end-state goals); Concerning Cause, supra note 54, passim (analyzing causation in light of the goals of Coasean rather than common-law tort theory); Property Rules, supra note 10, passim (formulating new conceptions of property rights to conform to Coasean tort theory).
66. Property Rules, supra note 10, at 1090.
67. As Calabresi explains:

The first issue which must be faced by any legal system is one we call the problem of "entitlement." Whenever a state is presented with the conflicting interests of two or more people, or two or more groups of people, it must decide which side to favor. Absent such a decision, access to goods, services, and life itself will be decided on the basis of "might makes right"—whoever is stronger or shrewder will win. Hence the fundamental thing that law does is to decide which of the conflicting parties will be entitled to prevail.

Id. (footnote omitted).
68. See Costs of Accidents, supra note 54, at 24-33 (promoting justice and reducing accident costs are the goals of tort law); Concerning Cause, supra note 54, at 73-91 (discussing compensatory and distributinal goals); Property Rules, supra note 10, at 1093-1105 (entitlements are granted if they further economic efficiency, distributional preferences, and other justice considerations).
may be taken with respect to the claims of other people. For example, a person may have an entitlement to clean air that a polluting factory would be compelled to respect. The entitlement does not imply ownership in the air itself or a particular space, but only that, should a conflict arise between the holder of the entitlement and another party, the holder of the entitlement is preferred. As such, the concept of entitlement deviates from Epstein’s theory not only because it is concerned with the rights between people with respect to things rather than rights in things, but also because it includes claims about conduct as well as claims about tangible things.

Moreover, the reciprocity assumption also reduces the need to rely on reification. Once causation and the physical invasion it implies no longer necessarily determine violations of rights, physical boundaries are no longer as important. Similarly, once real or imagined physical boundaries no longer are the determinants of “property,” causation becomes difficult to apply as a primary means to designate violations of property rights. Physical things and physical invasions thus are no longer the touchstones of rights and violations. Entitlements may exist without reference to things and mental or psychic harm may be considered even though no physical invasion has occurred.

Calabresi also implicitly rejects reification when he recognizes that a right no longer implies absolute dominion. Entitlements are either inalienable, or are protected by a property rule or a liability rule. An entitlement protected by a property rule cannot be taken without the consent of the entitlement holder. In contrast, an entitlement protected by a liability rule can be taken without the holder’s consent upon

69. See, e.g., Property Rules, supra note 10, at 1102-05 (entitlement to silence).
70. See id. at 1111-15 (certain fundamental moral entitlements, such as freedom, are deemed inalienable even if the entitlement holder wants to sell them because of the psychic effects of such a transaction on other members of society). See also G. CALABRESI & P. BOBBITT, TRAGIC CHOICES 32 (1978) (discussing the difficulty in pricing “moralisms”); Concerning Cause, supra note 54, at 78 n.12 (injury or harm not limited to physical or economic damage). Contra Epstein, Nuisance Law, supra note 19, at 64-65 (questioning characterization of certain establishments as nuisances in the absence of physical invasion). For a further description of this view, see Kennedy, supra note 10, at 398-400.
71. Property Rules, supra note 10, at 1092-93, 1105-10, 1115-2A. See also Michelman, Pollution as a Tort: A Non-Accidental Perspective on Calabresi’s Costs (Book Review), 80 YALE L.J. 647, 670-73 (1971) (discussing the costs involved with each rule). This distinction has become standard in the economic analysis of law. See, e.g., Polinsky, Controlling Externalities and Protecting Entitlements: Property Right, Liability Rule, and Tax-Subsidy Approaches, 8 J. LEGAL STUD. 1 passim (1979) (considering the relative merits of each approach).
72. Property Rules, supra note 10, at 1092, 1105.
the payment of an objectively determined amount of compensation. In this framework, "ownership" of the entitlement is not coextensive with control, particularly when the entitlement is protected by a liability rule. For example, even though the farmer in the Coase Theorem has possession or control of his land, he does not have total dominion over it (as Epstein would desire) if either a property or liability rule exists in favor of the rancher or if the farmer has an entitlement protected only by a liability rule. If a property rule or a liability rule existed in favor of the rancher, the farmer would not have complete dominion over his land in the absence of a bribe or a payment to the rancher. If an entitlement protected only by a liability rule existed in favor of the farmer, he would always be subject to a possible "trump" of his activities upon the payment of an objectively-determined fee by the rancher.

b. Causation: While causation is the linchpin of Epstein's theory in that it joins damage to responsibility, once the reciprocity assumption of the Coase Theorem is accepted, causation plays only a secondary role. This happens in several ways. First, causation is no longer necessarily linked to individual acts. Calabresi argues that liability should not be determined on a case-by-case basis; rather, liability should be placed on that category of persons that is the cheapest cost avoider.

Thus, rather than individual acts, groups of activities are considered to identify the party that should bear the losses. Individual acts—such as the rancher's cows eating the farmer's corn—are deemed reciprocal because the cause in any given case is no longer necessarily

73. Id. at 1092, 1105-06.
74. Some of the points in this discussion about cause were originally made in Borgo, Causal Paradigms in Tort Law, 8 J. LEGAL STUD. 419, 452-55 (1979).
75. Id. See also Costs of Accidents, supra note 54, at 6 & n.8, 131-97 (causation is not used as a means of imposing moral blameworthiness, but instead is subordinated to the use of tort theory to influence social conduct); Concerning Cause, supra note 54, at 106-08 ("cause" used as guise for social goals). Another example of treating cause from an end-state perspective is found in Shavell, An Analysis of Causation and the Scope of Liability in the Law of Torts, 9 J. LEGAL STUD. 463 (1980).
76. Costs of Accidents, supra note 54, at 255-59. Contra Epstein, Intentional Harms, supra note 19, at 441 ("[A]s a substantive matter, the tort law should be seen as a system of corrective justice that looks to the conduct, broadly defined, of the parties to the case with a view toward the protection of individual liberty and private property.") (emphasis added).
77. Costs of Accidents, supra note 54, at 104, 114-19, 274-77. See also Michelman, supra note 71, at 656-57 & n.19 (agreeing with Calabresi that in order to exert effective deterrent pressures, liability rules must speak in terms of classes of activities).
The connection between acts and damage in a particular case becomes relevant only insofar as it provides empirical support for determining the implementation of end-state goals.\textsuperscript{79}

Second, the focus need no longer be solely retroactive.\textsuperscript{80} Once end-state goals are considered, the relevant inquiry becomes the relationship between the status quo and the preferred end-state. Past occurrences are important for the information they provide on how best to achieve the end-state goals. Thus, the role for cause in this framework is not the retrospective re-creation of discrete past events, but rather the assessment of past data to predict the proper means to attain instrumental goals. Thus in this sense as well, cause in individual cases is \textit{"reciprocal"} in the Coasean sense. From the perspective of implementing end-state goals, the retrospective cause of an event in an individual case by itself is of no greater importance than the retrospective cause in any other individual case. The importance of each is judged instead by the information it provides for implementing the desired end-state. By reference to the end-state, the cause of one individual past event is reciprocal, that is, treated equally with, the cause of any other individual past event.

c. \textit{Moral responsibility}: In Epstein’s theory of torts, causation is linked to moral standards. If a person acts and, because of his act, the person or property of another is damaged, he is prima facie responsible. With the Coase Theorem, however, this changes in three ways. First, an overt act is not a prerequisite to responsibility.\textsuperscript{81} Liability might be imposed in part because one party has better information about avoiding accidents or can more easily correct mistakes in the initial assignment of liability.\textsuperscript{82} Only factors relevant to implementation

\textsuperscript{78} Costs of Accidents, supra note 54, at 256.

\textsuperscript{79} Thus in his most recent treatment of the topic, Calabresi begins by setting out four goals for torts—loss spreading, distributional equity, specific deterrence, and general deterrence. The role of \textit{"cause"} is then assessed in terms of these four goals. Concerning Cause, supra note 54, at 73-91.

\textsuperscript{80} Costs of Accidents, supra note 54, at 239-65; Concerning Cause, supra note 54, at 73-91. See also Borgo, supra note 74, at 453-54 (characterizing economic analysis as forward-looking since it implies that a tort action is not concerned with the harm that occurred but rather with cost-benefit analysis); Michelman, supra note 71, at 656 (discussing Calabresi’s emphasis on prospective rules).

\textsuperscript{81} For instance, in the example used in the Coase Theorem, if an entitlement exists in favor of the rancher, the farmer can be said to be liable even though he was passive. Contra Epstein, Strict Liability, supra note 19, at 166-67 (volitional act prerequisite to liability).

\textsuperscript{82} See Costs of Accidents, supra note 54, at 135-97 (describing cheapest cost avoider analysis).
of end-state goals are considered; particularly acts (or omissions) are not germane. Second, responsibility may be placed on a group rather than just on an individual basis. Classes of activities may be used for purposes of assigning liability. Third, and most important, liability is not associated with moral shortcomings. Instead, liability generally follows because of a party's superior ability to fulfill a role made important by the end-state goal, such as being the cheapest cost avoider, the best collector of information, or the best briber. Commonsense "moral" standards or individual shortcomings are not invoked as a reason to impose liability. Calabresi, for example, rejects "fault" as a dominant principle in deciding the assignment of liability.

C. THE PSYCHOLOGICAL PERSPECTIVE OF THE EPSTEIN/CALABRESI DEBATE

The debate between Epstein and Calabresi, although initially framed in terms of reciprocity or causation, is in part a debate about the appropriate use of certain psychological constructs. Epstein must reject the principle of reciprocity not only because it places cause in a secondary role, but also because it is ultimately incompatible with his use of reification and his linkage of causation to responsibility. Correspondingly, Calabresi's tort theory, because it accepts the principle of reciprocity, accepts not only a different argument about causation, but an entire set of complementary psychological constructs. Thus, one can view the controversy about the reciprocity assumption as a deeper dispute about the use of particular psychological constructs in legal discourse.

Before the significance of the use of these constructs can be understood, particularly with respect to the Coase Theorem itself, three threshold questions must be addressed. First, why does each contrasting position cluster around a particular group of constructs? For example, why does reification tend to be used along with cause and personal responsibility? Second, why do Epstein's constructs tend to be incompatible with those used in the Coase Theorem? Third, why do Epstein's constructs—reification, cause, and personal responsibility—tend to be associated with common sense and intuition? The next section
will explore the insight that the branch of developmental psychology represented by the work of Jean Piaget might provide for these questions.

II. THE WORLD OF THE CHILD—PIAGET'S THEORY AND THE CHILD'S CONCEPTION OF REALITY, CAUSALITY, AND OBLIGATION

Adults often assume that children are merely smaller, weaker, and less intelligent versions of themselves. The world of the child, however, is marked by a progression through distinct cognitive stages. The relationship between this development and the acquisition of knowledge in children has been studied by the developmental psychologist Jean Piaget.\(^87\) Piaget's theory—which has been termed "genetic epistemology"\(^88\)—holds that "knowledge is actively constructed through the knower's self-regulated interaction with the environment."\(^89\)

The purpose of this section is to examine the work of Piaget, in particular his earlier studies of the development of moral judgment and conceptions of causality in children, for findings that may aid in understanding the debate over the Coase Theorem represented by the disagreement between Epstein and Calabresi discussed above. In particular, Piaget's theories will be used to describe why arguments for and against the Coase Theorem appear to be characterized by reliance on the incompatible psychological constructs discussed in the previous section.\(^90\)

A brief caveat is in order, however. Piaget's work consists of both

\(^87\) Piaget's theories have been further developed by other writers. A distinction has been recognized between Piaget's theory and Piagetian theory. Bearison, *You Gotta Have an Epistemology* . . . (Book Review), 27 CONTEMP. PSYCHOLOGY 682, 682 (1982). This Article's brief review of this branch of developmental psychology will generally be limited to the works of Piaget. For a review of some of the works of other writers, see infra note 90.

\(^88\) See, e.g., Bearison, supra note 87, at 682.

\(^89\) *Id.* Piaget's theories have been interpreted by some subsequent writers to be applicable to the thinking of adults as well as children. For example, John Flavell has stated that "Piaget has . . . for a long time freely conceded that not all 'normal' adults, even within one culture, end up at a common genetic level; adults will show adult thought only in those content areas in which they have been socialized." J. FLAVELL, THE DEVELOPMENTAL PSYCHOLOGY OF JEAN PIAGET 20 (1963) (citing Piaget, *Psycho-Pédagogie et Mentalité Enfantine*, 1928 J. PSYCHOL. NORM. PATH. 25, 31-60). *See also id.* at 41 ("Piaget has also described in considerable detail a general conception about the nature of intellectual functioning. He has tried to uncover the basic and irreducible properties of cognitive adaptation which hold true at all developmental levels.") (emphasis in original).

\(^90\) A good, brief summary of Piagetian theory, by Piaget, is J. PIAGET & B. INHELDER, THE PSYCHOLOGY OF THE CHILD (1969). Other accessible works summarizing Piaget's work include: R. BEARD, AN OUTLINE OF PIAGET'S DEVELOPMENTAL PSYCHOLOGY FOR STUDENTS AND
a descriptive component, which focuses on the basic features of human thought, and a normative component, which suggests that certain features are more developed (and thus preferable) than others because of their association with certain supposedly sequential and orderly stages of development. While these two components cannot be totally separated, this Article's focus is on the descriptive rather than normative aspect of Piaget's work. No claim will be made that a necessary cor-

The purpose of this section is not to provide a definitive account of the psychological structures of human thought. Rather, its purpose is not to provide a complete evaluation of the various academic disputes within this general area. Rather, the purpose is only to point out those features of the developmental psychology of Piaget that support the general arguments made in this Article. This section focuses on the work of Piaget because of his pioneering and influential role in developmental psychology.

Recent research in psychology and sociology that more thoroughly develops and refines some of Piaget's work has given rise to the subdiscipline of attribution theory. This theory centers on the everyday perceptions of events by persons by addressing how people explain causes of behavior and assess responsibility—two areas which correspond to Piaget's treatment of causation and liability. This addition to Piaget's theories reinforces the idea that commonsense thinking has definite structures and dispositions. Major works in attribution theory include: F. Heider, THE PSYCHOLOGY OF INTERPERSONAL RELATIONS (1958); H. Kelley, CAUSAL SCHEMATA AND THE ATtribution PROCESS (1972); K. Shaver, AN INTRODUCTION TO Attribution PROCESSES (1975). See also Kelly, THE Process of Causal Attribution, 28 AM. PSYCHOLOGIST 107, 108 (1973) (“[It is precisely common sense with which attribution theory is concerned.”); Ross, THE Intuitive Psychologist and His Shortcomings: Distortions in the Attribution Process, in COGNITIVE THEORIES IN SOCIAL PSYCHOLOGY 337, 338 (L. Berkowitz ed. 1978) (“[Attribution theory] deals with the ‘naive psychology’ of the ‘man in the street’ as he interprets his own behaviors and the actions of others.”). This body of work reinforces the idea that commonsense or intuitionistic thinking has structures that often run counter to formalistic methods of analysis usually associated with "rational" or "scientific" thought such as statistical analysis. Particularly relevant studies include Kruglanski, Hamel, Maides & Schwartz, Attribution Theory as a Special Case of Lay Epistemology, in 2 NEW DIRECTIONS IN Attribution RESEARCH 299 (J. Harvey, W. Ickes & R. Kidd eds. 1978); Ross, supra; Ross, Some Afterthoughts on the Intuitive Psychologist, in COGNITIVE THEORIES IN SOCIAL PSYCHOLOGY, supra, at 385; Tversky, Features of Similarity, 84 PSYCHOLOGICAL REV. 327 (1977); Tversky & Kahneman, Judgement under Uncertainty: Heuristics and Biases, 185 Sc. 1124 (1974).

Recent attempts to assess the importance of this work for legal analysis include: Attribution in the Criminal Justice System, 2 LAW & HUM. BEHAV. 285 (1978); Lloyd-Bostock, The Ordinary Man, and the Psychology of Attributing Causes and Responsibility, 42 MOD. L. REV. 143 (1979).

91. Piaget makes several normative assertions in his theory. In particular, he claims that later developmental stages are in some way "higher" than or preferable to earlier stages. J. PIAGET, THE MORAL JUDGMENT OF THE CHILD 313-25, 397-98 (1966) [hereinafter cited as THE MORAL JUDGMENT OF THE CHILD]. This aspect of Piaget's theory is further developed by Lawrence Kohlberg. See Kohlberg, From Is To Ought: How to Commit the Naturalistic Fallacy and Get Away With It in the Study of Moral Development, in COGNITIVE DEVELOPMENT AND EPistemology 151, 180-81 (T. Mischel ed. 1971) (the psychological theory as to why a child moves from stage to stage is essentially the same as the philosophical theory of why a higher stage is preferable to a lower stage); Kohlberg, The Claim to Moral Adequacy of the Highest Stage of Moral Judgment, 70 J. PHI. 630, 630 (1973) (a "higher or later stage of moral judgment is 'objectively"
relation exists between the use of particular psychological constructs and preferred moral or political arguments. For purposes of the argument to be developed in the following pages, it is sufficient that Piaget's work is generally descriptive of the various psychological constructs present in human thought, and that some general shift in emphasis occurs over time, even if this shift may not be as complete as Piaget himself might suggest. This section will briefly review how Piaget might analyze the three psychological constructs—reification, causation, and moral realism—that are present in theories such as Epstein's that reject the Coase Theorem, but not present in those theories that accept the validity of the theorem.

A. REIFICATION—THE CHILD'S CONCEPTION OF REALITY

Piaget's work suggests that reification can be traced to the development of the conception of reality in the child. In his early work, The Child's Conception of Physical Causality,92 Piaget set out to test the validity of preferable to or more adequate than an earlier stage of judgment according to certain moral criteria”) (emphasis in original).

Applying such normative standards to legal theory is inappropriate for two reasons, however. First, these standards are based on extrapolations from individual behavior, rather than the social aspects of the use of particular psychological constructs. Both Piaget and Kohlberg fail to confront either the reality of the exercise of power, or the existence of social structures apart from individual behavior, such as the interaction of individuals competing for limited resources. Thus, Piaget and Kohlberg's application of the normative aspects of psychological theory to legal thought is necessarily incomplete. See Goodpaster, Kohlbergian Theory: A Philosophical Counter-invitation, 92 ETHICS 491, 494 (1982) (Kohlberg's theory of moral development does not “make out a clear case for relevance to normative ethics.”); Simon, Homo Psychologicus: Notes on a New Legal Formalism, 32 STAN. L. REV. 487, 489-90 (1980) (the psychological literature obscures critical issues of lawyering and legality by celebrating the private and the personal at the expense of the public and the social); Skolnick, The Limits of Childhood: Conceptions of Child Development and Social Context, 39 LAW & CONTEMP. PROBS. 38, 52-71 (Summer 1975) (developmental psychology neglects influence of social and cultural contexts).

A second problem with the application of normative standards to legal theory is that it fails to account for the possibility that distinct forms of thought develop within groups. For example, it may be that lawyers tend to favor an intuitionistic mode of analysis, whereas economists favor one more consistent with the Coase Theorem. A normative standard preferring one method of analysis to another would ignore the group dynamics involved. For discussions of this social element of group thought, see B. BLEDESTAIN, THE CULTURE OF PROFESSIONALISM 80-128 (1976) (middle class America has been subject to professionalization, creating a pattern of thinking among groups); T. KUHN, THE STRUCTURE OF SCIENTIFIC REVOLUTIONS 111-35 (2d ed. 1970) (when a particular paradigm changes, it causes the professional community to view the world differently).

Thus, this Article does not use Piaget's theories to argue that the Coase Theorem is normatively superior to theories of law that reject Coase. Instead, the Article's thesis is that by using Piaget in a descriptive fashion, we can explain why there appears to be an unwillingness among lawyers and laypeople to accept the Coase Theorem. Once this psychological barrier is recognized, a coherent normative debate can take place on the merits of the theorem.

92. J. PIAGET, THE CHILD'S CONCEPTION OF PHYSICAL CAUSALITY (1930) [hereinafter cited
the competing theories that knowledge is a priori or, in the alternative, that events in the world impress themselves directly on the mind. Instead of confirming either of these two theories completely, Piaget posited a compromise, asserting a constant interaction between existing operations of the mind (operations) and the events of the world (causality):

The truth, in short, lies half-way between empiricism and apriorism: intellectual evolution requires that both mind and environment should make their contribution. This combination has, during the primitive stages, the semblance of confusion, but as time goes on, the mind adapts itself to the world, and transforms it in such a way that the world can adapt itself to the mind.\(^9\)

This process, according to Piaget, is a general move from complete subjectivity toward increasingly greater objectivity. In the earliest stages, the world and the mind of the child are one. No distinction is made between events of the mind and events of the world\(^9\) these two universes collapse into a single reality, each contributing to the other.\(^9\) The external world shares the characteristics of the self, such as consciousness and purpose. As the child progresses from these early stages, these two universes gradually begin to separate into somewhat distinct conceptual entities—the objective and the subjective.\(^9\) The child begins to structure the external, objective world as he becomes conscious of its existence apart from his own subjective universe. However, this process of separation is never quite complete:

At each step in the process of dissociation these two terms evolve in the sense of the greatest divergence, but they are never in the child (nor in the adult for that matter) entirely separate. From our present point of view, therefore, there is never complete objectivity: at every stage there remain in the conception of nature what we might call "adherences", fragments of internal experience which still cling to the external world.\(^9\)

Adherences are reifying, in that abstract internal concepts are externalized into concrete form.\(^9\) One form of adherence important to the present discussion is animism. Through animism, the child "endow[s]
things with consciousness and life." Inanimate objects are invested with feelings or with the ability to move; in short, they are seen as differing from humans only in appearance. Similar adherences related to beliefs are prevalent for the child, who is "quite incapable of distinguishing between thought and the things thought about." Names are situated in objects, dreams are localized in the eyes, and later in the head, and "the child believes that he thinks with his mouth . . . and that these words themselves form part of the external things."

Reification is a natural stage in the development of the child. Yet because total objectivity is never attained in adults, the reification tendency will be incorporated into the reasoning of adults. The degree to which adults reify will vary with the individual, because not all adults will achieve the same development. Some will, for reasons such as age, stress, or background, be more animistic than others.

1. Dynamic participation: "The sun and moon follow us . . . ; things around us notice us and obey us . . . ."
3. Artificialism: "Things . . . take notice of man and are made for man; everything about them is willed and intentional, everything is organized for the good of men."
4. Finalism: "The deep and stubborn finalism of the child shows with what difficulty external reality frees itself from schemas due to internal and physical experience."
5. Notion of force: "Things make efforts, and their powers imply an internal and substantial energy analogous to our own muscular force."

_103_ See supra note 97 (process of separation never becomes complete).

101. James Sully, a predecessor of Piaget, provides a particularly revealing description of this tendency to reify, that is, to confuse the internal and external worlds. In describing the child's view of the natural world, Sully remarks:

At first, that is to say after the child has had experience enough at seeing and touching things at the same time to know that the two commonly go together, he believes that all which he sees is tangible or substantial. Thus he will try to touch shadows, sunlight dancing on the wall, and picture forms. This tendency to "reify," or make things of, his visual impressions shows itself in pretty forms, as when the little girl M., one year eleven months old, "gathered sunlight in her hands and put it on her face."

J. SULLY, STUDIES OF CHILDHOOD 95 (1895).


Piaget remarks that the differentiation "remain[s] uncompleted at the close of childhood and survive[s] throughout the intellectual development of the adult." _Id._ at 252. _See also supra_ text accompanying note 97 (process of separation never becomes complete).

103. _See_ J. PIAGET, THE CHILD AND REALITY 51 (1973) (intellectual development in child and adolescent is integrative, that is, "structures constructed at a given age become an integral part of the structures of the following age").

Piaget posits that animism may completely disappear as the child develops. _See Child's Conception_, supra note 92, at 245-46 (describing the process of evolution that leads the child from a dynamic to a mechanical view of the world). Other experimenters, however, have found significant amounts of animistic thinking in adults. _See_ e.g., _Crannel, The Responses of College Students to a Questionnaire of Animistic Thinking, 78 SCI. MON. 54_ (1954); _Dennis & Mallenger, Animism & Related Tendencies in Senescence, 4 J. GERONTOLOGY 218, 219-20_ (1949) (finding animistic thinking in people ages 70 and over).

105. Piaget speculated that during times of stress, people regress to earlier stages of thought.
Thus, the presence of reification in mature thought is understandable, for reification is linked to the development of human thought, and is a process that adults as well as children experience. Its presence can be seen in theories that reject the Coase Theorem's reciprocity assumption. Epstein based his rejection of reciprocity on the argument that a right exists in one party in every case to obtain a favorable judgment from the court. Thus, the harm inflicted on that person by the opposing party is not reciprocal with the harm inflicted on the other party by causing him to alter his behavior; instead the latter harm is justified by the former.107 Thus, the allocation of liability is manifested in one party in every case. Under Coasean analysis, however, reciprocity is accepted in part because reification is not present. The goal of the system is a broad, end-state objective of efficient resource allocation and risk deterrence; this does not necessarily dictate the existence of a right and wrong party in each case. Liability is allocated so that the end-state goals are met. The concreteness of a case-by-case analysis is eliminated.

B. CAUSATION—THE ATTRACTION OF MOVEMENT AND FORCE

For Epstein, causation is the linchpin of the law of torts. Without it, a prima facie case of liability cannot be established.109 Moreover, when two people simultaneously act on each other, such as in a car collision, division of liability is measured by the amount of force released by each.110 In contrast, the Coase Theorem dismisses force as a relevant concern in assigning liability for a tort. For example, Calabresi's cheapest cost-avoider model drops the use of force and movement.111 Thus, for Coasean analysis, force and movement are subordinate to the end-state goals the theory seeks to advance.

See, e.g., The Moral Judgment of the Child, supra note 91, at 136-37 (when an adult is forced to solve someone else's problems rather than his own, he often reverts to moral principles he has discarded for himself).

106. Piaget speculates that adults in some societies may not advance beyond certain stages of cognitive development:

In particular, it is quite possible, and this is the impression we have from known ethnographical work, that in many societies, adult thought does not go beyond the level of "concrete" operations, and therefore does not reach that of propositional operations which develop between the ages of twelve and fifteen in our milieus.


107. See supra text accompanying notes 30-33.

108. See supra text accompanying notes 66-73.

109. See Strict Liability, supra note 19, at 160-89.

110. Defenses and Subsequent Pleas, supra note 19, at 179-80.

111. The relevant category for loss spreading becomes groups of activities rather than acts. See supra text accompanying note 77.
Piaget's work on causality contributes to an understanding of the attraction of each of these views. Whereas the decline in reification in later developmental stages is associated with a greater external application of internal conceptions and thought processes, notions of causality demonstrate a shift toward greater internal comprehension of external phenomena. Thus, the child's perception of causality parallels his perception of reality. The two develop simultaneously, each influencing the other.

Two of Piaget's findings are particularly relevant. First, causal explanation—just as development in general—moves from irreversibility (in that the child cannot distinguish the physical event from the factors that caused the event to occur) in the earliest stages to reversibility (the ability to make this distinction) in the more advanced stages. Piaget posits no less than seventeen distinct types of causal relation in child thought and sums up this entire development by stating that "[t]hree processes seem . . . to characterise this evolution: the desubjectification of causality, the formation of series in time, and the progressive reversibility of the systems of cause and effect." The distinction between the earlier and later stages is that notions of causality shift from extreme irreversibility to an increasing recognition of the concept of reversibility. The early stages of this process are strikingly similar to the positions of Epstein, who emphasizes the nonreciprocal or irrevers-

112. Child's Conception, supra note 92, at 269-71.
113. Id. at 258-67. These types range from "phenomenistic causality," at the less advanced stages, in which two facts are regarded as connected by a relation of causality merely because they are given together in perception (e.g., a fire set alongside an engine is regarded as the cause of movement). Id. at 259-60. The more advanced stages involve such types as "mechanical causality" (e.g., the wind pushes the clouds) that exhibit the collaboration of internal and external forces. Id. at 263-64.
114. Id. at 267.
115. Id. at 270. As Piaget explains:

The progress from irreversibility to reversibility is thus continuous. This process, moreover, seems extremely natural if we bear in mind the manner in which the idea of reality grows up in the child. For the primitive universe is both strewn with subjective adherences and very near to immediate perception. Now, in so far as it is tinged with the child's subjectivity, this universe is irreversible: the flow of consciousness, psychological time, the whims of desires and actions which follow one another without order or repetition—all these things are projected in their entirety into the external world. Similarly, in as much as it is near to immediate perception, the child's universe is irreversible, for perception never shows us the same sun nor the same trajectory, nor the same movements twice. Events cannot happen over again in the same way. It is the mind that builds up reversible sequences underneath perception. To the extent that the child's universe is removed from these constructions and close to the immediately given, it is irreversible. Thus the advance towards reversibility shown by the development of child causality follows exactly the same lines as those underlying the processes defined in connection with the idea of reality.

Id. at 271.
ible nature of causation in torts. Calabresi, on the other hand, builds on the Coase Theorem and accepts the reciprocal or reversible aspects of activities.

The second aspect of Piaget’s work relevant to the debate over the Coase Theorem is his explanation of the primacy of the earlier, irreversible causal explanations. In other words, why do the notions of mechanical thrust or pull seem more elementary than, say, those of heat, even though they occur no more often? At least a partial answer can be gleaned from Piaget’s recent work, Understanding Causality. What gives primacy to the concept of movement over other less obvious causal explanations is its early use by the child to begin his differentiation from external reality. A child’s first interaction with objects, and also his own body, is by movement. He pushes, grasps, or throws objects near him. The actions are irreversible. From this interaction with objects the child begins to develop schemes, which later are used to build operations. Most significantly, however, the schemes and the causal acts that give rise to them are not differentiated, as are operations and causality in later stages. Because the child is unable to differentiate the prelogical scheme (internal) from the causal movement (external), the development of operations, where differentiation begins, is delayed. The development of operations requires reversibility, yet the earliest logical schemes are irreversible.

Force, movement, and action thus give rise to the earliest logical structures in the child’s development. The early experiences involving irreversible actions form the first states of cognitive development and are incorporated into later stages. Because of this, individual motions, force, and movement tend to be perceived as more basic and thus more attuned to common sense and ordinary understanding. Reversibility is not possible until later stages of causal relation are reached.

116. UNDERSTANDING, supra note 92.
117. See J. PIAGET, supra note 106, at 12-73.
118. See UNDERSTANDING, supra note 92, at 26. Piaget goes on to explain that:

When the subject pours a liquid from one container into another, modifies the form of an object or the spatial arrangement of a collection, these actions remain all the more distant from the rule of reversible operations the more they appear to the subject to be of a causal nature, to the extent that causality introduces new effects that are not preformed and that modify the object without our being able in advance to impose limits on these transformations, which will be the case only when this causality becomes an attribution of operations. In other words, since most causal actions are irreversible, for an action to be internalized in an operation it is necessary for it to be sufficiently differentiated from causal actions or from the causal aspect of actions in general; otherwise, undifferentiation will constitute a delaying factor.

Id. at 115.
C. Moral Responsibility—The Connection of Causation and Liability

For Epstein, causation alone creates a prima facie case of liability.\(^{119}\) Liability, in turn, is based on the notion of moral responsibility for wrongful conduct.\(^{120}\) In contrast, Calabresi does not link causation of liability with moral sanction. For him, "justice" considerations may alter a particular torts decision, but they are not initially fused with that decision.\(^{121}\)

The Moral Judgment of the Child,\(^{122}\) one of Piaget’s earliest works, suggests several reasons for the attraction of linking causation to obligation. Piaget analyzed children’s attitudes toward game rules\(^{123}\) and stealing and lying,\(^{124}\) as well as explored children’s notions of justice.\(^{125}\) In addition, and of significance here, he studied their attitudes toward clumsiness—the child’s earliest exposure to torts.\(^{126}\) His method was to tell children stories that included both intentional and accidental behavior by children and to ask in which story the child was "naughtier." For example, he told the children a story involving clumsiness where the act was accidental, or even well-intentioned, but resulted in considerable material damage.\(^{127}\) He then told another story in which the damage done was less, but the act was ill-intentioned.\(^{128}\) He found that the younger children judged the acts by external results rather than internal intent,\(^{129}\) a tendency he termed "objective responsibility."\(^{130}\) A

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119. See supra text accompanying note 109.
120. See supra text accompanying note 27.
121. See Costs of Accidents, supra note 54, at 24-26, 293-300.
123. Id. at 13-108.
124. Id. at 109-96.
125. Id. at 197-325.
126. Id. at 121-38.
127. One such story was the following:
   A little boy who is called John is in his room. He is called to dinner. He goes into the dining room. But behind the door there was a chair, and on the chair there was a tray with fifteen cups on it. John couldn’t have known that there was all this behind the door. He goes in, the door knocks against the tray, bang go the fifteen cups and they all get broken!
   Id. at 122.
128. One such story was the following:
   Once there was a little boy whose name was Henry. One day when his mother was out he tried to get some jam out of the cupboard. He climbed up on to a chair and stretched out his arm. But the jam was too high up and he couldn’t reach it and have any. But while he was trying to get it he knocked over a cup. The cup fell down and broke.
   Id. at 123-33.
129. Id. at 123-33.
130. Id. at 117.
child who broke fifteen cups by accident was deemed "naughtier" than a second child who broke one cup intentionally. Consequences rather than intent determined liability.\textsuperscript{131} Piaget's explanation for this phenomenon is particularly relevant:

We can therefore put forward the hypothesis that judgments of objective responsibility occurring in the course of our interrogatory were based upon a residue left by experiences that had really been lived through. Although new material may since have enriched the child's moral consciousness and enabled him to discern the nature of subjective responsibility, these earlier experiences are sufficient, it would seem, to constitute a permanent foundation of moral realism which appears on each fresh occasion.\textsuperscript{132} Moreover, judgment of others also tends to be more severe than judgment of self.\textsuperscript{133}

The use of an objective conception of responsibility is part of a stage Piaget terms moral realism, which he describes as "the tendency which the child has to regard duty and the value attaching to it as self-subsistent and independent of the mind, as imposing itself regardless of the circumstances in which the individual may find himself."\textsuperscript{134} Along with objective responsibility, moral realism is also associated with a conformance to rules regardless of content.\textsuperscript{135} Piaget suggests moral realism follows from the general features of child thought:

The first group of factors that tend to explain moral realism is therefore based on one of the most spontaneous features of child thought—realism in general. For the child is a realist, and this means that in almost every domain he tends to consider as external, to "reify" . . . the contents of his mind. . . .

. . . .

Being therefore a realist in every domain, it is not surprising that the child should from the first "realize" and even "reify" the moral laws which he obeys. It is forbidden to lie, to steal, to spoil things, etc.—all, so many laws which will be conceived as existing in themselves, independently of the mind, and in consequence independently of individual circumstances and of intentions.\textsuperscript{136}

\textsuperscript{131} Id. at 124-26.
\textsuperscript{132} Id. at 136.
\textsuperscript{133} Id. at 136-37, 183.
\textsuperscript{134} Id. at 111. \textit{See generally id.} at 174-96 (outlining conclusions drawn from Piaget's study of moral realism in the child).
\textsuperscript{135} Id. at 111.
\textsuperscript{136} Id. at 187-88.
Thus, as with reification and causation, the connection of liability with causation is also related to a distinct Piagetian stage. Under an earlier stage, liability can be imposed irrespective of any moral responsibility for the act, whereas the later stages require some notion of fault for the imposition of liability.

D. PIAGET'S THEORY AND THE EPSTEIN/CALABRESI DEBATE

The three questions raised at the beginning of this section—why reification, causation, and moral responsibility tend to be associated with one another, why Epstein's constructs are incompatible with Calabresi's, and why Epstein's constructs are perceived as more "basic"—can now be addressed. First, the connection between reification, cause, and moral responsibility is the result of an interplay of developmental forces. Reification tends to be easily associated with causation and, in turn, with moral responsibility because of an overall connection between the stages of development. While there is a gradual transformation from one stage of development to another, the earlier stage is never entirely eliminated from the mind. Thus, the prior stages still appear in later stages of development, even though the results the prior stages produce are inconsistent with those of the later stages. These connections between stages, although lessened somewhat, do not disappear from adult thinking.

Second, the incompatibility of the constructs used by Epstein with those used by Calabresi is understandable once the source of each is linked to a different stage of development. Within the Piagetian framework, not only do such constructs mark different stages but they also represent larger competing constructs. Causation and reciprocity, for example, do not mix well because causation represents a stage prior to reciprocity.

Third, the use of Epstein's constructs is likely to be accepted as somewhat more "basic" not only because Epstein's constructs correspond to earlier stages of cognitive development, but also because they are integrated into later stages of adult thinking. Thus, Epstein's constructs are present in every stage of cognitive development. Making an appeal to the common sense of ordinary people stresses such factors because of the greater presence of such constructs in everyday thought.

137. Based on the analysis of Piaget's theory above, the relation of the three concepts can be schematized in the following manner:

Reification—confusing internal with external;
Causation (and primacy of force)—confusing external with internal;
Moral realism—confusing internal with external.
On the other hand, the use of Calabresi's constructs, and his concomitant rejection of those of Epstein, is likely to be seen as less basic, and thus less intuitively appealing. This is because Calabresi's constructs correspond to later stages of cognitive development that are less familiar and also in conflict with the more basic constructs to which Epstein's theory appeals. However, this distinction does not mean that one theory is normatively superior to the other. Instead, it simply explains why one is generally seen as more intuitively attractive than the other.

III. PSYCHOLOGICAL STRUCTURES AND LEGAL THEORY

The first two sections of this Article establish several propositions. First, the Epstein/Calabresi debate about the reciprocity assumption of the Coase Theorem, although typically described as merely one about causation, is a broader dispute about the use of sets of psychological constructs such as reification, causation, and moral realism in normative legal argument. Second, the use of these constructs by Epstein and Calabresi leads to the respective rejection and acceptance of the Coase Theorem by each. Finally, the existence of these psychological constructs, and the relationship between them, correspond in general to Piaget's description of the development of human thought.

The applicability of these psychological structures is not limited, however, to the current debate in tort theory. Instead, the presence of these constructs in an individual's legal argument can explain his reaction to broader issues in legal theory. The purpose of this section is to demonstrate the applicability of the psychological framework developed in sections I and II to two other areas of legal thought. The first is the psychological structure of common-law thought in general. The vehicle used to develop this theme is the recent delineation by Bruce Ackerman, in *Private Property and the Constitution*, of ordinary observing and scientific policymaking as distinct modes of thought in the present legal culture. Ackerman also details the influence of these concepts on the jurisprudence of the takings clause. Significantly, the psychological structures of ordinary observing and scientific policymaking are the same as those found in the debate between Epstein and Calabresi on the Coase Theorem. Thus, the same psychological constructs that animated the Epstein/Calabresi debate about causation

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138. B. ACKERMAN, supra note 35. For an earlier work discussing common-law thought, see K. LLEWELLYN, THE COMMON LAW TRADITION: DECIDING APPEALS (1960) (contrasting the use of common sense and wisdom by earlier judges in deciding appeals—the "Grand Style"—with the current appellate style of eliminating common sense and relying on rules—the "Formal Style").
are also present in the analysis of the takings clause by ordinary observers and scientific policymakers. In addition, Ackerman associates ordinary observing with traditional legal scholarship and scientific policymaking with the Coase Theorem (along with other types of analysis). This suggests that the psychological structure of common-law thought may be more readily explained than previously recognized.

This section also will demonstrate the applicability of the analysis developed in sections I and II to the recent debate between Mark Kelman and Matthew Spitzer/Elizabeth Hoffman over empirical proof of the Coase Theorem. This debate represents another example of the descriptive power of the psychological structure of the Coase Theorem.

A. Private Property and the Constitution—the Psychology of Ordinary Observing and Scientific Policymaking and Some Speculations on Common-Law Thought

1. The Nature of Ordinary Observing and Scientific Policymaking

In Private Property and the Constitution, Bruce Ackerman reflects on current legal thought and its influence in the jurisprudence of the takings clause. Instead of one type of legal thought, Ackerman finds "two fundamentally different ways of thinking about law."139 One variety of legal thought Ackerman terms "ordinary observing." The legal analysis of the ordinary observer relies on two fundamental assumptions. The first is that good legal analysis cannot be divorced from the plain talk of nonlawyers.140 Once stripped of the technicalities generated by adversarial confrontation, the legal dialogue of the ordinary observer is grounded in the proposition that "nonlegal ways of speaking can be expected to reveal the basic structure and animating concerns of legal analysis."141 The second assumption relied upon by the ordinary observer is that "law should support dominant social expectations as these are expressed in ordinary language."142 Thus, the ordinary observer has been described as one who "aligns himself with laymen in two senses: substantively, he demands laws that fulfill lay expectations; procedurally, he demands legal analysis that is comprehensible and familiar to the educated nonlawyer."143

140. Id. at 10.
141. Id.
142. Id. at 94.
A second mode of legal thought Ackerman terms "scientific policymaking." For the scientific policymaker, two different assumptions are made about language and legitimation. First, the scientific policymaker rejects the idea that the language of the laymen necessarily provides the best framework for legal dialogue.144 Rather than being concerned with how laymen use similar-sounding terms, the scientist "conceives the distinctive constituents of legal discourse to be a set of technical concepts whose meanings are set in relation to one another by clear definitions."145 Second, rather than being concerned with a case-by-case method of decisionmaking, the scientific policymaker evaluates decisions in light of a relatively small number of abstract principles—what Ackerman terms the "comprehensive view”—that are assumed to be imputed to the operation of the legal system, whether or not these principles are in fact consistent with present social practice.146

After defining these modes of legal thought, Ackerman turns to the current jurisprudence of the takings clause to illustrate the conflict between these two approaches in the present legal culture, and to analyze the implications of the conflict for the future of legal thought. Ackerman’s thesis is that takings law can be understood as the product of a legal culture in transition.147 On the one hand, ordinary observing, the traditional method of analysis in the American legal culture, is less able to provide a coherent framework for the modern political conceptions of property and of the role of the state. On the other hand, scientific policymaking, while potentially able to provide a more modern framework, has yet to be developed fully as a form of legal analysis. As a result, "the subterranean conflict between the two forms of legal thought expresses itself on the surface of professional life by the common perception that takings law is incoherent, its principles altogether mysterious."148

2. *The Psychology of Ordinary Observing and Scientific Policymaking*

From the perspective of developing an understanding of the importance of the psychology of the Coase Theorem to the present legal culture, Ackerman’s analysis of the takings clause is significant. Ordinary observing and scientific policymaking, as ideal types, are animated by

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144. B. ACKERMAN, supra note 35, at 10-11.
145. Id. at 10.
146. Id. at 11-15.
147. See id. at 89, 168-89.
148. Id. at 168.
the same psychological structures present in the Epstein/Calabresi debate.

a. The psychology of ordinary observing: Ordinary observing, which Ackerman associates with traditional legal analysis,\textsuperscript{149} uses the intuitions of the layman as a source of legitimation.\textsuperscript{150} For the ordinary observer, the meaning of the takings clause is to determine, from the layman’s perspective, “whether (a) one of [l]ayman’s things (b) has been taken (c) by the state (d) without [o]rdinary justification.”\textsuperscript{151} If ordinary intuitions are used for normative legal analysis, however, psychological theory suggests that the resulting method will favor particular constructs. Predictably, the four elements in the ordinary observer’s analysis of the takings clause are based on notions of reification, causation, and moral realism.

The first element, “property,” is dominated by the idea of reification. Ordinary observers generally perceive persons as “the” owner of property.\textsuperscript{152} For them, “property talk is about relations between people and things.”\textsuperscript{153} As a result, physical control over things is a far more significant indicia of ownership than abstract claims of ownership that do not involve immediate possession, such as potential uses of property or future interests in ownership.\textsuperscript{154}

The second element, “taking,” also relies on reification. A taking occurs for the ordinary observer when one of his things is either transferred to another person or destroyed without his consent.\textsuperscript{155} Transfer without consent emphasizes the subjective (or person) part of reification, while destruction without consent emphasizes the objective (or thing) part of reification. In either case, the ordinary observer treats ownership as rights in things. Thus it is predictable from the perspective of Piaget’s theory that state action which, even though severe, only restricts a person’s use of one of his things and does not transfer or destroy it would be problematical for the ordinary observer.\textsuperscript{156} As Ackerman notes in one of his examples, regulation requiring the compulsory garaging of all second automobiles to conserve energy is much

\textsuperscript{149.} Id.
\textsuperscript{150.} See id. at 10-15, 93-97.
\textsuperscript{151.} Id. at 116.
\textsuperscript{152.} See id. at 26-27, 116-45.
\textsuperscript{153.} Id. at 244 n.31.
\textsuperscript{154.} See id. at 116-23, 241 n.24.
\textsuperscript{155.} See id. at 123-36.
\textsuperscript{156.} See id. at 136-45.
more difficult for an ordinary observer to perceive as a "taking" than a regulation depriving the owner of possession. Such a result is consistent with the expected features of intuitionistic thought because none of the aspects of ownership critical from a reification perspective—in particular, physical possession of a tangible thing—are clearly implicated.

The third element, "by the state," represents, for the ordinary observer, a problem of determining whether the state "caused" the taking. Even admitted state action is difficult to label a taking for the ordinary observer if the relationship between the act by the state and the transfer or destruction of a thing does not comport with an intuitive sense of causation. Thus, an explicit bureaucratic order, a limitation on the present use of land, or a physical taking are all more likely to be perceived by the ordinary observer as action by the state.

157. Id. at 137-41. See also id. at 252 n.49 (in order to determine whether a taking occurred when a restriction is placed upon the sale of a layman's artwork, an inquiry into the layman's taste is required). In part, Ackerman's analysis here was prophetic. See Andrus v. Allard, 444 U.S. 51, 64-68 (1979) (prohibition of the sale of lawfully acquired eagles was ruled not to be a taking because it was only a denial of the right of sale).

158. In assessing the "by the state" element, in addition to causation, the ordinary observer also uses reification and moral realism. First, the "state" exists "in" certain places (such as a capitol building or state office building) and "in" certain people. The act complained of, thus, must be by one who clearly "works for" the state. See B. ACKERMAN, supra note 35, at 148, 242 n.26. Second, in part because the focus of the analysis is on the acts of the "people" who work for the state, and in part because the state is deemed to have no special role to play in ordering society, the criteria for determining whether there has been a "taking" by the state is to ask whether a layman would label the action complained of a "taking" if a private person had done the same thing.

159. See id. at 145-50.

160. See, e.g., id. at 147-48, 256 n.69 (President Nixon's order to control prices by bureaucratic intervention raised the takings issue).

161. See id. at 154-55, 247 n.36, 262 n.86. This, for example, includes the problems of non-conforming use in zoning law.

162. See id. at 124-25, 257 n.71. The current strength of this view on the Supreme Court, as well as an apparent division of the Justices among ordinary observer/scientific policymaking lines, is evident in Loretto v. Teleprompter Manhattan CATV Corp., 102 S. Ct. 3164 (1982). Six Justices took the position that a "permanent physical occupation of property" constitutes a taking "without regard to whether the action achieves an important public benefit or has only minimal economic impact on the owner." Id. at 3175-76. Emphasizing that "[i]n such a case, the property owner entertains an historically-rooted expectation of compensation," Id. at 3179, the majority stressed the interference with dominion over a physical thing. Id. at 3174-77. In contrast, the three dissenting Justices, showing obvious discomfort with the majority's use of reification, found the per se takings rule used by the majority to be "uniquely unsuited to the modern urban age." Id. at 3182 (Blackmun, Brennan & White, JJ., dissenting). In a scientific policymaking-like analysis, the dissent stressed the economic consequences of the government action which, in this case, may well have increased the economic value of the property owner's interest, even though he was deprived of a physical portion of his property. Id. at 3182-84. This case is also of note because of the obvious conflict between the majority and the dissent about "property" itself. The majority seems to treat the owner's interest as dominion over a physical thing while the dissent is
than regulation of prices in the market, a limitation on the future uses of property, or regulation of third parties.

The fourth, and final, element of the takings clause as perceived by an ordinary observer is that the taking be "without ordinary justification." In Ackerman's description of the ordinary observer, even if property is taken by the state, the taking may be justified if the owner of the property was using the property in a way inconsistent with the prevailing expectations of the dominant social institutions. While perhaps not as obvious as the use of reification and causation in the first three elements, the concept of ordinary justification in the fourth element correlates to the use of moral realism. A defining characteristic of moral realism is the association of moral obligation and physical regularity with a reified superstructure of values. The result is a reification of obligation and an endowing of the physical world and of social institutions with a reified and self-enforcing set of values. Social or moral standards are perceived to exist in the world. While the use of moral realism in Epstein's work focuses on the connection between responsibility and physical regularity, moral realism in the ordinary observer's perception of the takings clause correlates with the assumption of a dominant, self-enforcing standard of obligation in society. The ordinary observer judges the propriety of takings against the dominant expectations of existing social structure. Piaget's theory suggests, however, that the substance of those standards would conform to the reified social standards of the dominant groups in society.

In the context of the takings clause, then, the ordinary observer must compare the actions of the state against those of other supposedly well-socialized individuals. This not only means that the state is treated as if its acts were those of a private person, but also that the standard against which it is judged corresponds to the dominant social standards that define when a person's property may be taken away because he "misbehaved." Much like the child who is chastised for using his things in an immature fashion, the property owner who misuses his property is denied compensation "[s]ince, from an ordinary observer's point of view, it is quite justified to take somebody's thing more comfortable perceiving the matter as one involving an entitlement protected by a liability rule.

163. See B. ACKERMAN, supra note 35, at 146-47.
164. See id. at 154-55, 247 nn.36 & 41.
165. See id. at 133-34, 250 n.43.
166. See id. at 150-56.
167. See supra text accompanying notes 134-36.
away from him if it is necessary to stop him acting in a way he should recognize as socially unacceptable."168

The psychological features of ordinary observing thus correspond to the same constructs that were implicit in Epstein's critique of the Coase Theorem. Reification, causation, and moral realism form the implicit psychological structure of the legal arguments. Moreover, a coordinated use is made of all three constructs even though an ordinary observer may be appealing to different aspects of the constructs than does Epstein. In Epstein's argument, reification of rights focuses on property and personal rights, while Ackerman's description of ordinary observing, since he is specifically considering the takings clause, focuses on the use of reification to define property rights. Also, Epstein's use of moral realism focuses on the association of cause with responsibility, while Ackerman's use of moral realism focuses on the justification for taking property. Both, however, make a similar use of causation.

b. The psychology of scientific policymaking: Scientific policymaking uses psychological constructs that compete with those used by ordinary observing. Ackerman develops two varieties of scientific policymaking, based on the use of utilitarian and Kantian comprehensive views. A common starting point is what Ackerman terms a "scientific" view of property. As opposed to the ordinary view of property as rights in things, the scientific analysis treats property as relationships between people with respect to things.169 From this perspective, the task of the law "is not to identify 'the' rights of 'the' property owner through some mysterious intuitive process but to determine in whose bundle one or another right may best be put."170 The crucial question for the scientific policymaker in interpreting the takings clause is to determine when "justice" requires the state to pay compensation after it has rearranged bundles of property rights between people,171 not whether a layperson would say that the state has "taken" a person's thing. The scientific policymaker believes that the legal system is made up not only of rules, but also of general principles describing the abstract ideals the system seeks to further. These principles, which the policymaker believes can resolve every potential case, are referred to by

168. B. ACKERMAN, supra note 35, at 151. Ackerman argues that much of this animates the idea of public nuisance. Id. at 153.
169. See id. at 26-29.
170. Id. at 27.
171. Id. at 29-31.
Ackerman as the "comprehensive view." "Justice," in turn, is defined differently depending upon whether the policies underlying the comprehensive view are derived from utilitarian or Kantian theory.

For the utilitarian, who seeks to maximize social welfare, the task is largely one of isolating the various costs associated with the rearrangement of property rights. One type of cost is the effect of general uncertainty, the reaction of risk-averse persons to the possibility that government regulation making their activity more expensive will be instituted. A second cost, citizen disaffection, is the adverse reaction of the general citizenry to the decision of the state of whether or not to pay compensation. The third factor in the utilitarian equation is process costs, which are the costs of paying and processing compensation claims. Thus, the general form of the justice question for the utilitarian scientific policymaker is "whether \( P \leq U + D \), where \( P \) = process costs, \( U \) = uncertainty costs, and \( D \) = the costs of citizen disaffection. If \( P > U + D \), compensation should be denied; if \( P < U + D \), it should be granted."

From the Kantian perspective, the justice of the compensation clause takes on a different meaning. The Kantian scientific policymaker, who believes that people should be treated as ends rather than means, views the people who lose property rights as having a special claim to any gains accruing to others as a result of the state's action. Accordingly, for the Kantian, "compensation is required when \( P < B - C \), where \( P \) is process costs, \( B \) is project benefit, and \( C \) is other project costs."

The psychological constructs used in scientific policymaking contrast sharply with those used in ordinary observing. Nonreification of property rights and reciprocity are underlying assumptions of scientific policymaking, as is a distrust of moral realism. First, the scientific view of property emphasizes rights between people with respect to things

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172. Id. at 11, 196 n.19.
173. See id. at 41-70. A second factor is the function of the judicial role in relation to the comprehensive view. Compare id. at 31-39 (discussion of judicial role in scientific policymaking), with id. at 43-44 (discussion of judicial role in utilitarian adjudication).
174. Id. at 44-45.
175. Id. at 46-48.
176. Id. at 45-46.
177. Id. at 48.
178. See generally id. at 71-87 (description of Kantian approaches to the compensation clause).
179. Id. at 74-75.
180. Id. at 74.
rather than rights in things, thus denying the importance of reification in normative legal argument.

Second, the scientific policymaker relies on reciprocity rather than causation as a basis for making legal decisions. The questions the ordinary observer answers by using causation, the scientific policymaker answers by reference to reciprocity and the comprehensive view. For example, if a layperson would say that the state caused the taking of one of his things, a prima facie case for compensation is established for the ordinary observer. The ordinary observer also uses causation to determine which parties are properly considered in a claim for compensation, that is, the person who caused the taking and the person who had property taken, and also which claims are justified, that is, all those caused by the state without justification.

In contrast, for the scientific policymaker, causation is irrelevant to whether compensation should be paid. Both utilitarians and Kantians answer these same questions by reference to their version of the comprehensive view. For the utilitarian, the parties whose interests are considered are those who generate process costs, uncertainty costs, and citizen disaffection costs. Those claims that are deemed valid are determined by reviewing these costs in the manner described above.\(^1\) For the Kantian, a different set of interests are important and a different test is used to determine which takings should be compensated.\(^2\) As with the utilitarian, however, causation is not a relevant factor.

Third, and finally, the use of scientific policymaking indicates a distrust of moral realism. Piaget's theory suggests that intuitionistic thought is the fountainhead of moral realism.\(^3\) In his description of scientific policymaking, however, Ackerman notes that "[i]t is central to my thesis that this kind of highly abstract thinking does not spontaneously arise in the heads of all people everywhere."\(^4\) Thus, Ackerman suggests that scientific policymaking is based on a rejection of moral realism. Moreover, scientific policymaking expressly rejects existing social structures—a prominent source of moral realism—as necessary guides for legal analysis.\(^5\)

The psychological structure of scientific policymaking as a mode

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181. See supra text accompanying notes 173-77.
182. See supra text accompanying notes 178-80.
183. See supra text accompanying notes 122-36.
184. B. ACKERMAN, supra note 35, at 90. For Ackerman's description of the structures of modern American legal thought, see id. at 90-93.
185. See id. at 105-06, 180-82.
of legal thought thus correlates with the constructs found in Calabresi's tort theory. An emphasis on rights between people with respect to things, reliance on an end-state theory to assess existing social structures (whether the ends be efficiency, wealth distribution, utility, or Kantian), and a distrust of moral realism are elements common to Calabresi's tort theory and scientific policymaking. Intuition and commonsense thought are downplayed in each, as attention is focused on conflicting, explicit normative standards that are considered independently from the merits of the individual case.

Ackerman's delineation of the distinction between the ordinary observer's and the scientific policymaker's methods of legal analysis relies on the same psychological constructs as those underlying the Epstein/Calabresi debate over the Coase Theorem. An ordinary observer uses reification, causation, and moral realism in ways similar to Epstein, as well as laypeople, in making an intuitionistic argument against the Coase Theorem. This connection suggests that the applicability of the psychological dimension discussed in this Article is not limited to the Coase Theorem, but instead may apply to all areas of legal analysis as a descriptive component of common-law thought.

In general, the legal thought of this period appears to make a prominent use of reification. For example, the contours of common-law property, reflecting the influence of Blackstone, generally treated property as rights in "things" and ownership as complete dominion. Kennedy, *The Structure of Blackstone's Commentaries*, 28 BUFFALO L. REV. 209, 311-20, 328-50 (1979); Vandeveld, *The New Property of the Nineteenth Century: The Development of the Modern Concept of Property*, 29 BUFFALO L. REV. 325, 328-33 (1980). Reification also appeared to play an important role in conflict of laws and civil procedure. Conflict law emphasized the physical location of a "thing" for contracts and property, and the physical location of the hurt or damage for torts. RESTATEMENT OF CONFLICT OF LAWS §§ 46-53, 208-13, 311-31, 377-78 (1934). Similarly, jurisdiction centered on the physical presence or control over things (in rem), e.g., Arndt v. Griggs, 134 U.S. 316, 320-21 (1980) ("[the state] has control over property within its limits"), and people (in personam), e.g., McDonald v. Mabee, 243 U.S. 90, 91 (1917) ("[t]he foundation of jurisdiction is physical power").

An intuitionistic sense of causation was, of course, a central aspect of tort law. G. White, *Tort Law in America* 92-102 (1980). This question often fractured into difficult intuitionistic issues such as last clear chance, remoteness of damage, and intervening cause. Nevertheless, the basic structure appears to be one animated by intuitionistic concepts of cause. See W. Prosser,
B. **The Kelman/Spitzer-Hoffman Debate—Ordinary Intuitions, the Coase Theorem, and Some Speculations on the Construction of Reality by Lawyers**

1. **The Kelman/Spitzer-Hoffman Debate**

In a recent exchange of articles, Matthew Spitzer and Elizabeth Hoffman debate Mark Kelman in an empirical defense of the Coase Theorem. Kelman begins the exchange by attacking the validity of the Coase Theorem, which he views as the major ideological weapon used by the conservative “Chicago schools” of law and of economics to attack the use of state action. Kelman argues that the Coase Theorem is wrong because “[c]onsumers do not behave in a way such that the Theorem holds true.” As evidence he relies on casual empirical data showing that consumers do not treat opportunity income as the equivalent of realized income. As Kelman explains in one of his examples:

> A fully rational individual, a professor at a business school, buys a bottle of imported wine for $5. After its value increases, a wine dealer with whom he regularly deals offers him $100 for the bottle of wine. Although he has never purchased a bottle of wine for $100, in fact, he has never paid more than $35 for one and would not do so now, the professor drinks the wine rather than sell it. What is observed here is a dramatic divergence between the treatment of opportunity cost income and realized income. If Coase’s hypothesis were...
true, the individual must treat the $95 in opportunity cost income, *i.e.*, the amount he would realize were he to sell the wine, just like the received income that he actually possesses. However, the individual does not do this. Although he would not spend $95 of realized income on wine, he "spends" $95 of opportunity income on it.190

Kelman posits several possible explanations for this behavior.191 The first is that "people often care less about things that could be than about things that are immediate and tangible."192 The second is that a rise in income is less important to people than a fall in income.193 A rise in income is expected to result in more saving because people have not adjusted to spending this increase in income.194 Thus, a decline in the current standard of living is feared more than an equivalent rise in income is desired. The third explanation, which Kelman personally finds most persuasive,195 is that consumers try to "close" transactions.196 Kelman uses as a hypothetical the case of the consumer who insists on continuing to play tennis at a club every week despite an injury because he has already paid a $100 nonreturnable fee to join the club:

The consumer, however, feels he would be wasting the $100 if he does not play; he ignores the fact that no funds will be demanded in the future and asks whether, in the past, he has received value for the $100 he has spent. Consumers try to "close" transactions: $100 was spent on tennis, and the consumer wants $100 of tennis value.197

In the case of the tennis player, value has not yet been received for payment. Kelman asserts that a consumer who already owns a good has received value for it, and thus views the transaction as closed. As such, he is willing to ignore any future opportunity income from the

190. *Id.* at 678-79 (emphasis in original) (footnote omitted).
191. Kelman maintains that the various rationales he puts forth only explain the motivation behind the behavior he describes; they neither support nor challenge the basic validity of the behavior's existence. *Id.* at 678, 685. As Kelman explains:

For the purposes of this Article, it does not matter whether the behavior manifested by the economic actors that have been discussed is rational or irrational, explicable or inexplicable. Insofar as the Coase Theorem is designed to undercut the notion that the liability rules that determine who is legally accountable for harm in cases of mutual interaction will affect substantive results—therefore to deny the inevitability [sic] of political decisions on the contours of the polity—it simply fails, liability rules will affect substance.

*Id.* at 685 (footnote omitted).
192. *Id.* at 688. For examples of this, see *id.* at 688-89.
193. *Id.* at 689-91.
194. *Id.* at 690.
195. *Id.* at 688 n.52.
196. *Id.* at 691-93.
197. *Id.* at 691.
initial transaction.\textsuperscript{198} Kelman concludes:

Coase's hypothesis was based on a single counterfactual assumption that can be stated in two distinct ways: From one vantage point, he assumes that people invariably place the same value on moving from state $A$ to some different state $B$ as they would place on moving back from $B$ to $A$. Alternatively stated, Coase assumes that people treat opportunity income, which neoclassical economists feel people implicitly "spend" whenever they do not sell a saleable right or good, in the same way as actual received income, which they explicitly spend. Consumers simply do not behave in this manner.\textsuperscript{199}

In reply,\textsuperscript{200} Spitzer and Hoffman attack Kelman's critique of the Coase Theorem on two grounds. First, Spitzer and Hoffman argue that Kelman's analysis is flawed because it is premised on a misunderstanding of the use of formal models.\textsuperscript{201} Kelman's critique, they contend, is at best only an interesting hypothesis because Kelman failed to "prove" his empirical hypothesis over a sufficiently large population, and instead only relied on casual data suggesting exceptions to the formal model assumed by the Coase Theorem.\textsuperscript{202} Second, Spitzer and Hoffman argue that even assuming the empirical validity of Kelman's statement with respect to consumers, the Coase Theorem is not necessarily moot because "even if producers do value realized income more than they do opportunity income in profit-making situations, entrepreneurs may be able to arbitrage the difference and generate an outcome identical to that predicted by the Coase Theorem."\textsuperscript{203}

\textsuperscript{198} Id. at 691-92.
\textsuperscript{199} Id. at 698.
\textsuperscript{200} Spitzer & Hoffman, A Reply to Consumption Theory, Production Theory, and Ideology in the Coase Theorem, 53 S. Cal. L. Rev. 1187 (1980).
\textsuperscript{201} Id. at 1190-92.
\textsuperscript{202} Id. at 1194-1208.
\textsuperscript{203} Id. at 1208. In a short rejoinder, Kelman maintains his belief that the Coase Theorem is not valid. Kelman, Spitzer and Hoffman on Coase: A Brief Rejoinder, 53 S. Cal. L. Rev. 1215 (1980). Kelman briefly argues that, contrary to Spitzer's and Hoffman's claims to the contrary, his empirical analysis of the theorem does demonstrate its invalidity. Id. at 1215-19. He then shifts his focus from an empirical analysis to argue that there exist two sociological perspectives of the Coase Theorem. The first is the positivist view that the Coase Theorem is a potentially incorrect view of reality. Id. at 1219-20. The second perspective is a hermeneutic analysis, which sees the theorem as an "internal statement expressing a culture," rather than an external statement that describes a culture. Id. at 1220 (emphasis omitted). For Kelman's full argument on this point, see id. at 1220-22. Rather than being dominated by one of these perspectives, Kelman argues that people oscillate between them. Id. at 1222-23. Because Spitzer and Hoffman respond only to the positivist perspective, Kelman claims that they fail to rebut his claim that the Coase Theorem fails as a hermeneutic device to adequately express our culture. Id. at 1223.
2. Ordinary Intuitions and the Coase Theorem

From the perspective of psychological theory, the debate between Kelman and Spitzer/Hoffman is largely one about the structure of the Coase Theorem, and thus is a continuation of the same conflict between intuitionistic and formalistic modes of legal analysis present in the Calabresi/Epstein dispute and in Ackerman's distinction between ordinary observing and scientific policymaking.

Kelman's argument against the use of the Coase Theorem is that consumers simply do not behave in such a way that it is true. Although he does not explicitly consider the psychological genesis of his critique, from such a perspective, an alternative statement of Kelman's argument is that the Coase Theorem runs counter to the everyday intuitions of ordinary people. When Kelman presents casual data suggesting that consumers do not equate realized income with opportunity income, he is arguing (much like both Epstein and the ordinary observer) that such an assumption conflicts with the psychological structure dominant in the "commonsense" behavior of laypersons. Moreover, when Kelman appeals to people to recall an "internal realm of resistance" to the Coase Theorem, he is implicitly making reference to the existence of the conflicting, yet coexisting, psychological structures predicted by Piaget's theory. Indeed, although Kelman's principal argument with the Coase Theorem is a political one, at one point

204. See supra text accompanying note 189.

205. Kelman's attack on the Coase Theorem stems from what he views as its connection with the conservative "Chicago School" of law and of economics. However, while the Coase Theorem has tended to be associated with conservative law and economics, primarily because of the influence of Richard Posner, this need not be so. It is true that the motivating force behind Coase's writing of the article may well have been to promote theoretical support for an argument for less government regulation on the basis of economic efficiency. See Coase, supra note 2, at 17-18, 42-44; Horwitz, supra note 14, at 906-07; Kennedy, supra note 10, at 393-97. However, the theoretical structure inherent in the Coase Theorem is not so easily cabined. While the structure of the Coase Theorem forces a decision on wealth distribution, the theorem itself does not mandate what that distribution should be. Before any distribution can be selected, a choice must be made on whether or not to assume the presence of transaction costs. See Transaction Costs, supra note 12, at 69-70. In addition, a determination must be made as to what entitlements should be assumed to be fundamental. See Kennedy, supra note 10, at 422-44. These choices cannot be made, and thus no method of wealth distribution adopted, without recourse to normative political theory. Since the Coase Theorem is silent on the choice of such a political theory, the theorem does not by its own terms necessarily apply only to a particular school of thought.

Acceptance of the Coase Theorem, however, can systematically affect the choice of a guiding political philosophy. A key feature of the theorem is that within the sphere of its operation, it gives no special importance to the status quo. However, this is not determinative. If conservative assumptions about the status quo are made, conservative results tend to follow; on the other hand, if liberal assumptions about the status quo are made, liberal results tend to follow. If the "no transaction costs" assertion is taken seriously, everybody can get together with everybody else and
in his rejoinder he suggests, without elaboration, that the structure of the Coase Theorem also might be explained on the basis of "psychologically oriented models of blocked perceptions." **206** Indeed, Piaget's the-

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**206.** Kelman, *supra* note 203, at 1222. The context of Kelman's statement is the following:

To the extent that law and economic literature proceeded for nearly twenty years ignoring a perfectly accessible behavioral assumption, there is reason to inquire into the social function and structure of the mode of thought. Thus, it is worth explaining why the point raised in my piece had never previously appeared, if only to deny its significance. It is hardly a difficult or complex point, yet it goes to the very heart of the most widely cited law and economics proposition in academic legal life. Whether one accounts for this systematic distortion of thought, as I did in my original article, as reflective of an explicit political agenda and particular concrete interests, or one develops psychologically oriented models of blocked perceptions, part of the story one must tell in dealing with a theory is, once again, a story of the theorists.

*Id.* at 1222 (emphasis added).
ory suggests that such a "psychologically oriented model" exists and that reification, causation, and moral realism serve as those "blocked perceptions."

A consumer intuitively may not equate realized income and opportunity income, counter to the assumption of the Coase Theorem, for the simple reason that the latter concept is alien to the established contours of the psychology of everyday thought. Together, the three rationales offered by Kelman as possible explanations of such behavior by consumers—the "could be versus the is," the growth of income, and "closing" transactions—indicate a psychological preference for the tangible, the status quo, and the realized. In turn, this correlates generally to the use of reification, moral realism, and, to a lesser extent, causation.

207. An analogous problem—the definition of "income" in the tax law—was recently considered by Mark Campisano in Ordinary Observing and Utilitarian Policymaking in the Internal Revenue Code, supra note 143. Campisano suggests that before a layman considers an increase in wealth as income, he requires a transfer of something of value that is severable so that it can then be exchanged for other goods or services. Id. at 792-94. Campisano also argues that this increase does not count as income until it is "in his hands" or under his control. Id. at 797-98. Thus, to a layman the concept of imputed income—the analogue to Kelman's argument about opportunity income and realized income in the context of the Coase Theorem—is an anathema. As Campisano explains:

The transfer requirement allows the ordinary observer to respond quickly and easily to certain questions about the nature of "income." Take, for example, the issue of "imputed" income from domestic services. If the ordinary observer were asked whether the cash value of a housewife's homemaking services in the couple's own home should be included as income on the couple's joint tax return, he would answer emphatically in the negative. The fact that her services obviously had some value to the couple would be irrelevant because, to the layman—whose opinion is determinative for the ordinary observer—the decisive fact is that no one paid the housewife to do her chores. . . . He would find it preposterous that the housewife should pay a tax when she did not earn any money. The layman would certainly reach the same conclusion if he were asked whether he should have to report as income the rental value of his home. Indeed, because of the prerequisite of a transfer that inheres in the commonsense meaning of "income," the layman would unequivocally reject any attempt to levy a tax on any income that was "imputed" to him. As far as he, and therefore the ordinary observer, is concerned, imputed income is not income at all. Id. at 793.

Campisano's discussion of imputed income is not exactly analogous to the opportunity income/realized income dichotomy in the Coase Theorem. Campisano is concerned with the ordinary interpretation of income in the absence of consummated transactions, while Kelman is concerned with why such transactions are not made by consumers. Nonetheless, the two issues contain the common thread of a layperson's concept of "control," which, in turn, would appear to be related to the use of reification. Cf. B. Ackerman, supra note 35, at 127-29 (discussing the importance of the concept of "control" in the takings context). Most importantly, both Campisano and Kelman recognize the divergence of "commonsense" intuitions from other formalistic methods of analysis.

Campisano's article is also relevant as an example of the use of the ordinary observing and scientific policymaking modes of analysis described by Bruce Ackerman in Private Property and the Constitution, discussed supra in notes 138-46 and accompanying text.
Because of the layperson's tendency to reify, tangible items, that is, things, are preferred over intangible potentialities. Thus it is not surprising from the standpoint of Piaget's theory to find, as Kelman notes, that people generally value a certain chance of receiving $500 over a fifty percent chance of receiving $1000 and fear a certain loss of $500 more than a fifty percent chance of losing $1000, or that a person may be more upset about losing $50 from his pocket than failing to save $50 on the price of a washing machine because he failed to check the prices of a similar machine in a store next door.\(^{208}\) In each case the loss of a tangible item is deemed more substantial. Also, because of the influence of moral realism, which favors present values and existing standards, the status quo takes on favored status. People tend to use the status quo as a starting point and attempt to justify it. In addition, the use of causation implies an existing background of events that the individual's causative actions has changed.\(^{209}\) Thus, change is defined by reference to the status quo. Without the status quo as a reference point, the concept of causation is unmanageable. Finally, realized events are more important than potential events because of elements of control which in turn appear to be related to reification. Moreover, once realized, an event becomes part of the status quo and thus is given preference. Whatever the exact genesis of Kelman's specific argument that laypeople prefer realized income, and thus his general claim that they do not accept the Coase Theorem, it seems clear that the psychic preference for the status quo is an important part of that argument. Because of the correlation between the psychological constructs used by Kelman and those used by Epstein and Ackerman's ordinary observer, it appears that this preference is not due to random or "irrational" behavior, but rather, is due to the predictable features of intuitionistic thought.

This theory is also consistent with the observations of Spitzer and Hoffman. In defense of the Coase Theorem, Spitzer and Hoffman argue that even if Kelman's argument might prove true for consumers, entrepreneurs could arbitrage any difference between consumer conduct of the kind described by Kelman and that assumed in the Coase Theorem and thus still generate a result identical to the Coase Theorem. While not a point that Spitzer and Hoffman would be willing to accept without empirical proof, this is nonetheless a recognition on

\(^{208}\) Kelman, *supra* note 187, at 689.

\(^{209}\) This appears to be the main thrust of Borgo, *supra* note 74.
their part that these two contrasting modes of thought can coexist. Moreover, should Spitzer and Hoffman devise what they consider to be a true empirical test of the Coase Theorem, it would be important to consider the background of the subjects. If laypersons are included, the intuitionistic thinking of the kind described by Kelman would be expected to dominate. On the other hand, if persons with substantial economic training were made the subjects of the study, it would be expected that most of them would conform to the predictions of the Coase Theorem, although one might nonetheless expect varying behavior even by these groups in their personal as opposed to their professional capacity.

Thus, both Kelman and Spitzer/Hoffman recognize the possibility that laypersons may not act as the Coase Theorem would predict (although Kelman more so than Spitzer and Hoffman). What distinguishes their positions are the conclusions each draws from that possibility. For Kelman, the existence of counterexamples to the Coase Theorem is important because they represent areas set off from the influence of the Coase Theorem, and thus suggest that the theorem is not

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210. Campisano, supra note 143, also contributes to this point in his suggestion that business taxpayers should be treated differently than individual taxpayers:

The result of these differing characteristics is that the ethical justifications for an ordinary-observing approach to taxation are significantly less persuasive with respect to the business taxpayer than with respect to the personal taxpayer. The ethical justifications for ordinary observing are grounded in the propriety of protecting the expectations of the layman. But the business taxpayer's expectations are weaker and his world-view more sophisticated than those of the personal taxpayer. Because the business taxpayer experiences taxes simply as a cost of doing business, to be passed along like any other cost, his tax expectations must be considered less substantial and less in need of protection than those of the personal taxpayer, who experiences all taxes fully, as a direct reduction in his standard of living. Further, because the business taxpayer is a legal sophisticate, at least in the sense that he forms his expectations with the aid of legal advice, his tax expectations are not as vulnerable to disappointment as those of the personal taxpayer, who forms his expectations from lay experience alone. In sum, even in its own terms, the case in favor of ordinary observing is substantially weaker for business taxation than it is for personal taxation.

_id_ at 821-22 (footnotes omitted). See generally _id._ at 818-32 (providing a more extensive discussion of the businessman/layman distinction and Campisano's argument in favor of different tax treatment for each).

211. Hoffman and Spitzer attempt an empirical proof of the Coase Theorem in Hoffman & Spitzer, _The Coase Theorem: Some Experimental Tests_, 25 _J. L. & ECON._ 73 (1982). Interestingly enough, the subjects of the experiment, college students, tended to come to a decision in which the participants shared the profit in a more or less equal fashion, rather than attempting to maximize their own payoff. _Id._ at 91-95. This point obviously troubled Hoffman and Spitzer. _Id._ at 93 & n.47. In fact, it seems as if this data reinforces some of Kelman's initial observations. Given the artificial setting in which the students had to perform and what must have seemed the "windfall" nature of the situation, this generally comports with some of Kelman's casual data. See Kelman, _supra_ note 187, at 689-90 (treatment of windfall gain). More importantly, the cultural aspects of the use of the Coase Theorem have still not been confronted.
as complete a model of society as its proponents suggest. In contrast, for Spitzer and Hoffman, the existence of these two vantage points is only of secondary importance and perhaps is even irrelevant. For them, if the Coase Theorem remains true in at least some areas it will, much like their entrepreneur, dominate the rest. Ultimately, the conclusion each draws is political; however, they are conclusions bound up in the psychology of the Coase Theorem and the significance to be drawn from the existence of these two structures of thought.

CONCLUSION

During the last several decades there has been an increased perception that the traditional common-law approach to the law is losing its place as the dominant mode of analysis in legal scholarship. The furor over the incursions of economics into normative legal analysis,\textsuperscript{212} the increased interest in legal theory,\textsuperscript{213} and the growing perception that legal scholarship is in need of new direction,\textsuperscript{214} are all signs of transition in the legal culture. The purpose of this Article has been to sharpen the perception of what this transition is, as well as to suggest some direction for further study on why it is coming about. The immediate purpose of this Article has been only to point out the general connection, in a descriptive sense, between the Coase Theorem, other modes of legal thought, and the use of particular psychological constructs.

One set of propositions focuses on the psychology of human thought in general. It is sufficient for present purposes that Piaget's theory of developmental psychology establishes the basic validity of several propositions, even though psychologists may debate among


themselves about the fine points of their application. First, because of the nature of the development of human thought, two contrasting sets of psychological constructs exist in the thoughts of children. Second, the constructs that correspond to the earlier stages of development still influence the thought of adults, even though they change in some ways as a person matures. Third, due to the continuing influence of such constructs (particularly reification, causation, and moral realism) intuitionistic thought—the common sense of laypersons—contains a predictable and consistent structure.

A second set of arguments, those based on the current status of the legal culture, suggests that these psychological propositions are linked in some way to the debate in the legal culture about the Coase Theorem. The first is that traditional legal training, because of its reliance on a sophisticated application of the intuitive thought of laypersons, makes significant use of reification, causation, and moral realism. The use of these constructs plays an important role in defining the structure of common-law thought in general, and is not linked just to the debate between Epstein and Calabresi on tort theory, Ackerman's treatment of the takings clause, or the debate between Kelman and Spitzer/Hoffman on an empirical proof of the Coase Theorem. Finally, as these debates demonstrate, the psychological structure of the Coase Theorem is incompatible with the psychological structure of common-law thought. Thus, the Coase Theorem is controversial in part because it challenges the implicit, yet critical, proposition of traditional legal training that normative legal argument must ultimately be grounded in the intuitionistic thought of laypersons.

At the same time, however, this Article suggests that the psychology of the Coase Theorem has certain limitations and that further connections must be made between the psychology of the Coase Theorem and other aspects of legal theory. The psychology of the Coase Theorem, alone, cannot adequately address the political or cultural aspects of legal thought. While this psychological analysis can provide a useful descriptive account of the structure of common-law thought and of the Coase Theorem, it cannot provide an answer as to why common-law thought rose to prominence when it did, why it is losing its hold on the legal culture, or why the Coase Theorem began to gain acceptance in the legal culture when it did. Thus, before any final assessment can be made of the reaction of the present legal culture to the Coase Theorem, two additional areas must be addressed: the relationship between the psychology of the Coase Theorem and political theory; and the rela-
tionship between the psychology of the Coase Theorem and the construction of reality by lawyers. Each of these topics will be considered in subsequent articles, but at this point several general connections can be noted. First, a connection may well exist between the use of certain psychological constructs in normative legal argument and adherence to particular political theories. For example, Epstein's argument that "[p]rivate property is an external manifestation of the principle of personal autonomy" correlates to, and perhaps is tantamount to, an argument that reification should play a normative role in political theory. Similarly, the common law, Epstein's tort theory, and ordinary observing all tend to be associated with historical justice frameworks, while the Coase Theorem, Calabresi's tort theory, and scientific policymaking all tend to be associated with distributive justice or end-state political theories.

Second, a connection may exist between the use of the Coase Theorem and social construction of reality by the legal culture. Although perhaps most explicit in the exchange between Kelman and Spitzer/Hoffman, one of the concerns of Ackerman's work on ordinary observing and scientific policymaking (as well as an implicit concern of the Epstein/Calabresi debate) is the possibility that different modes of legal thought exist and that these, in turn, are directly related to the professional training of lawyers.

The possibility of these further connections between the Coase Theorem and political theory and professional training suggests one final point, the truth or falsity of which could be of extreme importance to the legal culture. It certainly is the case that the Coase Theorem grates on the hardened intuitions of so many lawyers because of its psychology, but it may also be the case that Ronald Coase's parable grates on the hardened intuitions of so many lawyers quite simply because it is a story about the death of the common law.

215. For some initial efforts linking legal thought to political structures, see B. ACKERMAN, supra note 35, at 179-83 (discussing ordinary observing, scientific policymaking and the relation to political theory); R. UNGER, supra note 213, at 72-100 (analyzing the connection between impersonal laws and a deeper set of presuppositions about thought and society); Ackerman, Four Questions for Legal Theory, in NOMOS XXII, PROPERTY 351, 366-71 (J. Pennock & J. Chapman eds. 1980) (discussing impact on normative questions by communicating as ordinary observers as opposed to scientific policymakers); Kennedy, Form and Substance in Private Law Adjudication, supra note 213 (analyzing how and why lawyers choose between using rules or equitable standards to support legal arguments in private law adjudication).

216. Nuisance Law, supra note 19, at 63.

217. For initial efforts here, see Ackerman, Four Questions for Legal Theory, supra note 215, at 371-72 (predicting a shift from ordinary observing to scientific policymaking among lawyers).