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BRIGHAM-KANNER PROPERTY RIGHTS CONFERENCE JOURNAL

VOLUME 2 SEPTEMBER 2013

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STONE-AGE PROPERTY IN DOMESTIC ANIMALS: AN ESSAY FOR JIM KRIER

ROBERT C. ELLICKSON*

How and when the herds were transferred from the collective ownership of the tribe or gens to the proprietorship of the heads of the families, is not known to us. But it must have been practically accomplished in this stage [i.e., the middle stage of barbarism].

—Friedrich Engels, The Origin of the Family, Private Property and the State (1884)

As befits this Festschrift, I start my essay with a tribute to Jim Krier's scholarly contributions. I then turn my focus to *Evolutionary* Theory and the Origin of Property Rights, an article in which Jim insightfully speculates about the property rights that prehistoric hunter-gatherers would have recognized.2 The Neolithic Period, the final and most dynamic era of the Stone Age, commenced around 11,000 BP (years before present). At around that time, some former hunter-gatherers began to settle down and shift to agricultural activities. I assert that in their narratives about this era, both Krier and illustrious predecessors such as William Blackstone have largely neglected an important ancient innovation—the emergence of property rights in domesticated animals. Through selective breeding, Neolithic peoples transformed various wild ungulates into sheep, cattle, and other herdable animals. By the outset of the Bronze Age, c. 5,000 BP, livestock had come to constitute a major fraction of human wealth.

To incentivize husbandry of livestock, members of prehistoric bands had to create a system of informal property rights in tame

^{*} Walter E. Meyer Professor of Property and Urban Law, Yale Law School. I thank Jim Krier—the honoree himself—for helpful comments.

^{1.} FRIEDRICH ENGELS, THE ORIGIN OF THE FAMILY, PRIVATE PROPERTY AND THE STATE 195 (Ernest Untermann trans., 1902) (1884). Engels defines a gens as a broadly extended family, or clan, all of whose members are related to a single ancestor. Id. at 102-03. The members of a gens would have been roughly as numerous as those of a band. $See\ infra$ text accompanying notes 57-59.

^{2.} See James E. Krier, Evolutionary Theory and the Origin of Property Rights, 95 CORNELL L. REV. 139 (2009) [hereinafter Krier, Evolutionary Theory].

animals. I present a narrative of the evolution of those rights that challenges the one that Friedrich Engels offers in the epigraph. Zoological archaeologists have discovered that, millennia prior to the domestication of hoofed animals, hunter-gatherers had domesticated the dog from the wolf. In many settings, ancient peoples likely used their extant system of property in dogs as a template for property in livestock. I contend that the best indirect evidence suggests, contrary to Engels, that Neolithic peoples customarily would have, from the outset, owned domesticated animals privately as individuals or families, not communally as members of bands or tribes.

I. KRIER'S SCHOLARLY ACHIEVEMENTS: THE FRUITS OF RESTLESSNESS

Jim has presence. I vividly recall our first encounter, in 1970, in a billiard parlor on Wilshire Boulevard in Los Angeles. The late Gary Schwartz, a treasured mutual friend who was then a colleague of Jim's at UCLA, had arranged our get-together. Jim's wit, irreverence, and intensity all made an immediate impression. I can't recall which of us prevailed in our billiard match—a lapse in memory that suggests that Jim, who had brought his own cue, had carried the day.

Three overarching features of Jim's scholarly accomplishments stand out. First, because Jim is uncommonly restless and nonconformist, he has resisted joining bandwagons. Instead, his instinct is to pioneer. In 1971, just after completing his second year of teaching, Jim published one of the first casebooks in the soon-to-burgeon field of environmental law.³ Although several veteran legal scholars also authored early environmental law casebooks at around the same time, Jim's was the most conceptually ambitious.⁴ Other notable environmental law scholars of Jim's generation, such as Bruce Ackerman and Dick Stewart, did not publish in the field until some years later.

^{3.} James E. Krier, Environmental Law and Policy (1st ed. 1971). The phrase "environmental law" is reported to have been first formally coined at a September 1969 conference that Jim attended. RICHARD J. LAZARUS, THE MAKING OF ENVIRONMENTAL LAW 47–48 (2004).

^{4.} See Jerry L. Mashaw, Revealing the Secret Curriculum, 59 VA. L. REV. 159 (1973) (reviewing KRIER, supra note 3). Mashaw praises Krier's efforts to reconceptualize environmental law by identifying basic policy issues and various institutional processes for addressing them.

Also pioneering, but far better known, was the Dukeminier and Krier casebook, *Property*. The first edition appeared in 1981, when competing works were largely atheoretic. In both *Property* and its famous teaching manual, Jim again sought to reconceptualize a complex field. In the first edition, he included a large dollop of 1970s law and economics, a momentous advance at the time. *Property* quickly came to dominate the U.S. casebook market and, over thirty years later, it still does. This landmark work has profoundly influenced scholarship in the field of property law. It has shaped the ideas of not only the hundreds of thousands students who have been assigned to read it but also the many hundreds of professors who have taught from it.

Jim's restlessness soon impelled him to move beyond 1970s law and economics. In 1988, he inserted in the second edition of *Property* several pages on "The Perspective(s) from Critical Legal Studies," a provocative movement then on the upswing.⁷ And in 1990, he published two articles, one co-authored with Roger Noll, that drew on frontier developments in cognitive psychology to challenge the unalloyed rational-actor model long dominant in economics.⁸

The arc of Jim's scholarship demonstrates the depth of his skepticism, a second of his admirable scholarly traits. Some property scholars have an unbridled faith in markets, and others, in government regulation. In his various works, Jim has striven to deflate both these enthusiasms. In a world of true believers, dauntless doubters are invaluable.

^{5.} Jesse Dukeminier & James E. Krier, Property (1st ed. 1981).

^{6.} On February 8, 2013, the seventh edition of *Property* was the top-selling casebook on the Amazon list. List of top-selling casebooks, http://www.amazon.com (follow "Books" hyperlink; then follow "Law" hyperlink; then follow "Business" hyperlink; then follow "Property" hyperlink); *see also* Alan Watson, *Introduction to Law for Second-Year Law Students?*, 46 J. LEGAL EDUC. 430, 435 n.19 (1996) (referring to a publisher's flyer that asserted that *Property* had been adopted at over 150 law schools).

^{7.} Jesse Dukeminier & James E. Krier, Property 139-41 (2d ed. 1988).

^{8.} James E. Krier, *Risk and Design*, 19 J. LEGAL STUD. 781 (1990) [hereinafter Krier, *Risk and Design*]; Roger G. Noll & James E. Krier, *Some Implications of Cognitive Psychology for Risk Regulation*, 19 J. LEGAL STUD. 747 (1990).

^{9.} See James E. Krier, The Tragedy of the Commons, Part II, 15 HARV. J.L. & PUB. POLY 325, 332–33 (1992) [hereinafter Krier, Part II] (critiquing free-market environmentalism, partly because market transactions are largely based on a foundation of governmentally provided rules); Krier, Risk and Design, supra note 8, at 782–85 (asserting that cognitive illusions may be devil government regulators as much, and in some contexts more, than market participants).

Third, Jim has been an exceptionally collaborative scholar. Beneath his surface grumpiness is a solid core of warmth. Far more than any other prior awardee of the Brigham-Kanner Prize, Jim has published with co-authors. An early example was the Krier and Ursin book on the regulation of air pollution in California. ¹⁰ The Dukeminier-Krier alliance, forged in the 1970s, endured for almost four decades. Following Jesse Dukeminier's death, Jim replenished his casebook team by adding Greg Alexander and Mike Schill.¹¹ Close to one-half of Jim's scholarly articles have been co-authored. Some of these collaborations, for example, those with Clay Gillette and Michael Heller, were repeated. 12 Those of us who have tried our hand at co-authorship can attest to its potential complications, among them the risk of free riding and the hassle of compromise. In many non-legal disciplines, co-authorship of course has become routine because it enables specialists to yoke their talents. Partly on account of the growing body of empirical work, co-authorship in law also has been on the rise. 13 On this front as well. Jim Krier has consistently been ahead of the curve.

II. AN INTRODUCTION TO STONE-AGE PROPERTY RIGHTS: NARRATIVES AND INDIRECT SOURCES OF EVIDENCE

A lifelong immersion in property law may prompt an imaginative scholar to ponder the prehistoric origins of property institutions. In a 1992 article, Jim revealed his fascination with the topic, and in 2009, in *Evolutionary Theory*, made an important contribution to the small literature addressing it. ¹⁴ In the remainder of this essay,

JAMES E. KRIER & EDMUND URSIN, POLLUTION AND POLICY: A CASE ESSAY ON CALIFORNIA AND FEDERAL EXPERIENCE WITH MOTOR VEHICLE AIR POLLUTION, 1940–1975 (1977).

^{11.} The first fruit of this new alliance was Jesse Dukeminier, James Krier, Gregory Alexander & Michael Schill, Property (6th ed. 2006).

^{12.} Clayton P. Gillette & James E. Krier, Risk, Courts, and Agencies, 138 U. PA. L. REV. 1027 (1990); Michael A. Heller & James E. Krier, Deterrence and Distribution in the Law of Takings, 112 HARV. L. REV. 997 (1999); Michael A. Heller & James E. Krier, Making Something Out of Nothing: The Law of Takings and Phillips v. Washington Legal Foundation, 7 SUP. CT. ECON. REV. 285 (1999); James E. Krier & Clayton P. Gillette, The Un-Easy Case for Technological Optimism, 84 MICH. L. REV. 405 (1985).

^{13.} See Tom Ginsburg & Thomas J. Miles, Empiricism and the Rising Incidence of Co-Authorship in Law, 2011 U. Ill. L. Rev. 1785.

^{14.} See Krier, Part II, supra note 9; Krier, Evolutionary Theory, supra note 2.

I attempt to build on his efforts, focusing on the earliest forms of property rights in domesticated animals.

A. The Neolithic Revolution

Members of the species *homo sapiens* are thought to have become behaviorally modern in the period 80,000–55,000 BP.¹⁵ During the long prehistoric period, most humans were associated in a nomadic hunter-gatherer band consisting of no more than a few dozen members.¹⁶ A band would set up a temporary camp in a territory, hunt and gather nearby, and, when local game and fruit had become harder to find, relocate to establish a new camp where pickings promised to be more plentiful. Archaeological evidence indicates that the hunter-gatherer way of life was virtually universal prior to c. 11,000 BP, after the end of the most recent Ice Age.

During the subsequent Neolithic Period of the late Stone Age (c. 11,000–4,000 BP), human life underwent a great transformation. In some locales, most notably the Fertile Crescent of southwest Asia, groups of people began to reside in permanent settlements. As shortages of game animals became increasingly pronounced, many human groups shifted away from hunting and gathering and toward agriculture and the herding of domesticated animals (pastoralism). A group of herders might be nomadic for either all or part of the year or, alternatively, live year-round in permanent abodes from which they were able to manage their herds. By c. 5000 BP, archaeological evidence in Mesopotamia attests to the first appearance of organized states, mathematics, and writing. The rest, as they say, is history.

^{15.} See Jared Diamond, Evolution, Consequences and Future of Plant and Animal Domestication, 418 Nature 700, 704 (2002); see also Steven Pinker, The Better Angels of Our Nature 40 (2011) (setting the date at c. 75.000 BP).

^{16.} Among the !Kung San of Botswana and Namibia, a group that continued to hunt and gather well into the twentieth century, individuals were able to change their band affiliations. According to a tally by Richard Lee, 13 percent switched bands over the course of a single year. James Woodburn, *Egalitarian Societies*, 17 MAN 431, 435 (1982).

 $^{17.\,}$ Jared Diamond, Guns, Germs, and Steel: The Fates of Human Societies 134-42 (1997).

^{18.} Diamond, supra note 15, at 704.

^{19.} On the various modes of Stone-Age pastoralism, see Kamyar Abdi, *The Early Development of Pastoralism in the Central Zagros Mountains*, 17 J. WORLD PREHISTORY 395 (2003).

The domestication of sheep, cattle, and other livestock was well underway in the Fertile Crescent by 10,000 BP.²⁰ To engage in herding, members of a Neolithic band had to develop norms governing property rights in livestock. What might these norms have been? The unearthing of sheep bones at an archaeological dig at a Neolithic site would prove that sheep were being herded but would be unlikely to reveal anything about the property norms that had governed human entitlements in those animals. In *Evolutionary Theory*, Krier concisely identifies the inherent limits on research into ancient practices: "Because property began in prehistoric times, no one can really prove what actually happened, as a matter of historical truth. The objective is a plausible explanation that is logically intact and consistent with what we know about human development."²¹

Like Krier's, my analysis assumes that the motivations and psychologies of ancient peoples were basically similar to those of people in contemporary times. Some commentators doubtless would reject this assumption. Those who imagine the possibility of a radically better future commonly also assume the reality of a radically superior remote past. Utopian views of the human condition in prehistoric times include the depiction in *Genesis* of man before "the fall," the notion in Greek mythology of a prehistoric Golden Age, and Rousseau's view that the advent of civil society corrupted "natural man." What we know about human development casts doubt on all of these visions.

B. Narratives on the Origin and Evolution of Property Rights

A century or more before Friedrich Engels speculated about ancient patterns of livestock ownership, other notables had offered narratives describing human experience in the "state of nature"—a stage of human development that I equate with the Stone Age. ²³ In this section I briefly review the imaginings of William Blackstone, John Locke,

^{20.} See infra notes 52-53 and accompanying text.

^{21.} See Krier, Evolutionary Theory, supra note 2, at 146.

^{22.} See infra text accompanying notes 34-38.

^{23.} On these turns to narrative, see Carol Rose, *Property as Storytelling: Perspectives from Game Theory, Narrative Theory, Feminist Theory*, 2 YALE J.L. & HUMAN. 37, 38–39, 51–53 (1990).

and Jean-Jacques Rousseau about how property rights evolved and also summarize those of Krier and other contemporary scholars.

In his *Commentaries on the Laws of England*, Blackstone provides one of the most detailed and prescient of the narratives on how property institutions arose. Writing almost a century before the Darwinian Revolution,²⁴ Blackstone quaintly treats the Book of Genesis as an authoritative source on life in prehistoric times.²⁵ Blackstone generally envisions private property as having emerged in four stages.²⁶ The first stage was the conferral of private ownership of a movable object, such as a garment or hunted animal, on the person who had personally labored to make it available.²⁷ The second stage, according to Blackstone, was the recognition of private rights in domestic animals. To this topic Blackstone devotes a single sentence:

But the frequent disappointments, incident to that method of provision [hunting], induced them to gather together such animals as were of a more tame and sequacious nature; and to establish a permanent property in their flocks and herds, in order to sustain themselves in a less precarious manner, partly by the milk of the dams, and partly by the flesh of the young.²⁸

Blackstone then immediately turns to the evolution of private rights in water, and finally to his fourth envisioned stage—private property in land—a complex topic that he understandably discusses at length.²⁹

^{24.} Charles Darwin, On the Origin of the Species (1859).

^{25. 2} WILLIAM BLACKSTONE, COMMENTARIES *2-3, *5-6 (1766).

^{26.} Id. at *2-9. Krier lauds the perspicacity of Blackstone's narrative. See Krier, Evolutionary Theory, supra note 2, at 158-59 n.93.

^{27. 2} BLACKSTONE, *supra* note 25, at *4–5. Members of a preliterate group in fact typically do entitle someone who has made an item to own it, often subject to a duty to share it under certain circumstances. *See* WILLIAM CRONON, CHANGES IN THE LAND: INDIANS, COLONISTS, AND THE ECOLOGY OF NEW ENGLAND 61 (1983); Alan Barnard & James Woodburn. *Property, Power and Ideology in Hunting and Gathering Societies: An Introduction, in* HUNTERS AND GATHERERS 2: PROPERTY, POWER, AND IDEOLOGY 4, 16 (Tim Ingold, David Riches & James Woodburn eds., 1988). This regularity suggests that there never was an era of "primitive communism," that is, "a period of human history before the rise of the state during which private property was unknown" Richard B. Lee, *Primitive Communism and the Origin of Social Inequality, in* THE EVOLUTION OF POLITICAL SYSTEMS: SOCIOPOLITICS IN SMALL-SCALE SEDENTARY SOCIETIES 225, 225 (Steadman Upham ed., 1990).

^{28. 2} BLACKSTONE, *supra* note 25, at *5. Elsewhere in the *Commentaries*, Blackstone includes a lengthy section on the law of domesticated animals. *Id.* at *389–94.

^{29.} *Id.* at *6–9. Blackstone envisages that ancient societies recognized private property in houses, huts and movable cabins prior to recognizing it in agricultural lands. *Id.* at *4.

The sequence of events in John Locke's influential discussion of the normative foundations of private property, written close to a century prior to Blackstone's, is vaguer. According to Locke, at the outset God gave "the World in common to all Mankind." Locke reasons that, because a person owns his own labor, movables acquired through the dint of effort, for example, acorns gathered or wild deer slain, also become private property. Locke thinks that private property in land also could be obtained through cultivation and other forms of work and vaguely implies that private property in land was recognized at a later date than private property in movables. Locke makes a few passing references to the domestication of animals. In his eyes, the taming of beasts and the breaking of oxen plainly can give rise to legitimate claims of animal ownership, the does not attempt to fit these events into any timeline.

Jean-Jacques Rousseau, in his *Discourse on Inequality*, imagined that "peoples in the primitive condition . . . [lacked] any kind of property."³⁵ In this state of nature, "natural men" were equal and peaceable. ³⁶ But, as nature's bounty became scarcer, people came to honor private property in livestock, and, ultimately, in land. ³⁷ The advent of private property deprived man of his naturalness, fostered inequality, and led to status-seeking and other varieties of "misery and horror." For Rousseau, the recognition of private property in land was the key baneful development. ³⁹ In his eyes, property in livestock was at most a sideshow, as it had been for Blackstone and Locke.

Contemporary scholars who have discussed the prehistoric evolution of property rights have had the advantage of post-Darwin scientific understandings. Surprisingly, however, many of them neglect the

 $^{30.\ \} JOHN\,LOCKE, TWO\,TREATISES\,OF\,GOVERNMENT\,291\,(Peter\,Laslett\,ed., 1960)\,(3d\,ed.\,1698).$

^{31.} *Id.* at 287–90. To obtain ownership of a resource that had been up for grabs in the state of nature, however, a person must leave resources "as good" for acquisition by others—the famous Lockean proviso. *Id.* at 290–91.

^{32.} Id. at 290-302.

^{33.} See id. at 294, 299.

^{34.} Id. at 294, 298.

^{35.} JEAN-JACQUES ROUSSEAU, DISCOURSE ON THE ORIGINS AND FOUNDATIONS OF INEQUALITY AMONG MEN 92 (Maurice Cranston trans. & ed., 1984) (1755).

^{36.} Id. at 70, 115.

^{37.} Id. at 90-91, 109, 119.

^{38.} *Id.* at 109. *But see id.* at 180 n.2 (editor's comment that in contemporaneous writings Rousseau had assessed private property more favorably).

^{39.} Id. at 109.

evolution of property rights in domesticated animals. In *Evolutionary Theory*, for example, Krier offers a vision of prehistory that is far more sophisticated than Blackstone's, Locke's, and Rousseau's. Taking advantage of recent scholarly advances, Krier invokes evolutionary game theory and cites the results of anthropological investigations. His chronological narrative, however, addresses the emergence of entitlements only in personally crafted objects and land, not in animals.

Krier's article repeatedly refers to Harold Demsetz's seminal essay on the evolution of property rights. 40 Demsetz uses as his central example a transition in property rights in land, namely a Labradorean tribe's shift from communal to exclusive hunting territories. 41 Like Krier's, Demsetz's article includes no references to property in domestic beasts. Other leading articles on the property systems of preliterate peoples similarly slight the topic. Richard Posner's *A Theory of Primitive Society* makes only scattered mention of domesticated animals, and Martin Bailey's valuable review of property rights among aboriginal peoples makes none. 42 These various depictions overlook a major form of prehistoric wealth.

C. The Importance of Livestock in Prehistory

The people of the late Stone Age prized livestock for many reasons. In his narrative, Blackstone observes that a domestic animal could serve as a dependable source of milk and meat. ⁴³ But members of some species also were capable of serving as beasts of burden and as sources of wool and leather. And the capacity of domestic animals to reproduce greatly enhanced their value as capital assets.

 $^{40.\} Harold\ Demsetz,\ Toward\ a\ Theory\ of\ Property\ Rights,\ 57\ Am.\ Econ.\ Rev.\ Papers\ \&\ Proc.\ 347\ (1967).$

^{41.} Demsetz's example suggests that the increasing scarcity of resources is conducive to the emergence of private property rights. Krier, by contrast, speculates that increasing scarcity might undermine property conventions by inducing some individuals to more aggressively pursue resources in the possession of others. Krier, *Evolutionary Theory*, *supra* note 2, at 152–56. If c—the costs of acting as a Hawk in Krier's Hawk-Dove game—remained constant as scarcity increased, this indeed would be likely. But scarcity might also provoke possessors to defend their holdings more fiercely, increasing c and deterring Hawklike behavior.

^{42.} Richard A. Posner, A Theory of Primitive Society, 23 J.L. & ECON. 1, 15 (1980) (discussing the lending of cattle in some African tribal societies); id. at 21 (discussing the custom of bride price, often calculated in cattle); Martin J. Bailey, Approximate Optimality of Aboriginal Property Rights, 35 J.L. ECON. 183 (1992).

^{43.} See supra text accompanying note 28.

In Neolithic, Bronze-Age, and Iron-Age societies, livestock commonly came to constitute a significant fraction of human wealth, especially in environments where grazing land was plentiful. In ancient Mesopotamia, tablets dating from the late third millennium BCE attest to robust sales of livestock,⁴⁴ and small farmers there are thought to have routinely owned flocks of sheep and goats, and sometimes a few cattle as well.⁴⁵ The Code of Hammurabi, proclaimed in Babylon c. 1750 BCE, includes thirty-one paragraphs that refer to livestock.⁴⁶ Because most Israelites were pastoralists, references to livestock pepper the *Book of Genesis*. It is said that "Abel kept flocks," that Abraham became "very wealthy in livestock," and that Jacob and Rachel, Jacob's favorite wife, both were experienced shepherds, as were their son Joseph and his many brothers.⁴⁷

Across the long sweep of property history, livestock continued to be central in most societies. In the twentieth century, in many areas of sub-Saharan Africa a new husband traditionally was obligated to pay a "bride price," measured in livestock, to the father of the bride. In the early nineteenth century, most American households were still engaged in agriculture and routinely owned farm animals. At that time, domesticated pigs famously roamed the streets of Manhattan. Through the first decade or two of the twentieth century, horses continued to be routine sights in cities.

By the twenty-first century, however, for most city dwellers in developed nations, sheep, goats, pigs, cattle, and horses are out of sight and also largely out of mind. Livestock now constitute less than 0.4% of wealth in the United States.⁵⁰ Contemporary scholars

^{44.} See Benjamin R. Foster, Commercial Activity in Sargonic Mesopotamia, 39 IRAQ 31, 36–37 (1977).

^{45.} J.N. POSTGATE, EARLY MESOPOTAMIA: SOCIETY AND ECONOMY AT THE DAWN OF HISTORY 159, 164 (1994).

^{46.} Laws of Hammurabi ¶¶ 7, 8, 35, 57–58, 224–25, 241–52, 254–56, 258, 261–65, 267–71, in Martha T. Roth, Law Collections from Mesopotamia and Asia Minor 71–142 (1995).

^{47.} Genesis 4:2, 13:2, 29:9, 31:4, 30:29-43, 37:2; 45:10, 47:17.

^{48.} See, e.g., Alan H. Jacobs, African Pastoralists: Some General Remarks, 38(3) ANTHRO-POLOGICAL Q. 144, 149 (1965) (indicating the amount of bride price, measured in numbers of live-stock, that various groups require); Christine Mary Venter, The New South African Constitution, 21 J. LEGIS. 1, 8–9 (1995).

^{49.} See Hendrik Hartog, Pigs and Positivism, 1985 WIS. L. REV. 899.

^{50.} In 2010, the total combined value of cattle, pigs, and sheep in the United States was \$85.8 billion. U.S. CENSUS BUREAU, 2012 STATISTICAL ABSTRACT 556, tbl. 870. In that year, the total value of household and nonprofit organization assets was \$24.2 trillion. *Id.* at 470, tbl. 722.

and teachers of property law thus have reason to pass over the rules of ownership of domestic animals. But those with a long historical perspective do not.

D. Sources of Indirect Evidence on Prehistoric Property Rights in Domestic Animals

The balance of this essay is devoted to the identification of the core issues of animal ownership and the presentation of educated guesses about how Neolithic people would have addressed those issues. These educated guesses are based on evidence marshaled from three social settings somewhat analogous to those of prehistoric peoples. The most probative sources of evidence are anthropological studies, mostly conducted in the twentieth century, of the practices of largely preliterate bands, tribes, and chiefdoms engaging in either pastoralism or hunting and gathering. These surviving groups are socially and developmentally somewhat similar to Neolithic societies but also hardly perfectly representative of Stone-Age bands and tribes. 51 A second group of sources of indirect evidence are early historical materials. The peoples of ancient Mesopotamia, Egypt, and Israel, for example, all left written and pictorial records that provide clues of their rules governing the ownership of animals. The property norms of the Hutterites, a vibrant Anabaptist sect with some 40,000 contemporary members, provide a third source of indirect evidence. Most Hutterites currently reside in the northern Great Plains of North America in separate rural colonies that have 60 to 250 members each. The Hutterites are pertinent because their members are religiously committed to "having all things in common," an inclination that many of the early domesticators of animals may have shared. Part III taps these three disparate sources of evidence to frame hypotheses about likely Neolithic norms governing property in livestock. Part IV makes use of the same three sources to suggest likely Stone-Age regimes for property in dogs. Dogs warrant separate discussion because they were the first animals to be domesticated and have special attributes, such as an inclination to bond with humans.

III. STONE-AGE NORMS GOVERNING PROPERTY IN LIVESTOCK

Zoological archaeologists, by examining buried bones and associated DNA, have recently amassed much evidence about when and where Neolithic people first tamed formerly wild species of animals. The first domestications of livestock appear to have been accomplished in the Fertile Crescent about 11,000 BP, when the bezoar was bred into the goat, and the mouflon into the sheep. ⁵² Over the course of the ensuing millennium or two, residents of the same region followed up by domesticating the wild boar into the pig and the aurochs into cattle. ⁵³

States didn't appear until many millennia later. Therefore, as Krier recognizes in *Evolutionary Theory*, bands and tribes initially would have had to rely entirely on informal norms to create and enforce property rights in livestock.⁵⁴ Members of a closely knit group, such as a band of hunter-gatherers, have good information about one another's conduct and also can expect that their continuing relationships will offer them ample opportunities to both informally reward

^{52.} See Melinda A. Zeder, Domestication and Early Agriculture in the Mediterranean Basin: Origins, Diffusion, and Impact, 105 Proc. NAT'L ACAD. SCI. U.S.A. 11,597, 11,598 (No. 33, Aug. 19, 2008); see also DIAMOND, supra note 17, at 141–42 (noting the exceptional diversity of the species of mammals then present in the Fertile Crescent).

^{53.} See Zeder, supra note 52, at 11598: see also T. Douglas Price & Ofer Bar-Yosef, Introduction to Symposium on the Origins of Agriculture, 52 CURRENT ANTHROPOLOGY S163 (Supp. 4, Oct. 2011); Melinda A. Zeder, The Origins of Agriculture in the Near East, 52 CURRENT ANTHROPOLOGY S221 (Supp. 4, Oct. 2011). Neolithic peoples undoubtedly had the intellectual capacity to engage in selective breeding. Cf. Genesis 30:29–43 (providing an extended account of Jacob's selective breeding of sheep and goats). Some animals, however, may have contributed to their own taming. On the process of self-domestication, see infra text accompanying notes 85–86.

^{54.} Krier points out that, contrary to the state-centered perspective of Jeremy Bentham, these property entitlements would not have been created or enforced by formally authorized lawmakers, but rather by decentralized norm-makers. Krier, *Evolutionary Theory, supra* note 2, at 143–46. He discusses game-theoretic accounts that support the spontaneous emergence of property conventions, which, once established, become largely self-enforcing. *Id.* at 151–57. In many contexts, it is likely that specific individuals would have driven the process of norm formation. In my parlance, these would have been norm entrepreneurs who proposed new property rules, and opinion leaders who promoted within the pertinent social group the most promising of the rules that the norms entrepreneurs had put forward. Both these types of innovators then would have been rewarded with enhanced social status for having helped create the valuable new norm. *See* Robert C. Ellickson, *The Market for Social Norms*, 3 AM. L. & ECON. REV. 1 (2001); *cf.* Krier, *Evolutionary Theory, supra* note 2, at 156 n.84 (citing sources on the dynamics of norm formation).

prosocial behavior and punish antisocial behavior.⁵⁵ A band member who violated a property norm would risk becoming the target of measured self-help actions by a property owner, negative gossip within the group, and perhaps formal condemnation by the group's elders.

A full-fledged system of informal private property in livestock entails an interlocking set of substantive norms, three of which warrant emphasis.⁵⁶

A. Customary Entities for the Ownership of Livestock

In the epigraph, Engels highlights the fundamental issue of who a Stone-Age owner of livestock conventionally would have been. To simplify, I consider only five possible candidates. The smallest and simplest ownership entity for livestock would have been a single individual. The next smallest would have been a family, that is, an intimate kinship group whose membership perhaps would extend somewhat beyond an adult couple and their children. Individual and family ownership both are forms of private ownership. The next larger candidate would have been a band, defined by Jared Diamond as "a few dozen individuals, many of them belonging to one or several extended families."⁵⁷ During the early Neolithic period, bands of hunter-gatherers are thought to have begun to increasingly ally into tribes, that is, local groups with hundreds of members. 58 Band ownership and tribal ownership are forms of communal ownership. the sort that Engels imagined was conventional for livestock in early prehistory. ⁵⁹ In the latest stages of the Neolithic age, there began to

 $^{55.\ \}mbox{Robert C.}$ Ellickson, Order Without Law: How Neighbors Settle Disputes $177{-}82\ (1991).$

^{56.} There are additional issues, such as the "fullness" of an owner's entitlements in an animal. See Frank I. Michelman, Ethics, Economics, and the Law of Property, in ETHICS, ECONOMICS AND LAW, NOMOS XXIV 3, 5 (J. Roland Pennock & John W. Chapman eds., 1982). If prehistoric norm-makers were to have conferred full entitlements, the owner of a hoofed animal would have been entitled to control its use (and eventual slaughter), freely transfer the animal (for example, by sale or inheritance), and order others not to touch the animal. Neolithic norm-makers might have carved out exceptions to this full set of entitlements. A band's norms, for example, might have forbidden an owner from torturing an animal, banned a gift of live-stock to a member of an enemy tribe, and entitled any member to pet a tame animal belonging to another band member.

^{57.} JARED DIAMOND, THE WORLD UNTIL YESTERDAY 14 (2012).

^{58.} *Id.* at 14–15.

^{59.} See supra note 1 and accompanying text.

appear *hierarchical institutions*, such as the palaces and temples of early Mesopotamia. An institution of this sort would have become a fifth candidate to serve as the conventional owner of a domestic animal.

The merits and demerits of individual ownership, as opposed to communal ownership, have been much discussed. ⁶⁰ The key advantage of individual ownership is that it is a cheap method of creating sharp incentives for diligent management. The owner of a pregnant cow, for example, has a strong incentive to stay up during the wee hours of the night to help it calve. When an ownership group has multiple members, by contrast, each of them might be tempted to free-ride on such an occasion. In a family infused with kinship altruism, this free rider risk commonly could be largely overcome. ⁶¹ Ownership of an animal by a band or tribe, by contrast, poses more challenging collective action problems. Communal owners may succeed in using norms, contracts, or other governance devices to overcome these challenges, but those measures are likely to entail transaction costs greater than those entailed under a simpler system of private ownership.

But private ownership of a grazing animal has downsides as well. It concentrates risks, while group ownership helps to spread risks. ⁶² In some contexts, group ownership also might promote interactions that would enhance generalized trust among group members. Members of a Neolithic band, when choosing a customary form for the

^{60.} See, e.g., Demsetz, supra note 40; Robert C. Ellickson, Property in Land, 102 YALE L.J. 1315 (1993). Garrett Hardin has famously illustrated the potentially negative interplay that can arise when resources used in combination are held in different ownership forms. See Garrett Hardin, The Tragedy of the Commons, 162 SCIENCE 1243 (1968). Hardin's basic scenario features herdsmen who individually own cows but bring them into a pasture that they own communally. Hardin imagines that each herdsman would seek to maximize his cows' consumption but free-ride on performing collective duties to conserve the pasture. In Hardin's scenario, if the cows and pastures had both been owned communally, the tragedy might have been not overgrazing, but undergrazing arising from shirking on shepherding duties.

^{61.} Kin-based altruism tends to reduce, but not entirely eliminate, collective action problems that arise between two or more owners. As a result, individual ownership tends to be more efficient than ownership by a family, particularly an extended family. See Krier, Evolutionary Theory, supra note 2, at 142 n.11, 144–45. Anthropologists who study preliterate groups seldom distinguish sharply between individual and family ownership of a domesticated animal, perhaps because the members of a closely knit family are themselves commonly willing to leave the matter unresolved. For example, when a contemporary family household brings in a dog as a pet, the family members may not formally specify which of them owns the dog, but instead decide the dog's care and fate by consensus.

^{62.} See Ellickson, supra note 60, at 1341-44.

ownership of livestock, would have had the brainpower to balance these countervailing considerations.

An archaeological dig is unlikely to turn up direct evidence about conventional livestock-owning entities in early Neolithic times. The best alternative, then, is to consult the three sources of indirect, but suggestive, evidence. Investigations by anthropologists, historians, and others have produced a mountain of information on the customary ownership entities of current-day livestock-owning groups that have become literate only during the past century or two. As a shortcut, I report ownership practices in a geographically scattered handful of some of the better known of these societies. Among the Maasai, who herd cattle on communal lands in the Great Rift Valley of Kenya and Tanzania, cattle customarily are owned either by individuals or intimate family units. 63 Individual or family ownership of livestock similarly is customary among the Saami, who herd reindeer in Lapland, 64 and among the Bedouin of the desert Near East. 65 As early as 1700, the Navajo of the American Southwest were heavily engaged in the herding of sheep, horses, and cattle, species that had been introduced by Spanish explorers. 66 In general, Navajo customs have supported either individual or family ownership of livestock.⁶⁷ The customs of Mongolian herders have been

^{63.} Robert A. Blewett, Property Rights as a Cause of the Tragedy of the Commons: Institutional Change and the Pastoral Maasai of Kenya, 21 E. ECON. J. 477, 478 (1995); Joseph Kieyah, Indigenous Peoples; Land Rights in Kenya: A Case Study of the Maasai and Ogiek People, 15 PENN. St. L. Rev. 397, 400 (2007). Like many pastoralists, a Maasai family commonly pools its animals in a common herd to facilitate corralling and the supervision of grazing, but retains ownership rights over them. Allen H. Jacobs, Maasai Pastoralism in Historical Perspective, in PASTORALISM IN TROPICAL AFRICA 406, 416 (Théodore Monod ed., 1975).

^{64.} Mattais Ahrén, Indigenous Peoples' Culture, Customs, and Traditions and Customary Law—The Saami People's Perspective, 21 ARIZ. J. INT'L & COMP. L. 63, 69 (2004); Robert P. Wheelersburg, New Transportation Technology Among Swedish Sami Reindeer Herders, 24(2) ARCTIC ANTHROPOLOGY 99, 103 (1987).

^{65.} EMRYS L. PETERS, JACK GOODY & EMANUEL MARX, THE BEDOUIN OF CYRENAICA: STUDIES IN PERSONAL AND CORPORATE POWER 52, 175, 238 (1991).

^{66.} JAMES F. DOWNS, ANIMAL HUSBANDRY IN NAVAJO SOCIETY AND CULTURE 5 (1964).

^{67.} There is little published work on Navajo livestock ownership practices prior to the late nineteenth century. For evidence of Navajo practices thereafter, see DOWNS, *supra* note 66, at 62–66, 91 (describing mid-twentieth-century customs); PETER IVERSON, THE NAVAJO NATION 24 (1981) (reporting an assertion, in 1928, by an elderly male Navajo that his wife, children, and grandchildren all had an ownership interest in his large herd of sheep); Eric Henderson, *Navajo Livestock Wealth and the Effects of the Stock Reduction Program of the 1930s*, 45 J. ANTHROPOLOGICAL RES. 379, 380 (1989) (describing family ownership of sheep, horse, goats, and cattle in the late nineteenth century).

similar, except during the decades when Soviet rulers ordered them to collectivize their herds.⁶⁸ The consistency of these ownership patterns supports the inference that Neolithic pastoralists would have been far more likely to have owned livestock privately at the level of the individual or family, than communally at the level of the band or tribe.

In the earliest civilizations whose written and pictorial records survive, livestock appear to have been customarily owned either by individuals, families, or hierarchical organizations. In Bronze Age Mesopotamia, which several millennia previously had been the site of the first domestications of livestock, most small farmers owned flocks of sheep and goats, and some urban families also invested in herds. ⁶⁹ A section of the Code of Hammurabi sets out different rules for the compensation of an individual owner of livestock, as opposed to an institutional owner, such as a temple or palace. 70 In ancient Egypt, cattle, sheep, and other herd animals are commonly portrayed in tomb paintings. Shepherds typically are depicted as field hands working for a hierarchical owner, for example, a pharaoh, noble, or temple. In ancient Israel, by contrast, passages in *Genesis* imply that flocks generally were individually owned.71 In none of these three ancient societies were livestock customarily owned in communal fashion by members of a band or tribe.

In a Hutterite settlement, by contrast, cattle, pigs, and other farm animals are collectively owned. Adult male colony members periodically elect a particular member to serve as the dairy-boss, hog-boss, and so on. The Hutterites have reduced the risks of free riding that communal ownership typically poses. Hutterites follow rituals that help insulate their members from outside influences. They speak a German

 $^{68.\} Maria\ E.\ Fernandez-Gimenez, \textit{The Role of Mongolian Nomadic Pastoralists' Ecological Knowledge in Rangeland Management,}\ 10\ Ecological\ Applications\ 1318,\ 1319-20\ (2000).$

^{69.} See Postgate, supra note 45, at 159.

^{70.} Laws of Hammurabi, supra note 46, at \P 8 ("If a man steals an ox, a sheep, a donkey, a pig, or a boat [goat?]—if it belongs either to the god or to the palace, he shall give thirtyfold; if it belongs to a commoner, he shall replace it tenfold. . . ."). On temple and palace ownership of livestock in Mesopotamia, see POSTGATE, supra note 45, at 160, 164.

^{71.} See supra text accompanying note 47.

^{72.} See Hanna Kienzler, Communal Longevity: The Hutterite Case, 100(1) ANTHROPOS 193, 203 (2005) (describing how a colony assigns responsibilities for the raising of its communal cattle, sheep, hogs, chickens, ducks, and turkeys).

dialect and gather daily as a group for prayers and meals. As a result of the thickness of the social ties in the sect, a cattle-boss, for example, who failed to act as a conscientious agent for the group would likely suffer the sting of negative social sanctions.

The three sources of indirect evidence support several grounded suppositions about Neolithic patterns of livestock ownership. Prehistoric groups lived in highly diverse physical and social environments. The anthropological and historical sources suggest that most early pastoral groups customarily would have favored either individual or family ownership of livestock. But some groups probably proceeded otherwise. The emergence of hierarchical institutions during the late Neolithic period suggests that in some early herding groups, a "big man" and his allies might have wrested ownership of the group's herds. Finally, the Hutterites' success in owning livestock communally suggests that some Neolithic bands and tribes likely would have pursued that option, particularly in high-risk settings. To implement communal ownership these groups would have had to devise, as the Hutterites have, institutional mechanisms for deterring members from the shirking of chores essential for the maintenance of the herd.

B. Norms Permitting the Capture of a Wandering Animal Whose Owner Had Failed to Signal Was Owned

Prior to the initial domestications of livestock during the early Neolithic period, a hunter who saw a boar in a field knew that the beast had to be wild and hence up for grabs. Domestication made hunting more complicated. Thereafter, a hunter about to slay an apparent wild boar had to be concerned that a putative owner would show up and demand restitution for the loss of a domestic pig.

Members of a prehistoric band needed to invent norms to resolve a dispute of this sort arising between two of their members. It is implausible that they would have protected an owner's rights only as long the owner retained the domestic animal in custody, for example, on a leash or behind a fence. After being set loose, many domestic animals are inclined to return to their owners on their own initiative, and many others can readily be rounded up. In an era when fencing costs typically were prohibitively high, a band's norms thus would not have specified that loss of custody of a domestic

animal automatically resulted in the relinquishment of an ownership claim to it. But a blanket rule favoring owners in these disputes would have placed hunters in a quandary. How could a hunter know whether an animal in a field was a huntable boar, as opposed to another's domestic pig that was to be left alone?

Neolithic bands likely devised rules that would have incentivized both owners and hunters to take cost-justified actions to reduce the probability that a hunter would kill or capture a roaming animal that an owner had temporarily released. A plausible general norm would sustain an owner's claim to an unloosed animal only if, under the circumstances, the hunter knew or should have known that the animal likely had an owner who had temporarily set it loose. This norm would have incentivized an animal owner to provide visual cues of ownership that a conscientious hunter could recognize. At least four different types of cues—what Krier has referred to as "unambiguous signs of possession" — were available to Stone-Age animal owners. First, after domestication, the appearance of a species of animals typically changes. Domestic pigs, for example, are physically distinguishable from wild boars. Suppose that a member of a pastoral band, while hunting, were to have killed an animal that looked like a specimen of a domestic species traditionally herded by the band's members. If so, the band's norms likely would have required the hunter to bear the risk of having to indemnify the band member who owned the slain animal. This approach would have encouraged owners of livestock to engage in selective breeding to change how their animals looked.⁷⁴ Second, the suggested norm would have induced an owner to place an artificial marking, such as a brand, on an ungulate. 75 Stone-Age paintings in southwest Europe

^{73.} Krier, Evolutionary Theory, supra note 2, at 158; see also CAROL M. ROSE, PROPERTY AND PERSUASION: ESSAYS ON THE HISTORY, THEORY, AND RHETORIC OF OWNERSHIP 267–304 (1994); Robert C. Ellickson, The Inevitable Trend Toward Universally Recognizable Signals of Property Claims, 19 WM. & MARY BILL RTS. J. 1015 (2011).

^{74.} Partly because owners of American bison have not succeeded in breeding them to look different from wild bison, they risk bearing the loss of an owned bison when it is on the loose. See State v. Crenshaw, 22 Mo. 457 (1856) (holding criminal statute forbidding the killing of another's cattle did not extend to the killing of another's buffalo). But cf. Ulery v. Jones, 81 Ill. 403 (1876) (remanding for new trial a tort claim for the killing of a trespassing buffalo that the killer knew belonged to his neighbor). See generally Dean Lueck, The Extermination and Conservation of the American Bison, 31 J. Legal Stud. S609 (2002).

^{75.} The Saami cut a distinctive ear-notch to brand a reindeer. *See* Wheelersburg, *supra* note 64, at 103. A collar is another unmistakable signal of animal ownership. *Cf.* Morewood

indeed depict brands on bison,⁷⁶ and wall paintings in Bronze Age Egypt portray field hands branding cattle.⁷⁷ Third, the hypothetical norm would have encouraged an owner to tame an animal so that its behavior would signal comfort in the presence of humans.⁷⁸ Fourth, the presence of an animal in a habitat where it would not normally have been found could have been regarded as a cue to a hunter that an owner had brought it there.

C. Norms Governing the Ownership of Offspring

Because hunter-gatherers typically acquired wild animals by slaying them, they had no need to devise norms to resolve the ownership of animal offspring. Much of the value of a domesticated animal, by contrast, lies in its potential to bear or father young. In virtually every legal system, the owner of a domesticated female animal is deemed also to own that animal's offspring.⁷⁹ Although direct evidence of how Stone-Age groups resolved this issue is unlikely ever to be uncovered, the evident merits of this "rule of increase" make it highly likely that members of a Stone-Age band also would have adopted it.⁸⁰ Awarding offspring to the owner of the mother animal sharply incentivizes the owner to care for both the mother and her

v. Wakefield, 133 Mass. 240 (1882) (holding that statutory provision compelled rejection of tort claim for killing of plaintiff's uncollared dog).

^{76.} Gerald Ruston, On the Origin of Trademarks, 45 Trademark Rep. 127, 129 (1955).

^{77.} Ancient Egyptian tomb paintings portray the branding of cattle, and archaeologists have unearthed a branding iron thought to be from Thebes c. 1550 BCE. Bronze Branding Iron, BRITISH MUSEUM, http://www.britishmuseum.org/explore/highlights/highlight_objects/aes/b/bronze_branding_iron.aspx (last visited July 16, 2013); see also Sidney A. Diamond, The Historical Development of Trademarks, 65 TRADEMARK REP. 265, 267 (1975).

^{78.} At least as far back as the Institutes of Justinian, legal systems have tended to protect the entitlements of an animal's owner as long as the animal retains the inclination of voluntarily returning to the owner (animus revertendi), as opposed to escaping into the wild. J. INST. 2.1.15; see also Mullett v. Bradley, 53 N.Y.S. 781 (1898) (holding that sea lion that had escaped captor and swum 70 miles lacked animus revertendi); 2 BLACKSTONE, supra note 25, at *392.

^{79.} See Jesse Dukeminier & James E. Krier, Property 127–28 (2d ed. 1988); Felix Cohen, Dialogue on Private Property, 9 Rutgers L. Rev. 357, 366 (1954) (asserting universality of the rule of increase); Thomas W. Merrill, Accession and Original Ownership, 1 J. Legal Analysis 459, 464–65 (2009). English decisions, however, awarded baby swans in equal shares to the owner of the cock and the owner of the hen, apparently on account of swans' strict monogamy. Id. at 465 n.6.

^{80.} See Cohen, supra note 79, at 366–68 (brilliantly employing dialogue to demonstrate the efficiency and fairness of the rule).

offspring during and after birth. An alternative rule that would have entitled the owner of the sire to a half share of the offspring commonly would have sparked disputes over paternity, complicated animal husbandry, and, in some applications, separated young animals from their mother and her milk.

D. The Form and Domain of Ownership Norms

A utilitarian bundle of norms of animal ownership would have served to maximize the aggregate value, for the members of a Stone-Age band, of the potentially conflicting activities of hunting and livestock-raising. In devising their norms, prehistoric people would have been wise to focus not only on the incentives of owners and hunters, but also on the ease of rule application. In some contexts, this might have led to the emergence of relatively mechanical norms, such as the rule of increase.⁸¹

If the members of a closely knit band were to have created any of the ownership norms discussed, they would have been readily able to enforce them against one other. Some herd animals graze widely. Band members, by allying themselves with other bands to form a tribe, would have been able to extend the sway of a set of ownership norms over a broader territory and thereby reduced the need to actively shepherd to prevent rustling. In some instances, a band or tribe's livestock ownership norms might even have had some binding effect on its enemies. Members of an enemy group might have anticipated that the killing or capture of a recognizably domesticated animal would have enhanced the risk that the animal owner's group would retaliate in some fashion.

When devising norms to govern the ownership of livestock, members of a prehistoric band would not have needed to start from scratch, but instead applied a template of property rules they had developed to handle an analogous challenge. The taming of a physically smaller animal, in fact, had previously put many prehistoric bands to a similar test.

^{81.} Cf. Robert C. Ellickson, The Entitlements of Unallied Hunters After a Sequential Capture, 63 U. TORONTO L.J. 126, 132–33 (2013) (providing examples of mechanical norms of animal capture honored by nineteenth-century whalers).

^{82.} See supra text accompanying notes 54-55.

IV. STONE-AGE PROPERTY IN DOGS

Zoological archaeologists have recently come to a consensus that the first domesticated species of animal was the dog. Gray wolves, the source species, are asserted to have first evolved into dogs in East Asia c. 15,000 BP, during the latter stages of the most recent Ice Age. The peoples of the Fertile Crescent were keeping dogs soon thereafter, long before their transition to herding and agriculture. The solution of the solution of the second se

Dogs evolved as a result of both self-domestication and selective breeding. Wild members of any species vary in skittishness when near humans. Scientists hypothesize that relatively docile grey wolves began to follow hunter-gatherer bands in order to scavenge killed prey, and thereby became ever more accustomed to human contact. Humans then could have adopted some of the pups of the tamest of their hangers-on. A wolf pup acquires its strongest social bonds when it is between three and eight weeks old and during that period would have been relatively easy to socialize. Complementing this self-selection, Ice-Age people could have engaged in selective breeding, for example, by culling out for survival the wolf-dog pups that promised to be relatively trainable.

A. Why Dogs Were Valued

Hunter-gatherers had numerous uses for dogs. ⁸⁹ A dog could serve as a sentry that barked when hostile people or animals were approaching, and members of many breeds were able to assist in hunting. Dogs also could have served as bed-warmers, companions, and, in

^{83.} Peter Savolainen et al., Genetic Evidence for an East Asian Origin of Domestic Dogs, 298 SCIENCE 1610 (2002).

^{84.} Id.

^{85.} Carlos A. Driscoll & David W. Macdonald, *Top Dogs: Wolf Domestication and Wealth*, 9 J. BIOLOGY 10, 10 (2010); Nicholas Wade, *From Wolf to Dog, Yes, but When?* N.Y. TIMES, Nov. 22, 2002.

^{86.} See Douglas Brewer, Terence Clark & Adrian Phillips, Dogs in Antiquity. Anubis to Cerberus: The Origins of the Domestic Dog 22 (2001).

^{87.} Id.

^{88.} Over the course of over forty years, Russian biologists in a renowned experiment selectively bred a tame variety of silver fox. See Lyudmila N. Trut, Early Canid Domestication: The Farm Fox Experiment, 87 AM. SCIENTIST 160 (Mar./Apr. 1999); see also Wade, supra note 85.

^{89.} See Wade, supra note 85.

emergencies, sources of meat. ⁹⁰ The earliest settlers of North America who crossed the Bering Strait land-bridge brought dogs with them, evidence of how highly they valued their canines. ⁹¹ And Neolithicera people were far more likely to bury a dog, than any other animal, in ritualistic fashion, not uncommonly in the same grave as humans. ⁹² After agricultural and pastoral activities took root, prehistoric people also could have used members of most breeds to assist in the policing of land boundaries, and, of a few breeds, in the herding of livestock.

B. Norms of Property in Dogs

A system of property in dogs requires the resolution of issues similar to those that must be resolved for a system of property in livestock. What entity or entities would Stone-Age people have customarily used for ownership of a dog? The sources of indirect evidence all suggest that, in a prehistoric setting, a dog would have been even more likely than a hoofed animal to have been owned privately by an individual or family, and not communally by a band or tribe. A dog is more disposed than other animals to bond with a single human master. Among the famously egalitarian Hadza and !Kung San,

^{90.} See PINKER, supra note 15, at 458 ("[H]alf of the traditional cultures that keep dogs as pets kill them, usually for food.").

^{91.} See Wade, supra note 85.

^{92.} On dog burials, see DARCY F. MOREY, DOGS: DOMESTICATION AND THE DEVELOPMENT OF A SOCIAL BOND 150–87 (2010) [hereinafter MOREY, DOGS]; Robert Losey et al., Canids as Persons: Early Neolithic Dog and Wolf Burials, Cis-Baikal, Siberia, 30 J. ANTHROPOLOGICAL ARCHAEOLOGY 174 (2011); Darcy F. Morey, Burying Key Evidence: The Social Bond Between Dogs and People, 33 J. ARCHAEOLOGICAL SCI. 158 (2006) (including, at 164, three references to the "owner" of a prehistoric dog).

^{93.} See supra text accompanying notes 52–79. For example, Stone-Age norms probably would have included the rule of increase, which would have conferred ownership of newborn puppies on the owner of the mother dog.

^{94.} Texts suggest that Ancient Egyptian villagers despised feral dogs, and it is asserted that they still do today. Brewer, Clark & Phillips, supra note 86, at 44. In some contemporary contexts, however, residents of a village may spontaneously contribute to the sustenance of a stray or feral dog. See Adam R. Boyko et al., Complex Population Structure in African Village Dogs and Its Implications for Inferring Dog Domestication History, 106 Proc. NAT'L ACAD. SCI. U.S.A., no. 33, at 13903 (Aug. 18, 2009). Absent an affirmative act of adoption by an individual or family, however, these acts of charity do not give rise to a claim of ownership, for example, rights to manage or sell the dog. Cf. Shawn Gorman & Julie Levy, Note, A Public Policy Toward the Management of Feral Cats, 2 Pierce L. Rev. 157, 157 (2004) (asserting that 9–12 percent of U.S. households feed free-roaming neighborhood cats).

^{95. &}quot;A faithful $\log\ldots$ loves its master much more that it loves itself and certainly more than its master ever can be able to love it back." Konrad Lorenz, Forward, in The WILD

two tribes that historically have engaged in hunting and gathering, dogs are owned by either an individual or a family. He same pattern is customary among the Maasai, the Saami, the Bedouin, the Navajo, the Navajo, and Mongolian pastoralists. He Fragments of historical evidence suggest that ancient Mesopotamians typically owned dogs individually. Some ancient Egyptian paintings portray a dog sitting beneath the chair of a seated person, a clue that ownership likely was individual. Perhaps the most telling evidence comes from Hutterite communities, whose present-day residents are unswervingly committed to communal ownership of livestock. Among the Hutterites, dogs typically are owned individually.

To incentivize the domestication of a Lupus into a Rover, prehistoric people had to provide Rover's owner with methods of authoritatively signaling to others in the band that Rover, while roaming,

CANIDS vii, x (Michael W. Fox ed., 1975); see also MOREY, DOGS, supra note 92, at 188–207 (discussing the bonding inclinations of dogs).

96. See Nicholas Blurton Jones, Kristen Hawkes & James O'Connell, Hadza Grandmothers as Helpers, in GrandmotherHood 160, 162 (Eckart Voland ed., 2005) (mentioning that a Hadza boy "had two dogs for several years"); RICHARD B. LEE, THE !KUNG SAN: MEN, WOMEN, AND WORK IN A FORAGING SOCIETY 143–44 (1979) (stating that "usually a man owns one or two dogs" and describing an owner's rejection of an offer to buy the owner's hunting dogs).

97. See AGGREY AYUEN MAJOK & CALVIN W. SCHWABE, DEVELOPMENT AMONG AFRICA'S MIGRATORY PASTORALISTS 71 (1996) (referring to Maasai women's pet dogs).

98. See Myrdene Anderson, The Saami Reindeer-Breeders of Norwegian Lapland, 73 Am. Scientist 524, 530 (1985).

99. See Joseph John Hobbs & Fujiyo Tsunemi, Soft Sedentarization: Bedouin Tourist Stations as a Response to Drought in Egypt's Eastern Desert, 35 Hum. Ecology 209, 211, 219 (2007).

100. See Hal L. Black & Jeffrey S. Green, Navajo Use of Mixed-Breed Dogs for Management of Predators, 38(1) J. RANGE MGMT. 11 (1985) (indicating that contemporary Navaho own dogs at the family or individual level).

101. See NATASHA FIN, LIVING WITH HERDS: HUMAN-ANIMAL COEXISTENCE IN MONGOLIA 213–14 (2011) (stressing ties between a dog and a particular family).

102. See Edmund I. Gordon, Sumerian Animal Proverbs and Fables: "Collection Five" (Conclusion), 12(2) J. CUNEIFORM STUD. 43, 56–57 (1958) (citing proverbs that refer to the "master" of a dog). See generally Brewer, Clark & Phillips, supra note 86, at 49–80.

103. See Henry S. Fischer, Ancient Egyptian Names of Dogs and Other Animals, 12 METROPOLITAN MUSEUM J. 173 (1977) (reproducing two paintings of this ilk). See generally Brewer, Clark & Phillips, supra note 86, at 28–48.

104. See supra note 72 and accompanying text.

105. See Rod A. Janzen & Max Stanton, The Hutterites of North America 165 (2010) (mentioning a man's pet Pekingese dog); see also Peter Tschetter, Growing Up in a Hutterite Colony 49–50 (2012) (describing how a man who owned a dog complied with colony financial manager's order that all dogs be killed because they had been harassing sheep).

was not to be captured or killed. This required a revolutionary innovation in property norms. Before the first wolves had been domesticated into dogs, a Stone-Age hunter who saw any animal on the loose typically could have been confident that it was up for grabs. 107 By conspicuously feeding and training a particular wolf-dog, a wouldbe owner could have signaled to other band members that they should regard that animal to be private property. In addition, an aspiring owner might have provided visual cues to other band members, such as an ear-notch, primitive collar, or trained pattern of tame behavior. Moreover, the earliest owners of wolf-dogs might have engaged in selective breeding, which eventually would have changed the physical appearances of their animals. Thereafter, a hunter considering seizing or slaying a roaming animal with a doglike appearance would anticipate that band mates, in the event of an ownership dispute, would apply norms tailored to the ownership of a domestic animal, not a wild one.

CONCLUSION

In the passage quoted in the epigraph, Friedrich Engels imagined that the members of an ancient tribe or band would have initially owned their herds and flocks communally but later uniformly vested ownership of livestock in "heads of families." Engels's narrative is fanciful in several respects. In light of the wide variations among human settings, it is inconceivable that patterns of livestock ownership would have evolved everywhere in the same sequence. Second, Engels's notion that band or tribal ownership of livestock would have been customary during the earliest period of domestication is implausible. Members of some Neolithic bands likely would have endeavored to own their hoofed animals communally. But it is telling that the members of contemporary nomadic herding groups have, for as far back as historical sources disclose, overwhelmingly rejected that option and instead owned livestock as individuals or families. 109

^{106.} See supra text accompanying notes 73-78 (analyzing this challenge when livestock

^{107.} Stone-Age norms, however, might have prohibited a hunter from capturing or killing a wild animal that a fellow band member had either been chasing or caught in a trap. Cf. Pierson v. Post, 3 Cai. 175 (N.Y. Sup. Ct. 1805).

^{108.} See supra text accompanying note 1.

^{109.} See supra notes 63-68 and accompanying text.

And how might have Engels imagined that members of a Stone-Age band would have owned their dogs, a small element of their means of production? All sources of indirect evidence suggest that dogs during that period would virtually never have been owned communally by an entire band, but instead privately by a family or individual. 110 As it happens, when Engels was a boy, his family owned a beloved dog. Mira, and at age 21 he acquired one of his own, Namenloser. 111 And Jean-Jacques Rousseau, despite his abstract concerns that private property regimes tend to foster inequality and status-seeking, was himself particularly devoted to the dogs that he owned in succession. The authors of the biography, Rousseau's Dog, feature two, Turc and Sultan. 112 Like Engels and Rousseau, staunchly egalitarian groups such as the !Kung San and the Hutterites have ended up opting for private ownership of dogs. 113 Might not the people of the Neolithic era have done the same? And, after they had first domesticated livestock, adopted a similar ownership regime for their hoofed animals as well?

^{110.} See supra notes 96-105 and accompanying text.

^{111. &}quot;I now have a dog whom I got from August Bredt of Barmen when he left here. It's a handsome young spaniel, much bigger than our dear Mira and quite crazy." Letter from Friedrich Engels to his sister Marie Engels (Aug. 8, 1842), available at http://www.marxists.org/archive/marx/works/1842/letters/42_08_08.htm.

^{112.} DAVID EDMONDS & JOHN EIDINOW, ROUSSEAU'S DOG: TWO GREAT THINKERS AT WAR IN THE AGE OF ENLIGHTENMENT 33 (2007) (describing Rousseau's devotion to Turc); *id.* at 2–3 (recounting Rousseau's travel with his "beloved dog" Sultan when he exiled himself in England in 1766 under the sponsorship of David Hume); *see also* William Kessen, *Rousseau's Children*, 107 DAEDALUS 155, 156 (Summer 1978). Rousseau was far more interested in dogs than children. He ordered his longtime companion, Thérèse Le Vasseur, to abandon each of their five newborns at a foundling hospital. EDMONDS & EIDINOW, *supra*, at 11–12.

^{113.} See supra notes 96 & 105 and accompanying text.

EVOLUTION AND ENVIRONMENT IN THE PROPERTY SCHOLARSHIP OF JAMES KRIER

CAROL M. ROSE*

I have known Jim Krier since I started teaching law in 1978. We were both at Stanford at the time, and we were both new there too, but unlike me, Jim was already a tenured professor, coming in from UCLA.

I have to say that my experience with Jim was quite mixed. In one way, he was a real menace. He was one of two people (the other was Lawrence Friedman) beside whom I could not sit in a faculty meeting. Both of them had the habit of dropping acerbic but hilarious asides about the proceedings, and as a very junior faculty member, I just could not afford to get the giggles. So I got into the habit of waiting until Jim and Lawrence had both taken a seat, and then plopping down somewhere else, next to some more sober person.

That was the menace side. The other side was the education I got from watching and listening to Jim at faculty workshops. Stanford had then and still has now a lot of very smart faculty members. But I never heard anyone rip right into the center of an argument the way Jim did, exposing the weaknesses or pointing out the strengths of what we all were hearing. It was a revelation to me. I have heard him do it again many times in subsequent years, after we both went on to other law schools but came together at conferences. In fact, although we were never colleagues again, I have seen a good deal of Jim at meetings and confabs for what I have come to call the Property Mafia, many of whose members have received Brigham-Kanner prizes or have been on panels for the recipients.

To me, the most memorable of Jim's conference performances occurred at a conference that was held at the University of Colorado under the auspices of a foundation for biological and social research. There were a number of sociologists, anthropologists, and biologists on the panels. The idea seemed to be to convince property and environmental law teachers that we should all become devotees of

^{*} Ashby Lohse Professor of Water and Natural Resource Law, University of Arizona Rogers College of Law; Gordon Bradford Tweedy Professor of Law and Organization (emer.), Yale Law School; J.D. Univ. of Chicago, 1977; Ph.D. Cornell Univ., 1970.

sociobiology, and that we should recognize that our legal as well as other institutions were more or less determined by an evolutionary biology that was dominated by selfish genes. Not surprisingly, the law teachers soon became quite restive with what sounded to us like something out of Herbert Spencer's survival of the fittest. All practices seemed to be treated as the natural and inevitable consequences of evolutionary biology, including social injustices, inefficiencies, and inequities that many of us thought were not a matter of inexorable nature at all, but were rather more contingent and capable of change.

One of our lecturers was giving the standard rap that likened institutional patterns to evolutionary changes in organisms, whereby institutions mimic organisms by selecting for evolutionary fitness. Among other things, the speaker had to confront some unused or dysfunctional features of the organisms themselves, like the human appendix or the panda's thumb. His explanation was that these were merely leftovers or failed experiments—a set of aberrations on the path to reproductive success. Jim got up and said, "You know, this really doesn't work. Right, the panda's evolution may have given it some appendage that is irrelevant to its long-term survival. But we don't think there is anything the matter with the animal. We think there is something the matter with the theory." The house burst into applause. The obvious implication was that if the theory could not fully explain the panda's body, it was not going to explain social institutions fully either.

I want to come back to Jim's rather complicated relationship to evolutionary theories, but first I would like to mention again some of his truly stellar achievements in property law. There is of course the casebook he pioneered with the late Jesse Dukeminier. Since its appearance, this book has transformed property teaching in the United States, and over a longer run it has transformed property scholarship. The reason for its success is that it dragged property teaching out of a relentless concentration on categorization, and instead convinced both teachers and students that the subject has some real intellectual content. Some of those students have attended Brigham-Kanner conferences, and they and others form a modern

^{1.} Jesse Dukeminier & James E. Krier, Property (1981). The casebook has now gone through seven editions, the seventh (2010) including new editors Greg Alexander and Michael Schill.

generation of property scholars who would never have pursued the subject of property if they had not seen how engaged it can be with modern scholarship—not only with law and economics but also with legal history, art and architecture, and with just plain goofball human nature. Dukeminier and Krier were not the very first in the transformation of property teaching—I think of the casebooks of the late Curt Berger, ² as well as Lance Liebman's foray with Charles Haar ³—but it was to first to systematize that transformation.

The casebook was also by no means Jim's first contribution to property law. I am not a person who thinks that early work always forecasts the whole range of later scholarly interests, but still, I know that there are sometimes some early glimmers. I think that is true in Jim's early work too. I specifically asked the 2012 Brigham-Kanner conference organizers to include some of Jim's environmental work, and some of this came early in his academic career. Here he was an early proponent of the idea of applying property concepts to environmental controls, building on the work of the Canadian economist J. H. Dales. I was also interested to see how he, like Bob Ellickson, was very quick to explore the applications of Guido Calabresi's work on "liability rules." Jim cited Calabresi's opening salvo on the topic even before the appearance of Calabresi's now-iconic 1972 article with Douglas Melamed, One View of the Cathedral, an article that famously distinguished "liability rules" from "property rules". And of course some of Jim's later work again grappled with the property

^{2.} Curtis J. Berger, Land Ownership and Use (1968).

^{3.} CHARLES M. HAAR & LANCE LIEBMAN, PROPERTY AND LAW (1977).

^{4.} J. H. DALES, POLLUTION, PROPERTY AND PRICES (1968). Jim cited and worked with Dales's analysis in several of his early environmental articles, among others *The Pollution Problem and Legal Institutions: A Conceptual Overview*, 18 UCLA L. REV. 429 (1971); *Environmental Watchdogs: Some Lessons from a Study Council*, 23 STAN. L. REV. 623 (1971); *Resource Allocation, Information Cost, and the Form of Government Intervention*, 13 NAT. RESOURCES J. 89 (1973) (with W. David Montgomery); *The Irrational National Air Quality Standards: Macro- and Micro-Mistakes*, 22 UCLA L. REV. 323 (1974).

^{5.} Guido Calabresi, Transaction Costs, Resource Allocation and Liability Rules—A Comment, 11 J. L. & ECON. 67 (1968); Guido Calabresi & Douglas Melamed, Property Rules, Liability Rules and Inalienability: One View of the Cathedral, 85 Harv. L. Rev. 1089 (1972). Jim cited Calabresi's earlier article prominently in The Pollution Problem and Legal Institutions: A Conceptual Overview, 18 UCLA L. Rev. 429, 436 (1971). Bob Ellickson also used Calabresi and Melamed's formulation in an early article: Robert C. Ellickson, Alternatives to Zoning: Covenants, Nuisance Rules, and Fines as Land Use Controls, 40 U. Chi. L. Rev. 681 (1973).

rule/liability rule distinction. Fin's environmental law casebook with Dick Stewart is still one of the best ever produced, even though environmental law has taken many new directions since the casebook's original publication. As Jim told me with his characteristic pithiness, he was bailing out of the environmental casebook because he felt himself turning into a chronicler of minuscule regulatory changes.

Now I am going to come back to the topic of evolution in Jim's work. Somewhere in those early years, Jim encountered Harold Demsetz's short but important essay, Toward a Theory of Property *Rights.* For those who don't know this piece, it is an evolutionary story, more or less, about the ways that property rights evolve when it is worth the effort to create them. The piece keys off the historical example of the colonial era's fur trade in the Hudson Bay area, when European buyers began to purchase beaver pelts from native hunters. In the past, the native groups had only used these furs for subsistence purposes, but the payoffs from the fur trade encouraged them to hunt so extensively that they seemed to be driving the animals to the verge of complete annihilation. This was the first snapshot in the Demsetz story: a common pool problem where open access to the wildlife stock seemed about to destroy that stock. The second snapshot in the article depicts the same group of native hunters somewhat later, after they had succeeded in establishing a set of informal familial property rights to hunting areas. With their ability to control access to these areas, the "owners" now maintained them as habitat for the animal stocks, and they calibrated their hunting to sustainable and profitable levels.

I think it is fair to say that the evolutionary component of Demsetz's story, taken together with other stories about the evolution of property rights or of other methods of resource management, has been one of the central preoccupations in Jim's scholarship. He included a substantial part of Demsetz's article in the very first edition of the Dukeminier and Krier property casebook, and my guess is that this inclusion is one reason why Demsetz's article is now so canonical.

^{6.} See, e.g., Property Rules and Liability Rules: The Cathedral in Another Light, 70 N.Y.U. L. REV. 440 (1995) (reconsidering the advantages and disadvantages of the different rules).

^{7.} James E. Krier & Richard B. Stewart, Environmental Law and Policy: Readings, Materials and Notes (1978).

^{8.} Harold Demsetz, Toward a Theory of Property Rights, 57 Am. Econ. Rev. 347 (1967).

The casebook made the piece familiar to generations of property students and scholars.

But Jim has always been skeptical of the Demsetz story. Shortly after I met him, I heard him describe what he thought was the most important problem in the story: the article begins with overhunting, a common pool problem about overexploiting a resource, to which the solution is a system of property rights. But as Jim astutely observed, the establishment and operation of a property regime itself is another common pool problem, involving joint efforts on establishment and maintenance. The upshot is that the hunters could overcome a common pool issue in hunting only if they could overcome a higher level common pool problem in governance. The two common pool issues have the same basic structure, and Jim's question was, if they could not solve the first, how could they solve the second? What exactly happened in the gap between the first snapshot of overhunted animals and the second of sustainable management in a system of property rights? Demsetz just gave the snapshots, without saying how the first problem morphed into the second solution. Jim also claims that when he confronted Demsetz with this question, Demsetz answered that this was why he called the article "toward a theory of property rights."

During the 1980s, I heard Jim make this argument about the Demsetz piece a number of times, and I even cited his oral comments about it before Jim put it in writing, because I thought it was an extremely important insight. But to the best of my knowledge Jim did not get around to putting it into an article until 1992, when he wrote *The Tragedy of the Commons, Part II.* This was a review essay about a book on Free Market Environmentalism, where the book's authors told what was basically the Demsetz story about the evolution of property rights, as applied to the management of environmental resources. As Jim pointed out, this evolutionary story assumes the proof—that at some level people can solve common pool problems—without saying how it happens. Of course, it is true that

^{9.} Carol M. Rose, The Comedy of the Commons: Custom, Commerce, and Inherently Public Property, 53 U. Chi. L. Rev. 711, 719 (1986); Carol M. Rose, Rethinking Environmental Controls: Management Strategies for Common Resources, 1991 Duke L. J. 1, 4.

^{10.} James E. Krier, The Tragedy of the Commons, Part II, 15 HARV. J. L. & Pub. Pol'y 325 (1992).

people do solve common pool problems at least some of the time. But sometimes they fail, too. When people do solve these dilemmas, how do they do it? Jim's position was that we need to be more humble about these issues, and we need to look to actual experience to see when and where we can solve these problems, and when and where we can't. ¹¹

So where did Jim's skeptical turn come from? I think I know, and here is one place where a look back to his early work is definitely illuminating. The place to look is his early environmental work, and in particular, his 1977 book with Edmund Ursin on the history of air pollution regulation in California. Jim reprised a bit of this book in his 1994 article, *The End of the World News*, where he mentioned that he had worked on the book a half-dozen years before its publication. That means that he began thinking about this history and working through it no later than the early 1970s.

The book recounts California's and especially the Los Angeles basin's experience with smog, the unpleasant and unhealthy air pollution that results when sunlight interacts with the gases that come out the exhaust pipes of automobiles. The Los Angeles basin is a notorious trap for air pollutants, and given the city's smog-producing combination of strong sunshine with a burgeoning car culture, foul air had become a noticeable issue by the 1940s. No substantial market interests were addressing the smog issue at that time, and indeed it was not in anyone's particular pocketbook interest actually to do much about this classic common pool problem. Pollution and Policy recounts how California regulators also took a long time to get on the case, and when they did, how they more or less muddled about, zeroing in on easy targets and paths of least resistance. The first—and mistaken—regulatory target was a factory that made synthetic rubber. 14 No doubt it seemed obvious that the cause of the pollution could not be us, with our little bitty cars and their little bitty exhaust emissions. But of course it was us, in the accumulation of

^{11.} Id. at 339-48.

^{12.} JAMES E. KRIER & EDMUND URSIN, POLLUTION AND POLICY: A CASE ESSAY ON CALIFORNIA AND FEDERAL EXPERIENCE WITH MOTOR VEHICLE AIR POLLUTION, 1940–1975 (1977) [hereinafter Krier & Ursin, Pollution and Policy].

^{13.} James E. Krier, *The End of the World News*, 27 Loy. L.A. L. Rev. 851, 855–56 (1994) [hereinafter Krier, *The End of the World News*] (describing initiation of work on the book).

^{14.} Krier & Ursin, Pollution and Policy, supra note 12, at 53-54.

small individual increments to a big dirty sky. In fits and starts, California muddled along toward this unwelcome recognition, in a laborious and error-laden trial and error process that Jim labeled "exfoliation." And of course, the exfoliation process is not really over yet, often requiring the jolt of crises like the one that got the federal government to take air pollution seriously, the killer smog in Donora, Pennsylvania, in 1948. 16

The lessons from California's smog regulation have informed much of Jim's work. Exfoliation too was and is an evolutionary process, but it is not smooth, and its outcome is not certain in any given case. That lesson about contingency is visible in Jim's critique of "technological optimism," the view that bigger and better technology can solve our resource and pollution issues. One notable technological optimist whose work began to be noticed in the 1980s is Peter Huber, a prolific writer with both a law degree and advanced degrees in engineering. When Huber's and others' work in a similar vein began to capture attention, Jim observed the same problems in their analysis that he earlier had seen with Demsetz: markets and politics have parallel issues in dealing with common pool problems. ¹⁷ In both markets and politics, we don't bother to learn about things that don't earn; and things that do earn gain adherents who can outshout other sources of learning, at least until some crisis occurs.

The psychological lessons from the exfoliation process got a fresh look in Jim's 1990 article with the economist Roger Noll, on the implications of cognitive psychology for risk regulation. Here Jim worked with Noll to identify some of the common cognitive mistakes that people make in assessing any kind of empirical issues: too many searches for confirmation of preexisting beliefs, too much reliance on simple analogies that come to mind easily (like recent news or personal experiences), too much concern about losing what we have as opposed to considering what we might gain by taking some

^{15.} Id. at 289; see also Krier, The End of the World News, supra note 13, at 855.

^{16.} KRIER & URSIN, POLLUTION AND POLICY, supra note 12, at 8, 104-06, 263-66.

^{17.} James E. Krier & Clayton P. Gillette, *The Un-Easy Case for Technological Optimism*, 84 MICH. L. REV. 405 (1986). The article cites Huber at 406, note 2, among other locations. *See* Peter Huber, *Safety and the Second Best: The Hazards of Public Risk Management in the Courts*, 85 COLUM. L. REV. 277 (1985).

^{18.} Roger G. Noll & James E. Krier, Some Implications of Cognitive Psychology for Risk Regulation, 19 J. LEGAL STUD. 747 (1990).

measure. The article organized a body of psychological research that had been accumulating over the previous decade, notably with the work of Daniel Kahneman and Amos Tverski, ¹⁹ but also work by others like Paul Slovic²⁰ and Baruch Fischhoff.²¹ But it was still a little too new for most law professors, even though these kinds of errors could have profound effects on risk perceptions and the legislation based on those perceptions. The Noll and Krier article is not cited in anything like the volume that it deserves, illustrating what I think has been the main flaw in Jim's scholarship: he is often so far ahead of the curve that later scholars have not realized that he was there first.

In any event, systematic cognitive errors help to explain why human approaches to social problems do not always take a straight-line path of evolutionary success, or sometimes even to success at all. Most fundamentally, the takeaway from Jim's work is that any straight-line evolutionary story is likely to be bogus, at least at least when it comes to management systems for resources. No system of resource management—not even a system of property rights—is necessarily the next evolutionary success.

Of course, property rights systems do emerge and do manage resources reasonably well sometimes, even many times. It is easy to point to successful evolutions of property rights regimes and make fun of the doubts—like admitting that, yes, things do work in practice, but do they work in theory? But the fact is that the theory does matter, because theory is basically the way we understand *why* things evolve as they do. If we do not know why things develop as they do, we may find ourselves in catastrophic situations that we cannot reverse.²² Evolution, or at least institutional evolution, is considerably more contingent than a set of stepwise moves toward more and more effective systems, based on improved technology or

^{19.} See, e.g., Daniel Kahneman & Amos Tverski, Prospect Theory: An Analysis of Decision Under Risk, 47 Econometrica 263 (1979).

^{20.} See, e.g., Paul Slovic, Perception of Risk, 236 Science 289 (1987); Daniel Kahneman, Paul Slovic, & Amos Tversky, Judgment Under Uncertainty: Heuristics and Biases (1982).

^{21.} See, e.g., Baruch Fischhoff, Cost-Benefit Analysis and the Art of Motorcycle Maintenance, 8 POL'Y SCI. 177 (1977).

^{22.} Krier, *The End of the World News, supra* note 13, at 862–64 (observing that climate change could present problems so massive that the ordinary pattern of institutional trial and error has no room to recover from irreversible miscalculations).

improved economic understanding or both. Instead, there are many, many opportunities for bungling and false steps—and some of those bungles may be exceedingly difficult to reverse. Yes, some factors help to build successful institutions, including property rights institutions. But as Jim's whole career has taught us, one of the tasks of legal scholars, and economics scholars too, is to try to find out what those factors are and how they work together.

PUBLIC EMPLOYEES AND THE CURIOUS MINI-REVIVAL OF CONTRACT CLAUSE JURISPRUDENCE

JAMES W. ELY, JR.*

For decades the Contract Clause of the federal Constitution, once a muscular vehicle for judicial review of state legislation, has languished in the constitutional backwater. The Supreme Court has not invoked the provision in more than 30 years, although lower federal courts occasionally apply the clause to invalidate state laws. Most state constitutions also contain a contract clause, and some state courts enforce the state provision with more vigor than is the current norm in the federal courts. Since the New Deal era, the Supreme Court has not treated the Contract Clause as a significant barrier to state modification of agreements and rarely hears Contract Clause challenges.

From time to time, however, the Supreme Court has found it necessary to explain that the Contract Clause retains some vitality. In 1977 the Court revealingly observed: "Whether or not the protection

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- 1. U.S. CONST. art. I, § 10, cl. 1 provides in part: "No State shall . . . pass any . . . Law impairing the obligation of Contracts" For the decline of the Contract Clause, see James W. Ely, Jr., Whatever Happened to the Contract Clause?, 4 CHARLESTON L. REV. 371 (2010).
- 2. Allied Structural Steel Co. v. Spannaus, 438 U.S. 234 (1978) (retroactive legislative modification of company pension plan ran afoul of Contract Clause); U.S. Trust Co. v. New Jersey, 431 U.S. 1 (1977) (state abrogation of bond covenant violated Contract Clause).
- 3. E.g., United Healthcare Ins. Co. v. Davis, 602 F.3d 618 (5th Cir. 2010) (act altering health insurance contracts was substantial impairment of existing contracts and lacked adequate justification); Equip. Mfrs. Inst. v. Janklow, 300 F.3d 842 (8th Cir. 2002) (retroactive application of statute limiting termination of dealers by manufacturers not based on legitimate public purpose and was void under Contract Clause).
- 4. Brian R. Schar, Note, Contract Clause Law Under State Constitutions: A Model For Heightened Scrutiny, 1 Tex. Rev. L. & Pol. 123 (1997).
- 5. Keystone Bituminous Coal Ass'n v. DeBenedictis, 480 U.S. 470, 502 (1987) (declaring that "it is well settled that the prohibition against impairing the obligation of contracts is not to be read literally").

 $^{^{\}star}$ Milton R. Underwood Professor of Law, Emeritus, and Professor of History, Emeritus. Vanderbilt University.

of contract rights comports with current views of wise public policy, the Contract Clause remains a part of our written Constitution." This comment suggests the gap between the views of the framers that contractual stability was essential and contemporary thinking which envisions nearly plenary legislative authority over contracts. Its tone also underscores the Court's hesitant approach toward enforcement of the Contract Clause. A year later the Court insisted that "the Contract Clause remains part of the Constitution. It is not a dead letter." This defensive comment speaks volumes about the lowly position of the Contract Clause in modern constitutional law. Such language, moreover, has not been matched by meaningful enforcement of the provision. Instead, as in other areas of constitutional law, 8 the Court has formulated a vague multi-prong test for determining Contract Clause violations:

- 1) Has a change in state law operated as a substantial impairment of a contractual obligation? (This inquiry in turn has been subdivided into three components—is there a contract? Has a change in law impaired that contract? Is the impairment substantial?)
- 2) If the impairment is substantial, does the law serve a legitimate public purpose?
- 3) Are the means chosen to accomplish this purpose reasonable and necessary?⁹

^{6.} U.S. Trust Co., 431 U.S. at 16 (1977).

^{7.} Allied Structural Steel Co. v. Spannaus, 438 U.S. 234, 241 (1978).

^{8.} Compare to the multifactor balancing test set forth in Penn Central Transportation Co v. City of New York, 438 U.S. 104 (1978) to determine the existence of a regulatory taking. See Gideon Kanner, Making Laws and Sausages: A Quarter-Century Retrospective on Penn Central Transportation Co. v. City of New York, 13 Wm. & MARY BILL RTS. J. 679 (2005); Anthony B. Sanders, Of All Things Made in America Why Are We Exporting the Penn Central Test?, 30 Nw. J. INT'L L. & Bus. 339, 354 (2010) (observing that under the Penn Central approach "courts are free to range just about as widely as they please in determining whether the government has taken property without providing just compensation").

^{9.} Energy Reserves Grp., Inc. v. Kansas Power & Light Co., 459 U.S. 400, 411-12 (1983); U.S. Trust Co., 431 U.S. at 17-27 (1977). A number of state courts have also adopted this test in adjudicating state contract clause claims. See, e.g., Mass. Cmty. Coll. Council v. Commonwealth, 420 Mass. 126, 649 N.E. 2d 708, 711-13 (1995); Opinion of the Justices (Furlough), 135 N.H. 625, 630, 609 A.2d 1204, 1207 (1992) (finding that federal and state contract clauses "offer equivalent protections where a law impairs a contract"); Carlstrom v. State, 103 Wash.2d 1, 694 P.2d 1, 3 (1985) ("[W]e continue to find cases construing the federal provision persuasive in construing the state clause.").

Each of the prongs of this test warrants comment. On occasion contract clause claims fail because courts either find that no contract existed or rule that there was no legislative impairment of an agreement. For example, in *Scott v. Williams* (2013) the Supreme Court of Florida upheld legislative changes to the state retirement system. Faced with a huge budget shortfall, the lawmakers converted the retirement program to a contributory system and ended cost-of-living adjustments for services after July 1, 2011. Although a statute declared that the rights of retirement system members were contractual in nature, the Florida Supreme Court ruled that it did not prevent the legislature from altering benefits which accrue from future service. The Court found no impairment of a contract in violation of the contract clause in the state constitution.

If a court concludes that there was a contractual impairment, they next consider if such infringement was substantial. Whether an impairment is deemed substantial turns in part upon the expectation of the parties. In ascertaining the severity of an impairment, courts give weight to whether the industry had been regulated in the past, taking the position that in such case further regulation might then be expected. ¹² Of course, given pervasive regulations in

^{10.} Gen. Motors Corp. v. Romein, 503 U.S. 181 (1992) (rejecting argument that workers' compensation law was implied term of collective bargaining agreement, and holding that hence law retroactively imposing additional financial obligations did not violate Contract Clause); Fraternal Order of Police v. Prince George's Cnty., 608 F.3d 183 (4th Cir. 2010) (county reserved limited right to modify its own contract, and hence employee furlough plan did not violate Contract Clause); Valenti v. Snyder, 853 F. Supp. 2d 691, 695-96 (E.D. Mich. 2012) (unratified tentative collective bargaining agreement was not a contract entitled to protection under the Contract Clause); Rhode Island Council 94 v. Rhode Island, 705 F. Supp. 2d 165 (D. R.I. 2010) (finding that expired collective bargaining agreement did not provide contractual protection for retiree health benefits, and that hence state change in health benefit scheme did not run afoul of Contract Clause); Barker v. City of Lyon, 813 N.W. 2d 424, 427-28 (Ct. App. Minn. 2012) (holding that employee's right to post-retirement payment of health insurance premiums has not vested before changes in calculating premiums, and stressing that Contract Clause protects contractual relationships not mere expectation interests): Alston v. City of Camden. S.C., 322 S.C. 38, 471 S.E.2d 174 (1996) (holding that neither municipal ordinance nor employee handbook constituted a contract that prevented unilateral reduction in employee benefits by city).

^{11.} Scott v. Williams, 107 So. 3d 379, 385-89 (Fla. 2013).

^{12.} See Energy Reserves Grp., Inc. v. Kansas Power & Light Co., 459 U.S. 400, 411–16 (1983) (finding that a Kansas price control statute did not substantially impair a contractual arrangement because the parties were operating in a heavily regulated industry and hence the law did not infringe the utility's reasonable expectations); Toledo Area AFL-CIO Council v. Pizza, 154 F.3d 307, 324 (6th Cir. 1998) (stressing "existing Supreme Court precedents relying

so many areas of the modern economy, this judicial stress upon the existence of regulation is an avenue to significantly dilute contract clause protection. In deciding whether the challenged law serves a legitimate public purpose, courts consider whether the legislation is aimed at a general problem or benefits special interests. Where a law impairs a private contract, federal courts usually defer to a legislative determination as to whether the measure was reasonable and necessary. ¹³

In constructing this analytical framework, the Supreme Court ignored the plain language of the clause, which sets forth an unequivocal command against state impairment of agreements. Not only does finding a contract clause violation rest upon subjective factors and ad hoc inquiry, but in most cases federal courts give substantial deference to legislative assessments. The contemporary approach to the Contract Clause treats state police power as paramount to individual rights under agreements. ¹⁴ It is not surprising, then, that with

upon the heavily regulated nature of an industry as grounds to discount the severity of impairments resulting from subsequent regulations"); Maine Educ. Ass'n Benefits Trust v. Cioppa, 842 F. Supp. 2d 373 (D. Me. 2012) (stressing heavily regulated nature of insurance industry, and rejecting Contract Clause challenge to legislative changes to insurance regulations on the ground that "parties to those collective bargaining agreements should readily expect that changes in insurance regulations may change the nature of the health insurance benefits as well as the cost of those benefits in coming years"); Easthampton Savings Bank v. City of Springfield, 874 F. Supp. 2d 25, 32 (D. Mass. 2012) (noting that mortgage industry has been heavily regulated, and that mortgagee "must have reasonably expected that some of the terms of their mortgages could be impaired by future changes in regulation"); *In re* Estate of DeWitt, 54 P.3d 849, 859 (Colo. 2002) ("Additionally, courts should consider whether the statute in question touches on an area that has historically been regulated by the legislature; if so, the statute is less likely to be found to violate the contact clause.").

13. U.S. Trust Co., 431 U.S. at 22–23 (1977) ("As is customary in reviewing economic and social regulation... courts properly defer to legislative judgment as to the necessity and reasonableness of a particular measure."); Easthampton Sav. Bank v. City of Springfield, 874 F. Supp. 2d 25, 32 (D. Mass. 2012) (stressing deference to legislative judgment and finding that mortgage foreclosure ordinance protected basic societal interest); In re Estate of DeWitt, 54 P.3d at 859 (Colo. 2002) ("When the state is not a party to the contract, a court should defer to the legislature's judgment regarding the necessity and reasonableness of the statute, notwithstanding that the statute may impose a financial hardship on the contracting parties.").

14. U.S. Trust Co., 431 U.S. at 22 (1977) ("The States must possess broad power to adopt general regulatory measures without being concerned that private contracts will be impaired, or even destroyed, as a result."); Toledo Area AFL-CIO Council v. Pizza, 154 F.3d 307, 322 (6th Cir. 1998) ("Contracts Clause jurisprudence evinces a concern for ensuring that the regulatory power of the States is not eviscerated by a per se ban on legislation impairing private contracts.").

respect to private contracts the Contract Clause has been drained of much meaning.¹⁵

The situation, however, is somewhat different regarding contracts to which a state is a party. Maintaining that a state's self-interest is involved when a state impairs its own agreements, the Supreme Court in U.S. Trust Co. v. New Jersey (1977) declared that in this context "complete deference to a legislative assessment of reasonableness and necessity is not appropriate." 16 It explained that if "a State could reduce its financial obligation whenever it wanted to spend the money for what it regarded as an important public purpose, the Contract Clause would provide no protection at all." ¹⁷ In determining the necessity for a state to abrogate its own obligations, the Court insisted that "a State is not completely free to consider impairing the obligation of its own contracts on a par with other policy alternatives." It then found that the retroactive repeal of a bond covenant pledging revenue as security for the bonds was neither reasonable nor necessary. 19 Although state courts are not obligated

^{15.} This result parallels the current federal judicial treatment of other property clauses in the Constitution and Bill of Rights. Challenges to economic regulations based upon the due process clauses of the Fifth and Fourteenth clauses are reviewed under a toothless rational basis test and such regulations are presumed to be constitutional. As a practical matter, due process challenges to economic regulations never prevail. JAMES W. ELY, JR., THE GUARDIAN OF EVERY OTHER RIGHT: A CONSTITUTIONAL HISTORY OF PROPERTY RIGHTS 139-41, 149-50 (3rd ed. 2008). Revealingly, the Second Circuit Court of Appeals has explicitly endorsed a rational basis test to determine whether an impairment of private contracts violates the Contract Clause. Ass'n of Surrogates & Sup. Ct. Reporters v. New York, 940 F.2d 766, 771 (2d Cir. 1991), cert. denied, 502 U.S. 1058 (1992). Similarly, the Fifth Amendment's "public use" limitation on the exercise of eminent domain at the federal level has been virtually eviscerated by heavy deference to legislative determinations of what constitutes public use. E.g., Kelo v. City of New London, 545 U.S. 469 (2005).

^{16. 431} U.S. 1, 26 (1977).

^{17.} Id. at 26.

^{18.} Id. at 30-31.

^{19.} Justice William J. Brennan dissented in an opinion stressing state power over public contracts. He observed:

Decisions of this Court for at least a century have construed the Contract Clause largely to be powerless in binding a State to contracts limiting the authority of successor legislatures to enact laws in furtherance of the health, safety, and similar collective interests of the polity. In short, those decisions established the principle that lawful exercise of a State's police power stand paramount to private rights held under contract.

Id. at 33. Brennan specifically rejected the majority's holding that stricter judicial review is appropriate when a state impairs its own obligations. Id. at 53, n.16.

to adopt the double standard of review in construing the contract clauses in state constitutions, many have followed suit. ²⁰ "Because a governmental entity is party to the contract and benefits from the impairment," the Court of Appeals of Michigan remarked, "we are to employ heightened scrutiny in our review of the statute." ²¹

The lowered deference standard applied when a state has altered its own contractual obligations has raised a related issue concerning allocation of the burden of proof. Some courts have placed the burden of proving the reasonableness and necessity of the impairment on the state. ²² In 2011, however, the First Circuit Court of Appeals allocated the burden of proof to the parties challenging the state's actions. ²³ The court was concerned that requiring the state to prove reasonableness and necessity "would likely discourage legislative action impacting public contracts" and declared that even in the context of public contracts "the state's judgment that the impairment was justified is afforded meaningful deference."

I. PUBLIC AGREEMENTS AND THE CONTRACT CLAUSE

The dual standard of review adopted in *U.S. Trust Co.* represented a radical departure from prior contract clause jurisprudence. To appreciate this point we should briefly sketch the history of the Contract Clause pertaining to public agreements. Historians have long debated the intended scope of the provision.²⁵ Although the Contract Clause received surprisingly little discussion at the constitutional convention and the state ratifying conventions, all agree that the framers were vitally concerned about safeguarding private agreements from state impairment. The immediate impetus for the provision was the need to curb state debtor relief measures which

 $^{20. \ \}textit{See, e.g.}, \ \textit{Valdes v. Cory}, \ 139 \ \textit{Cal. App.} \ 3d \ 773, \ 790, \ 189 \ \textit{Cal. Rptr.} \ 3d \ 212, \ 226 \ (1983).$

^{21.} AFT Michigan v. State, 297 Mich. App. 597, 825 N.W.2d 595, 602 (Mich. App. 2012), application for leave to appeal pending.

^{22.} See, e.g., Toledo Area AFL-CIO Council v. Pizza, 154 F.3d 307, 323 (6th Cir. 1998).

^{23.} United Auto., Aerospace, Agric. Implement Workers v. Fortuno, 633 F.3d 37, 42–45 (1st Cir. 2011).

^{24.} Id. at 43-44.

^{25.} James W. Ely, Jr., *The Marshall Court and Property Rights: A Reappraisal*, 33 J. MARSHALL L. REV. 1023, 1029–33 (2000) (reviewing the literature discussing the scope of the Contract Clause and concluding that the framers envisioned a broad reading of the provision to cover all types of contractual rights).

undercut the sanctity of private agreements and threatened to disrupt credit relationships. One cannot, however, infer the scope of the clause solely from the necessities of the moment. Unlike a similar provision in the Northwest Ordinance which is expressly limited to private contracts, the Contract Clause is phrased in broad and unqualified language and would seemingly reach all types of agreements. As Wallace Mendelson cogently pointed out, "[i]f the Constitutional Convention had wanted the clause to cover only private contracts, it could easily have said so."26 It is far from evident that the framers intended to differentiate between public and private contracts. Indeed, after ratification two prominent framers, James Wilson, 27 then a member of the Supreme Court, and Alexander Hamilton, 28 expressed the view that states were bound by their contractual undertakings.

Federal courts early took the position that state contracts were within the ambit of the Contract Clause. In Vanhorne's Lessee v. Dorrance (1795) Justice William Paterson, a member of the constitutional convention and later a member of the Supreme Court, treated a state land grant as a contract and declared that a state could not abrogate a prior disposition of land in violation of the Contract Clause.²⁹ Likewise, in Fletcher v. Peck (1810) the first Supreme Court decision to address the Contract Clause, Chief Justice John Marshall ruled that a state land grant was an executed contract protected by the Contract Clause, and that the clause prevented states from abrogating such grants.³⁰ In a famous line of decisions, the Supreme Court thereafter construed the Contract Clause to bar state infringement of grants of tax exemptions and corporate charters. 31 Despite some criticism of these decisions starting in the late nineteenth century, 32 the

^{26.} Wallace Mendelson, B. F. Wright on the Contract Clause: A Progressive Misreading of the Marshall-Taney Era, 38 W. Pol. Q. 262 (1985).

^{27.} Chisholm v. Georgia, 2 U.S. 419, 465 (1793) (Wilson, J.).

^{28. 4} THE LAW PRACTICE OF ALEXANDER HAMILTON 382-84 (Julius Goebel, Jr. & Joseph H. Smith, eds., 1980).

^{29. 2} U.S. 304 (Cir. Ct. Penn. 1795).

^{30. 10} U.S. 87 (1810).

^{31.} Dartmouth Coll. v. Woodward, 17 U.S. 518 (1819); Wilson v. New Jersey, 11 U.S. 164

^{32.} In the 1870s some commentators sought to reopen the question of whether the Contract Clause reached public contracts. Their particular target was Dartmouth College, which was seen as a shield for corporate privilege. In the 1871 edition of his influential treatise, TREATISE ON THE CONSTITUTIONAL LIMITATIONS WHICH REST UPON THE LEGISLATIVE POWER OF THE STATES 280 n.2 (2nd ed. 1871), Thomas M. Cooley sharply criticized Dartmouth College and the public

principle that the Contract Clause covered public contracts seemed well settled. "To allow a state to repudiate its contracts unilaterally," Richard A. Epstein has cogently observed, "is to invite the very abuses of factional coalition that the contract clause was designed to prevent, for we can be sure that almost every repudiation will provide benefits to some group at the expense of others."³³

Yet courts gradually developed doctrines that curtailed the protection afforded public contracts. In Charles River Bridge v. Warren Bridge (1837), for example, the Supreme Court determined that corporate charters should be strictly construed for Contract Clause purposes, and that only express privileges were to be safeguarded from legislative alteration. 34 In West River Bridge Co. v. Dix (1848) the Court held that a state's exercise of eminent domain prevailed over any rights conferred by corporate charters. 35 All contracts, including franchise privileges, were subordinated to that power. More significant was a line of decisions, beginning in the 1870s, declaring that the states could not bargain away their police power to safeguard the health, safety, and morals of the public.³⁶ The Contract Clause makes no mention of a police power exception, and in fact appears to impose an absolute bar on state impairments. As the notion of police power was enlarged in the twentieth century, the Contract Clause, especially with respect to public arrangements, would be reduced in importance.

Although the Supreme Court gradually allowed the states latitude to modify or abridge public contracts, it continued to vigorously police the infringement of private agreements. It looked skeptically at state laws hampering the foreclosure of mortgages and the collection of debts. In *Bronson v. Kinzie* (1843) the Court struck down laws that retroactively altered the terms of existing mortgages.³⁷ Chief Justice Roger B. Taney asserted that the purpose of the Contract

law branch of contract clause jurisprudence. See generally HERBERT HOVENKAMP, ENTERPRISE AND AMERICAN LAW, 1836–1937 19–35 (1991) (noting that conception of a corporate charter as a contract "fell apart" in late nineteenth century).

 $^{33.\ \,}$ Richard A. Epstein, Toward a Revitalization of the Contract Clause, 41 U. CHI. L. REV. $703,\,719$ (1984).

^{34. 36} U.S. 420 (1837).

^{35. 47} U.S. 507 (1848).

^{36.} Stone v. Mississippi, 101 U.S. 814 (1880); Fertilizing Co. v. Hyde Park, 97 U.S. 659 (1878); Beer Co. v. Massachusetts, 97 U.S. 25 (1878).

^{37.} Bronson v. Kinzie, 42 U.S. 311 (1843).

Clause "was to maintain the integrity of contracts, and to secure their faithful execution throughout this Union."38 Similarly, the Court invalidated the retroactive application of homestead exemption laws to pre-existing contracts. ³⁹ In Barnitz v. Beverly (1896) the justices struck down a Kansas law authorizing the redemption of foreclosed property where no such right previously existed. 40 State courts also frequently invalidated debt-relief measures that retroactively infringed private contract rights. 41

To be sure, in the early twentieth century the Supreme Court began to gradually weaken the protection of private obligations under the Contract Clause. In 1905, without much discussion, the Court extended the police power exception to private agreements between individuals. It declared that "parties may not estop the legislature from enacting laws intended for the public good."42 Protection of private agreements was further diluted when the Supreme Court, sustaining rent controls growing out of World War I, ruled that state authority to deal with emergencies was paramount to private contracts. 43

The Contract Clause then received an even more grievous blow in Home Building & Loan Association v. Blaisdell (1934), a decision that became the cornerstone of the modern reading of the provision. 44 This ruling by a sharply divided Supreme Court upheld a two-year state moratorium on the foreclosure of mortgages. The measure was reminiscent of debt-relief laws that federal and state courts had repeatedly struck down in the nineteenth century. Chief Justice Charles Evans Hughes, speaking for the majority, stressed that the moratorium was a temporary response to the economic emergency created by the Great Depression. In effect, he enlarged the police power to

^{38.} Id. at 318.

^{39.} Edwards v. Kearzey, 96 U.S. 595 (1878); Gunn v. Barry, 82 U.S. 610 (1873). For contract clause challenges to retroactive application of enlarged homestead exemptions, see James W. Ely, Jr., Homestead Exemption and Southern Legal Culture, in Signposts: New Directions IN SOUTHERN LEGAL HISTORY 295-302 (Sally E. Hadden & Patricia Hagler Minter, eds., 2013).

^{40. 163} U.S. 118 (1896) (Shiras, J.).

^{41.} See, e.g., Sheets v. Peabody, 7 Blackf. 613 (Ind. 1846); Rosier v. Hall, 10 Iowa 470 (1860); Jones v. Crittenden, 4 N.C. 55 (1814); Hollister v. Donahoe, 78 N.W. 959 (S.D. 1899).

^{42.} Manigault v. Springs, 199 U.S. 473, 480 (1905).

^{43.} Marcus Brown Holding Co. v. Feldman, 256 U.S. 170, 198 (1921).

^{44. 290} U.S. 398 (1934). For the background of this case, see JOHN A. FLITER & DEREK S. HOFF, FIGHTING FORECLOSURE: THE BLAISDELL CASE, THE CONTRACT CLAUSE, AND THE GREAT Depression (2012).

encompass the regulation of economic conditions. The controversial *Blaisdell* case is the subject of a vast literature and cannot be treated in detail here. ⁴⁵ As a practical matter, *Blaisdell* drained the Contract Clause of much vitality and opened the door for legislation that weakened the security of private agreements. In dissent, Justice George Sutherland presciently warned of "future gradual but ever-advancing encroachments upon the sanctity of private and public contracts." ⁴⁶ Indeed, as the New Deal justices gained ascendancy on the Court, they stressed deference to legislative judgments and abandoned any notion that emergency conditions were necessary to vindicate state interference with contracts. Consequently, the Contract Clause as presently construed seems to prohibit very little. The key point for our purpose is that historically the Supreme Court treated public and private contracts on more or less a level playing field, and certainly did not accord public contracts a special degree of solicitude.

This historical pattern was altered, of course, when the Supreme Court in *U.S. Trust Co.* turned away from a unitary standard of review and provided more stringent review when a state impaired its own obligations. It is apparent that there are serious problems with this dual standard. First, there is no textual or historical basis for differentiating between the scrutiny accorded to private and public contracts, nor was that the practice throughout the nineteenth century. Indeed, courts historically were more alert to police violations of private agreements, and were more deferential to state authority over public contracts. ⁴⁷ From an historical perspective, therefore, *U.S.*

^{45.} For criticism of Blaisdell, see Richard A. Epstein, Toward a Revitalization of the Contract Clause, 51 U. Chi. L. Rev. 703, 735–38 (1987); Douglas W. Kmiec & John O. McGinnis, The Contract Clause: A Return to the Original Understanding, 14 Hastings Const. L.Q. 525, 541–44 (1987); Rebecca M. Kahan, Comment, Constitutional Stretch, Snap-Back, & Sag: Why Blaisdell Was A Harsher Blow to Liberty Than Korematsu, 99 Nw. U. L. Rev. 1279, 1302–07 (2005); Charles A. Bieneman, Note, Legal Interpretation and a Constitutional Case: Home Building & Loan Association v. Blaisdell, 90 Mich. L. Rev. 2534, 2535–64 (1992) (arguing that Blaisdell "was wrongly decided under any theory of interpretation"). See also ROBERT A. LEVY & WILLIAM MELLOR, THE DIRTY DOZEN: HOW TWELVE SUPREME COURT CASES RADICALLY EXPANDED GOVERNMENT AND ERODED FREEDOM 50–66 (2008) (criticizing Blaisdell as one of the most harmful Supreme Court decisions since the New Deal).

^{46.} Blaisdell, 290 U.S. at 448 (Sutherland, J., dissenting).

^{47.} Kmiec & McGinnis, *supra* note 45, at 547 ("The state invokes the same justification for modifying public contracts and private contracts—namely, that public welfare will be advanced by the alteration—and the alteration should be reviewed under the same standard"); Michael W. McConnell, *Contract Rights and Property Rights: A Case Study in the Relationship Between Individual Liberties and Constitutional Structure*, 76 CAL. L. REV. 267, 293–94 (1988)

Trust Co. has things backwards. Courts allowed state lawmakers greater latitude regarding changes in state contracts. Second, the Court has failed to offer a clear explanation for this dual standard of review. Cursory references to a state's self-interest are not compelling. The self-interest of legislators could also be at issue when they interfere with contracts between private parties. "All legislative decisions," one scholar has pointed out, "presumably involve the state's self-interest."48 Third, and equally troublesome, the Court has never explained what level of deference is applicable to state actions concerning public contracts, and the lower federal courts have been left to wrestle with this issue without guidance. Consequently, the notion of less deference has done more to obscure than to enlighten.

II. THE DEBT CRISIS AND PUBLIC EMPLOYEE CONTRACTS

Whatever the wisdom of a heightened standard of review for public contracts, the notion that state infringement of their obligations should receive a less deferential level of scrutiny features prominently in contract clause attacks upon state and local government efforts to modify public employee contracts. In recent years states and localities have suffered recurring periods of grave fiscal crisis, marked by huge budget shortfalls and underfunded pension plans. 49

("[T]he modern thrust of contracts clause jurisprudence is precisely backwards.... It is interference with private contracts that lies at the heart of the clause."); Thomas W. Merrill, Public Contracts, Private Contracts, and the Transformation of the Constitutional Order, 37 CASE WESTERN L. REV. 597, 609 (1987) ("[T]he modern Court has in effect turned the contract clause of both the framers and the post-Charles River Bridge era on its head. The prior understanding was that private contracts were protected from state interference with more rigor than public contracts."). See also U.S. Trust Co., 431 U.S. at 53 n.16 (1977) (Brennan, J., dissenting) (finding no historical support for applying a stricter standard when a state's own obligations are at issue).

48. Stewart E. Sterk, The Continuity of Legislatures: Of Contracts and the Contract Clause, 88 COLUM. L. REV. 647, 687 (1988).

49. RICHARD RAVITCH & PAUL A. VOLCKER, REPORT OF STATE BUDGET CRISIS TASK FORCE (July 17, 2012) (surveying six states, stressing huge underfunding of pension and health care liabilities for retired public employees, and noting volatility of state revenues). The severe shortfall in state pension plan funding can be traced to several sources. See Debra Brubaker Burns, Too Big to Fail and Too Big to Pay: States, Their Public-Pension Bills, and the Constitution, 39 HASTINGS CONST. L. Q. 253, 267 (2011-2012) ("First, many states over-promised benefits to employees during the financially flush 1990s. Second, many states have projected unrealistic amounts of funding resources or rates of return for current and future pension investments.").

In January of 2013, for instance, bond-rating agencies downgraded Illinois bonds to the lowest rating in the United States, citing massive unfunded pension liabilities and the lack of any legislative action to address the problem. ⁵⁰ As one authority has explained, "perhaps the single largest problem facing municipalities today is the dramatic and growing shortfall in public pension funds." ⁵¹ Facing severe financial pressure, many municipalities are on the brink of insolvency. For example, several municipalities in California have filed for bankruptcy. ⁵² Within the context of bankruptcy a local government may gain the flexibility to cancel or alter contracts that could not otherwise be terminated. In June of 2013 the City of Detroit filed for bankruptcy, the largest municipal bankruptcy in American history. City officials maintain that generous retirement and health care benefits are an unsustainable burden for an impoverished community with a sizeable debt

See also Ernest A. Young, Its Hour Come Round At Last? State Sovereign Immunity and the Great State Debt Crisis of the Early Twenty-First Century, 35 HARV. J.L. & PUB. POL'Y 593, 617–20 (2012) (discussing the severe debt crisis in several states, and pointing out that "states have failed to set aside money to fund future obligations for healthcare costs and pensions"); Gavin Reinke, Note, When a Promise Isn't a Promise: Public Employers' Ability to Alter Pension Plans of Retired Employees, 64 VAND. L. REV. 1673, 1679 (2011) ("This mismanagement and lack of foresight combined to produce significant shortfalls for state public employee pension funds in a very short period.").

- 50. Mark Peters, *S&P Cuts Illinois Credit Rating*, WALL St. J. (Jan. 25, 2013, 5:30 PM), http://online.wsj.com/article/SB10001424127887324539304578264293106044944.html #articleTabs%3Darticle. The Illinois legislature remains deadlocked over steps to deal with the pension crisis. Mark Peters, *Pension Deal Again Proves Elusive in Illinois*, WALL St. J., June 3, 2013.
- 51. Jeffrey B. Ellman & Daniel J. Merrett, *Pensions and Chapter 9: Can Municipalities Use Bankruptcy to Solve Their Pension Woes?*, 27 EMORY BANKR. DEV. J. 365, 367 (2012). *See also* The Pew Ctr. on the States, the Widening Gap Update 1–11 (June 2012) (pointing out that despite widespread steps to reduce the cost of retiree benefits the gap between state assets and obligations for public sector employee benefits has actually increased).
- 52. In the 1930s Congress provided for municipality bankruptcy in response to the impact of the Great Depression on local governments. The law was substantially revised in the mid-1970s in the wake of New York City's financial crisis. For the current statute, enacted in 1978, see 11 U.S.C. §§ 901–946 (2013). Chapter 9, providing federal bankruptcy relief for municipalities, has been rarely used in the past. Pursuant to the Supreme Court's decision in United States v. Bekins, 304 U.S. 27 (1938), a Chapter 9 filing by a municipality must be authorized by the state. Accordingly, the availability of municipal bankruptcy relief varies widely among the states. Richard A. Trotter, Running on Empty: Municipal Insolvency and Rejection of Collective Bargaining Agreements in Chapter 9 Bankruptcy, 36 S. Ill. U. L.J. 45, 55–56 (2012). Bankruptcy is not available for the states, although there have been proposals for a bankruptcy law that would allow states to restructure unsustainable debts. See David A. Skeel, Jr., States of Bankruptcy, 79 U. CHI. L. REV. 677 (2012) (arguing that Congress should fashion a bankruptcy option for states facing financial collapse).

and a declining population. The Michigan Constitution protects the pension system of public employees from being diminished. The extent to which, if at all, Detroit pensions should be restructured in bankruptcy is hotly contested. ⁵³ Moreover, a number of other financially distressed Michigan cities are operating under state-appointed emergency managers.

In this climate many state and local governments have begun to reconsider and trim benefits for public sector employees.⁵⁴ Such steps have taken various forms—reducing pensions for current workers as well as retirees, raising the retirement age, setting new eligibility requirements, increasing worker contributions to pension and health plans, imposing wage freezes, mandatory unpaid furloughs and payroll lags, and modifying both cost-of-living adjustments and the caps on earnings for retirees. These measures often infringe collective bargaining agreements. Others may run afoul of state constitutional or statutory provisions recognizing state employee retirement systems as some form of a contractual relationship. In 1938 New York became the first state to adopt such a provision in its constitution. ⁵⁵ Six other states followed suit, although the extent of the constitutional protection afforded employee benefit schemes varies.⁵⁶ The Illinois Constitution, for example, not only declares that membership in a public retirement system amounts to a contract but broadly states "[t]he accrued benefits of members of any state or statewide public retirement system shall not be diminished or impaired."57 A more difficult

^{53.} David Skeel, Facing Up to America's Pension Woes, WALL St. J., July 25, 2013.

^{54.} Stephen F. Befort, Unilateral Alteration of Public Sector Collective Bargaining Agreements and the Contract Clause, 59 Buff. L. Rev. 1, 8–12 (2011); Paul M Secunda, Constitutional Contracts Clause Challenges in Public Pension Litigation, 28 Hofstra Lab. & Emp. L.J. 263 (2010). See also Eric M. Madiar, Public Pension Benefits Under Siege: Does State Law Facilitate or Block Recent Efforts to Cut the Pension Benefits of Public Servants?, 27 A.B.A. J. Lab. & Emp. L. 179, 180–85 (2012) (discussing moves to reduce state employee retirement benefits, and surveying different legal approaches in how states treat pension plans).

^{55.} N.Y. Const. art. V, § 7.

^{56.} Besides New York, Alaska, Arizona, Hawaii, Illinois, Louisiana, and Michigan have constitutional provisions pertaining to public employee pensions. Florida, Kentucky and Wisconsin have statutes declaring that participation in a state retirement system constitutes a contract. Kenneth T. Cuccinelli II, E. Duncan Getchell, Jr., & Wesley G. Russell, Jr., Judicial Compulsion and the Public Fisc—A Historical Overview, 35 HARV. J. L. & PUB. POLY 525, 535–36 (2012); Ellman & Merrett, supra note 51, at 378 (2012); Anna K. Selby, Comment, Pensions in a Pinch: Why Texas Should Reconsider Its Policies on Public Retirement Benefit Protection, 43 Tex. Tech. L. Rev. 1211, 1231–34 (2011).

⁵⁷. Ill. Const. art. XIII, § 5. The pension clause of the Illinois Constitution could pose a more formidable barrier to benefit reform than the Contract Clause. Eric Michael Madiar, Is

question is presented where there is no express agreement or constitutional provision. Under those circumstances a claimant must first establish that a particular statute gives rise to a contractual relationship, not a mere expectancy. Courts presume that legislation usually sets a policy which may be changed as circumstances dictate. They require an unequivocal expression of legislative intent to create a binding contract. Notwithstanding this presumption against construing statutes as contracts, courts in a majority of states take the position that employee participation in a governmental retirement system creates a contract between the state and its employees. Thus, efforts to

Welching on Public Pension Promises an Option for Illinois? An Analysis of Article XIII, Section 5 of the Illinois Constitution, 1–76 (March 1, 2011), http://ssrn.com/abstract=1774163. However, there is authority that health insurance benefits for state employees and retirees are not covered by the pension protection clause of the Illinois Constitution. Maag v. Quinn, No. 2012 L 162 (Ill. 7th Jud. Cir. Mar. 19, 2013) (order granting motions to dismiss).

58. Dodge v. Bd. of Educ., 302 U.S. 74, 79 (1937) ("The presumption is that such a law is not intended to create private contractual or vested rights but merely declares a policy to be pursued until the legislature shall ordain otherwise. He who asserts the creation of a contract with the state in such a case has the burden of overcoming the presumption.").

59. Nat'l R.R. Passenger Corp. v. Atchison, Topeka, & Santa Fe R.R. Co., 470 U.S. 451, 465–66 (1985) ("Policies, unlike contracts, are inherently subject to revision and repeal, and to construe laws as contracts when the obligation is not clearly expressed would be to limit drastically the essential powers of a legislative body."). See also Maag v. Quinn, No. 2012 L 162, slip op. 1, 5 (Ill. 7th Cir. Ct. Mar. 19, 2013) (observing that "[e]mployees cannot turn employment benefits conferred by statute into enforceable contract rights by continuing their employment, nor can implementing agencies convert statutes into contracts," and holding that Illinois statutes did not create enforceable contract rights in retirees for health care benefits); Strunk v. Pub. Emp. Retirement Bd., 338 Or. 145, 108 P.3d 1058, 1075 (2005); Tice v. State, No. 10-225, slip op. at 12 (S.D. 6th Cir. Ct. April 11, 2012) (finding that state employee "does not have a contract right to a forever COLA at the rate which was in effect at the time of Plaintiff's retirement").

60. See, e.g., Valdes v. Cory, 139 Cal. App. 3d 773, 783, 189 Cal. Rptr. 3d 212, 221 (1983); Justus v. State, 2012 WL 4829545 (Colo. Ct. App. 2012), petition for cert. to Colorado Supreme Court pending (holding that retired public employees have contractual right to cost-of-living adjustment formula in effect at time of retirement, but remanding case to determine whether modification of COLA was substantial impairment of contract and was reasonable and necessary to serve a public purpose); Unified Gov't of Athens-Clarke Cnty. v. McCrary, 280 Ga. 901, 635 S.E.2d 150, 151 (2006); Denning v. Kansas Pub. Emp. Retirement Sys., 285 Kan. 1045, 180 P.3d 564, 569 (2008); Cloutier v. State, 163 N.H. 445, 452–58, 42 A.3d 816, 821–26 (2012) (holding that retirement plan for judges created contract subject to age and service requirements, but remanding case to ascertain whether change in calculation of retirement benefits amounted to substantial impairment of contract); Oregon Police Officers' Ass'n v. State, 323 Or. 356, 918 P.2d 765, 775–76 (1996). See also Eric M. Madiar, Public Pension Benefits Under Siege: Does State Law Facilitate or Block Recent Efforts to Cut the Pension Benefits of Public Servants?, 27 A.B.A. J. LAB & EMP. L. 179, 181 (2012) ("Most states follow the contractual approach based on court decisions or specific constitutional or statutory decisions.").

Only a few jurisdictions adhere to the once dominant view that the retirement benefits of public employees are merely expectancies which can be altered without restriction. See Pennie

modify health and pension benefits set the stage for litigation alleging a violation of the Contract Clause.⁶¹

Given the malleable nature of the applicable test and the uncertainty over the standard of review, it is hardly surprising that federal and state courts have reached conflicting decisions regarding state legislation that curtailed the existing contractual rights of public employees. One line of cases found no contract clause violation and sustained the moves by state and local governments to unilaterally alter labor contracts. 62 Although recognizing that more stringent oversight is required when a state impairs its own contracts, these courts insist that some deference to legislative policy decisions is nonetheless warranted. 63 They also typically give great weight to the severity of the budgetary problems confronting lawmakers. Thus, in 2011 the First Circuit Court of Appeals stressed that "in today's fiscal climate . . . many states face daunting budget deficits that may necessitate decisive and dramatic action."64 In assessing the reasonableness and

v. Reis, 132 U.S. 464, 471 (1889); Dallas v. Trammell, 129 Tex. 150, 156, 101 S.W.2d 1009, 1016-17 (1937). The existence of a contract, of course, is a prerequisite to sheltering employee benefits under the Contract Clause.

^{61.} There is little doubt that states have a largely free hand to alter benefits prospectively for newly hired employees because the Contract Clause only protects existing contracts against retroactive impairment. "With the exception of layoffs and furloughs," one authority has pointed out, "a state's tools for addressing unsustainable contracts with its public employee unions ordinarily apply only to future contracts." David A. Skeel, Jr., States of Bankruptcy, 79 U. CHI. L. REV. 677, 711 (2012). Such future changes, however, do little to alleviate a state's current liabilities.

^{62.} Buffalo Teachers Fed'n v. Tobe, 464 F.3d 362 (2d Cir. 2006), cert. denied, 550 U.S. 918 (2007); Baltimore Teachers Union v. Major & City Council of Baltimore, 6 F.3d 1012 (4th Cir. 1993), cert. denied, 510 U.S. 1141 (1994); United Auto., Aerospace, Agric. Implement Workers v. Fortuno, 633 F. 3d 37 (1st Cir. 2011); In the Matter of Subway-Surface Supervisors Ass'n v. New York City Transit Auth., 44 N.Y.2d 101, 375 N.E.2d 384 (1978) (finding that imposition of wage freeze did not violate Contract Clause).

^{63.} United Auto., Aerospace, Agric. Implement Workers v. Fortuno, 633 F.3d 37, 44-45 (1st Cir. 2011); Buffalo Teachers Fed'n v. Tobe, 464 F.3d 362, 370 (2d Cir. 2006), cert. denied. 550 U.S. 918 (2007) ("[B]ut what does giving less deference to the legislature actually mean? We hasten to point out that less deference does not imply no deference."); Baltimore Teachers Union v. Major & City Council of Baltimore, 6 F.3d 1012, 1019 (4th Cir. 1993), cert. denied, $510~\mathrm{U.S.}~1141~(1994)$ ("While complete deference is inappropriate, however, at least some deference to legislative policy decisions to modify these contracts in the public interest must be accorded."). See also Cuccinelli, Getchell, & Russell, supra note 55, at 541 ("Changes in these situations could be sustained upon a showing of financial necessity to preserve the program at all. Refusal by the courts to accord some deference to a legislative finding of necessity would be problematic.").

^{64.} United Auto., Aerospace, Agric. Implement Workers v. Fortuno, 633 F.3d 37, 43 (1st Cir. 2011). See also Buffalo Teachers Fed'n v. Tobe, 464 F.3d 363, 373 (2d Cir. 2006), cert.

necessity of the challenged measures, these courts pointedly refuse to act, in the words of the Fourth Circuit Court of Appeals, "as superlegislatures," and decline to second-guess policy alternatives. As the Fourth Circuit explained: "Not only are we ill-equipped even to consider the evidence that would be relevant to such conflicting policy alternatives; we have no objective standards against which to assess the merit of the multitude of alternatives." In the same vein, the Second Circuit, upholding a City of Buffalo temporary wage freeze, even raised the scarecrow of a return to *Lochner* if courts could evaluate whether other alternatives might have been better to address the city's bleak financial picture. 66

Illustrative of this trend is a 2008 decision by the Supreme Court of Kansas rejecting a contract clause challenge to change in retirement benefits. The court declared that reasonable alteration of an employee's pension rights to protect the financial integrity of the system could be sustained so long as the change balances the benefits and detriments to employees. It observed that "our precedent has recognized that there may be times when pension system changes are necessary for the greater good, even if an individual employee or retirant may suffer some marginal disadvantage." 67

Other courts have looked more skeptically at state laws that cut public employee benefits, reasoning that such actions ran afoul of the Contract Clause. 68 These courts gave less weight to the existence

denied, 550 U.S. 918 (2007) ("[N]o one questions the existence of a very real fiscal emergency in Buffalo."); In the Matter of Subway-Surface Supervisors Ass'n v. New York Transit Auth., 44 N.Y.2d 101, 375 N.E.2d 384, 389 (1978) (noting "the financial distress under which the city was laboring and which threatened to overwhelm it").

^{65.} Baltimore Teachers Union v. Mayor of Baltimore, 6 F.3d 1012, 1022 (4th Cir. 1993), cert. denied. 510 U.S. 1141 (1994).

^{66.} Buffalo Teachers Fed'n v. Tobe, 464 F.3d 362, 371 (2d Cir. 2006), cert. denied, 550 U.S. 918 (2007). For decades the Supreme Court's decision in Lochner v. New York, 198 U.S. 45 (1905) has been assailed as a poster child of judicial activism in support of business interests, and has served as a punching bag for constitutional theorists of various stripes. Recently, a number of revisionist scholars have defended the decision as a vindication of individual liberty, and attacked the conventional account of the case as inaccurate and politically inspired. See DAVID E. BERNSTEIN, REHABILITATING LOCHNER: DEFENDING INDIVIDUAL RIGHTS AGAINST PROGRESSIVE REFORM (2011).

^{67.} Denning v. Kansas Pub. Emp. Retirement Sys., 285 Kan. 1045, 180 P.3d 564, 570 (2008).
68. Univ. of Hawaii Prof1 Assembly v. Cayetano, 183 F.3d 1096 (9th Cir. 1999); Ass'n of Surrogates & Sup. Ct. Reporters v. State of New York, 940 F.2d 766 (2d Cir. 1991), cert. denied, 502 U.S. 1058 (1992); State of Nevada Emp. Ass'n, Inc. v. Keating, 903 F.2d 1223 (9th Cir. 1990); Chiles v. United Faculty of Florida, 615 So.2d 671 (Fla. 1993) (holding that legislature's

of a fiscal crisis, and some even pointed out that financial problems were foreseeable when collective bargaining agreements were made. ⁶⁹ They questioned whether, on the facts presented in particular situations, infringement of labor contracts served a public purpose.

The difficulty with this inquiry into public purpose is well illustrated in *American Federation of State, County and Municipal Employees v. City of Benton* (2008).⁷⁰ The city announced plans to terminate the payment of retiree health insurance premiums. Finding that the city's unilateral action amounted to a substantial impairment of a collective bargaining agreement, the Eighth Circuit Court of Appeals turned to consider whether the city had a legitimate public purpose to justify its plan. The court was skeptical about the city's argument grounded on financial necessity. "Although economic concerns can give rise to the City's legitimate use of the police power," the court explained, "such concerns must be related to 'unprecedented emergencies,' such as mass foreclosures caused by the

unilateral abrogation of pay raise in collective bargaining agreement violated contract clause in Florida Constitution); Massachusetts Cmty. Coll. Council v. Commonwealth, 420 Mass. 126, 649 N.E.2d 126 (1995) (unpaid furloughs impaired collective bargaining agreement); AFT Michigan v. State, 297 Mich. App. 597, 825 N.W.2d 595, 600-04 (Mich. App. 2012), application for leave to appeal pending (state law requiring school districts to withhold three percent of employee wages as contribution to fund for retiree health care benefits violated contract clause in both federal and state constitutions); Opinion of the Justices (Furlough), 135 N.H. 625, 609 A.2d 1204 (1992); Oregon Police Officers' Ass'n v. State, 323 Or. 356, 918 P.2d 765 (1996) (statute increasing level of employee contributions to state pension plan runs afoul of federal Contract Clause); Carlstrom v. State, 103 Wash.2d 391, 694 P.2d 1 (1985) (legislative cancellation of salary increase provided for in union agreement was unconstitutional impairment of contract). See also Donohue v. Paterson, 715 F. Supp. 2d 303 (N.D.N.Y. 2010) (on motion for preliminary injunction, emergency appropriation bill which imposed unpaid furloughs and wage freeze held to constitute likely violation of Contract Clause); Welch v. Brown, 2013 WL 1292373 (E. D. Mich. 2013) (finding that action by city to alter retiree health care plans under collective bargaining agreement likely violated contract clause, and granting temporary injunction against modification of contract).

69. Univ. of Hawaii Prof'l Assembly v. Cayetano, 183 F.3d 1096, 1107 (9th Cir. 1999) (declaring that state "knew of the budgetary crisis at the time the collective bargaining agreement was negotiated," and the impairment was therefore not reasonable); Massachusetts Cmty. Coll. Council v. Commonwealth, 420 Mass. 126, 649 N.E.2d 708, 716 (1995) (noting that state's fiscal problems "were reasonably foreseeable when the collective bargaining agreements were signed"); Strunk v. Pub. Emp. Retirement Bd., 338 Or. 145, 108 P.3d 1058, 1095 (2005) (rejecting state's "economic hardship affirmative defense," and finding that legislation eliminating annual assumed earning rate credit for employees and suspending annual cost-of-living adjustments for retirees violated contract clause in Oregon Constitution).

70. American Fed'n of State, Cnty. & Municipal Emp. v. City of Benton, 513 F.3d 874 (8th Cir. 2008).

Great Depression."⁷¹ Because the city failed to demonstrate such a severe emergency, its plan was held not to constitute a public purpose and thus to violate the Contract Clause. This problematic analysis puts courts in the uncomfortable position of ascertaining when a financial crisis is serious enough to justify a contractual impairment. What criteria should be employed in making such a determination? Would any financial distress short of a general depression suffice? How much weight should be accorded a legislative declaration of economic difficulty?

Yet even a judicial finding of a valid public purpose might not be enough to save a cost-cutting scheme. A California appellate court invalidated on contract clause grounds fiscal-emergency legislation that withheld state funding of an employee retirement program. The court recognized the existence of a fiscal crisis in the state, and agreed that "the Legislature's adoption of cost-cutting measures furthers an important public interest." Nonetheless, the court found that the lawmakers failed to consider the availability of less drastic measures to reach its goal and could not demonstrate an emergency justification for its impairment of the state's contract.

In the same vein, several courts have taken the position that unilateral reduction of employee benefits was neither reasonable nor necessary in view of other available options. They suggested seeking additional federal aid, the reduction of other state services, or an increase of taxes, rather than contract impairment, as a solution to financial problems. ⁷⁴ The Ninth Circuit expressed concern that public

^{71.} Id. at 882.

 $^{72.\ \} Valdes\ v.\ Cory,\ 139\ Cal.\ App.3d\ 773,\ 789-91,\ 189\ Cal.\ Rprt.\ 212,\ 224-26\ (3rd\ Dist.\ 1983).$

^{73.} Id. at 791, 189 Cal. Rptr. at 226.

^{74.} Univ. of Hawaii Prof'l Assembly v. Cayetano, 183 F.3d 1096, 1107 (9th Cir. 1999); Opinion of the Justices (Furlough), 135 N.H. 625, 636, 609 A.2d 1204, 1211 (1992) ("The legislature has many alternatives available to it, including reducing non-contractual State services and raising taxes and fees."). See also Donohue v. Paterson, 715 F.2d 306, 322–25 (N.D.N.Y. 2010) (insisting that state must demonstrate that there were no reasonable alternatives to impairment of employee contracts, and must "explain why a particular level of savings must be obtained from state personnel"); AFT Michigan v. State, 297 Mich. App. 597, 825 N.W.2d 595, 603 (Mich. App. 2012), application for leave to appeal pending ("The state has not shown that it first undertook to reduce retiree health benefits, or to require present retirees to contribute to their own health care plans, or to restructure the benefits system in any way other than to legislate state-imposed modifications of freely-negotiated contracts."); Welch v. Brown, 2013 WL 1292373 (E. D. Mich. 2013) (finding that actions by city in abrogating retiree health care plans to balance budget were not reasonable in view of failure to consider other options such as tax or service fee increases).

employees were being called upon to bear the brunt of addressing a budgetary crisis. The Supreme Court of Oregon worried that failure to sustain a statutory pension system "would serve notice on any person who might consider embarking on a career in public service that the state's promise could well prove to be worthless, even after the employees had given consideration for those promises in the form of partial performance." Given the general judicial neglect of the Contract Clause, this cluster of cases finding a constitutional violation represents a somewhat puzzling trend of invoking the clause in a narrow if important field.

Where does this mixed record leave us? Several observations are in order. First, the seemingly inconsistent results reached by different courts flow directly from the current test for analyzing claimed violations of the Contract Clause. The components of this test are so open-ended that one could justify almost any outcome. Much depends on how much weight is assigned to legislative determinations. Second, heightened review of public contracts puts courts in an ironic position. Having lectured for decades that courts should not interfere with social and economic policies, some courts and commentators have reversed gears and maintain that there is a duty to examine the reasonableness of legislative policy with regard to public employee contracts. Consider, for instance, a suggestion by the First Circuit Court of Appeals regarding challenges to modification of public employee contracts. The court stated:

[I]f a state purports to impair a contract to address a budgetary crisis, a plaintiff could allege facts showing that the impairment did not save the state much money, the budget issues were not as severe as alleged by the state, or that other cost-cutting or

^{75.} Univ. of Hawaii Prof'l Assembly v. Cayetano, 183 F.3d 1096, 1107 (9th Cir. 1999).

^{76.} Oregon Police Officers' Ass'n v. State, 323 Or. 356, 918 P. 2d 765, 776 (1996).

^{77.} Leo Clark, *The Contract Clause: A Basis for Limited Judicial Review of State Economic Regulation*, 39 U. MIAMI L. REV. 183, 253 (1985) ("Substantial gaps and ambiguities continue to plague the contract clause doctrine.").

^{78.} Nila M. Merola, *Judicial Review of State Legislation: An Ironic Return to Lochnerian Ideology When Public Sector Contracts Are Impaired*, 84 St. John's L. Rev. 1179, 1210 (2010) ("The dichotomous holdings and the varying level of deference afforded to the legislatures, both within and among the circuits, illustrate the inconsistencies amid the lower courts in applying the third prong of the *U.S. Trust* test.").

 $^{79.\,}$ Id. at 1211-17 (urging the application of strict scrutiny to state laws that impair public sector labor agreements).

revenue-increasing measures were reasonable alternatives to the contractual impairment at issue.⁸⁰

There is no evading the fact that such judicial scrutiny would entail difficult policy considerations. On what principled basis does a court decide whether a proposed alternative to benefit cuts is feasible or preferable? Would a tax increase negatively impact the business climate, and thus further exacerbate the budgetary crisis? Is a wage freeze more reasonable than layoffs, or reducing school or employee work hours? Should pension plans be funded if other creditors must go unpaid? There is no obvious answer to these questions.

III. TOWARD A PRINCIPLED CONTRACT CLAUSE

Litigation in this area is likely to continue as the budgetary short-falls of states and localities show no signs of abating.⁸¹ Is there a way to escape the muddle of current contract clause jurisprudence? The partial revival of the clause with respect to public employee contracts may open the door to a more comprehensive reconsideration of the role of the provision in constitutional law. I propose a return to a principled reading of the Contract Clause.

The first step is to recall that the framers drafted the Constitution, and certainly the Contract Clause, against a background of financial distress in the post-Revolutionary era. ⁸² It was the judgment of the framers that security of contracts even in troubled times was essential for economic growth. ⁸³ It is revealing that the framers thought contractual arrangements were sufficiently vital to require a specific

 $^{80.\,}$ United Auto., Aerospace, Agric. Implement Workers v. Fortuno, 633 F.3d $37,\,45$ (1st Cir. 2011).

^{81.} In June of 2012 public-sector unions in Rhode Island filed a lawsuit challenging the state's overhaul of the public pension system alleging a violation, among other provisions, of the state constitution's contract clause. *See generally* Cuccinelli, Getchell& Russell, *supra* note 55, at 541 (predicting an increase in litigation flowing from alteration of public sector benefits).

^{82.} Blaisdell, 290 U.S. at 453–65 (1934) (Sutherland, J., dissenting) (maintaining that the history surrounding the framing of Contract Clause makes clear that the provision was framed against background of economic hardship and was to apply with special force in times of financial distress).

^{83.} James W. Ely, Jr., *Economic Liberties and the Original Meaning of the Constitution*, 45 SAN DIEGO L. REV. 673, 698–702 (2008). *See also* LAWRENCE M. FRIEDMAN, A HISTORY OF AMERICAN LAW 203 (3rd ed. 2005) (declaring that the Contract Clause reflected the notion that "business had to be able to rely on the stability of arrangements legally made, at least in the short and middle run. The contract clause guaranteed precisely that kind of stability, or tried to.").

ban on state impairment at the same time that they felt a bill of rights was unnecessary. ⁸⁴ The framers did not differentiate between public and private contracts, and certainly never suggested that financial problems at the state level should override contractual obligations. The very purpose of the clause was to curtail state authority.

The second step is to jettison the murky multi-prong test, and employ the same standard of review for public and private contracts. ⁸⁵ Consistent with the language of the Contract Clause, any material state legislative impairment of an existing agreement or the remedies available for the enforcement of contracts should trigger careful judicial scrutiny. All contracts should be put on a level playing field. There should be no supine deference to legislative decisions with respect to either public or private contracts. Something more than conclusory statements about public welfare must be required before courts allow states to set aside private or public contracts. The Contract Clause does not provide that states may impair contracts whenever they contrive a reason.

Third, courts should be reluctant to see financial problems as an excuse for laws impairing contracts, whether mortgages, debts, bonds, or benefits promised public employees. It follows that, as a signal step toward a principled understanding of the Contract Clause, the *Blaisdell* opinion upholding a mortgage foreclosure moratorium should be overruled. Under my analysis, economic distress is not a justification for lifting the constitutional ban on the infringement of

^{84.} City of El Paso v. Simmons, 379 U.S. 497, 523 (1965) (Black, J., dissenting) (stressing that the Contract Clause was "one of the few provisions which the Framers deemed of sufficient importance to place in the original Constitution along with companion clauses forbidding States to pass bills of attainder and *ex post facto* laws."). *See also* Bruce Ackerman, *Constitutional Politics*, 99 YALE L. REV. 543, 537 (1989) ("Thus, the Federalists valued market 'freedom' so highly that they forbade the states from 'impairing the obligation of Contracts' in the original 1787 Constitution, at a time when they believed an elaborate Bill of Rights unnecessary.").

^{85.} Henry N. Butler & Larry E. Ribstein, *The Contract Clause and the Corporation*, 55 BROOK. L. REV. 767, 793 (1989) ("There is no substantial justification for permitting the state to impair private contracts more readily than its own because legislators always act in their own self-interest, regardless of whether the putative goals appear to be to benefit the state, the public, or special interests."); Michael W. McConnell, *Contract Rights and Property Rights: A Case Study in the Relationship Between Individual Liberties and Constitutional Structure*, 76 CAL. L. REV. 267, 293 (1988) (arguing that "the modern thrust of contract clause jurisprudence is precisely backward" and pointing out that "it is interference with private contracts that lies at the heart of the clause"); Thomas W. Merrill, *Public Contracts, Private Contracts, and the Transformation of the Constitutional Order*, 37 CASE WESTERN L. REV. 597, 629–39 (1987) (maintaining that "private and public contracts should be restored to an even playing field").

contracts. That was the position which generally prevailed before *Blaisdell*. In 1933, for example, the Supreme Court of North Dakota emphatically rejected the contention that an economic emergency could justify legislation enlarging the period of redemption from mortgage foreclosures sales, and declared that "[i]t must not be forgotten that the right of private contracts is no small part of the liberty of the citizen"

A positive feature of my approach is that courts would no longer have to decide the appropriate level of review, and would have no need to address the vexing question of whether a particular legislative abridgement of a public contract is "reasonable and necessary." Another advantage is that this mode of analysis will provide greater predictability in Contract Clause litigation. Finally, I submit that this construction of the Contract Clause is more faithful to the history, purpose, and text of the provision than is the present jumble.

How would my proposed reading of the Contract Clause impact litigation over legislative modifications of public sector employee contracts? In some respects such a change in constitutional doctrine would hamper the prosecution of claims for contractual impairment by public employees. There would no longer be an elevated level of judicial review when a state abridged its own contracts, as all agreements would be protected to the same extent. In particular, there would be no room for the suggestion that public employees deserve special attention by the courts. Any such a result should be seen as manifestly unprincipled and calculated to benefit one interest group. While public employees should not be singled out for harsh

^{86.} State ex rel. Cleveringa v. Klein, 249 N.W. 118, 124-28 (N.D. 1933).

^{87.} Kmiec & McGinnis, *supra* note 45, at 559 (pointing out that under its present test "the Supreme Court has interpreted a constitutional provision that was designed to provide certainty to contracting parties in a manner that maximizes the unpredictability of its application").

^{88.} See Merola, supra note 77, at 1211 (asserting that "enormous public interest . . . demands that strict scrutiny be applied to laws that impair public sector labor contracts," and insisting that "public employees deserve the utmost protection"). See also Univ. of Hawaii Prof'l Assembly v. Cayetano, 183 F.3d 1096, 1105–06 (9th Cir. 1999) (advancing similar argument); Ass'n of Surrogates & Sup. Ct. Reporters v. New York, 940 F.2d 766, 772 (2nd Cir. 1991) (stressing impact of lag payroll on affected state employees).

^{89.} Result-oriented jurisprudence, of course, is hardly new. See generally Martin Shapiro, The Supreme Court's "Return" to Economic Regulation, 1 STUD. IN AM. POL. DEV. 91, 93 (1986) (pointing out that after 1937 the Supreme Court abandoned the use of substantive due process to safeguard traditional property, but created rights under the rubric of due process "for the numerous clients of the New Deal, that is, government employees, the recipients of government benefits, intellectuals, racial minorities, and underdogs generally").

treatment in economically distressed times, neither should they be treated as a privileged class. What is good for the goose should be good for the gander. Indeed, one could argue that government as an employer needs greater freedom than private employers to adjust workplace relationships. 90

At the same time, public employees might benefit from my proposal to restore vigor and consistency to the Contract Clause. In the early twentieth century the Supreme Court began to rule that legislative police power encompassed the authority to modify agreements in order to deal with economic problems. Recall that in *Blaisdell* the Court upheld state legislation to postpone mortgage foreclosures. But the Court soon moved beyond private contracts. Similar reasoning was applied in the context of municipal debts. There is authority that a state, faced with a financial emergency, can restructure municipal debt even if some creditors suffer a loss. In Faitoute Iron & Steel Co. v. City of Asbury Park (1942) the Supreme Court declared: "The necessity compelled by unexpected financial conditions to modify an original arrangement for discharging a city's debt is implied in every obligation for the very reason that thereby the obligation is discharged, not impaired."91 This language suggests the existence of a reserved power to alter contracts to address municipal debt if financial circumstances warrant. Faitoute could well lend support to efforts of state and local government to roll back public employee benefits. If a state can alter bonded obligations to the detriment of creditors, why cannot a state modify public employee contracts? My proposal, however, points in another direction. The mere existence of budgetary problems would not constitute a justification for impairing private or public contracts, including public employee contracts.

Other aspects of my proposed approach would also assist potential public employee claims. Consider, for example, the element of foreseeability, often mentioned by courts under the current test in the context of ascertaining the expectations of the contracting parties or in determining whether a state's actions were reasonable. Foreseeability could easily prove a two-edged sword. True, some local governments were already experiencing financial difficulties when collective

^{90.} Alston v. City of Camden, S.C., 332 S.C. 38, 471 S.E.2d 174, 179 (1996) ("If anything, government should have more flexibility than business with respect to the employer/employee relationship.").

^{91. 316} U.S. 502, 511 (1942) (Frankfurter, J.) (rejecting a contract clause challenge to a state plan adjusting rights of bondholders of insolvent municipality).

bargaining agreements were negotiated or benefit schemes were enacted. By the same token, however, employees must also have been aware of deep financial problems afflicting the community. Indeed, financial experts have been warning for years that public employee pension funds were radically underfunded. This was hardly a secret for either local governments or public sector unions. ⁹² It is consequently quite possible that courts could conclude that employees must have understood that tight budgetary realities might frustrate fulfillment of collective bargaining agreements or statutory schemes. In a related field, the Seventh Circuit Court of Appeals upheld a state law curbing the collective bargaining rights of public employee unions and revealingly commented that the statute reflected "a rational belief that public sector unions are too costly for the state." This reasoning might find application in Contract Clause cases as well, to the detriment of employee claimants.

To my mind, loose considerations of whether an economic emergency was expected and foreseeable should have no bearing on Contract Clause analysis. Courts should no longer consult a crystal ball to decide whether a changed financial picture was foreseeable. The fact of a legislative impairment, not the reasonableness of the state's actions, would be the determinative issue.

I certainly make no claim that this brief essay resolves all the interpretative difficulties pertaining to the Contract Clause. Still, it seems apparent that we are presently on the wrong path and that current contract clause jurisprudence is deeply flawed. The Supreme Court, followed by some state courts, pays lip service to the importance of the Contract Clause and then formulates pliable tests that, as a practical matter, undercut the protective function of the provision against legislative interference with existing agreements. Perhaps the revival of interest in the Contract Clause with respect to public employee labor agreements will serve as a catalyst for a broad reconsideration and revitalization of the provision. Failing such a fresh look, any application of the clause to sustain public employee contracts looks like an anomaly calculated to serve the economic interests of one particular group.

^{92.} The financial problems have been evident for decades. Facing a severe fiscal crisis in the mid-1970s, New York City imposed a wage freeze for municipal employees. See Comment, The Constitutionality of the New York Municipal Wage Freeze and Debt Moratorium: Resurrection of the Contract Clause, 125 U. PA. L. REV. 167 (1976).

^{93.} Wisconsin Educ. Ass'n Council v. Walker, 705 F.3d 640, 656 (7th Cir. 2013).

ON THE USE AND ABUSE OF OVERFLIGHT COLUMN DOCTRINE

ERIC R. CLAEYS*

INTRODUCTION: THE AD COELUM FABLE

In contemporary debates about property and intellectual property ("IP"), one often hears a tale that goes like this: Once upon a time, the common law declared air to be private property, in columns appurtenant to the land directly beneath the columns. This doctrine was an application of a maxim I call here the "ad coelum maxim." "Ad coelum" is short for "cuius est solum, eius usque ad coelum et ad inferos": "To him to whom the soil belongs belongs also to heaven and to the depths." As Blackstone recounted, under this maxim "no man may erect any building, or the like, to overhang another's land So that the word 'land' includes not only the face of the earth but everything under it, or over it." 1

Whatever the *ad coelum* maxim's original merits, the tale continues, though even a century ago it was clearly out of date. "By the later part of the [nineteenth] century, the *cujus est solum* principle was so ingrained in the thinking of Anglo-American judges that they applied it reflexively to virtually all encroachments into a landowner's airspace." When the airplane was invented and then commercialized, if the maxim had been enforced literally, "then crossing each [air] column without permission [would have been] a trespass."

The tale climaxes like this: to avoid such perverse results, courts and regulators limited the *ad coelum* maxim's reach in cases decided

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^{1. 2} WILLIAM BLACKSTONE, COMMENTARIES *18 (A.W. Brian Simpson intro., 1979) (1766). For a history of the *ad coelum* maxim's genesis and its penetration into American law, see Andrea B. Carroll, *Examining a Comparative Law Myth: Two Hundred Years of Riparian Misconception*, 80 Tul. L. Rev. 901, 912–19 (2006).

^{2.} STUART BANNER, WHO OWNS THE SKY?: THE STRUGGLE TO CONTROL AIRSPACE FROM THE WRIGHT BROTHERS ON 19 (2008).

^{3.} MICHAEL HELLER, THE GRIDLOCK ECONOMY: HOW TOO MUCH OWNERSHIP WRECKS MARKETS, STOPS INNOVATION, AND COSTS LIVES 28 (2008).

between 1920 and 1950. In *United States v. Causby*, farmers sought just compensation for a taking allegedly inflicted by federal aviation regulations entitling army airplanes to fly over their farms. When it considered the *ad coelum* maxim, the U.S. Supreme Court warned: "that doctrine has no place in the modern world." If the air were not a "public highway . . . every transcontinental flight would subject the operator to countless trespass suits. Common sense revolts at the idea." "And with that sentence," Americans lived happily ever after. "[H]undreds of years of property law w[ere] gone, and the world was a much wealthier place."

Some modern property and IP scholars are fond of this tale, which I call here the "ad coelum fable." The tale seems to illustrate how "it is the special genius of a common law system, as ours is, that the law adjusts to the technologies of the time." For example, Michael Heller relates this fable as a story about "lighthouse beams," his way of suggesting how absurd it would be if every landowner could sue in trespass whenever someone else emitted across his property photons from a lighthouse light. Heller uses the lighthouse beam as one of several case studies confirming for readers why "it is wrong to see property ownership as fixed and unchanging. Even the staunchest private-property systems are always adapting rights to manage new resource conflicts."

No doubt, there was a period of time when landowners, airlines, and lawyers were all genuinely in suspense about how airplane overflights would be treated at common law. Yet the *ad coelum* fable

^{4. 328} U.S. 256 (1946).

^{5.} Id. at 261.

^{6.} Id. at 2

^{7.} Lawrence Lessig, $Google\ Sued$, LESSIG (Sept. 22, 2005), http://www.lessig.org/2005/09/google-sued/.

^{8.} LAWRENCE LESSIG, FREE CULTURE: HOW BIG MEDIA USES TECHNOLOGY AND THE LAW TO LOCK DOWN CULTURE AND CONTROL CREATIVITY 3 (2004).

^{9.} Heller, supra note 3, at 27, 29; see also Banner, supra note 2, at 11 ("[I]f the lawyers weren't careful they might put an end to aviation before it began."); Peter Linzer, From the Gutenberg Bible to Net Neutrality—How Technology Makes Law and Why English Majors Need to Understand It, 29 McGeorge L. Rev. 1, 7–10 (2008) (relying on the ad coelum fable to justify a new policy towards an open internet); Ryan Radia, A Balanced Approach to Copyright, CATO UNBOUND (Jan. 11, 2013), http://www.cato-unbound.org/2013/01/11/ryan-radia/a-balanced -approach-to-copyright/ (citing the transition from the ad coelum maxim as a precedent for revising contemporary copyright law); Matt Soniak, Do You Own the Space Above Your House?, MENTAL_FLOSS (June 25, 2012), http://mentalfloss.com/article/31018/do-you-own-space-above -your-house (retelling the ad coelum fable as told in text).

suggests that the common law of property was not capable of dealing with the overflight problem until Justice William Douglas injected fresh policy reasoning into the law. As Larry Solum has noted, however, that suggestion is "not even close" to a satisfying account of the "relationship between technological change and legal change." ¹⁰ In first-year common law courses, professors teach students that "common law" reasoning involves not only case holdings but also general policies internal to the field of law under study. In times of legal stasis, those internal general policies reconcile most holdings without being relied on extensively. In times of crisis, such as the overflight transition, those policies are appealed to explicitly and extensively; they guide legislators and judges as these officials adapt black-letter doctrine to changing circumstances. Solum is far from the first to raise doubts about the ad coelum fable. Yet neither he nor anyone else I know of has studied the overflight transition closely and seemed open to the possibility that the relevant doctrines had sufficient internal content to adapt to air travel.

This Article reexamines the *ad coelum* fable in that internalist spirit. The Article has two main claims. First, American property common law was not nearly as attached to the *ad coelum* maxim as the purveyors of the *ad coelum* fable suggest. At least some jurists and lawyers regarded the maxim only as a means to an end. These jurists and lawyers took for granted that property is justified by its tendency to secure and encourage uses of external resources valuable or beneficial to human well-being. Jurists and lawyers so minded used the *ad coelum* maxim as one of several heuristics to help match different resources to basic categories of property. And when judges used the maxim in the more prominent overflight cases decided between 1920 and *Causby*, they used it in a sensible fashion, pretty much as contemporary judges and scholars would.

For my part, I think the overflight transition deserves study because it provides further confirmation that moral or personhood-based theories of property deserve more credit than they get in contemporary property scholarship. When judges appealed in overflight cases to norms about valuable or beneficial "use," they reasoned consistently

^{10.} Lawrence B. Solum, Book Review, *The Future of Copyright*, 83 Tex. L. Rev. 1137, 1144 (2005) (reviewing LESSIG, *supra* note 8).

with a theory of productive labor I am developing and resuscitating in other scholarship.¹¹

That said, I realize that most readers are probably interested in how the ad coelum fable is used in contemporary scholarship or opinion advocacy about property and IP. Hence, my second claim: The fable is abused quite often in that scholarship and opinion advocacy. Some opinion writers and scholars have understandable motivations for propagating the ad coelum fable. Such writers or scholars favor technocratic approaches to property-related regulatory disputes: in some cases, pro-commons approaches, and in others, approaches that downgrade relatively strong equitable protection for property and upgrade relatively weak, damages-only remedies. In both settings, the ad coelum fable makes technocratic approaches to property regulation seem more desirable or inevitable than they really are. The fable sets up a straw man for easy criticism. In this caricature, "property" is all form and no substance—a right to exclude with little or no justification in the policy goals that justify exclusion. Since "property" seems incapable of accommodating policy concerns, by process of elimination other "regulatory" or "commons" approaches seem the only doctrinal vehicles available that can make the appropriate policy trade-offs.

I do not mean to suggest that regulatory approaches, commons arrangements, or weak-remedy private property approaches are misguided across the board. As we shall see, in some situations, such approaches accord with and complete the normative approach to property latent in the best-reasoned overflight cases. But such approaches should earn their own keep. The *ad coelum* fable makes a caricature of traditional principles of American property law. The fable's main function is to make alternative approaches look more attractive in contrast to that caricature. Educated consumers of scholarship and opinion writing about property policy should discount retellings of the *ad coelum* fable accordingly.

^{11.} On moral approaches to scholarship, see Eric R. Claeys, *Takings, Regulations, and Natural Property Rights*, 88 CORNELL L. REV. 1549, 1559–61 (2003) [hereinafter Claeys, *Takings, Regulations*]. On productive use and labor, see Eric R. Claeys, *Productive Use in Acquisition, Accession, and Labour Theory, in Philosophical Foundations of Property Law 33–53 (James E. Penner & Henry E. Smith eds., forthcoming) [hereinafter Claeys, <i>Productive Use and Labour Theory*], *available at* http://ssrn.com/abstract=2066166.

This Article demonstrates those claims as follows. In Part I, I explain how the *ad coelum* maxim fit into basic common law reasoning about property categories. In Part II, I explain how judges used the maxim as one of several resources to implement a moral theory of labor. In Part III, I show how the legal resources explained in Part I and the moral principles recounted in Part II apply to the overflight problem at common law. Of course, in the period between 1920 and 1950, state and federal aviation regulators needed to preempt state common law to insulate airlines from trespass liability. In Part IV, I explain how even a strongly pro-property rights (and labor-influenced) account of eminent domain and inverse condemnation accommodates the shift from the *ad coelum* maxim to aviation servitudes and an aviation air commons.

Parts V through VII prove my second claim. In Part V, I explain my general concerns about how the *ad coelum* fable is used in relation to technocratic approaches to property regulation. Parts VI and VII consider two contemporary case illustrations confirming my concerns—respectively, urban redevelopment with eminent domain, and copyright litigation over the Google Books digitization project.

I. SETTING THE AD COELUM MAXIM IN PROPER CONTEXT

Imagine that two historians conduct intellectual histories of the same era in a country. The first historian discovers that, during this era, speakers frequently used the maxim "a penny saved is a penny earned." He concludes that this era was stingy and incapable of appreciating the finer and magnificent public works that elevate a culture. The second historian discovers that, in the same era, people frequently used the maxim "you can't take it with you." She concludes that this era was materialistic and incapable of exercising the self-restraint necessary to conserve the culture's resources for posterity.

Obviously, both of these histories are defective. A careful intellectual historian would need to explain why people in that culture used both maxims, in what contexts they used each, and how they reconciled the maxims to one another. Yet the method used in these two hypothetical histories is basically the same as the method assumed in the *ad coelum* fable. Just because jurists frequently cited the *ad*

coelum maxim, it does not automatically follow that they applied the maxim unthinkingly and dogmatically wherever it might apply.

Take Blackstone. True, he does invoke the *ad coelum* maxim, and he is also notorious for describing "the right of property" as "that sole and despotic dominion which one man claims and exercises over the external things of the world, in total exclusion of the right of any other individual in the universe." But in between these two passages, Blackstone qualifies his understanding of property:

But, after all, there are some few things, which notwithstanding the general introduction and continuance of property, must still unavoidably remain in common; being such wherein nothing but an usufructuary property is capable of being had; and therefore they still belong to the first occupant, during the time he holds possession of them, and no longer. Such (among others) are the elements of light, air, and water; which a man may occupy by means of his windows, his gardens, his mills, and other conveniences ¹³

So although Blackstone describes a landowner's air column as exclusive private property, he also described the air in that column as a common resource, in which individuals may acquire property only in the limited form of a usufruct. An inquiring intellectual historian would want to know whether Blackstone had any principles for determining when commons solutions dominate and when the despotic tendencies associated with the *ad coelum* maxim dominate.

Blackstone was not an outlier. Before the advent of the airplane, the *ad coelum* maxim was strained less by trespass litigation ¹⁴ than by nuisance litigation involving pollution. If nineteenth-century property law was as formalistic as the *ad coelum* maxim suggests, courts should have applied the maxim unthinkingly in ordinary pollutionnuisance cases. They did not. The 1867 decision *Galbraith v. Oliver* involved a nuisance lawsuit by residents against a flour mill using

^{12. 2} BLACKSTONE, supra note 1, at *2.

^{13. 2} id. at *14.

^{14.} According to one case, in trespass litigation before overflight disputes, the *ad coelum* maxim was cited and considered in suits involving: ownership of birds nesting on land; overhanging structures and tree branches; a horse kicking a plaintiff through a fence separating two lots; ammunition shot over and into property; and telephone wires. *See* Swetland v. Curtiss Airports Corp., 41 F.2d 929, 934–36 (N.D. Ohio 1930), *modified on other grounds*, 55 F.2d 201 (6th Cir. 1932).

coal to power its operations.¹⁵ Although *Galbraith* was not reported in any national commercial legal reporter of which I am aware, the opinion was praised by the leading late nineteenth-century American treatise on nuisance, as a "very elaborate and able opinion, commendable for the common sense and straightforward manner in which [it gives] the test by which to determine the question of nuisance. . . ."¹⁶

The judge who decided *Galbraith* understood the *ad coelum* maxim as Blackstone had. On one hand, "[t]heoretically, the maxim is *cujus est solum*, *ejus est usque ad cœlum*. Doubtless his right to pure air is co-extensive with his freehold "17 On the other hand, "[t]hese rights are in a measure relative, made so by the necessities of social life in cities and thickly settled communities." These relative needs led the judge to impose usufructuary qualifications on the rights marked off theoretically by the *ad coelum* maxim: "Practically, a man can only maintain his right to so much circumambient atmosphere as is necessary for his personal health and comfort, and the safety of his property." 19

Now, skeptical or cynical readers will conclude that Blackstone and the judge who decided *Galbraith* talked out of both sides of their mouths. Or, that they used "dueling maxims" selectively, much as Karl Llewellyn suggested judges use dueling canons of statutory interpretation.²⁰ But charitable readers would consider another possibility. Perhaps these and other lawyers shared coherent principles for reconciling the *ad coelum* maxim with contrary maxims—say, "the atmosphere is a commons," or "claimants may 'own' only as much air as they can really 'use."

I suspect they did. As I have shown elsewhere, important strands of Anglo-American property common law internalize principles of

^{15. 3} Pitts. R. 78, 82 (Pa. Comm. Pl. 1867).

^{16.} H.G. WOOD, A PRACTICAL TREATISE ON THE LAW OF NUISANCES IN THEIR VARIOUS FORMS; INCLUDING REMEDIES THEREFOR AT LAW AND IN EQUITY § 431, at 474 (1st ed. 1875).

^{17.} Galbraith, 3 Pitts. R. at 79.

^{18.} Id.

^{19.} *Id.* at 79–80

^{20.} See Karl N. Llewellyn, Remarks on the Theory of Appellate Decision and the Rules or Canons About How Statutes Are to Be Construed, 3 Vand. L. Rev. 395 (1949–1950). Note, however, that Llewellyn may have been as uncharitable to canons of interpretation as retellers of the ad coelum fable are to common law maxims. See Antonin Scalia & Bryan A. Garner, Reading Law: The Interpretation of Legal Texts 59–60 (2012).

natural rights labor theory. ²¹ Those strands have tried (with varying degrees of consistency and conscientiousness, to be sure) to configure property doctrines so as best to promote the free, equal, and concurrent labor by all members of the citizenry. Natural rights—based labor theory has not been the only or (more recently) the main influence on American property law, as Justice Douglas's Court opinion in *Causby* seems to attest. ²² If one sets aside *Causby*, however, the best-reasoned overflight cases relied on norms about "valuable," "beneficial," or "productive use," and these norms are central to labor theory. ²³ These cases confronted the *ad coelum* maxim and other possibly conflicting legal principles, and they reconciled those principles in a sensible fashion. ²⁴

When I indict previous writings about overflights, readers may wonder: Am I criticizing the leading legal history on overflights, Stuart Banner's *Who Owns the Sky?* ²⁵ For the most part, no. My main complaints are with contemporary scholars and opinion writers who use the *ad coelum* fable as a sound bite in contemporary policy debates. The questions those scholars and opinion writers have begged could be explored with several different methods. Banner has explored those

^{21.} See, e.g., Claeys, Productive Use and Labour Theory, supra note 11; Eric R. Claeys, Jefferson Meets Coase: Land-Use Torts, Law and Economics, and Natural Property Rights, 85 NOTRE DAME L. REV. 1379, 1398—1430 (2010) [hereinafter Claeys, Jefferson Meets Coase].

^{22.} Cf. United States v. Causby, 328 U.S. 256, 261 (1946) (qualifying the reach of private overflight columns because such columns "would clog [the public air] highways, seriously interfere with their control and development in the public interest, and transfer into private ownership that to which only the public has a just claim"). Justice Douglas expressed his hostility toward natural rights principles more directly than he did in Causby in his opinion for the Court in Berman v. Parker, 348 U.S. 26, 31–33 (1954); see Eric R. Claeys, Public-Use Limitations and Natural Property Rights, 2004 MICH. St. L. Rev. 877, 907–10 [hereinafter Claeys, Public-Use Limitations].

^{23.} See Claeys, Productive Use and Labour Theory, supra note 11, at 17-19.

^{24.} Let me address a few sources of possible misconception about my claim in this and the next two Parts. I assume here that labor theory supplies a legitimate and sufficient basis for legal regulation when it applies, see id. at 6–7, but I do not mean to claim here that labor theory is the best possible, or a necessary, theory to explain and justify how property doctrines have been applied by American public officials. In addition, readers need not even agree with me that labor theory supplies a sufficient basis for contemporary property regulation. Even if readers think labor theory is misguided or historically outdated, theories of natural rights and labor were predominant in American law until fairly recently, perhaps 1950—as witnessed by the passages from Blackstone and the Galbraith case discussed in Part I. If a theory of productive labor justifies the approach taken in the seminal overflight cases in historical context, the ad coelum fable represents bad history and bad law regardless of whether that theory applies to present-day issues.

^{25.} Banner, supra note 2.

questions via intellectual history; here, I explore them with a mix of moral and conceptual philosophy as applied to property law.

I say "for the most part," however, because Banner probably assumes priors about legal and technological change different from the priors assumed by me (or fellow-travelers like Solum). Although Banner does not explain his priors systematically, he gives strong hints at them. When he discusses how the common law adapts to changing conditions, he relies heavily on the "idea that judges were sub rosa lawmakers," which was becoming "a commonplace among the law professors who became known as the legal realists." When Banner offers conclusions about how American law came to accommodate aerial overflights, he relies on prominent contemporary economic theories of property rights. 27 Although legal realists and economic property scholars differ in other respects, both assume relatively instrumental understandings of law. Both assume that law is implemented to advance policy goals, but both are basically indifferent to whether law internalizes the goals it promotes and embodies those goals in specific doctrines or in concepts running throughout law.²⁸ So although Who Owns the Sky? is very informative about the overflight transition, in my opinion it does not focus adequately on the precise mechanism by which the relevant fields of law adapted to the relevant changes in technology. As I hope to show, in most of the cases covered at substantial length in Who Owns the Sky?, 29 social and

^{26.} Id. at 94. Accord Stephen Siegel, Book Review, Stuart Banner, Who Owns the Sky?: The Struggle to Control Airspace from the Wright Brothers On, 28 LAW & HIST. REV. 282, 283 (2010) (concluding that, as a matter of legal intellectual history, Banner's work presents "a standard rendition of the transition from natural law and legal formalism to positivism and legal realism").

^{27.} See BANNER, supra note 2, at 290–91 (citing Harold Demsetz, Toward a Theory of Property Rights, 57 AM. ECON. REV. PAPERS & PROCEEDINGS 347 (1967)); id. at 291–93 (citing R.H. Coase, The Problem of Social Cost, 3 J.L. & ECON. 1 (1960)).

^{28.} See Jules L. Coleman, The Practice of Principle: In Defence of a Pragmatist Approach to Legal Theory 26–31 (2003); Eric R. Claeys, Exclusion and Private Law Theory: A Comment on Property as the Law of Things, 125 Harv. L. Rev. Forum 133, 138–40 (2012).

^{29.} By "substantial length," I mean the overflight cases listed in *Who Owns the Sky?*'s index. These cases include not only *Causby* but also Hinman v. Pacific Air Transport, 84 F.2d 755 (9th Cir. 1936); Thrasher v. City of Atlanta, 173 S.E. 817 (Ga. 1934); Gay v. Taylor, 19 Pa. D. & C. 31 (1932); Swetland v. Curtiss Airports Corp., 41 F.2d (N.D. Ohio 1930), *modified on other grounds*, 55 F.2d 201 (6th Cir. 1932); Smith v. New England Aircraft Co., 170 N.E. 385 (Mass. 1930); Johnson v. Curtiss Northwest Airplane Co. (Minn. Dist. Ct. 1923), *reprinted in Current Topics and Notes*, 57 Am. L. REV. 905, 908–11 (1923); and Commonwealth v. Nevin, 2 Pa. D. & C. 241 (1922).

normative concepts like "use," "enjoyment," "accession," and "effective occupation" gave the relevant fields of property law the right combination of focus and flexibility to respond to air travel.

II. THE AD COELUM MAXIM AND LABOR THEORY

A. Productive Labor Theory

Many readers will be surprised at my suggestions that social concepts of "use" or grounding norms of "labor" can guide property regulation; they assume that labor theory is as extreme and unqualified as they assume Blackstone to be. Consider this representative passage from Tim Wu, in his review of the book in which Heller retells the *ad coelum* fable:

[O]ne of the strongest intuitions in Anglo-American thought [holds] that property is a good thing, and that more property is almost always better. In fact, views on property, since about the time of John Locke, have bordered on reverential. Locke, for instance, described property as a natural right given to man by God as the reward for labor. ³⁰

Obviously, Wu is sloppy in the terms he uses to criticize Anglo-American thought. What might it mean for a legal system to hold that "more property is almost always better"? An increase in the quantity of valuable resources capable of being used to pursue decent life plans? No one should disagree with that. More legal rights to blockade the valuable uses of external resources? No one would agree with that. When held to coherent and realistic expectations, however, neither labor theory nor labor-influenced Anglo-American law holds that private property is always a good thing.³¹ In both labor theory and labor-influenced property law, legal private property is a means to an end. Private property is justified by whether

^{30.} Tim Wu, Move Over Marx: How Too Many Property Rights Wreck the Market, SLATE (July 14, 2008, 7:22 AM), http://www.slate.com/articles/arts/books/2008/07/move_over_marx.html (reviewing HELLER, supra note 3).

^{31.} Nor do those strands of common law today that continue to enforce policies similar to pre-1950 common law, even if contemporary authorities restate the arguments in favor of such policies while relying on different normative foundations.

and how well it contributes to a social arrangement in which most or all citizens are as free as possible to labor concurrently.

Let me restate the features of productive labor theory relevant here in extremely compressed form. The natural right to labor refers to a pre-political moral interest people have in engaging in activity likely to preserve them or make them more likely to flourish. (Goods likely to contribute to self-preservation, improvement, or flourishing will be referred to here for short as "life conveniences," and activity that seems practically likely to acquire or generate such life conveniences will be referred to here as "productive labor.") To secure this interest, a political community should institute legal protections securing personal liberty and private property. Those protections should endow citizens with broad freedom—the greatest freedom that all citizens may realistically enjoy on equal terms "to order their Actions, and dispose of their Possessions, and Persons as they think fit, with the bounds of the Law of Nature, without asking leave, or depending on the will of any other Man."

Nevertheless, neither labor rights nor the legal rights that declare and protect labor rights are boundless. When Wu refers to "property as a natural right given to man by God," it is reasonable to read him to be suggesting that labor-based property rights are incapable of being qualified in any significant respect. Not so. Locke's theory of politics justifies rights not as absolute trumps but rather as domains of freedom simultaneously justified and limited by the flourishing-based interests that ground labor rights. In other words, activity counts as morally defensible "labor"—and generates a robust claim of property over external resources—only if and to the extent that property secures and encourages proprietors to use the resources

^{32.} My account of Locke's theory of property relies substantially on accounts developed by A. John Simmons, The Lockean Theory of Rights (1992), and Stephen Buckle, Natural Law and the Theory of Property: Grotius to Hume (1991).

^{33.} See JOHN LOCKE, TWO TREATISES OF GOVERNMENT bk. II, § 26, at 286 (Peter Laslett ed., Cambridge Univ. Press 1988) (1690) [hereinafter LOCKE, TWO TREATISES] (explaining how the world has been given to "Men in common [with] reason to make use of it to the best advantage of Life, and convenience").

^{34.} Id. § 4, at 269.

^{35.} See Claeys, Productive Use and Labor Theory, supra note 11, at 23–25. For textual confirmation in Locke's own writings, see LOCKE, TWO TREATISES, supra note 33, bk. II, § 4, at 269 (describing the state of natural freedom as being bounded by the "Laws of Nature"); id. § 57, at 305 (justifying every law by its tendency to "direct[] a free and intelligent Agent to his proper Interest" and to "prescribe[] no farther than is for the general Good of those under that Law").

owned in productive fashion.³⁶ It becomes even more challenging to regulate property in a political community. To coordinate resource uses by many different individuals, property rights must be specified (Locke's term is "settled"). 37 Property rights are not secure without specific formal conventions, for all the same reasons that rights of personal safety are not secure on a highway until a legislature enacts a specific speed limit for it. In addition, conventional property rights must be homogenized, structured so that many different individuals may use the same conventional rights to pursue different goals within the range of life plans encompassed by self-preservation and -improvement. If "all the Power and Jurisdiction" any one citizen has is "reciprocal, no one having more than another" on account of moral human equality, legal rights specifying moral rights of liberty and property must confer relatively equal and homogeneous zones of autonomy to different citizens.³⁸

Within these moral constraints, although Lockean labor theory justifies rights of private property, it does so only to the extent that the rights are realistically likely to enlarge all citizens' concurrent interests in and opportunities to labor in pursuit of life conveniences. Every owner's property rights in relation to a resource are correlative with the productive labor interests every neighboring owner and nonowner may justly claim on that resource.³⁹ So conceived, Lockean labor theory does *not* prescribe (contra Wu) that more property is always better. Like Blackstone, Locke acknowledged that water the ocean—deserves to be regarded "that great and still remaining Common of Mankind"40 The ocean lends itself to several uses especially navigation—better promoted by a legal commons than by privatization. The ocean has few if any uses furthered significantly by private ownership. Furthermore, labor cannot be secured and uses cannot be coordinated unless it is easy to "put a distinction between" resources being labored on and resources left in "common." 41 It would be practically impossible to cordon any (private) segment of the ocean off from the (common) remainder.

^{36.} See Claeys, Productive Use and Labour Theory, supra note 11, at 12-20.

^{37.} LOCKE, TWO TREATISES, supra note 33, bk. II, § 38, at 295.

^{38.} See id. § 4, at 269.

^{39.} See Claeys, Productive Use and Labour Theory, supra note 11, at 14-17.

^{40.} LOCKE, TWO TREATISES, supra note 33, bk. II, § 30, at 289.

^{41.} Id. § 28, at 288.

B. Labor-Based Property in Land

The same principles structure and limit the scope of private property in relation to more traditional objects of ownership—land and personal articles. Ordinarily, relevant property, tort, and remedy doctrines all endow landowners with broad control over their lots. Tort law makes any unconsented entry a trespass, ⁴² and remedy law presumes that any repeat or ongoing trespass may be enjoined. ⁴³ When justified on labor-theoretic grounds, these doctrines both embody practical judgments that landowners will generate far more life conveniences if they are endowed with exclusive control over their lots than if their control is substantially limited. These doctrines also embody a second, parallel judgment: non-owners will have more opportunities to acquire life conveniences of their own—through purchase, barter, work, or gratuitous access—if they are required to respect landowners' exclusive control. ⁴⁴

Contrary to Wu, however, neither common law nor Locke requires that more control always be better. Assume that a neighbor builds a structure on a landowner's lot, that the structure encroaches on only a few unused square feet of the lot, and that it would be expensive to tear down the encroaching segment. In cases in which the neighbor builds the encroachment deliberately or carelessly, remedy law continues to entitle the owner to an injunction ordering the encroachment's removal, no matter how expensive it is to tear down the encroaching segment of the structure. This rule embodies a reasonable indirect consequentialist judgment: trespasses undermine the secure control owners expect as a precondition for laboring, and by enjoining deliberate or careless trespasses now the law deters them later. When the same *de minimis* encroachment is the result of a good-faith mistake, however, the law withholds from the owner the injunction and limits her to permanent damages for the encroached-on land. 46

^{42.} See, e.g., Jacque v. Steenberg Homes, Inc., 563 N.W.2d 154 (Wis. 1997); Longnecker v. Zimmerman, 267 P.2d 543, 545 (Kan. 1954); Dougherty v. Stepp, 18 N.C. (1 Dev. & Bat.) 371, 371 (1835).

^{43.} See, e.g., Geragosian v. Union Realty Co., 193 N.E. 726 (Mass. 1935); Baker v. Howard Cnty. Hunt, 188 A. 223 (Md. 1936).

^{44.} See Claeys, Productive Use and Labour Theory, supra note 11, at 21–27.

^{45.} In Locke's term, better to protect legitimate owners from those who "deserved the benefit of another's Pains, which he had no right to." LOCKE, TWO TREATISES, *supra* note 33, bk. II, § 34, at 291.

^{46.} See Golden Press, Inc. v. Rylands, 235 P.2d 592, 595 (Colo. 1951) (en banc).

This exception institutes a reasonable refinement to the indirect consequentialist presumption just explained: when the encroacher makes a good faith mistake, the encroachment does not destabilize the security of property as a deliberate trespass does. As long as the encroachment does not hit the owner where he lives, the structure does not deprive him "of any beneficial use" —i.e., opportunity for likely productive labor—and it secures the beneficial use the neighbor inadvertently and accidentally made of some of his lot. ⁴⁸

C. Labor-Based Accession Policy

The exception for good faith de minimis encroachments flags an apparent mismatch between labor norms and legal property rights. Ordinarily, trespass law and its presumptive remedies secure and promote rights of labor even though (or, really, because) they do not have elements expressly requiring landowners to labor (in a morally valuable, productive sense) as a precondition of getting legal relief. If this disjunction seems unusual or unrepresentative, it isn't. Throughout the law of property, there exist many seeming mismatches between legal rights and labor- or use-based moral rights. This fact confirms how incoherent it is to ask of a theory of property whether it holds that "more property is almost always better." Does the law create "more property" by giving the landowner an unqualified right to exclude . . . or by giving *non*-owners rights to appropriate land in extreme conditions? The former maximizes property's exclusionary quality, while the latter increases the sheer quantity of proprietary rights. Sound property law and policy do neither; they scale legal property to the moral use interests that justify it, differently in different contexts. Sometimes (as in usufructs), legal property should be kept narrowly tailored to the moral use interests that justify property. On other occasions (ordinary rights in land), legal property should outstrip those moral use interests. In many close cases (de minimis encroachments), property law mixes and matches the two approaches.

This choice (i.e., how best to scale legal property rights to underlying moral use interests) is described most often in property law and

^{47.} Lynch v. Union Inst. for Sav., 34 N.E. 364, 364–65 (Mass. 1893).

^{48.} See Eric R. Claeys, Exclusion and Exclusivity in Gridlock, 53 ARIZ. L. REV. 9, 31–32 (2011) [hereinafter Claeys, Exclusion and Exclusivity].

policy in terms of the principle of accession. 49 Assume that a cow grazes in a pasture field. 50 In terms of basic human perception, the dirt, crops, and cows are all different "things." Legally, however, the crops are accessories of—part of the same "thing" as—the soil by operation of the fixture doctrine, and the cows are the same by operation of the ratione soli rule. Morally, these legal classifications are quite easy to justify. The cows, crops, and soil are all better used as a single resource than as standalone resources, and people perceive all three as one single "thing"—a farm marked off by its boundaries because people's perceptions tend to run with their practical judgments about use potential. ⁵¹ By contrast, accession principles justify treating oil and gas as entities distinct from land. Oil and gas are movable, the land is not, and the oil and gas escape readily from the land when released. In addition, most nonmovable minerals have at least some tendency to enhance the use of superjacent land, even if only by supporting the land. By contrast, oil and gas's most common uses do not benefit the land. In labor-theoretic terms, land and oil or gas are most likely to be labored on productively if they are treated as distinct resources, with different regimes for acquisition and use. So although ordinary minerals are treated as accessories to the land superjacent to the mineral estate, oil and gas are distinguished as being "fugitive minerals," standalone resources capable of appropriation separate from the mineral estate.⁵²

These accession-related judgments highlight what is so problematic about the *ad coelum* fable. If the *ad coelum* maxim applied as relentlessly as the fable suggests, *de minimis* encroachments, oil, and gas should all have been deemed accessories to land. None were so deemed. Judges have kept these resources clear of the *ad coelum* maxim because they have intuited that the maxim states not a rote

^{49.} See Christopher M. Newman, Transformation in Property and Copyright, 56 VILL. L. REV. 251 (2011); Thomas W. Merrill, Accession and Original Ownership, 1 J. LEG. ANAL. 459 (2010); Henry E. Smith, Intellectual Property as Property: Delineating Entitlements in Information, 116 YALE L.J. 1742, 1751–82 (2007).

^{50.} The example comes from Locke, who regards the cow and the produce as accessories of the field when fenced and farmed. LOCKE, TWO TREATISES, *supra* note 33, bk. II, § 38, at 295.

^{51.} See R.A. Brown, The Law of Personal Property \S 2.4, 16.1–.2, at 17, 514–22 (1975); Claeys, Productive Use and Labour Theory, supra note 11, at 47–53; Newman, supra note 49, at 271.

^{52.} Robert E. Hardwicke, *The Rule of Capture and Its Implications as Applied to Oil and Gas*, 13 Tex. L. Rev. 391, 399 (1935).

rule but a legal conclusion. If accession policies prescribe that a resource be deemed an accessory to super- or subjacent land, the maxim applies; if not, judges cite some other maxim or mid-level property classification. And since judges have managed to be practical and attentive to context in encroachment disputes and disputes about oil and gas, inquiring readers should want to know whether they reasoned any differently in overflight disputes. The next two Parts take up that inquiry.

III. OVERFLIGHT DISPUTES IN LABOR-BASED COMMON LAW

This Part focuses on common law trespass litigation, interpreting closely two of the better-reasoned opinions considering the ad coelum maxim. One opinion comes from *Hinman v. Pacific Air Transport*, ⁵³ handed down in 1936 by Judge Haney for the U.S. Court of Appeals for the Ninth Circuit. The other opinion comes from Swetland v. Curtiss Airports Corp.,54 handed down in 1930 by Judge Hahn for the U.S. District Court for the Northern District of Ohio. I believe that most⁵⁵ of the other aerial trespass opinions covered in Who Owns the Sky? (including a circuit court opinion affirming Judge Hahn's opinion in pertinent part) confirm the portrait that emerges from Hinman and Swetland, and I will quote passages from these opinions in footnotes to corroborate my belief. I focus on Hinman and Swetland because they are, and have received respect for being, well-reasoned. Banner is more complementary of Hahn's opinion in Swetland than he is of any opinion besides Justice Douglas's opinion in Causby. 56 More than three decades after Hinman and Causby were handed down, these two cases received pride of place for establishing the "fundamental principle" that "a property owner owns only as much air space above his property as he can practicably use."57

^{53. 84} F.2d 755 (9th Cir. 1936).

^{54. 41} F.2d 929 (N.D. Ohio 1930), modified on other grounds, 55 F.2d 201 (6th Cir. 1932).

^{55.} The one possible outlier is Commonwealth v. Nevin, 2 Pa. D. & C. 241 (1922). The case arose out of a criminal prosecution for trespass. The court found the defendant not guilty primarily by holding that the overflying defendant could not have had effective notice that the complaining landowner had withheld consent for entry. The court also asserted (without elaboration) that entry on land under the relevant statute "indicates an encroachment on or interference with the owner's occupation of his soil; but is not synonymous with a flight over it." Id. at 242.

^{56.} See BANNER, supra note 2, at 176 ("Hahn... produced a learned and thorough opinion incorporating much of what had been written about aerial trespasses over the preceding three decades.").

^{57.} Geller v. Brownstone Condominium Ass'n, 402 N.E.2d 807, 809 (Ill. 1980).

A. The General Scope of the Ad Coelum Maxim

Hinman and Swetland both confirm several observations made thus far. First, in Swetland Judge Hahn flatly rejected the suggestion that more property is better: "Property in land must be considered for many purposes not as an absolute, unrestricted dominion, but as an aggregation of qualified privileges, the limits of which are prescribed by the equality of rights and the correlation of rights and obligations necessary for the highest enjoyment of land by the entire community of proprietors." ⁵⁸

Swetland and Hinman also confirm Part I's main lesson: Among sensible judges, the ad coelum maxim was understood as just a maxim. ⁵⁹ According to Judge Haney, the ad coelum "formula was never taken literally, but was a figurative phrase to express the full and complete ownership of land and the right to whatever superjacent airspace was necessary or convenient to the enjoyment of the land. . . . A literal construction of this formula will bring about an absurdity." According to Judge Hahn, "Maxims are but attempted general statements of rules of law. The judicial process is the continuous effort on the part of the courts to state accurately these general rules, with their proper and necessary limitations and exceptions."

B. Overflight Columns and Accession

Since neither judge treated the *ad coelum* maxim as the only applicable or the obviously best rule of decision for the overflight problem, both needed to consider three possible legal regimes for air. The

^{58.} Swetland, 41 F.2d at 941 (quoting Hibbard v. Halliday, 158 P. 1158, 1159 (1916) (quoting Thompson v. Androscoggin River Imp. Co., 54 N.H. 545, 551–52 (1874))).

^{59.} Carroll describes the maxim as having been cited "countless times in the courts of virtually every state in a wide variety of contexts." *Supra* note 1, at 918. The account provided here, however, suggests that, at least in some practically significant resource disputes, courts applied the maxim only after ascertaining that the resource covered by the maxim deserved to be treated as an accessory to surface land under criteria typically associated with accession law and policy.

^{60.} Hinman, 84 F.2d at 757.

^{61.} Swetland, 41 F.2d at 936. Accord Thrasher v. City of Atlanta, 173 S.E. 817, 825 (Ga. 1934) (describing the ad coelum maxim as "a generalization from old cases involving the title to space within the range of actual occupation"); Johnson v. Curtiss Northwest Airplane Co. (Minn. Dist. Ct. 1923), reprinted in Current Topics and Notes, supra note 29, at 908 (describing the maxim as "a generality").

air could be a public commons, it could be propertized in columns deemed to be accessories to subjacent land, or it could be a standalone resource, capable of being appropriated and owned independently from any other resource. Both judges quickly and rightly ruled out the option for standalone private property. Judge Hahn picked up the requirement that productive labor needed to "put a distinction" between private possessions and "common"⁶²: "[T]he very essence and origin of the legal right of property is dominion over it. Property . . . must be capable by its nature of exclusive possession."⁶³ By that criterion, air is an extremely poor fit for privatization. Like Blackstone, Judge Haney appreciated that air has characteristics "like the sea[; it] is by its nature incapable of private ownership, except in so far as one may actually use it."⁶⁴

As Haney's argument suggests, he regarded air as presumptively a better fit for treatment as a commons than as an accessory to subjacent land. To reverse that presumption, a policymaker would need to make the inquiries identified in Part II: whether onlookers commonly perceive superjacent air and subjacent land as one entity or as separate ones, and whether the air and land are practically more likely to be used productively as a single entity or as separate ones.

The first consideration cuts slightly in favor of the commons approach at low altitudes and decisively so at high altitudes. The air and ground can be used beneficially in complement to one another; human perception is pliable enough to process both as a single entity. That is why the *ad coelum* maxim has force at low altitudes. Perceptions are not pliable, however, for air at high altitudes:

It . . . would lead to endless confusion, if the law should uphold attempts of landowners to take out, or assert claims to definite, unused spaces in the air in order to protect some contemplated future use of it. . . . If such a rule were conceivable, how will courts protect the various landowners in their varying claims of portions of the sky?⁶⁵

The other consideration, the best possible uses of land and air, reinforces the same approach. "Title to the airspace unconnected

^{62.} See supra note 41 and accompanying text.

^{63.} Hinman, 84 F.2d at 758.

^{64.} *Id*.

^{65.} Id.

with the *use* of land is inconceivable[,]" Judge Haney insisted, "a thing not known to law." Haney also repeated and emphasized a concession made by the land-owning appellants/plaintiffs in *Hinman*, "that the space claimed must have *some use*, either present or contemplated, and *connected with the enjoyment of the land itself.*" That concession led to a rough guide to the doctrinal issue: The air could be parceled out into columns below the altitude beneath which (again) "effective possession" was possible, but not above that altitude. 68

C. Before Air Travel: The Dominance of Private Property and Accession

Obviously, this general standard (the scope of possible effective possession over subjacent land) does not by itself supply a determinate height or rule with which to settle overflight disputes. But no one should expect otherwise. As presented in the last Part, labor theory presents a practical theory of rights. ⁶⁹ Many different possible air-column ceiling levels could implement the prescriptions developed in the last part as speed limits do safe-driving norms. Similarly (and relevant here), the appropriate property regime should change as the most likely common beneficial uses of land and air change. So let me contrast how air deserved to be treated (in this section) before and (the next section) after the advent of air travel. Before 1900, there were not many likely uses of high-altitude air, either for public or private uses. Although people could build tall structures, it was not yet feasible (let alone cost-effective) to build skyscrapers. Conversely, although people could fly kites and send pigeons, there were not yet

^{66.} Id. at 757 (emphasis added).

^{67.} *Id.* (emphases added). *Accord* Johnson v. Curtiss Northwest Airplane Co. (Minn. Dist. Ct. 1923), *reprinted in Current Topics and Notes*, *supra* note 29, at 910 (preferring to treat "the upper air as a natural heritage common to all of the people," because the upper air's "reasonable use ought not to be hampered by an ancient artificial maxim").

^{68.} Swetland, 41 F.2d at 937 (quoting Francis M. Burdick, The Law of Torts: A Concise Treatise on Civil Liability for Actionable Wrongs to Person and Property 406 (4th ed. 1926)). Accord Swetland v. Curtiss Airports Corp., 55 F.2d 201, 203 (6th Cir. 1932) (declaring that a landowner "has a dominant right of occupancy for purposes incident to his use and enjoyment of the surface, and there may be such a continuous and permanent use of the lower stratum which he may reasonably expect to use or occupy himself as to impose a servitude upon his use and enjoyment of the surface").

^{69.} See supra notes 35-41 and accompanying text.

cost-effective methods for exploiting air as a common resource for mass travel or commerce.

Even with those limitations, however, it still made sense for legal decision-makers to assume that the ad coelum maxim applied upward without limit. Immediately above the surface, the maxim secures to an owner control over his surface and his likely uses, free from overhanging structures, swinging construction equipment, and many other possible use-disrupting intrusions. Longer range, the maxim also clarifies for innumerable third parties—among others, prospective buyers, prospective lenders, and prospective neighbors contemplating prospective pollution—who owns land. In a world without air travel, the same principles apply to high-altitude air columns. Under the ad coelum maxim, each owner may "use" the air immediately above her own lot as a receptacle for noise, smoke, and other byproducts of active land uses. The ad coelum maxim allots the right to emit pollution in rough but fair proportion to the land an owner owns. Separately, the ad coelum maxim entitles each owner to a share of sunlight and sky proportionate to the land he owns. No owner may claim views or light across others' property. Such claims would give would-be passive land users rights to restrain land-use choices by their more active neighbors. 70 By contrast, when the ad coelum maxim bars overhanging structures, it protects each owner's access to light and the sky.

D. After Air Travel: Air as a Semicommons

All the reasons for using the *ad coelum* maxim discussed in the last section continue to apply after the onset of air travel.⁷¹ Above the level of effective possible possession, however, it becomes more important to assert air's status as a commons, to facilitate its use in air travel. That new imperative justified converting air into a semicommons.⁷² Other resources have such dual status—especially water

^{70.} See, e.g., Fontainebleau Hotel Corp. v. Forty-Five Twenty-Five, Inc., 114 So. 2d 357 (Fla. Dist. Ct. App. 1959).

^{71.} See Swetland, 41 F.2d at 941.

^{72.} See Henry E. Smith, Semicommon Property Rights and Scattering in the Open Fields, 29 J. LEGAL STUD. 131 (2000). I thank Jim Krier for suggesting the semicommons classification.

in navigable riverbeds, a parallel noted by Judge Hahn in $Swetland^{73}$ —and it was reasonable to treat air similarly.

The legal semicommons, however, created one new question: how to treat airplanes taking off and landing in the airspace below the ceiling for possible effective possession. Ordinarily, trespass to land is a rights-based tort. When a legitimate land use frequently and incidentally generates unintentional trespasses, however, tort law may encourage the land use by excusing harmless trespasses. Pre-1900 common law excused hunting crossings on these grounds, ⁷⁴ and many states enacted statutes or adopted common law rules excusing cattle trespasses on similar grounds. ⁷⁵

The *Hinman* court and other courts instituted a similar harm element for plane takeoffs and landings, and it was reasonable for them to do so. ⁷⁶ By changing trespass from being a rights-based tort, Judges Haney and Hahn eliminated the possibility that landowners would try to get take-offs and landings enjoined routinely. That change was an indispensable precondition to having air travel. At the same time, the policies that entitle landowners to "own" air columns to the extent necessary to use and enjoy their lots also entitle those owners to be secure from significant disruptions to their intended uses or plans for enjoying the land. All the property and liberty rights bound

^{73.} The conclusions explained in this paragraph cut both ways. Because high altitude air is a commons, airlines may not acquire prescriptive easements in the high airways, either. *See Hinman*, 84 F.2d at 759.

⁷⁴. See McConico v. Singleton, 9 S.C.L. (2 Mill) 244 (1818). Other, more recent authorities to the same effect are collected in Thomas W. Merrill & Henry E. Smith, Property: Principles and Policies 404-05 (2d ed. 2012).

^{75.} See Lazarus v. Phelps, 152 U.S. 81, 86 (1894); Camp v. Flaherty, 25 Iowa 520, 520–21 (1870); RESTATEMENT (SECOND) OF TORTS \S 504 (1979); Claeys, Jefferson Meets Coase, supra note 21, at 1423-24.

^{76.} See Hinman, 84 F.2d at 758. Accord Swetland v. Curtiss Airports Corp., 55 F.2d 201, 203–04 (6th Cir. 1932) (protecting the plaintiff-landowners from "depriv[ation of] the use and enjoyment of their property" according to traditional standards of nuisance); Johnson v. Curtiss Northwest Airplane Co. (Minn. Dist. Ct. 1923), reprinted in Current Topics and Notes, supra note 29, at 911 (confirming the plaintiff's right to recover against possible future nuisances or actual trespasses at lower altitudes). In the district court proceedings in Swetland, Judge Hahn proceeded similarly but more on the facts than by legal conclusion. Because the plaintiffs sued in equity after the airport was built but before it was fully operational, Hahn held he was not justified in awarding injunctive relief until it was clear whether the defendants would "operate their airport with the most modern appliances and with the least possible annoyance and injury to plaintiffs." Swetland, 41 F.2d at 933.

up with air travel justified limiting trespass from being a pure rightsbased tort, but landowners' rights to control the use and enjoyment of their land justified their having legal causes of action for actual property damage or pollution.

IV. OVERFLIGHTS IN LABOR-BASED CONSTITUTIONAL LAW

As *Causby* confirms, in some trespass suits, governments or plane companies defended *prima facie* claims of trespass on the ground that those claims were preempted by government aviation regulations preempting state trespass laws. If the regulations preempted the common law, plaintiff-owners responded, they counted as acts of inverse condemnation. This Part examines how courts considered those constitutional inverse-condemnation arguments.⁷⁷

A. No Property, No Taking

There was an easy way to reject these inverse-condemnation arguments as they applied to aviation regulations for high altitudes: to deny that landowners had any "property" at all in high-altitude airspace. In current law, even when authorities provide strong protections against regulatory takings, they refrain from applying those protections to laws that specify background restrictions already inherent in owners' titles. The Judge Hahn relied on a similar argument in *Swetland*. Since landowners had never held property in high-altitude space, Hahn concluded, neither aviation regulations nor the relevant common law took landowner property unconstitutionally as long as it did not interfere with "a landowner's right of effective possession" for the airspace closer to the ground.

^{77.} Readers may wonder whether the inverse-condemnation principles I assume and apply here were solidly grounded in the texts of the federal Constitution or applicable state constitutions. I avoid that issue here. For some of the textualist objections why constitutional property rights limitations might not cover inverse condemnations, see Eric R. Claeys, *Takings: An Appreciative Retrospective*, 15 WM. & MARY BILL RTS. J. 439, 443–46 (2006).

^{78.} See, e.g., Lucas v. South Carolina Coastal Council, 505 U.S. 1003, 1028-30 (1992).

^{79.} Swetland, 41 F.2d at 938 ("There are no precedents or decisions which establish rules of property as to [high-altitude] air space [and] there is much doubt whether a strict and careful translation of the [ad coelum] maxim would leave it so broad in its signification as to include the higher altitudes of space."). Accord Gay v. Taylor, 19 Pa. D. & C. 31, 36 (1932) (when a state aeronautics commission instituted flight take-off and landing paths, it did "not take

This argument was surely right and decisive in relation to challenges about ownership of high-altitude overspace. It was not dispositive, however, in relation to the airspace within the scope of landowners' possible effective possession. *Causby* itself confirms as much, for even though the case repudiated the *ad coelum* maxim it still held that the eminent domain claimants suffered a taking when airplanes took off and landed within "the immediate reaches above [their] land." So let us consider how courts relied on the labor-based principles elaborated in Part II in the course of considering constitutional challenges to aviation regulations.

B. The Relation Between Eminent Domain and Police Regulation

In that spirit, let us assume that the common law clearly assigned private ownership of air columns, both low and high altitude, to the owners of the land subjacent to the columns. Let us further assume that state and/or federal aviation regulations abrogated such common law rights when they authorized airplanes to take off, fly, and glide in landowners' air columns. On these assumptions, the challenged aviation regulations so private property—presumptively. That presumption did not automatically make the regulations constitutional takings. But it did force the governments or private parties defending the regulation to show why the aviation rules were *bona fide* regulations, or justly compensated takings—and not un- or undercompensated takings.

When informed by labor-based natural rights principles, the relevant constitutional provisions imposed three basic limitations on aviation regulations.⁸² First, if a government action was in substance an exercise of the power of eminent domain, it was constitutional only if just compensation was paid, and if the taking was for

away from plaintiffs any property rights that they theretofore had"). *Cf.* Thrasher v. City of Atlanta, 173 S.E. 817, 825 (Ga. 1934) (suggesting that an inverse-condemnation challenge was disposed of largely by a state statute limiting the *ad coelum* doctrine, such that an owner's "title will include only such portions of the upper space as may be seized and appropriated by the owner of the soil").

^{80.} United States v. Causby, 328 U.S. 256, 266 (1946).

^{81.} Or judicial decisions declaring the common law to have changed, to avoid conflict between that common law and the challenged regulations. I refrain from discussing this possibility in text only for ease of exposition.

^{82.} See Claeys, Public-Use Limitations, supra note 22; Claeys, Takings, Regulations, supra note 11.

a public use in a narrow sense. (This possibility will be considered in Part IV.D, below.) The other two limitations related to the police power. If a government action counted as a constitutional exercise of the police power, that finding supplied a constitutional justification for the action separate from the power of eminent domain; any action justifiable as a police regulation did not need to satisfy the public use or just compensation requirements of eminent domain. So second, a government action counted as police regulation, justifying what might otherwise count as an act of eminent domain, if it prevented harm. Harm-prevention regulations delineated the bounds between property uses that were legitimate and those that wrongfully threatened the lives, liberties, or properties of other citizens, or threatened interests of the public at large. 83 Finally, a government action also counted as a justifiable police regulation if it reordered existing property rights to the mutual benefit of all interested owners.⁸⁴ Such actions were often described as "secur[ing] an average reciprocity of advantage" to the interested owners, 85 and I will refer to them here as "reciprocity-of-advantage regulations."

C. Aviation Regulations as Reciprocity-of-Advantage Regulations

To clarify how reciprocity-of-advantage principles apply to the over-flight transition, I will study the 1930 case *Smith v. New England Aircraft Co.*⁸⁶ as closely as I did *Hinman* and the common law portion of the district court opinion in *Swetland* in the last Part.⁸⁷ In *Smith*, the Supreme Judicial Court of Massachusetts considered a constitutional challenge to regulations made by the Massachusetts state legislature and by the U.S. Secretary of Commerce (acting under authority conferred by the federal Air Commerce Act of 1926). Taken together, these regulations: barred airplanes from flying over thickly settled areas; required airplanes to fly above legally set minimum

^{83.} See Claeys, Public-Use Limitations, supra note 22, at 888–91, 914–19; Claeys, Takings, Regulations, supra note 11, at 1568–72, 1576–87.

^{84.} See Claeys, Public-Use Limitations, supra note 22, at 889-92, 919-28.

^{85.} See Pa. Coal Co. v. Mahon, 260 U.S. 393, 415 (1922).

^{86. 170} N.E. 385 (Mass. 1930).

^{87.} In Who Owns the Sky?, BANNER, supra note 2, treats at substantial length four cases considering eminent domain or inverse-condemnation challenges to overflight regulations: Swetland, Smith, Causby, and Thrasher v. City of Atlanta, 173 S.E. 817 (Ga. 1934). Thrasher reinforces the main lessons from Swetland and Smith and will be covered in footnotes; the other three cases are treated in the text.

altitudes except when taking off or landing; set such altitudes at 1000 feet for settled areas and 500 feet for unsettled areas; and declared the airspace above these minimums to be "navigable airspace . . . subject to a public right of freedom of interstate and foreign air navigation . . ." Chief Justice Rugg considered whether these regulations secured a reciprocity of advantage.

Rugg began by taking judicial notice that "[a]ircraft and navigation of the air have become of great importance to," among other goods, "commerce as a means of transportation of persons and commodities." That finding supplied the basis for an average reciprocity of advantage. Even assuming that the regulations limited landowners' property rights, it still enlarged those owners' liberties and property rights in their capacities as prospective travelers and consumers. If landowners all held unqualified property rights in their respective columns, they could frustrate air travel and shipment considerably by suing to have overflights enjoined. By holding out, however, landowners would make air travel and shipment less common and more expensive. They would make prohibitively expensive the free exercise of their liberties to travel by airplane, or they might frustrate all the normative interests they could further with cheaper access to a wider range of commercial goods.

Before concluding that the aviation regulations did satisfy reciprocity-of-advantage standards, however, Chief Justice Rugg needed to be practically certain that the advantages landowners gained as prospective travelers and consumers more than compensated for the property rights they lost in their capacities as landowners. Here, Rugg distinguished, correctly, between high- and low-altitude airspace. As for the former, "[i]t would be vain to treat property in airspace upon the same footing as property which can be seized, touched, occupied, handled, cultivated, built upon and utilized in its every feature." Rugg was practically certain that, for high-altitude overflights, landowners were getting and not losing an average reciprocity of advantage:

The light of the sun has not been obscured and the land has not been shadowed. No airplane of through travel has been established over their land. Nothing has been thrown or fallen from

^{88.} Smith, 170 N.E. at 389 (citing Mass. St. 1928, c. 388, § 10; 44 U.S. Stat. 568).

^{89.} Id. at 388.

^{90.} Id. at 390.

the aircraft upon the underlying ground. There have been no noxious gases or fumes. There has been no other interference with any valuable use of which the land of the plaintiff[] [landowner] is capable. ⁹¹

By contrast, Rugg expressed serious (and justified) concern about landowners near take-off and landing paths. Ultimately, Rugg decided the relevant questions not on constitutional grounds but on statutory grounds; he concluded that the regulations in question did not authorize low-altitude take-offs or landings. Before doing so, however, Rugg hinted strongly that the reciprocity-of-advantage calculus did not justify those take-offs and landings. As had Haney and Hahn, Rugg used the scope of "possible effective possession" to delineate the "scope of possible trespass" or takings, and he worried that 100-foot overflights more closely resembled trespasses by roofs, wire, overflying bullets, and overhanging structures. Aerial navigation, important as it may be, Rugg properly concluded, "has no inherent superiority over the landowner where their rights and claims are in actual conflict."

Because Rugg rested his decision on statutory grounds, however, he did not suggest what Massachusetts would have needed to do to rectify the constitutional violations at which he hinted for low-altitude overflights. Oversimplifying somewhat, Massachusetts should have been required to pay Smith and other affected owners damages for property damages or interferences with the use of their lots. As Part II.D explained, trespass law switches from a rights-based to a harm-based model when land abuts public commons. The policy reasons that justify the switch at common law also supply an average reciprocity of advantage in constitutional law (at least, as long as landowners are compensated for actual property damage or use disruptions they suffer).

^{91.} Id. at 391.

^{92.} See id. at 391-92, 393.

^{93.} *Id.* (quoting Frederick Pollock, The Law of Torts: A Treatise on the Principles of Obligations Arising from Civil Wrongs in the Common Law: To Which Is Added the Draft of a Code of Civil Wrongs Prepared for the Government of India 362 (13th ed. 1929)).

^{94.} *Id. Accord* Thrasher v. City of Atlanta, 173 S.E. 817 (Ga. 1934) (assuming that owners of land could "complain of any use" of high-altitude space "tending to diminish the free enjoyment of the soil beneath").

^{95.} Smith, 170 N.E. at 392.

D. Aviation Regulations and Eminent Domain

Labor-based constitutional standards used harm-prevention regulation, reciprocity-of-advantage regulation, and eminent domain each to approximate a different aspect of the public good. 96 Harmprevention regulations and reciprocity-of-advantage regulations both promote the public good understood as the aggregation of the citizenry's free, and equal, moral rights. 97 Harm-prevention regulations focus more on protecting those rights, and reciprocity-of-advantage regulations more on realigning the legal specifications of those rights to accord more closely with the moral rights, but both aim at the concurrent enjoyment by citizens of their moral rights. However, the public good also encompasses the government's owning the resources it needs to secure the citizenry's moral rights in situations in which the government's control and direction of the use of property is practically likely to secure and enlarge the same rights. Sometimes, the government manages the property in trust for the citizens (military bases, or common-carrier utilities); on other occasions, the government gives citizens direct access to a new commons (a new navigation servitude). Since aviation travel and commerce fit this latter paradigm, it is no surprise that some courts used eminent domain legal principles to review the propriety of new aviation regulations. That is what happened in *Causby*.

If aviation regulations are treated as an eminent domain problem, ⁹⁸ the regulations must satisfy two constitutional limitations. First, the takings must be for a public use. That limitation is easy to satisfy, under even the narrowest reasonable understanding of the public use doctrine. ⁹⁹ Whenever the government takes property to create or enlarge a commons, the public "uses" the commons. Because the air commons is open to anyone with an aircraft fit for flight, that commons is for public use.

The other limitation is that any owner who suffers a taking must receive just compensation. This inquiry tracks the high-altitude/lowaltitude distinction as the reciprocity-of-advantage analysis did in

^{96.} See Claeys, Public-Use Limitations, supra note 22, at 886-901, 909-12.

^{97.} See, e.g., LOCKE, TWO TREATISES, supra note 33, bk. II, § 124, at 350–51 (defining "chief end . . . of Mens . . . putting themselves under Government [as] the Preservation of their Property").

^{98.} And, if we continue to assume that landowners really did have "property" in highaltitude airspace subject to eminent domain protections.

^{99.} See Claeys, Public-Use Limitations, supra note 22, at 901-05.

the last section. In eminent domain terms, the prospects of air travel and the purchase of air-shipped goods supply landowners with implicit in-kind compensation for the possessory rights or servitudes taken from them to create the air commons. ¹⁰⁰ For high-altitude overflights, landowners' interests in the condemned airspace are so trivial that the in-kind compensation amply compensates any technical taking. By contrast, when owners complain of lower disruptions in takeoffs and landings, as *Causby* suggested, "the path of glide for airplanes might reduce a valuable factory site to grazing land, an orchard to a vegetable patch, a residential section to a wheat field. . . . [T]he use of the airspace immediately above the land would limit the utility of the land and cause a diminution of its value" sufficient to require just compensation. ¹⁰¹

Now, in *Causby*, Justice Douglas did not follow this analysis totally consistently. He made a slight formalistic error, because he defined the taking as the penetration by airplanes into the landowners' boundaries, not as the actual damage or use interferences the owners suffered to their land. ¹⁰² In context, however, that is a fairly minor criticism.

E. The Moral Basis for Rearranging Moral Property Rights

The analysis presented in this Part may seem strange to some readers. Reciprocity-of-advantage regulation and eminent domain both use legal coercion to restructure moral rights. Readers may assume that any moral theory of rights cannot justify such coercive restructuring.

Although I cannot deal with this reaction exhaustively, I can address three perceptions that contribute to it. First, the reaction may be informed by a belief that a property right is a "moral" right only if "it cannot be taken against the owner's wishes. I could not call my house my property if the law allowed someone else to wrest ownership from me against my will." ¹⁰³ (For ease of exposition, I refer to

^{100.} See Richard A. Epstein, Intel v. Hamidi: The Role of Self-Help in Cyberspace?, 1 J.L. Econ. & Pol'y 147, 154–55 (2005). On implicit in-kind compensation generally, see RICHARD A. EPSTEIN, TAKINGS: PRIVATE PROPERTY AND THE POWER OF EMINENT DOMAIN 195–282 (1985).

^{101.} United States v. Causby, 328 U.S. 256, 262 (1946).

^{102.} See EPSTEIN, supra note 100, at 49-50.

 $^{103.\} Jeffrey$ Evans Stake, The Uneasy Case for Adverse Possession, 89 Geo. L.J. 2419, 2420 (2000–2001).

this characteristic here as "absoluteness.") Yet a theory of morality may propound a coherent and robust theory of moral rights without claiming that those rights are absolute rights. As Part II explained, labor theory may be conceived of so that it grounds property rights not in a will-based account of rights but rather an interest-based account. Thus, Locke grounds law in "the direction of a free and intelligent Agent to his proper Interest," and he specifies that law "prescribes no farther than is for the general Good of those under that Law." ¹⁰⁴ He hints at an interest-based foundation for property when he justifies it by its tendency to secure to all citizens equal domains of opportunity to "make use of those things, that were necessary or useful [each] to his [own] Being." 105 Pre-1920, it was practically certain that these use interests were best served by enforcing the ad coelum maxim without qualification. After the advent of the airplane, these interests were better served by treating the high-altitude airspace as a semicommons.

If labor theory makes moral rights so pliable and context-dependent, however, readers may wonder whether the rights it justifies are too weak to be protected against confiscatory government action. I believe it is, for two main reasons. First, although labor-based property rights are not absolute in the sense just described, as I have explained elsewhere, they are absolute (or, more precisely, "deontological") in another sense ¹⁰⁶: individual rights are lexically prior to the community's good. The requirements for reciprocity-of-advantage regulations embody this requirement. Even if a policy enlarges the rights of most or all citizens, it is not legitimate unless it holds harmless individuals whose rights it eliminates or reconfigures. ¹⁰⁷

^{104.} LOCKE, TWO TREATISES, supra note 33, bk. II, § 57, at 305 (emphasis added).

^{105.} Id., bk. I, § 86, at 205.

^{106.} See Claeys, Productive Use and Labour Theory, supra note 11, at 24–25. I attribute this formal and political understanding of "deontology" to John Rawls. Rawls defined "deontological" to refer to a theory of justice that makes the Right lexically prior to the Good; the converse of a "deontological" theory is a "teleological" theory, which makes the Good prior to the Right. See John Rawls, A Theory of Justice 30–32 (1971). I do not mean to suggest that Locke's theory of justice resembles Rawls's in most respects, only that it is deontological in Rawls's formal definition of that term.

^{107.} This deontology criterion clarifies considerably, for example, what the judge meant in *Gay v. Taylor* when he insisted that the new and burgeoning aviation "industry are no more privileged to infringe on the rights of others than anyone else and they must be held to the same rules of conduct in their operations as individuals engaged in different and less glamorous pursuits". 19 Pa. D. & C. 31, 35 (1932).

Separately, labor-based property theory also treats the problem of commensurability with extreme sensitivity. Because rights as justified in Part II are grounded in flourishing-based normative interests, in principle it is possible for a government regulator to settle rights conflicts by asking which of two rights-claimants is exercising his rights more consistently with human flourishing rightly understood. 108 In practice, however, labor-based rights are structured so as to discourage such judgments. In practice, many judgments commingle moral issues with the capacities, needs, or desires of different actors. In his epistemological writings, Locke specifies, "[P]leasant Tastes," "Happiness," and other sources of value all "depend not on the things themselves" that generate value for people "but [on] their agreeableness to this or that particular Palate, wherein there is great variety." Labor-based rights are structured embodying a presumption that the same rights will be valued differently by people with different palates. That creates a strong working presumption that rights claims are *not* commensurable. This presumption can get overridden. Yet equity illustrates nicely how much it takes to override the presumption of incommensurability when it treats substantial encroachments as enjoinable and refrains from making injunctive relief available only for de minimis encroachments. The aviation commons case study illustrates the same difference, in how the cases distinguish between high- and low-altitude boundary invasions. 110

Thomas Merrill and Henry Smith have lodged one last objection to the reciprocity of advantage and implicit in-kind compensation justifications developed here: "[W]hen airplane travel first developed and challenges were brought based on trespass, no one could

^{108.} See Eric R. Claeys, Virtue and Rights in American Property Law, 94 CORNELL L. REV. 889, 934–36 (2009) (criticizing on this basis Gregory S. Alexander, The Social-Obligation Norm in American Property Law, 94 CORNELL L. REV. 745 (2009), and Eduardo M. Peñalver, Land Virtues, 94 CORNELL L. REV. 821 (2009)).

^{109.} JOHN LOCKE, AN ESSAY CONCERNING HUMAN UNDERSTANDING § IV.iii.19, at 550 (Peter Nidditch ed., 1979) [hereinafter LOCKE, HUMAN UNDERSTANDING].

^{110.} To be sure, in other fields of property law, owners may be forced to suffer coerced rearrangements of their property rights even when they are actually occupying and using the property affected. Yet such rearrangements are justified when they are unavoidable—i.e., when the property lends itself to overlapping public and private uses. The *Smith* court cited the paradigm case for such rearrangements—mill-dam acts. *See* Smith v. New England Aircraft Corp., 170 N.E. 385, 390 (Mass. 1930) (citing, *inter alia*, Lowell v. Boston, 111 Mass. 454, 454–67 (1873)). That limitation helps justify landowners being forced to accept injurious or noxious low-altitude overflights, but it does not undermine the basic understanding of rights and regulations discussed in this Part.

be sure air travel would work out to the benefit of all."111 Merrill and Smith's question raises an overarching issue: How much purchase does a moral theory of property rights have if it if it cannot clearly "sort[] out the bona fides of a proposed public good"?112 This objection assumes premises rejected by natural law- and rights-based political moralities in the general family under study here. In these moralities, there is no reason to favor property over the absence of property, or regulation over underregulation. In principle, error costs can run in both directions. And when a practical theory of morality prescribes what should be done, it must take its bearings in relation to what can be done . . . and what can be known about what can be done. Locke, for example, takes pains to stress that human life proceeds in a "State of *Mediocrity*." When men make moral prescriptions in conditions of epistemological mediocrity, the standards of certainty they can realistically expect are the standards of probability associated with "Judgment and Opinion," not the "Knowledge and Certainty" associated with theoretical mathematics or physics. 113

Many sobering implications follow in practice. For one thing, there will never be bright-line distinctions between public-interested and factious regulations. As *Federalist No. 10* argues, distinctions between the two can be settled only by public officials with virtues typical of "enlightened statesmen." For another, in practice, it is inevitable that public officials will need to make judgments relying on incomplete information. Chief Justice Rugg assumed as much in *Smith*: "The experience of mankind, although not necessarily a limitation upon rights, is the basis upon which airspace must be regarded. Legislation with respect to it may rest upon that experience." Could Rugg have been 100% sure that aviation would succeed—or that aviation regulations were not backdoor wealth transfers from landowners to airlines and air shippers? No, and no. But it would have been impractical for Rugg to withhold judicial approval from any regulation that was not 100% certain to succeed in promoting

^{111.} MERRILL & SMITH, supra note 74, at 15.

^{112.} Daniel D. Polsby, What If This Is as Good as It Gets?, 2 Green Bag 2D 115, 115–16 (1998) (book review).

^{113.} Locke, Human Understanding, supra note 109, § IV.xii.10, at 645; see Claeys, $Productive\ Use\ and\ Labour\ Theory,\ supra\ note\ 11,\ at\ 57–58.$

 $^{114.\} See$ The Federalist No. 10, at 42, 43–45 (James Madison) (George W. Carey & James McClellan eds., 2001).

^{115.} Smith, 170 N.E. at 390.

citizens' concurrent uses of land and air. And it would have been extreme or self-indulgent for him to declare unconstitutional any restriction of property on the bare ground that it might have had wealth-transferring effects.

V. THE WAGES OF THE AD COELUM FABLE

These priors about error costs and incomplete information highlight why the *ad coelum* fable is so problematic when used in contemporary discussions about property or IP policy. In property doctrine and policy, false positives (Type I errors) occur most often when proprietary control denies to non-owners the access they need to vindicate their legitimate interests in accessing and using resources they don't own. False negatives (Type II errors) occur when property law does not give owners the exclusive control they deserve. In false negative cases, the lack of exclusive control prevents property owners from securing their legitimate use interests. ¹¹⁶ As Parts III and IV just traced, in both trespass and eminent domain—related constitutional law, property policy was open to both types of errors in aerial-trespass disputes. The *ad coelum* fable makes property seem far more susceptible to Type I errors than to Type II errors.

In the *ad coelum* fable, the American legal system "eliminated—er, adjusted—some sticks in the bundle of rights we call 'private property' to accommodate a potentially valuable new technology. No compensation was due from the government or from fledgling commercial air carriers because nothing was 'taken' from private landowners." Yet the cases tell a much more interesting story. As Part II showed, in the labor-based natural rights approach at work in the cases, "private property" consists not just of any bundle of rights, or of the biggest bundle of rights, but rather of the bundle of rights most likely to secure to owners, neighbors, and other stakeholders their just interests in using the resource in question for different productive individual goals. As Part III showed, in application of that general approach, legal property in airspace was

¹¹⁶. Or, conversely, when non-owners get more access to owned resources than they need to secure their legitimate use interests.

^{117.} Heller, supra note 3, at 29.

^{118.} See also Eric R. Claeys, Bundle-of-Sticks Notions in Legal and Economic Scholarship, 8 Econ Journal Watch 205 (2011).

understood to be subject to an inherent limitation: such property was justified only to the extent it seemed practically likely to secure concurrent opportunities for productive use to landowners and nonowners with stakes in the air. It is thus misleading to suggest that judges "eliminated" property in air columns, or to suggest there was anything improper in their "adjusting" black-letter property better to accord with and embody the moral ends legal property was expected to advance.

Then, as Part IV showed, in cases reviewing constitutional challenges to overflight transitions, judges most certainly did not construe the relevant constitutional doctrines in whatever manner most directly subsidized and encouraged air travel. James DeLong has it right: *Causby* "stands for close to the opposite of the principle" for which it is cited in the *ad coelum* fable. 119 *Causby*'s and *Smith*'s analyses of the relevant constitutional limitations instead apply a set of adequacy criteria according to which a public-law transformation of property rights is illegitimate unless it pays serious "regard to the impact on existing rights." 120

The *ad coelum* fable accentuates the costs of Type I errors and eliminates the costs of Type II errors. In relation to airspace, there were no real downsides to creating a commons at high altitudes and qualifying trespassory rights at lower altitudes—but there might be real downsides in other regulatory disputes. If a contemporary work uses the overflight transition as a leading illustration, inquiring readers had better wonder whether that illustration was selected because the work accentuates Type I errors as the *ad coelum* fable does.

VI. GRIDLOCK AND REDEVELOPMENT BY EMINENT DOMAIN

A. The Stakes Between Property Rules and Liability Rules

In the rest of this Article, let me illustrate with two examples from property and IP scholarship. Heller's book *Gridlock* illustrates one tendency: to portray "liability rule" property-regulatory regimes more

 $^{119.\ \} James \ De Long, Google \ Print\ and\ the\ Airspace\ Analogy:\ Lessig's\ Counterfactual\ History\ (Nov.\ 8,\ 2005), available\ at\ http://web.archive.org/web/20060202225103/http://weblog.ipcentral.info/archives/2005/11/google_print_th.html.$

^{120.} Id.

sympathetically than "property rule" regimes. Many different property policy disputes focus on the precise circumstances in which nonowners 121 may initiate proceedings forcing owners to alienate some of their property rights. In the common law's terms, the disputants disagree on how broad and encompassing proprietary rights of disposition should be. At one hypothetical extreme, owners could be endowed with absolute rights of disposition. Doctrinally, the most direct way to implement such rights is to entitle proprietors, as a matter of right, to automatic equitable relief preventing any unconsented takings or uses of their things. 122 In legal/economic analyses of property, the legal rules that declare such broad rights of disposition are called "property rules." 123

At the other hypothetical extreme, owners could be limited to relatively narrow rights of disposition. Doctrinally, whenever a property right was taken, courts could routinely limit the proprietor's recovery to market value permanent damages. In legal/economic analysis, such an entitlement is called a "liability rule." Although others and I have reservations about the terms "property rule" and "liability rule," I use them and cost-benefit factors commonly associated with them here because Heller assumes and applies those terms and factors in *Gridlock*.

^{121.} Or co-owners, in cases involving stakeholders with partial ownership interests. Such cases may include tenants in common, partners, or present possessors facing off against future interest holders. I pass over these possibilities in text for ease of exposition.

^{122.} See, e.g., sources cited supra note 43.

^{123.} Guido Calabresi & A. Douglas Melamed, *Property Rules, Liability Rules, and Inalienability: One View of the Cathedral*, 85 HARV. L. REV. 1089, 1092 (1972). "Property rules" may be understood to include not only a presumption in favor of equitable relief for ongoing takings but also presumptions in favor of restitutionary damages and punitive damages and criminal liability for deliberate takings. I focus in the text on equitable relief for ease of exposition.

^{124.} Id.

^{125.} In short: Social practice and legal doctrine are much more qualified and context-specific than legal/economic analysis about what it means for a wrongdoer to pay damages as compensation for his wrong. In law and social practice, only in a few extreme cases (e.g., the ouster by one tenant in common of other cotenants) does the law effectively permit and sanction the activity in question by letting the seeming wrongdoer pay for the privilege of conducting the activity. See Claeys, Exclusion and Exclusivity, supra note 48, at 36–43; Jules L. Coleman & Jody Kraus, Rethinking the Legal Theory of Rights, 95 YALE L.J. 1335, 1352–65 (1986). Otherwise, a damages-only judgment does not convert the wrong into a permissible activity, and legal/economic analyses of remedies "completely misrepresent the actual normative guidance of the law" when they suggest that damages-only judgments do effectively legitimize the penalized activity. J.E. PENNER, THE IDEA OF PROPERTY IN LAW 66 (1996).

The trade-offs between property and liability rules highlight a limited but still-important issue about the scope of private property rights. When litigants argue over property and liability rules, all disputants concede (at least at a high level of generality) that owners deserve rights of control and use traditionally regarded as incident to ownership. The choice between property and liability rules focuses on how far owners' rights of disposition should sweep. When rights of disposition are construed extremely narrowly, the constructions create Type II error costs. In rights-based terms, narrow disposition threatens the values that justify the autonomy associated with ownership. 126 In utilitarian terms, the damages-only approach injects into the law "an additional stage of state intervention: not only are entitlements protected, but their transfer or destruction is allowed on the basis of a value determined by some organ of the state rather than by the parties themselves."127 On the other hand, if property rights generate too many hold-out problems (the Type I error costs identified in the last part), such state intervention may be cost-justified and necessary. Hold-outs can (in economic terms) extract rent and diminish social welfare or (in rights-based terms) impair the abilities of non-owners to exercise legitimate moral rights to access, use, or enjoy resources.

B. Overstating the Advantages of Liability Rules

Virtually all recurring resource disputes are regulated by property rules in some cases and liability rules in others. Even in encroachment disputes, where property rules are strongly preferred, property and remedy doctrines make liability rules available for good faith *de minimis* encroachments. There is no one-size-fits-all formula predicting when property rules or liability rules will be preferable; the trick is to determine which of the relevant factors matter most in a particular resource dispute. On one hand, when a legal regime makes it easy for non-owners to proceed under liability rules, non-owners may expropriate subjective value held by owners over and above

^{126.} Coleman & Kraus, supra note 125, at 1338-39.

^{127.} Calabresi & Melamed, supra note 123, at 1092.

^{128.} See Richard A. Epstein, A Clear View of The Cathedral: The Dominance of Property Rules, 106 YALE L.J. 2091, 2096–2101 (1997) [hereinafter Epstein, Clear View].

market value.¹²⁹ In addition, liability-rule proceedings create administrative costs, especially the costs of trying and adjudicating proceedings to value the property being taken. On the other hand, market bargains generate transaction costs,¹³⁰ and they may also encourage market participants to hold out or free-ride.¹³¹

The factors just recounted are the most concrete factors, applicable to the facts of individual disputes. Other relevant factors focus more on the rule-level consequences different legal regimes have on party behavior. On one hand, the more generously property law offers opportunities for non-owners to initiate liability-rule proceedings, the more it discourages non-owners from bargaining with owners, and the more it *en*courages non-owners and owners both to lobby and litigate. These incentives generate social costs associated with what have been called (respectively) "market bypass" and "secondary rent seeking." Of course, by the same token, if property law institutes property rules more often than it should, it encourages owners to engage in their own secondary rent-seeking by holding out.

All of the preceding factors were stated formally. It is impossible to predict in the abstract, in the absence of empirical information and details helping focus normative trade-offs, which factor or factors will outweigh others. Given that abstraction, it is dangerous for a utilitarian analysis of property to treat a few case studies as poster cases illustrating general trends about the trade-offs between property and liability rules. Yet that is exactly how the *ad coelum* fable is used in *Gridlock*.

C. Overstating the Scope of Gridlock

Gridlock portrays property as a blockade right. "Sometimes we create too many separate owners of a single resource," it argues.

^{129.} See Calabresi & Melamed, supra note 123, at 1108. In the text I assume that the liability-rule valuation proceeding aims to compensate the owner with market value; if the proceeding guarantees owners with value higher than market value the expropriated difference is correspondingly smaller.

^{130.} See id. at 1106.

^{131.} See id. at 1106–07. Calabresi & Melamed also gave considerable attention to whether one party was better positioned than other parties to minimize social costs, or (in the alternative) whether one party was better positioned than others to bargain around erroneous assignments of liability. See id. at 1096–97. These factors have not proven durable in analyses of property remedy disputes, probably because they are too party- and case-specific.

^{132.} See Thomas W. Merrill, The Economics of Public Use, 72 CORNELL L. REV. 61, 85–89 (1986).

"Each one can block the others' use. If cooperation fails, nobody can use the resource." [W]e must train ourselves to spot a gridlock economy," *Gridlock* concludes, "and then develop simple ways to assemble fragmented property," "through individual, joint, [or] state effort." [T]he Lighthouse Beam"—i.e., overflight gridlock—seems to confirm the book's basic thesis. [135]

Since the lighthouse beam study seems to focus too much on Type I property error costs, inquiring readers should wonder whether *Gridlock*'s other case studies understate the Type II error costs that may arise in property regulation. I think several of Heller's case examples do understate these error costs; 136 let me focus on one example, which Heller calls "block parties." A block party refers to the jockeying that starts when a developer sees economic potential in assembling several small lots of land (most likely, in an urban area) into a larger lot. The developer may try to bargain with the owners of the small lots—but "[n]egotiations frequently collapse when owners discover that an assembly is in process." The developer may also lobby state and local officials to "blight" the lots and transfer them to him through eminent domain. 139 As Heller acknowledges, however, even if "[e]minent domain . . . overcome[s] the minority tyranny of holdouts . . . it routinely leads to lengthy political fights, corruption, and unfair redistributions of property." ¹⁴⁰

Although Heller does propose a distinct solution for the problems created by block parties, ¹⁴¹ he advances *Gridlock*'s main thesis and claimed contribution simply by arguing that block parties are problems. Land assemblies certainly seem problematic if all land rights are, like the rights to overflight columns, inflexibly *ad coelum*.

I doubt there is such a problem. Heller asserts: "Land is much easier to break up than to put back together—land transactions

^{133.} HELLER, supra note 3, at 15.

^{134.} Id. at 21.

¹³⁵ Id. at 27–30

^{136.} See Richard A. Epstein, Heller's Gridlock Economy in Perspective: Why There Is Too Little, Not Too Much Private Property, 53 ARIZ. L. REV. 51, 57 (2011) (criticizing Heller's treatment of the subprime mortgage crisis); id. at 57–62 (radio spectrum); id. at 74–82 (the patent thicket).

^{137.} See HELLER, supra note 3, at 109.

^{138.} Id. at 113.

^{139.} Id. at 110-11.

^{140.} Id. at 114.

^{141.} See id. at 118-21.

work like a one-way ratchet." Heller provides no empirical support for this assertion. Perhaps the assertion is supposed to be intuitively persuasive. Yet it is just as intuitively plausible that developers can find large lots of lands adequate for their plans: in vacant areas, or in neighborhoods in which all residents are willing to sell. Case studies also show that large prospective developers, such as universities and theme parks, have successfully used secret purchasers to circumvent (so-called) block-party gridlock. 143

Since Heller's intuition and the contrary intuition are both at least plausible, it might help to conduct a consequentialist comparison: on one hand, of the pros and cons of leaving land assembly to markets and, on the other hand, the corresponding pros and cons for using eminent domain or some other coercive mechanism. Heller supplies figures illustrative of such a cost-benefit analysis. Heller describes the case of New York City and State's blighting of a block in Times Square to make space for a new New York Times corporate headquarters. Heller uses data from the Times Square project to illustrate the costs and benefits of block parties generally. Yet reasonable minds may interpret the relevant costs and benefits very differently. When the relevant data seems susceptible to different interpretations, Heller consistently interprets the data consistent with the ad coelum fable. 144

As Heller reports it, City authorities condemned the blighted land for about \$85 million, "[b]ut the real market value of the assembled land could have been up to three times higher, as much as \$250 million," for a net increase of "[u]p to \$165 million in real estate assembly value." ¹⁴⁵ Assume both figures are accurate. ¹⁴⁶ A complete

^{142.} Id. at 111.

^{143.} See Daniel B. Kelly, The "Public Use" Requirement in Eminent Domain Law: A Rationale Based on Secret Purchases and Private Influence, 92 CORNELL L. REV. 1, 22-24 (2006).

^{144.} In the rest of this section, I restate criticisms developed in Claeys, Exclusion and Exclusivity, supra note 48, at 43-48. Because I understand better now than four years ago where Heller got his data and how he interpreted it, in text I modify slightly my specific reasons for doubting that Heller's data support his main arguments.

^{145.} See Heller, supra note 3, at 110-11.

^{146.} Heller probably derived the \$250 million estimate from comparable-sales estimates conducted by a landlord ousted from one of the blighted lots. See id. at 110 (quoting office building owner Sydney Orbach); Paul Moses, The Paper of Wreckage: The 'Times' Bulldozes Its Way to a Sweetheart Land Deal You Will Pay For, THE VILLAGE VOICE, June 18, 2002, available at http://www.villagevoice.com/2002-06-18/news/the-paper-of-wreckage/full/(reporting on a comparable-sales estimate by Orbach), cited in HELLER, supra note 3, at 234 n.7. The

cost-benefit analysis would need to discount the \$165 million putative net gain for the losses in subjective value suffered by all the ousted landlords and tenants on the condemned block. Such losses supply one of the reasons why encroachment doctrine favors property rules, ¹⁴⁷ and Heller himself acknowledges that "anytime you say your property is not for sale, you are valuing it above fair market value." ¹⁴⁸ Yet he concedes that "these values . . . are hard to measure," ¹⁴⁹ and he does not revise his net assembly-value figure to discount for them.

A complete cost-benefit analysis would also discount for the social costs of market bypass and secondary rent-seeking. Encroachment doctrine limits the *de minimis* exception only to cases in which the mistaken encroachment is built in good faith to minimize the "danger of multiple sequential transformations of property rights,"¹⁵⁰ and Heller himself acknowledges, "Why bother with voluntary market transactions when you can get the state to take the land you want?"¹⁵¹ According to the news story on which Heller relied, the *Times* received preferential treatment because its partner-developer was close with New York Governor George Pataki; the *Times* and that developer received tax credits in the deal worth (according to one estimate) up to \$79 million. ¹⁵² In Heller's portrait of the Times Square project, however, the putative \$165 net gain seems a much stronger reason for blighting the block than the demoralization and secondary rent-seeking costs seem grounds for leaving well enough alone.

VII. COPYRIGHT AND GOOGLE BOOKS

The *ad coelum* fable is used even more enthusiastically in IP scholarship and policy debates. As Heller uses the fable to legitimize forced liability-rule transfers of disposition rights associated with

landlord's figure should be discounted for the possibility that he had an axe to grind with the *Times* and state and local authorities. Heller's use of it should also be discounted, because it would confirm his thesis if land in Times Square was extremely fragmented and had huge real estate assembly potential.

- 147. See Epstein, Clear View, supra note 128, at 2098.
- 148. HELLER, supra note 3, at 114.
- 149. Id. at 114-15.
- 150. Epstein, Clear View, supra note 128, at 2100.
- 151. Heller, *supra* note 3, at 110–11.
- 152. See Moses, supra note 146.

property, Larry Lessig has used it to justify significant expansions of the IP commons—specifically, the public domain available on the Internet.

A. Free Culture

This tendency is obvious in Free Culture, the work in which Lessig popularized the ad coelum fable. 153 Free Culture begins with the hopeful prospect that "the Internet has unleashed an extraordinary possibility for many to participate in the process of building and cultivating a culture that reaches far beyond local boundaries." ¹⁵⁴ The book worries that this culture-creating process may be derailed: The Internet "threatens established content industries," and such industries may manipulate the "idea of intellectual property to disable critical thought by policy makers and citizens" about how to facilitate culture creation. 155 Free Culture starts with the ad coelum fable, and it uses the fable's overbroad portrait of overflight columns to illustrate the perils of overbroad IP. 156

By now, the problems with Lessig's analogy should be apparent. Although proprietary rights of exclusive control may confer a legal monopoly over a resource, such rights are socially beneficial and not harmful if the monopoly is structured and qualified to secure to all potential claimants on that resource their due interests in accessing, using, and enjoying it. 157 As Parts III and IV showed, when air travel became commercially feasible, concepts of "use" that had previously justified private ownership of air were supple enough to justify a commons for high-altitude air. Similarly, copyright law need not be scaled back or jettisoned because existing laws seem to frustrate new information, technology, or uses of either. Copyright law and policy may and probably do internalize norms that recognize and accommodate the due interests all IP producers and consumers have in the intellectual content of works protected by copyright.

^{153.} See LESSIG, supra note 8, at 1-13.

^{154.} Id. at 9.

^{155.} Id. at 9, 12.

^{156.} See, e.g., id. at 3-7 (recounting how RCA, the dominant company in AM radio, used patent law and federal communications regulatory law to smother FM radio).

^{157.} See Edmund W. Kitch, Elementary and Persistent Errors in the Economic Analysis of Intellectual Property, 53 VAND. L. REV. 1727, 1729-38 (2000).

I do not mean to suggest here that all features of contemporary copyright doctrine are drafted or administered now in manners that reconcile property and just public policies sensibly. Indeed, if lawmakers and judges were to apply to copyright principles of labor and use like those applied to overflights, they would reinforce some of Lessig's major criticisms of copyright law as currently written. For example, under a labor- and use-based approach to copyright, it is ordinarily indefensible for Congress to extend retroactively the terms for existing copyrighted works, as it did in the Sonny Bono Copyright Term Extension Act. 158 Labor principles justify the copyright system in part by how well it secures to content consumers their moral interests in using or enjoying intellectual content. Specified properly, copyright accommodates those interests by encouraging the creation of more authored works for consumers to use and enjoy. It is impossible for that justification to cover retroactive extensions of copyright terms. Copyright holders get longer periods of exclusive control, but content consumers suffer interferences with use and enjoyment without any gaining reciprocating advantage in return.

By invoking the *ad coelum* maxim as his lead example, however, Lessig suggests that copyright detracts from the goals most people expect IP law to further more often than it promotes and embodies those goals. I believe that copyright can be understood to internalize those goals. Even when copyright doctrines fall short of reconciling these goals well, copyright's normative content supplies a good internal guide for recalibrating bad doctrines.

B. The Google Books Project

Let me illustrate using the dispute over Google Books. ¹⁵⁹ Starting in 2004, Google sought to make digital copies of close to twenty million books, load them all into a digital library, and make the contents

^{158.} See 17 U.S.C. § 302(a) (2012); Eldred v. Ashcroft, 537 U.S. 186 (2003) (rejecting a constitutional federalism challenge to § 302(a)); Lessig, supra note 7, at 213–46. Such extensions might be justified in exceptional cases. In particular, term extensions might be appropriate if Congress abrogated the exclusive rights associated with copyright to satisfy the needs of users and extended terms as a compensatory gesture. Term extensions then might secure an average reciprocity of advantage or implicit in-kind compensation as explained in Part IV.

^{159.} See Lessig, supra note 7. See Richard A. Epstein, Networks and Copyrights: A False Analogy, PROGRESS SNAPSHOT (Nov. 21, 2005), http://www.pff.org/issues-pubs/ps/2005/ps1.21networkepstein.html [hereinafter Epstein, Networks].

of that library available on the Internet. Google copied the entire contents of every book it digitized. Although copyrights had expired for many of the books, many millions more remained under copyright. Google intended to vary how much content viewers could access depending on whether the book in question was still under copyright. Viewers could read uncopyrighted works in their entirety. For works still under copyright, however, viewers could view the publication information and a few lines of text around the specific text caught by their search terms. ¹⁶⁰

Google tried to accommodate the likely claims of copyright holders in at least two main ways. Even before there was any litigation, Google offered copyright holders opportunities to opt out. If a work has not yet been digitized, the copyright holder may contact Google and request that the work not be included in the library; if it has, the holder may request that the work be removed from the library, or that it be available for some searches but excluded from others.¹⁶¹ Notwithstanding that opt-out, however, a class of authors and publishers sued Google in 2005, alleging that the Google Books project infringes class members' copyrights. Google denied liability for infringement and pleaded fair use as an independent justification for its copying. 162 In 2011, a district court judge denied the parties' motion to approve a proposed class settlement. 163 As of the writing of this Article, publisher-plaintiffs have settled privately with Google, ¹⁶⁴ the district court certified a class for the Authors Guild and the lawvers representing the class of authors, and that certification order is being appealed.¹⁶⁵

Legally, the core of the class plaintiffs' argument is that Google infringed on their copyrights by digitizing their works; each digitization, after all, copies a work of authorship in its entirety. Normatively, the core of the class plaintiffs' case is that they deserve property in

^{160.} See Authors Guild v. Google, Inc., 770 F. Supp. $2d\,666, 670-71$ (S.D.N.Y. 1991); Lawrence Lessig, For the Love of Culture, New Republic (Jan. 26, 2010), http://www.newrepublic.com/article/the-love-culture.

^{161.} See, e.g., Matthew Sag, The Google Books Settlement and the Fair Use Counterfactual, 55 N.Y.L. Sch. L. Rev. 19, 29 (2010/2011).

^{162.} Authors Guild, 770 F. Supp. 2d at 670-71.

^{163.} See id. at 679-83, 686.

^{164.} See Andi Sporkin, Publishers and Google Reach Settlement, ASS'N OF AM. PUBLISHERS (Oct. 4, 2012), http://www.publishers.org/press/85/.

^{165.} See Authors Guild, Inc. v. Google, Inc., No. 12-2402, 2012 BL 212662 (2d Cir. Aug. 14, 2012) (granting Google leave to appeal the district court's order certifying the plaintiffs' class).

the exclusive control over and disposition of rights to copy their books. The class plaintiffs are entitled to bargain over the conditions under which they will participate in the Google Books project, they argue, on the same terms that they are generally entitled to follow when they license the use of their copyrighted works. By contrast, legally, the core of Google's case is that, because it is committed to limit search access to copyrighted works, its digitization project is covered by copyright's fair use limitation. ¹⁶⁶ Normatively, if the fair-use limitation immunizes digitization from infringement liability, such a ruling will encourage digitization and the expansion of the public domain.

C. The Ad Coelum Fable in the Google Books Litigation

I do not mean here to offer a definitive account how the Google Books dispute should be resolved. Among other things, I hope to abstract here from procedural issues arising out of the proposed settlement and the class litigation; I hope to focus instead on the merits of copyright holders' suits for infringement. Even here, I do not mean to suggest that the overflight transition teaches or requires any single outcome in the merits of the infringement litigation stoking the Google Books dispute. My points are as follows: There are good arguments on both sides of the infringement issue; those arguments can be grounded in concepts of use internal to copyright; a sensitive retelling of the overflight transition clarifies both the merits and the internal "use" interests on both sides; but the *ad coelum* fable portrays what is a close case as a lopsided one.

Let me start with the case for infringement and against fair use. The overflight cases recounted in Parts III and IV all focused considerably on possible effective possession. "Possible effective possession" described the sphere of land and space over which landowners needed broad control and dominion in order to use and enjoy their lots. In copyright, however, the analogue to possible effective possession consists of exclusive control over copying of the protected work of authorship. This control guarantees that the author may make the work the basis for exchange of value. ¹⁶⁷ The possibility of exchange encourages the author to create the work and to disseminate it to people who may be interested in enjoying it for themselves. As long

^{166.} See 17 U.S.C. § 107 (2012).

^{167.} See Newman, supra note 49, at 289, 297.

as a work remains under copyright, it is always at least possible that the author (or her assignee) may derive expected benefits from the copyrights by licensing the copyrighted works on advantageous terms. That possibility justifies reading Section 106 literally: copyright holders have "the exclusive rights . . . to reproduce the copyrighted work in copies." ¹⁶⁸

Now for the case against infringement and for fair use. The overflight analogy seems salient because copying technology has changed significantly from when Section 106's reproduction rights were originally drafted. 169 If exclusive control over copying is an indirect means to secure copyright holders' interests in making commercial use of their works of authorship, the control should be limited to exclude acts of copying that seem too attenuated from the underlying interest in commercial use. Routine digital copying seems relatively attenuated from that interest. "Whereas it made sense to assume that each printed copy of a book was intended (and likely) to satisfy demand for the work on the part of at least one reader, a single beneficial use of a work may now involve the making of numerous copies." That technological gap justifies excusing digitized copying—even commercial copying—when copies are "more incidental and less exploitative in nature than more traditional types of commercial use."171

In addition, the Google Books project may satisfy reciprocity-of-advantage and other similar adequacy criteria courts applied when they tried aerial-trespass cases. Google Books gave all copyright holders a right to opt out and instruct it not to digitize their copyrighted works. In doing so, Google Books paid at least some respect to the exclusive control to which Section 106 entitles copyright holders. To be sure, an opt-out regime does threaten or undermine owner control. Yet Google's opt-out regime respects and perhaps indirectly enlarges the use interests of copyright holders—much as air travel and commerce did for landowners. When a copyrighted

^{168. 17} U.S.C. \S 106(1) (2012). See, e.g., Computer Assocs. Int'l, Inc. v. Altai, 982 F.2d 693, 701–02 (2d Cir. 1992) (assuming that a defendant was liable for copyright infringement where it copied more than 30% of a copyrighted software program).

^{169.} See Matthew Sag, Copyright and Copy-Reliant Technology, 103 Nw. U. L. Rev. 1607 (2009).

^{170.} Newman, supra note 49, at 303.

^{171.} See, e.g., Kelly v. Arriba Soft Corp. 336 F.3d 811, 818 (9th Cir. 2003) (declaring that thumbnail copies in a search engine constitute fair uses).

work is 50 or more years old, it may be reasonable to presume that digitization will do more to widen the audience for the work than exclusive rights of control and commercialization would.¹⁷² The same presumption might make sense for works of authorship that are orphaned (i.e., a reasonably diligent search could not identify the copyright owner or owners because of passage of time or fragmentation of ownership).¹⁷³ One statutory factor makes relevant to fair use analysis "the effect of the use upon the potential market for or value of the copyrighted work."¹⁷⁴ For old and/or orphaned works, Google Books could arguably supply a reciprocity of advantage, by expanding these works' ranges of contemporary uses.

Back to the case for infringement and against fair use. In the cases covered in Parts III and IV, it is telling that courts erred on the side of protecting landowners beneath the ceiling for possible effective possession. Although this tendency is not flatly required by labor theory or other theories that can justify property, it makes considerable sense as a means of implementing such theories—and it is surprisingly resilient in doctrine and practice. This tendency implements at least two property-related policies. By conserving to owners control over activities within their scopes of possible effective possession, property helps keep rights simple and clear. ¹⁷⁵ An exception for Google Books digitization would blur property rights. Since Google Books plans to make commercial use of the information in its databases, any holding excusing its digitization would create blurry lines between excusable and unjustifiable commercial uses. ¹⁷⁶ In addition, quite often in property law, if an owner is getting some benefit from the exercise of basic possession over a resource—or even if she merely could get some benefit from the resource—the law tends to avoid letting non-owners claim a right to put the resource to a use that is allegedly more valuable than the owner's. In all situations not

^{172.} See Epstein, Networks, supra note 159.

^{173.} See, e.g., Alessandra Glorioso, Note, Google Books: An Orphan Works Solution, 38 HOFSTRA L. REV. 971 (2010).

^{174. 17} U.S.C. § 107(4) (2012).

^{175.} In labor-theoretic terms, this tendency marks property claims clearly. See supra notes 38 & 41 and accompanying text. In economic terms, the tendency minimizes information costs that arise when third parties must process relatively fine-grained property rights. See Smith, supra note 49, at 1777–82.

^{176.} Cf. 17 U.S.C. § 107(1) (2012) (requiring consideration of whether the purpose and character of an otherwise-infringing use is "of a commercial nature").

covered by fair use or other limitations, a copyright empowers the rights-holder to decide how best to commercialize the copyrighted work. Every unconsented copy justified by fair use or another limitation dilutes the owner's opportunities to commercialize and to set the terms for commercialization. Now, as the overflight transition shows, in some extreme situations legal decision-makers may become practically certain that legal rights of exclusive control cease to protect and instead interfere with owners' underlying interests in using and getting value from their owned resources. But if courts did not reach that point of certainty in overflight cases until landowners ceased to have any prospect of effective occupation of airspace, perhaps legal decision-makers today should give every practicable benefit of the doubt to copyright holders.

More subtly, when the overflight transition is understood sensitively, it changes how a legal decision-maker might frame the relevant policy issues. Let us review two possible justifications for Google's fair use argument, ¹⁷⁷ and then reconsider those justifications using the adequacy criteria explained in Part IV. One justification is the "spread of knowledge," the "opportunity" the Google database offers "to revive our cultural past, and to make it accessible." ¹⁷⁸ The other is wealth creation: if copyright "law requires Google (or anyone else) to ask permission before they make knowledge available like this, then Google Print can't exist." ¹⁷⁹ Both arguments seem to suggest that fair use doctrine may and should be construed in a manner likely to promote such utilitarian social goods as wealth or a vibrant domain of common knowledge.

The eminent domain and police power principles recounted in Part IV describe the public good differently. Under those principles, society's "utility" (rightly understood) consists in a state of affairs in which all citizens are allowed freely to exercise their rights. Thus, government may commandeer private property to enlarge its power

^{177.} Another justification besides those considered in the text is that the Google Books project is an assembly. As Dough Lichtman has explained, however, the "individual permissions" of different copyright holders "do not substantially interact" in such a manner that all the permissions stand or fall together. Doug Lichtman, *Google Book Search in the Gridlock Economy*, 53 ARIZ. L. REV. 131, 143 (2011). The digital repository may be more valuable the more books are stored in it, but it still has substantial value even if it has turns out to store only 5 or even 1 million of the books originally slated for digitization.

^{178.} Lessig, supra note 7.

^{179.} Id.

to provide public services, but it must hold the owners harmless by paying just compensation in eminent domain. Government may also reorder existing legal rights when doing so secures the interests of affected owners along with everyone else, but that showing must be proven. Either way, no one is "permitted to simply decree that something is now a commons, without regard to the impact on existing rights." ¹⁸⁰

Under that understanding of the common good, a lot more needs to be shown before it can be said that the cultural commons or wealth creation should justify the Google Books project. In some respects, reciprocity-of-advantage principles help justify the digitization project, especially for old and/or orphaned works. In other respects, the Google Books project seems more problematic. If Google Books is justified in terms of wealth creation, it is troubling that Google seeks to create wealth in a manner that circumvents the ordinary mechanism for wealth creation (i.e., commercialization respecting the rights of IP holders). Indeed, as the district court noted in rejecting the 2011 proposed class settlement, at least some of Google's competitors are trying to compile their own digital databases while respecting copyrights more than Google has to date. 181 Google is presuming that copyright holders will find inclusion in Google Books so advantageous that they will waive their rights to bargain over the terms on which they would otherwise have licensed Google to digitize their works. Even though Google gives these holders a right to opt out, it is still unusual for one party to presume that a stranger will waive its right to direct the use and terms of commercial distribution of a work under IP.

Similar problems apply to the creative-culture justification. That argument begs the question. In the short term, if Google may digitize works without infringement liability, it will make a wider range of works accessible. Yet if Google's conduct is retroactively approved, it may deter other future publishers or library-builders¹⁸² from negotiating individually and advantageously with copyright holders as

^{180.} DeLong, supra note 119.

^{181.} See Authors Guild v. Google, Inc., 770 F. Supp.2d 666, 679 (S.D.N.Y. 2011) (noting that Google's "competitors [have been] scanning copyrighted books," and quoting the counsel of a Google competitor as describing "Google [as taking] a shortcut by copying anything and everything regardless of copyright status").

^{182.} See Randal C. Picker, Private Digital Libraries and Orphan Works, 27 BERKELEY TECH. L.J. 1259 (2012).

at least some of Google's competitors are now. That deterrence effect might discourage more authors from creating new works in the long term than Google Books would make available in the short term.

CONCLUSION

In many contemporary retellings, pre-1920 property law had little or no internal policy content, the *ad coelum* maxim applied far more broadly than it needed, and the common law was thus lacking in resources to adjust for air travel when the airplane was invented. In reality, pre-1920 common law was justified on rights-based foundations that gave property law adequate normative content. Under those rights-based norms, it was quite sensible to construe the *ad coelum* maxim broadly before the advent of air travel and more narrowly afterward.

I think the legal system's adjustment of the *ad coelum* maxim's scope teaches a useful lesson about the focus and flexibility of natural rights—based theories of property. Yet this case study remains relevant to contemporary policy debates about property and IP. When told simplistically, as the *ad coelum* fable, the overflight case study suggests that property regimes often need to be revised significantly to keep up with technological progress. When their reasoning is understood in proper context, however, the best-reasoned cases laid down strict adequacy criteria for laws transforming private property rights. By those adequacy criteria, liability rule and commons-based property regimes are problematic more often than one would learn from authorities that like to retell the *ad coelum* fable.

I do not mean to suggest that liability rule or commons-based regimes are fundamentally misguided. My point is simpler: Every time the *ad coelum* fable is used to legitimate a new property regime, there is a strong likelihood that the fable is being used to overstate the advantages of liability rule or commons-based solutions, and to obscure or downplay the trade-offs those solutions entail. I hope that my retelling of the fable puts the advantages of each approach in proper perspective, and I hope I have highlighted the trade-offs.

AFFIRMATIVE CONSTITUTIONAL COMMITMENTS: THE STATE'S OBLIGATIONS TO PROPERTY OWNERS

CHRISTOPHER SERKIN*

INTRODUCTION

The United States Constitution enshrines primarily negative liberties. 1 It conveys rights to be free from government interference, but in its core provisions does little or nothing to create affirmative duties for the government.² At least that is the conventional view, reflected in several centuries of law and scholarship. When it comes to property, this conventional view may be wrong. In my contribution to this year's excellent Brigham-Kanner Property Rights Conference honoring James Krier, I argue that the Constitution requires the government—at least sometimes, in particular contexts—to take affirmative steps to protect or promote the "just" allocation of resources in the world. This is unconventional as a matter of constitutional law, but is surprisingly consistent with important strands of contemporary property theory. In particular, I argue here that emerging conceptions of property as a locus for obligations as well as rights can function as a two-way street. While the nature of property means that the State can ask a lot of property owners, the dynamic nature of property rights means that those obligations sometimes reverse and owners can make demands of the State.4

^{*} Professor of Law, Vanderbilt Law School. My thanks to Jim Krier for the opportunity to participate in this event, to Greg Alexander, Hanoch Dagan, Baily Kuklin, Brian Lee, Eduardo Peñalver, and Nelson Tebbe for comments on earlier drafts, and to Eric Claeys and William Edelglass for early conversations about the idea.

^{1.} See, e.g., Arthur S. Miller, Toward a Concept of Constitutional Duty, 1968 SUP. CT. REV. 199, 199; see also David P. Currie, Positive and Negative Constitutional Rights, 54 U. CHI. L. REV. 864, 864–66 (1986).

^{2.} The Constitution does explicitly create some affirmative constitutional obligations outside of the Bill of Rights. See, e.g., Susan Bandes, The Negative Constitution: A Critique, 88 MICH. L. REV. 2271, 2312 & n. 212 (1990). Some affirmative constitutional rights within the Bill of Rights also exist, like the right to counsel, but they remain the exception rather than the norm. See Currie, supra note 1, at 872–80 (describing affirmative constitutional obligations).

^{3.} See, e.g., Currie, supra note 1, at 865 (citing inter alia Debates on the Federal Constitution (J. Elliot ed., 1836)).

^{4. &}quot;State," in this essay, refers to all branches of government.

In fact, there are a number of different doctrinal and theoretical accounts that might justify the recognition of affirmative constitutional obligations to protect property. I explore some of these broader issues in a new paper, arguing for a category of "passive takings" (i.e., violations of the Fifth Amendment Takings Clause as a result of government *inaction*), specifically in the context of sea level rise. My goal here is at once narrower and subtler. As part of the conference's panel on Property's Moral Dimension, I will put aside doctrinal and consequentialist arguments for the State's affirmative obligations to focus exclusively on moral justifications for affirmative obligations within property theory.

In recent years, notable property theorists, like Professors Gregory Alexander, Eduardo Peñalver, and Hanoch Dagan, have argued that property rights are not merely "negative"—not concerned exclusively with owners' rights against the world—but also contain affirmative obligations to the community. Professor Dagan locates these affirmative obligations in "long-term average reciprocity." The State can impose obligations on property owners to the extent that property owners, in general and over the long term, can expect to receive off-setting benefits of equal or greater value. Professors Alexander and Peñalver, by contrast, locate their "social obligation norm" in conceptions of, and commitments to, human flourishing. Because both property and community are necessary for such flourishing, property owners are morally obligated to "share" their property to promote others' capacity to flourish, at least to some extent.

^{5.} See Christopher Serkin, Passive Takings: Government Inaction and the Duty to Protect Property (2013) (unpublished manuscript) (on file with author).

^{6.} See HANOCH DAGAN, PROPERTY: VALUES AND INSTITUTIONS 103–05 (2011); Hanoch Dagan, The Social Responsibility of Ownership, 92 CORNELL L. REV. 1255 (2007); Hanoch Dagan, Just Compensation, Incentives, and Social Meanings, 99 MICH. L. REV. 134 (2000) [hereinafter Dagan, Just Compensation]; Hanoch Dagan, Takings and Distributive Justice, 85 VA. L. REV. 741 (1999) [hereinafter Dagan, Takings]. This characterization of Dagan's work comes from Gregory S. Alexander, The Social Obligation Norm in American Property Law, 94 CORNELL L. REV. 745, 751 (2009) [hereinafter Alexander, The Social Obligation Norm]. Dagan's ultimate interests are broader than this, and encompass the regulative nature of property more generally, but this Essay focuses on only one aspect of Dagan's work.

^{7.} Their accounts appear together, and separately, in, Gregory S. Alexander & Eduardo M. Peñalver, Introduction, in Property and Community (2010); Gregory S. Alexander, Pluralism and Property, 80 Fordham L. Rev. 1018 (2011); Gregory S. Alexander & Eduardo M. Peñalver, Properties of Community, 10 Theoretical Inq. L. 127 (2009) [hereinafter Alexander & Peñalver, Properties of Community]; Alexander, The Social Obligation Norm, supra note 6, at 751.

^{8.} See Alexander & Peñalver, Properties of Community, supra note 7, at 766-68.

The conclusion of both accounts is quite similar: the State can ask a lot of property owners without violating constitutional protections because the nature and content of property rights already contain the roots of those obligations. This Essay argues that these same obligations generate surprising and previously unrecognized reciprocal obligations on the State.

When the State regulates consistently with the underlying moral obligations of property ownership, its regulations are constitutionally permissible because it is not demanding anything from property owners that they are not already morally compelled to provide. Laws and regulations that exceed or are inconsistent with those underlying moral obligations receive no such safe harbor. They are not necessarily unconstitutional, of course, but the State cannot rely on background commitments to the community as a defense. But community obligation accounts of property—whether based in reciprocity or human flourishing—are inherently dynamic in ways that libertarian accounts are not. Communities' needs change, the conditions of ownership change, and the appropriate allocation of benefits and burdens within a society changes over time. Therefore, where State-imposed obligations on property are justified or defended by their consistency with property owners' underlying moral obligations to others, those regulations can become unconstitutional over time. They can lose their safe harbor as conditions in the world change. Alterations in the balance of benefits and burdens, or in property owners' capacity to flourish, can require the government to act, either by modifying regulatory demands or paying compensation.

Interestingly, the two theoretical accounts outlined above suggest some different requirements on the State to act. Professor Dagan's focus on reciprocity means that the state must act whenever the implicit social bargain for long-term benefits is unexpectedly disrupted. The Aristotelian account of Professors Alexander and Peñalver, in contrast, requires the State to act when property owners' capacity to flourish is implicated, or when affirmative obligations imposed upon owners do not actually benefit the community.

This Essay first examines the current understanding of property as containing affirmative obligations. It then examines how theories

^{9.} The connection between moral obligations and constitutional rights raises serious issues that are set aside here for purposes of this Essay.

articulated most prominently by Professors Dagan, Alexander, and Peñalver can generate reciprocal obligations on the government to act. The Essay ultimately argues that recognizing the State's occasional responsibility to protect private property follows necessarily from these theoretical accounts and examines how they play out in the context of several leading doctrinal controversies.

I. THE TRANSFORMATION OF PRIVATE PROPERTY

The common law of property has come a long way from its Black-stonian origins. It is no longer—to the extent it ever was—that "sole and despotic dominion which one man claims and exercises over the external things of the world, in total exclusion of the right of any other individual in the universe." ¹⁰ The history of this evolution is contested, and the transformation is ongoing, but even a quick sketch sets the stage for a dynamic view of property with affirmative obligations on the State.

In one traditional account, property is, at its core, the right to exclude others. This Blackstonian vision has been justified on philosophical and normative grounds. For one, it creates a protected sphere of autonomy allowing owners to use or manage resources as they like, free from coercion and external demands. Protecting property is thus constitutive of liberty. Without property, people cannot be free because they must rely on others (or on the State) for their well-being. Property is therefore a necessary precondition for free participation in the political community.

Protecting property in this way also allocates to owners—and, hence, to the market—authority over a resource, allowing people to choose for themselves how best to maximize its value.¹³ From this

^{10.} WILLIAM BLACKSTONE, 2 COMMENTARIES ON THE LAWS OF ENGLAND *2 (1765–69). For the suggestion that the conception of property attributed to Blackstone was a caricature even in its own time, see Alexander, *The Social Obligation Norm, supra* note 6, at 754 (citing, *inter alia*, Carol M. Rose, *Canons of Property Talk, or, Blackstone's Anxiety*, 108 YALE L.J. 601, 603–06 (1998)).

^{11.} See, e.g., JAMES W. ELY, JR., THE GUARDIAN OF EVERY OTHER RIGHT: A CONSTITUTIONAL HISTORY OF PROPERTY RIGHTS (3d ed. 2008); see also THE PAPERS OF JAMES MADISON § 16 (William T. Hutchinson et al. eds., 1962) ("In a word, as a man is said to have a right to his property, he may be equally said to have a property in his rights.").

^{12.} See, e.g., ELY, supra note 11.

^{13.} See, e.g., RICHARD A. POSNER, ECONOMIC ANALYSIS OF LAW 40 (8th ed. 2011).

consequentialist perspective, private property increases overall societal well-being. True, property rights in this country have never conferred entirely unconstrained power. Nuisance law as well as early police power regulations, for example, created meaningful limits on the rights of owners: not to interfere with others' use of their own property, not to create substantial risks of public harm, and the like. ¹⁴ Nevertheless, strong private property rights give owners extremely broad power over resources in the world to encourage their productive use, and to allocate resources to people who value them more highly.

One of the State's central purposes in this account is to protect private property and, therefore, private transactions involving property. According to John Locke, people voluntarily leave the state of nature, where they are free from coercion, only because the State can protect property in ways that individuals cannot. The State's primary role is to provide known laws, neutral judges, and enforcement mechanisms that allow people to be secure in their property. Indeed, descriptively, much of the common law is an expression of that State protection for private property. The State creates and enforces the background rules that allow people to order their lives in reliance on relatively stable rights.

For present purposes, the important observation underlying all of this is a particular and static vision of property rights and the State. Property consists of the right to exclude, and the State's role is essentially one of neutral enforcer. By making property rights relatively inviolable, the State protects private ordering through the rights of owners to exclude others.¹⁷

This Lockean and fundamentally libertarian view of property changed, however, with the rise of the regulatory state and its concomitant restrictions on private rights. In an account familiar to most lawyers (although one that admittedly oversimplifies the history¹⁸),

^{14.} See, e.g., STUART BANNER, A HISTORY OF HOW, WHY, AND WHAT WE OWN 64-65 (2011).

^{15.} John Locke, The Second Treatise of Civil Government \S 123 (C.B. Macpherson ed., 1980) (1690).

^{16.} See id. § 131.

^{17.} Larissa Katz usefully characterizes property rights as the authority to set an agenda vis-à-vis a resource. See Larissa Katz, *Exclusion and Exclusivity in Property Law*, 58 U. TORONTO L.J. 275 (2008).

^{18.} See, e.g., WILLIAM E. NELSON, THE ROOTS OF AMERICAN BUREAUCRACY, 1830–1900 (1982).

the Supreme Court was initially resistant to emergent state interference with private rights in the early part of the twentieth century. The Court invalidated minimum wage laws, ¹⁹ child labor laws, ²⁰ and more, all in the name of protecting private rights against government intrusion. But that came to a relatively abrupt end in *West Coast Hotel Co. v. Parrish*, ²¹ where the Supreme Court relented, recognizing that private rights were not an impermeable barrier to the State's police powers. At the heart of this change was a newfound understanding that the State had an appropriate role in preventing people from using private rights in ways that interfered too much with others' well-being—or at least judicial deference to such a determination.

This, in turn, paved the way for a considerably more nuanced vision of property rights and their constitutional protection. Instead of creating a sphere of nearly unfettered liberty against the State and others, property was increasingly seen as a bundle of rights. ²² Individual sticks in that bundle could be reconfigured or removed without eliminating property. ²³ Property shifted away from a kind of categorical right against the world, to specific rights against other people (and the State) vis-à-vis a resource in the world. Property, then, became increasingly contextual. Rights against one person may not apply in the same way to another.

This relational understanding of property implicitly recognized that rights are generally zero sum. Expanding one person's right to exclude means limiting another's right to be included (or to access a resource).²⁴ That tension exposed a limit on the right to exclude—a limit defined by the negative effects of exclusion on others, and occasionally given voice in the case law.²⁵ Most famously, the New

^{19.} See Lochner v. New York, 198 U.S. 45 (1905).

^{20.} See Hammer v. Dagenhart, 247 U.S. 251 (1918).

^{21. 300} U.S. 379 (1937).

^{22.} For a history of this conception, and a leading treatment, see J.E. Penner, *The "Bundle of Rights" Picture of Property*, 43 UCLA L. REV. 711 (1996).

^{23.} But see BANNER, supra note 14, at 57–59 (arguing that the bundle of sticks metaphor was originally used to increase not decrease constitutional protection of property).

^{24.} See DAGAN, supra note 6, at 37 ("In certain circumstances, the right of nonowners to be included and exercise a right to entry is also quite typical of property").

^{25.} See Dagan, Just Compensation, supra note 6, at 135 ("The premise of a progressive approach to takings law is that ownership is not merely a bundle of rights, but also a social institution that creates bonds of commitment and responsibility among owners and others affected by the owners' properties.").

Jersey Supreme Court, in *State v. Shack*, ²⁶ held that a farm owner could not exercise his property rights to exclude aid workers seeking to provide services to migrant farmworkers. ²⁷ The Court wrote: "Property rights serve human values. They are recognized to that end, and are limited by it. Title to real property cannot include dominion over the destiny of persons the owner permits to come upon the premises." ²⁸ Likewise, limits on landlords' ability to pursue self-help or the creation of public easements to access the beach reflect increased recognition of the limits of rights of exclusion. ²⁹

In this more contemporary understanding, the State has been transformed from the neutral enforcer of an unconstrained right to exclude—or some early libertarian approximation thereof—to a mediator of competing interests. Indeed, the late nineteenth and early twentieth centuries marked a fundamental shift in the relationship between private property and the State. With industrialization, the move to cities, and then the Great Depression, people became increasingly aware that the State does not have a monopoly on coercive power. Private rights can be exercised coercively, too. Profoundly unequal bargaining power allowed some companies to use private rights to secure unfair advantages over employees—for example, in company towns where workers were not so different from indentured servants, living on company-owned land and working for wages that were almost entirely recaptured by the company.³⁰

A State that stood by simply to protect those private agreements was not protecting the welfare of its citizens as a whole. It was not enforcing some efficient and socially beneficial private ordering through truly voluntary market transactions. Instead, it was benefitting the rich at the expense of the poor—the wealth of the few over the welfare of the many. As one commentator wrote: "An illiterate

^{26. 277} A2d 369, 371 (1971).

^{27.} For a discussion of *State v. Shack*, see, e.g., Alexander & Peñalver, *Properties of Community*, *supra* note 7, at 149. The case may be an outlier in the case law but is a mainstay of academic discussion.

^{28.} Shack, 277 A.2d at 371.

^{29.} See, e.g., Alexander, The Social Obligation Norm, supra note 6, at 745, 801.

^{30.} For a general discussion of the evolution of labor and the conditions of the workforce during this era, see generally William E. Forbath, *The Shaping of the American Labor Movement*, 102 Harv. L. Rev. 1109 (1989); *see also generally* Barbara H. Fried, The Progressive Assault on Laissez Faire: Robert Hale and the First Law and Economics Movement (1998) (discussing Robert Hale's progressive-era view of coercion).

and impoverished peasant could not be master of himself and his destiny, however jealously his legal rights to unconstrained action might be protected."³¹ Or, as the English philosopher T.H. Green put it: "The individual is not in fact free from coercion merely because the state has not coerced him. On the contrary he is under pressure of some sort in respect to every act he performs."³²

Over time, and certainly by the second third of the twentieth century, liberal governments and their citizens began to recognize that the goal of the State was not simply to be an enforcer of private rights. Courts and commentators realized that the state had an important role, too, in creating the conditions necessary for people to increase their own well-being and welfare, however defined. The State therefore began to take a more active role in creating conditions that allowed more people to lead more fulfilling lives. Where private rights interfered sufficiently with others' ability to advance their own well-being, the State began to step in as a corrective. Today, the modern State no longer stands on the sidelines like a referee, merely defending the private allocation of private rights, but instead plays a central role in defining and limiting the substantive content of property to prevent its most coercive effects.

This more community-focused view of property implies substantial limits on the right to exclude. Exclusion, and property generally, cannot be used in ways that place too great a burden on the community. There is an even more striking consequence, too. Property does not have to consist of purely negative rights—rights to be free from intrusion by others—but can also contain affirmative obligations to minimize its coercive pressure. And this means, among other things, that the State can recognize those obligations and make substantial demands of property owners without offending property rights. ³³ Not

^{31.} Harry Holloway, *Mill and Green on the Modern Welfare State*, 13 W. Pol. Q., 394, 397 (1960) (interpreting T.H. Green).

^{32.} T.H. GREEN, PRINCIPLE OF POLITICAL OBLIGATION (1950), quoted in Holloway, supra note 31, at 397; see also Currie, supra note 1, at 868 (attributing to Green the view that "affirmative government aid might be essential to liberty.").

^{33.} In one modern formulation, property as an institution is fundamentally the delegation by the state of decision-making authority vis-à-vis a particular resource in the world. See Hanoch Dagan, The Public Dimension of Private Property 2 (2012) (unpublished manuscript) (on file with author) (suggesting one view that private property is "merely a form of regulation, one that happens to delegate decision making power to individuals (and corporations)

only must property owners allow access and entry to those in need—the famous ship-in-the-storm case, ³⁴ or *State v. Shack*—but property owners can also be called upon to "use" their property to benefit society more generally, by preserving historic or environmental resources on their land, by maintaining a certain amount of open space, by shoveling the sidewalks in front of their houses, ³⁵ and so forth. ³⁶ Property owners therefore have state-recognized obligations to use (or forego using) their property in specific ways to advance the well-being of society as a whole.

II. AFFIRMATIVE OBLIGATIONS IN PRIVATE PROPERTY

Contemporary property theory has increasingly recognized that property contains obligations to the community as well as negative rights to exclude others. This insight remains contested, and important scholarship continues to advance the exclusionary core of property rights. Nevertheless, theorists have articulated different justifications for affirmative obligations in property, most notably professors Hanoch Dagan, Gregory Alexander, and Eduardo Peñalver. Others exist as well, but the competing visions articulated by Dagan, on the one hand, and Alexander and Peñalver on the other, capture the core of the insight.

in the service of the public good and to the extent of such service"); see also Larissa Katz, Governing Through Owners: How and Why Formal Private Property Rights Enhance State Power, 160 U. Pa. L. Rev. 2029 (2012).

- $34.\ See$ Vincent v. Lake Erie Transp. Co., 124 N.W. 221 (Minn. 1910) (permitting trespass for necessity, but ordering payment of actual damages).
- 35. See Katz, supra note 33, at 2031–32 ("There are numerous examples in developed liberal democracies of governing through owners on a modest scale. For instance, snow laws require owners to shovel or clear snow for sidewalks that border their property.").
- 36. Only some of these look like required uses, as opposed to restrictions on uses, but the difference between the two is often in the eye of the beholder. An affirmative obligation to mow one's lawn is no different from a prohibition on allowing grass to grow above a certain length.
- 37. See, e.g., Thomas W. Merrill, Property and the Right to Exclude, 77 NEB. L. REV. 730, 754 (1998) ("[P]roperty means the right to exclude others from valued resources, no more and no less."); Penner, supra note 22. See also DAGAN, supra note 6, at 38.
 - 38. See supra notes 6 and 7 (citing some of their leading articles).
- 39. See, e.g., DAGAN, supra note 6, at 58 (citing inter alia ARTHUR RIPSTEIN, FORCE AND FREEDOM: KANT'S LEGAL AND POLITICAL PHILOSOPHY (2009)); see also Jeremy Waldron, Property, Justification and Need, 6 CAN. J. L. & JURISPRUDENCE 185 (1993) (discussing various philosophical justifications for social obligations in the content of property).

A. Dagan and Average Reciprocity

According to Professor Dagan, the State can make significant demands of property owners with the promise of an "average longterm reciprocity of advantage."40 The concept of "average reciprocity" lies at the heart of takings jurisprudence, and so delineates one constitutional boundary on government action.

In Penn Coal v. Mahon, 41 the Supreme Court found that Pennsylvania's Kohler Act was an unconstitutional taking of coal companies' "support estate" in coal. The Court distinguished an earlier case, Plymouth Coal Co. v. Pennsylvania, 42 in which it had upheld a law requiring coal companies to maintain walls between mines. In Penn Coal, the Court held that Plymouth Coal was distinguishable because the Act at issue in that earlier case simultaneously benefitted and burdened coal companies. Yes, it prohibited coal companies from breaking into others' mines, effectively limiting access to some of their own coal in order to keep others' workers safe. But it conferred a reciprocal advantage, because it prevented other coal companies from doing the same thing. According to the Supreme Court, the presence of this "average reciprocity of advantage" in Plymouth Coal justified the different outcomes in the two cases. 43

Unfortunately, the concept of average reciprocity has bedeviled courts and commentators ever since. 44 How broadly should courts be

^{40.} See Dagan, Takings, supra note 6, at 768-78. The following account of Dagan's work is based significantly on Alexander's characterization of Dagan's underlying normative commitments. See Alexander, The Social Obligation Norm, supra note 6, at 758-73. It is possible to read Dagan more narrowly, and his commitment to reciprocity as limited to resolving particular doctrinal problems in regulatory takings law. Nevertheless, Alexander's characterization of Dagan provides a particularly useful opportunity to contrast two different views of community obligations in property, and so is adopted here relatively uncritically.

^{41. 260} U.S. 393 (1922).

^{42. 232} U.S. 531 (1914).

^{43.} Penn Coal, 260 U.S. at 415 ("[The requirement in Plymouth Coal] was for the safety of employees invited into the mine, and secured an average reciprocity of advantage that has been recognized as a justification of various law.").

^{44.} See, e.g., Christopher Serkin, The Meaning of Value: Assessing Just Compensation for Regulatory Takings, 99 NW. U. L. REV. 667, 694-96 (2005) (discussing cases and theory); Lynda J. Oswald, The Role of the "Harm/Benefit" and "Average Reciprocity of Advantage" Rules in a Comprehensive Takings Analysis, 50 VAND. L. REV. 1449, 1490–1501 (1997); see also generally Raymond R. Coletta, Reciprocity of Advantage and Regulatory Takings: Toward a New Theory of Takings Jurisprudence, 40 Am. U. L. REV. 297 (1990); Brian A. Lee, Average Reciprocity of Advantage (2012) (unpublished manuscript) (on file with author).

able to look to identify reciprocal obligations? Zoning is the easy and also paradigmatic case. Restrictive zoning ordinances are constitutionally permissible under the Takings Clause because they impose reciprocal restrictions on neighbors' property. ⁴⁵ An owner may be harmed if she is forbidden from building the apartment building she wanted to build on her lot, but she is benefitted by the fact that her neighbors also cannot build apartment buildings on theirs. More difficult cases, however, push the boundary. The outer extreme is the famous case of *Shanghai Power Co. v. United States.* ⁴⁶ There, the Supreme Court rejected a takings claim based on President Carter's decision to extinguish a private lawsuit against Shanghai arising out of its nationalization of a hydroelectric dam. The Court ruled, in part, that the previous owner of the dam had received an average reciprocity of advantage from America's improved relations with China! ⁴⁷

It is in this doctrinal context that Professor Dagan originally proposed his vision for requiring only long-term reciprocity. ⁴⁸ As he put it, reciprocity exists if "the disproportionate burden of the public action is not overly extreme and is offset, or is likely in all probability to be offset, by benefits of similar magnitude" from other public benefits. ⁴⁹ In other words, a government can make demands of property owners so long as those demands are likely to be offset in the future by roughly proportional benefits from the State, although the benefits can take a very different form than the original burden.

This has important consequences for the imposition of affirmative duties on property owners. Professor Dagan himself defended his conception of long-term reciprocity precisely because "it allows the incorporation of social responsibility into the legal doctrine." To see the community-minded aspects of this idea, contrast Dagan's view

^{45.} See, e.g., Robert Meltz, Takings Law Today: A Primer for the Perplexed, 34 ECOLOGY L.Q. 307, 344 (2007) ("The paradigmatic example [of reciprocity of advantage] is zoning: a homeowner is required to forego, say, commercial use of his property, but benefits from others in the area being restricted in the same way.").

^{46. 4} Cl. Ct. 237 (1983).

^{47.} See Hanoch Dagan & James J. White, Governments, Citizens, and Injurious Industries, 75 N.Y.U. L. Rev. 354, 382–405 (2000); Daryl J. Levinson, Framing Transactions in Constitutional Law, 111 YALE L.J. 1311, 1390 (2002).

^{48.} See Dagan, Takings, supra note 6.

^{49.} Id. at 769-70.

^{50.} Id. at 771.

from the role of reciprocal advantages proposed by Richard Epstein in his famous book on the Takings Clause. ⁵¹ According to Epstein, the government is only permitted to regulate property without explicit compensation when doing so confers "implicit in-kind compensation" that matches or exceeds the burdens imposed. ⁵² This is at the heart of Epstein's libertarian opposition to government redistribution of property, and Epstein appears to require that, on balance, any particular government action not make people worse off. ⁵³ Dagan's requirement of average long-term reciprocity, instead of strict reciprocity deriving directly from the specific government action, recognizes the role of the State in smoothing both the benefits and burdens of community membership over time. ⁵⁴

Stepping back from the doctrinal details, Dagan's account offers a general vision of property within the State. The State can enact regulations significantly restricting the use and value of property and can make affirmative demands of property owners, so long as there is a promise of long-term reciprocal benefits, at least in the average. Therefore, Dagan's justification for property's affirmative obligations is based on the overall benefits that property owners receive—or are promised to receive—from their membership in the community.

B. Alexander and Peñalver and Human Flourishing

Professors Alexander and Peñalver offer a very different justification for the State to impose uncompensated affirmative obligations on property owners. Theirs is based on Aristotelian conceptions of human flourishing, building on work by Martha Nussbaum and Amartya Sen. ⁵⁵

 $^{51.\,}$ Richard Epstein, Takings: Private Property and the Power of Eminent domain (1985).

^{52.} Id. at 195-97.

 $^{53.\} Id.$ at 195 (focusing on the "extent the restrictions imposed by the general legislation upon the rights of others serve as compensation for the property taken."); $see\ also\ John\ E.$ Fee, $The\ Takings\ Clause\ as\ a\ Comparative\ Right, 76\ S.\ Cal.\ L.\ Rev.\ 1003,\ 1057–59\ (2003)\ (arguing\ that\ government\ should\ be\ able\ "to\ regulate\ a\ discrete\ group\ of\ landowners\ without\ providing\ compensation,\ as\ long\ as\ the\ regulation\ is\ reasonably\ designed\ for\ the\ special\ benefit\ of\ those\ landowners.").$

^{54. &}quot;Thus, the strict proportionality regime underplays the significance of belonging, membership, and citizenship, and it therefore undermines social responsibility." Dagan, *Just Compensation*, *supra* note 6, at 136; *see also* Eduardo M. Peñalver, *Regulatory Taxings*, 104 COLUM. L. REV. 2182, 2230–33 (2004) (criticizing narrow construction of implicit in-kind benefits).

^{55.} See Alexander & Peñalver, Properties of Community, supra note 7, at 136 (citing, inter alia, AMARTYA SEN, DEVELOPMENT AS FREEDOM (1999); MARTHA C. NUSSBAUM, WOMEN AND HUMAN DEVELOPMENT (2000)).

The Alexander and Peñalver argument is subtle and contains many important nuances that cannot be easily captured here. Fortunately, the broad outline of their argument is easy enough to state, even if some of its persuasive power comes from the omitted details.

In general terms, Alexander and Peñalver argue that a thick conception of justice and fairness requires a commitment to human flourishing. As they articulate it, human flourishing demands the presence of basic human capabilities, including: life, freedom, practical reason, and sociality. These, in turn, require, at a minimum and among other things: membership in a society; and "the capacity to make meaningful choices among alternative life horizons"⁵⁶

According to their account, membership in a society is not a luxury but is instead a precondition for human flourishing. We are social creatures, and society plays a crucial role in forming who we are as people.⁵⁷ At the same time, flourishing requires satisfaction of basic physical needs, as well as the means to set priorities in life without total dependence on others. What that means precisely depends on context and the relevant community, but it necessitates at least some minimal level of ownership and control over resources in the world. People without any property, who are dependent upon others for their survival, have no meaningful opportunity to engage in practical reasoning.⁵⁸

From this, Alexander and Peñalver argue that our dependence on community means that we are morally obligated to promote the human flourishing of others within our community as well. As they put it, "If an individual, as a rational moral agent, values her own flourishing, then to avoid self-contradiction, she must appreciate the value of others as well." This is a strong claim, and hardly self-evident. But it is based on a kind of moral symmetry borne of our dependence on community for our own ability to flourish. 60

The moral obligation to promote others' flourishing translates directly into a community-minded conception of property and, at least in modern society, to the power of the State to compel some

^{56.} Id. at 135.

^{57.} Id. at 138-40.

^{58.} Id. at 147-48.

^{59.} Id. at 141-42.

^{60.} See Alexander, The Social Obligation Norm, supra note 6, at 769–70 (discussing various justifications for this obligation).

level of "sharing." Although they do not specify any particular level of sharing, Alexander and Peñalver argue that people with surplus property can be required to give access to (or otherwise share) at least some of that surplus if it is necessary to satisfy others' need for "resources necessary for physical survival." But the State can go further, as well, and require sharing of surpluses to ensure that everyone in the community has access to those resources necessary to "participate at some minimally acceptable level in the social life of the community." The amount of redistribution the State can compel is unspecified and is socially and culturally contingent. But the important point for this discussion is that the commitment to human flourishing generates a "social obligation norm" that allows the State to make affirmative demands of property owners, at least to some extent.

This account of affirmative obligations is importantly different from Dagan's and permits involuntary redistribution in more circumstances. Dagan's account, based on reciprocity, requires that property owners' affirmative obligations be balanced out with reciprocal benefits, at least in the average and over the long term. Alexander and Peñalver's account requires no such reciprocity. Indeed, it may well be that the most advantaged members of a community are required to give without an expectation of benefits in return, even over the long term. As Alexander explains, "The real basis of our obligation here is not reciprocity but dependence."

While Alexander and Peñalver are undoubtedly on the same side of the broader fight about property rights with Dagan—all three argue for the power of the State to compel some measure of property

^{61.} The role of the State in Alexander and Peñalver's account is somewhat contingent. They recognize that it might be possible, in the abstract, to satisfy one's moral obligations to others directly, without mediation by the State. However, they persuasively argue that "[a]t least within the modern capitalist economy . . . guaranteeing to individuals the necessary access to . . . [the] prerequisites for the capabilities [for flourishing] . . . is beyond the abilities of private, voluntary communities "Alexander & Peñalver, *Properties of Community*, supra note 7, at 146.

^{62.} Id. at 146.

^{63.} Id. at 148.

^{64.} See Alexander, The Social Obligation Norm, supra note 6, at 760 ("[C]ommunities can only make demands of their members [under Dagan's account] if those demands are likely to pay back each individual in the community in the long, if not the short, run.").

^{65.} See id. at 771.

redistribution—Dagan's focus on long-term reciprocity is arguably the more parsimonious. Alexander and Peñalver recognize a social obligation norm whenever some members of society have surplus property and others have too little to foster even the most basic human capabilities necessary for human flourishing.

III. SOCIAL OBLIGATION'S TWO-WAY STREET

The property literature focusing on social obligations—whether based in reciprocity or flourishing—has focused exclusively on the commitments that property imposes on owners vis-à-vis the broader community. It has been used primarily to justify governmental limits on property rights and the imposition of affirmative obligations. This is understandable because these conceptions of property are generally deployed in response to libertarian accounts, with their emphasis on freedom from government interference. But it is important to recognize that a more community-minded conception of property imposes generally unrecognized reciprocal obligations as well. The reasoning of theorists like Dagan, Alexander, and Peñalver extend naturally and even inevitably to obligations that the State owes to property owners. Property's social obligations, in other words, are a two-way street. Exactly how, and to what extent, depends on the underlying theory. Dagan's reciprocity-based account of affirmative obligations generates different outcomes than a theory based on human flourishing, and in many ways the differences between these theories are starkest in the context of the state's own previously unexplored obligations.

A. Reciprocity and the State's Obligation to Property Owners

In Dagan's view, average reciprocity of advantage allows the government to impose significant obligations on property owners so long as those burdens can reasonably be expected to be offset in the average and over the long term. For Dagan, this reasoning justifies, at least in part, the result in *Penn Central Transportation, Co. v. New York.* ⁶⁶ While the historic landmarking challenged in that case

undoubtedly worked a substantial hardship on the owners of Grand Central Terminal, reciprocal offsetting benefits were easy to foresee. The law was intended to promote New York's "tourist attractions, business, and industry, and . . . the use of such landmarks for the education pleasure and welfare of the people of the city." As Dagan reasoned, those particular benefits "will accrue most generously for landowners in the concentrated geographic neighborhood around the [Grand Central] Terminal—the neighborhood where appellants' real estate holdings are clustered." Indeed, the New York Court of Appeals—as opposed to the United States Supreme Court—sustained the landmarking ordinance by employing surprisingly similar reasoning.

This view of reciprocity, however, demands an active role for the State. The State is, in a sense, responsible for smoothing the benefits and burdens of community membership over time. It can redistribute some of those benefits, but only with the promise of future repayment. That implicit promise creates an ongoing obligation on the State until the benefits are, in fact, repaid. Some—including, perhaps, Dagan himself—might object that enforcing reciprocity's promise in this way fundamentally misses the point. There should be no ultimate tallying of costs and benefits, no ledger that gets added up to see if everyone is made better off on some single scale of welfare. "Reciprocity of advantage," as a prospective test, is simply examining whether regulatory burdens are being placed on people who are likely to be excluded from most of the benefits of membership in the community. It is designed as an ex ante disincentive to burden the poor and politically powerless, and not as a continuing obligation that the State, in fact, needs to satisfy.⁷⁰

But holding the government accountable for those average longterm benefits is entirely consistent with Dagan's underlying goals of pressuring governments to place regulatory burdens on those best

^{67.} Dagan, *Takings*, *supra* note 6, at 797 (quoting *Penn Central*, 438 U.S. at 109 (Rehnquist, J., dissenting)).

^{68.} *Id.* at 797 (internal citations and quotation marks omitted).

^{69.} Penn Central Transp. Co. v. New York, 42 N.Y.2d 324 (1977) ("It is no accident that much of the city's mass transportation system converges on Grand Central. . . . Without the assistance of the city's transit system . . . the property . . . would be of considerably decreased value. It is true that most city property benefits to some extent from public transportation, but the benefit is peculiarly concentrated and great in the area surrounding Grand Central Terminal.").

^{70.} Dagan, Takings, supra note 6, at 791.

able to secure benefits from the government. Dagan's progressive view of the Takings Clause is a response to the otherwise overwhelming pressure to place regulatory burdens on the poor or politically powerless. Those progressive concerns do not disappear once a regulatory burden has been imposed. If anything, requiring the State to live up to its implicit promise of reciprocal benefits keeps the government honest. Viewing the test for reciprocity entirely prospectively would allow governments to promise future benefits too cheaply.

To make this intuition more concrete, return to Penn Central, but imagine, for a moment, that something changed dramatically to cut off the promise of long-term benefits that, for Dagan, justified the landmarking ordinance. What if, for example, increased storm surge cut off rail tunnels to Grand Central making it unusable for trains?⁷¹ Or what if an "urban redevelopment" project (or some catastrophic environmental disaster) led the city to condemn much of the property around Grand Central and leave it vacant and uninhabited? These may be unlikely events, indeed we can hope they are, but they are not outside of the realm of possibility. And they would profoundly distort the reciprocity calculus that, for Dagan, justified landmarking Grand Central in the first place. Now, the long-term benefits of being a transportation hub in a major commercial and tourist destination would not come to pass and the burden from the landmarking ordinance would create a much greater hardship, on balance, than the Supreme Court originally believed. The State's ongoing and active role in allocating the burdens and benefits of membership in society might compel it to act to readjust those previous burdens if they had not yet been fully or even partly repaid.

This is admittedly at odds with the typical reciprocity analysis. Reciprocity of advantage is raised by the government as a defense to a takings claim at the time the regulation is enacted. As a result, courts have always examined reciprocity of advantage at the time the regulation was enacted and not after the fact. Dagan, too, reasoned that a regulation imposing a substantial burden should not be a taking if it is likely to be offset by benefits of similar magnitude enjoyed

^{71.} While this may be unlikely in the details, the threat that storm surge can pose to rail tunnels under the East River was on vivid display in 2012 with Hurricane Sandy. For a description, see, e.g., James Barron, *Storm Barrels Through Region, Leaving Destructive Path*, N.Y. TIMES, Oct. 29, 2012, at A1.

^{72.} See, e.g., Oswald, supra note 44, at 1510–20 (discussing cases).

by the claimant from other public actions "73 In other words, he implicitly assumed that the analysis would be forward-looking.

There is, however, no conceptual reason for that temporal limitation. Once the idea of reciprocity is expanded as Dagan suggests beyond those reciprocal benefits built inherently into the regulatory action, the government must continue to provide the reciprocal benefits that justified the regulation in the first place.

Notice, then, the difference between Dagan's conception of property and a more libertarian one. Richard Epstein, recall, demands that reciprocity of advantage be narrowly defined, so that any reciprocal advantages are built directly and in a sense inherently into the regulation itself—the reciprocal benefits and burdens of zoning, for example. That analysis can take place at the time the regulation is enacted. There is no need for a wait-and-see approach for those reciprocal benefits because the State's allocation of burdens and benefits is contained entirely within the regulation itself. By expanding the temporal and regulatory frame—by allowing long-term, average reciprocal benefits from sources other than the regulation itself—Dagan implicitly anticipates the State's ongoing production of benefits and burdens. And this, in turn, suggests ongoing obligations on the State.

The intuition, then, is simply this: if the government justifies a regulatory burden on grounds that the regulation will generate off-setting benefits in the long term, and those benefits are subsequently eliminated, it is as if the original regulation becomes retroactively problematic. The prospect of long-term reciprocity is no palliative to regulatory harms if benefits disappear. Yes, the government can ask a lot of property owners based only on the prospect of future benefits, but—where reciprocity is the justification for regulatory burdens—the government must readjust the allocation of benefits and burdens if the promise of long-term reciprocity goes unfulfilled.

Nothing in this account demands any particular response from the government. It might revisit its original regulation, revoking it or amending it to mitigate some of its burdens. It might offer some additional protection to the affected property owners, like creating alternative benefits to replace those that never appeared. Or, the

^{73.} Dagan, Takings, supra note 6, at 744.

^{74.} See supra note 45 and accompanying text.

government might pay compensation either voluntarily or mandatorily through the Takings Clause. For purposes of this project, with its focus on the moral justifications for affirmative government obligations, I am agnostic about remedies, but it is important to recognize their breadth under Dagan's reciprocity-based account.

B. Human Flourishing and the State's Affirmative Obligations

A similar but nevertheless distinct analysis flows from Alexander and Peñalver's theory of a social obligation norm in property. Their view, again, is not based on reciprocity at all, but instead on a commitment to human flourishing. People with excess resources can be asked to "share" their property with those who need it to facilitate their flourishing, in the Aristotelean sense. As with Dagan, their writing focuses exclusively on the State's ability to burden property owners, not on obligations that the State may owe to property owners in return. But those obligations again follow naturally from their theory.

Even more than Dagan, Alexander and Peñalver articulate a dynamic vision of property. Rights are defined, not in the abstract or as a mere right to exclude, but in reference to the needs of the community—needs that change over time. Members of the community change, and reasonable conditions for flourishing change as well. Social obligations today can extend even to requiring landlords to provide air conditioning to tenants as part of the implied warranty of habitability, although the necessity of air conditioning to human flourishing is undoubtedly geographically and culturally contingent, and changes over time. ⁷⁶

Importantly, a commitment to human flourishing both justifies some State-imposed burdens on property, but also interposes some limits. One limit is "intrinsic to the norm itself." The State cannot ask so much of property owners—in the interests of promoting others' human flourishing—that owners' capacity to flourish is crippled.⁷⁸

^{75.} See supra note 51 and accompanying text.

^{76.} See Alexander, The Social Obligation Norm, supra note 6, at 754.

^{77.} Id. at 815.

^{78.} See id. (discussing limits of social obligation norm and offering as an example that "autonomy interests will limit the social-obligation norm if no equivalently weighty countervailing interests are present").

A commitment to human flourishing requires protecting not only the community's but also the property owner's capacity to flourish.

The State, then, may ask property owners to promote the community, but only insofar as the demands do not implicate the owners' capacity to flourish. In contrast to Dagan, Alexander justifies landmarking Grand Central Terminal because:

Private ownership of those aspects of a society's infrastructure upon which the civic culture depends comes with special obligations. . . . The development of Grand Central Terminal . . . would have inflicted on the community of New York a significant loss of cultural meaning and identity. No compensation should be constitutionally required to prevent a private owner from inflicting . . . a loss that is fundamentally at odds with the obligations of the owner of that property. ⁷⁹

This is only true, though, because the landmarking did not eliminate the property owner's capacity for flourishing.⁸⁰

But landmarking could implicate the burdened property owner's capacity to flourish. Consider historic preservation in the context of a smaller, more intimate factual setting involving the owner of a historically important single family home. Even there, the government may often make significant demands: to preserve the building, to maintain it in good repair, to preserve open space around it, and so forth. But what if the house is historically significant because the current owner's ancestor lived a notable but not remunerative life?⁸¹ And, further, what if the current owner's only asset is the house itself, a building with historical but little financial value? Then, it would seem, the government should not be able to demand the preservation of the house to promote the community's flourishing when the owner's own flourishing—and perhaps even survival—depends upon

^{79.} Id. at 795-96.

^{80.} It is hard to imagine what flourishing means in the context of the Penn Central Authority. Professor Alexander acknowledges the possibility of corporations flourishing, but does not explore it in any detail. *See id.* at 817 & n. 275 ("The status of collective entities such as corporations under a human flourishing moral theory is an extraordinarily difficult topic.").

^{81.} Cf., e.g., Adelle M. Banks, $Malcolm\ X's\ Boyhood\ Roxbury\ Home\ and\ MLK's\ Birthplace$, $Sweet\ Auburn\ Named\ Endangered\ Historic\ Places$, $HUFFINGTON\ POST\ (June\ 7,\ 2012\ ,\ 8:34\ AM)$, $available\ at\ http://huff.to/KWiue9\ (describing\ preservation\ efforts\ for\ run-down\ homes)$.

putting the house to a more lucrative use. ⁸² Justifying preservation by reference to the flourishing of the community demands a reciprocal concern for the flourishing of the owner. And, indeed, many historic preservation laws contain a kind of escape valve if the burdens are too high. ⁸³

There is another limit, too. If the State justifies some burdens on property owners by others' needs, the people in need must actually stand to benefit. An owner is not morally compelled to share her property because others are in need unless the property will actually go to and be useful to them. Although benefits can perhaps be indirect, there must at least be some plausible benefit to the people whose capacity for flourishing justifies the regulatory imposition.

Notice, however, that both of these limits on the State's demands can change over time. As communities change, and as the conditions of property owners change, burdens that once were innocuous can implicate owners' capacity for flourishing or outlive their usefulness. In either situation, the once-appropriate regulatory burden can become unjustifiable at least on grounds of promoting human flourishing.

Consider, for example, beach access. Alexander discusses the expansion of the public trust doctrine through the lens of human flourishing. Beaches, he argues, can be more than a pleasant diversion for a community. Instead, recreation in parks and on beaches can be vitally important for affiliation and for fostering sociability within a community. Alexander explicitly imagines "a single parent living in a public housing project in Camden" with no reasonable ability to get to the beach. That person's limited opportunities for recreation and sociability potentially justify—at least to Alexander—limits on littoral owners' right to exclude. The social obligation norm therefore extends to beachfront owners who must grant reasonable access to the public. And, indeed, a public easement granting access to the foreshore makes good sense.

But the content and extent of that easement takes on a decidedly different feel in the face of sea level rise. Beaches are no longer just

^{82.} This is not to suggest that historic preservation laws need to be evaluated by reference to the wealth of the current owner. There may well be alternative normative justifications for such laws that are indifferent to such concerns.

^{83.} See, e.g., J. Peter Byrne, Regulatory Takings Challenges to Historic Preservation Laws After Penn Central, 15 FORDHAM ENVIL. L. REV. 313, 321–25 (2004).

^{84.} See Alexander, Social Obligation Norm, supra note 6, at 806-07.

happy spots for communal recreation but can become an important buffer for storm surge. Some littoral owners may well seek to bolster protection of their property through a form of armoring. While hard-armoring—like sea walls—is often detrimental to adjacent property owners, soft-armoring—like the development of wetlands, tidal pools, and dunes, for example—can serve as important protection.

Imagine, then, a case in which a property owner's soft-armoring would interfere with the public's beach access. At the time that the public trust doctrine expanded to include public access to the beach, it imposed a relatively modest burden on littoral property owners. But with sea level rise, and the risk of storm surge, those burdens begin to look a lot more extreme if the effect is to prohibit valuable forms of soft-armoring. Indeed, the burden may—depending on the property—threaten the littoral owner's basic use of the property. This, in turn, could significantly burden the property owner's capacity for flourishing. In balancing the interests of the public's access to the beach against the interests of the property owner to protect her property from storm surge, the scales in this stylized example have shifted decidedly in favor of the property owner.

Or, to explore the second limit, imagine that buses stop running from Camden. In fact, the only members of the "public" using the beach are wealthy owners of luxury condominiums just a few blocks in from the water. While the burden of public access to the littoral owner has not changed, the beneficiaries have, and the "human flourishing" justification then loses much if not all of its persuasive force.

Stepping back, notice the important dynamic at work here, which extends beyond beach access. Changes in the world can eliminate the State's justification for a regulatory burden based on human flourishing. A permissible regulation can become impermissible over time as both the community's needs and the property owner's needs change. This, in turn, requires active State involvement in the ongoing obligations of property owners, and the State must either alter its regulatory burdens or pay compensation.

C. Affirmative Commitments to Protect Property

These different justifications for imposing affirmative obligations on property owners suggest something important and quite novel about the State's own obligations. In both Dagan's reciprocity-based account of social obligations, and in Alexander and Peñalver's Aristotelian one, the State expresses the community's demands of property owners. The State, therefore, both imposes the community's obligations, and repays them (under Dagan's theory), or uses them to promote the community's flourishing (under Alexander and Peñalver's).

This role cannot be filled by a State acting only as a neutral arbiter of the right to exclude, but requires a much more active role in constituting the content of property rights. The State here is the mediator of the competing demands of property owners and the community. It is not a passive observer of private market transactions, but is integrally bound up in allocating the burdens and benefits of ownership. The State's role, then, does not end with some regulatory enactment. The benefits and burdens of ownership are always changing, as are the needs of society. To the extent private property rights are defined at least in part by those competing pressures, the State's active role persists.

This observation follows naturally if not inevitably from social obligation conceptions of property. For community-minded theorists, unlike libertarians, property is a dynamic institution that evolves as the world and the community changes. The State cannot, therefore, sit back and watch, but is instead part of the process of defining the content of property rights, or policing their outer boundaries.

This strand of property theory generates significant and previously unrealized consequences, however. Most importantly, the State cannot divest itself of responsibility for the allocation of burdens and benefits in society. The State's active role means it has active responsibilities. And that extends to readjusting those benefits and burdens if they are no longer normatively justified. Or, to put it in Alexander's terms, the commitment to human flourishing justifies the State's imposition of affirmative obligations, but only so long as they are, in fact, necessary (or at least useful) for promoting others' capacity to flourish. When the state formalizes or codifies the moral obligations that inhere naturally in property, the State's role is inherently dynamic because our moral obligations are inherently dynamic. As

^{85.} Cf. Carol M. Rose, Planning and Dealing: Piecemeal Land Controls as a Problem of Local Legitimacy, 71 CAL. L. REV. 837, 887–92 (1983) (discussing the State's role in land use disputes through lens of mediating competing interests).

needs change—either owners' or the community's—the content of the social obligation norm changes as well. And to the extent that the State has (implicitly) justified the imposition of legal obligations on grounds that they are consistent with moral obligations, those legal obligations must then also be dynamic. When the purpose served by the social obligation disappears, so too does the normative justification for the obligation. If the State nevertheless refuses to alter or remove the previously imposed obligation, the property owner can object that the State's demands are no longer consonant with the rights and responsibilities of ownership.

And this, in turn, yields a dramatic conclusion: there are situations in which changes in the world alter the conditions for human flourishing, or cut off the possibility of reciprocal benefits, such that the State's failure to readjust the content of property rights is itself a violation of those rights. A legal obligation that is justified and permissible at the time it is enacted because it is consistent with moral obligations may become impermissible over time, even if the content of the legal obligation does not change. And so the State, in that situation, may have an affirmative constitutional obligation to act in order to keep the content of its laws consistent with underlying moral obligations. In other words, and at the extreme, the State's failure to respond to certain kinds of changes in the world can lead to a regulatory taking. To put it most dramatically, the Fifth Amendment Takings Clause therefore can impose an affirmative obligation on the State to act, and the State's failure to act can be unconstitutional.

For many property scholars—at least for many progressive property scholars—this result is likely to seem unsurprising. But from a constitutional perspective, the claim is quite unorthodox. After all, the Constitution is generally viewed as constraining, not requiring, government action. Nevertheless, under social obligation conceptions of property, where rights are dynamic and defined at least partly by reference to community needs, the State is inextricably bound up with the content of those rights and cannot escape liability by claiming inaction. The State, then, has affirmative constitutional commitments when it comes to property rights, and not just negative ones.

CONCLUSION

Theories of property reflecting property owners' obligations to their communities come with previously unrecognized reciprocal obligations on the State. The dynamic nature of property rights that these theories represent demands the active and ongoing involvement of the State in allocating the benefits and burdens of society. Just as owners' obligations do not end at the boundary of their property, the State's obligations do not end with the imposition of regulatory burdens.

MORAL OBLIGATIONS OF LANDOWNERS: AN EXAMINATION OF DOCTRINE

STEWART E. STERK*

Efficiency concerns generally take center stage in modern discussions of property's institutional foundations. But property's moral dimension has a far longer pedigree. Two of the ten commandments implicitly acknowledge the importance of property. "Thou shalt not steal" has no meaning in the absence of property ownership. Similarly, the command that "thou shalt not covet your neighbor's house" assumes that the house has an owner whose rights merit respect.

The widespread property norm recognizes rights in property owners and duties in potential resource users. Although owners may enjoy many rights with respect to property (including the rights to use and to transfer), much modern scholarship focuses on the right to exclude as the right that best captures the uniqueness of property. Conversely, potential users have a duty to "keep off" the property of others. The duty to "keep off" lies at the heart of the moral prohibition of theft. Conveniently, by bundling a set of legal rights in a single owner, the right to exclude makes it easier for potential resource users to acquire resources in a way consistent with their moral obligation—by bidding for those resources rather than appropriating them.

None of the commandments imposes comparable duties on owners or confers rights on potential users. Conceiving property as an institution in which owners have duties to anonymous strangers who

^{*} Mack Professor of Law, Benjamin Cardozo School of Law, Yeshiva University.

^{1.} Henry Smith has been most prominent among scholars emphasizing the centrality of the right to exclude. See, e.g., Henry E. Smith, Property as the Law of Things, 125 HARV. L. REV. 1691, 1702–04 (2012) [hereinafter Smith, Law of Things]; Henry E. Smith, Exclusion Versus Governance: Two Strategies for Delineating Property Rights, 31 J. LEGAL STUD. S453 (2002). Although Smith focuses principally on the information-cost advantages of exclusion rules, the right to exclude serves other functions as well. See, e.g., Eric R. Claeys, The Right to Exclude in the Shadow of the Cathedral: A Response to Parchomovsky and Stein, 104 NW. U. L. REV. COLLOQUY 262, 271–72 (2010) (noting power of exclusion rules to enlarge power to make life plans).

^{2.} Smith, Law of Things, supra note 1, at 1719.

^{3.} As Tom Merrill and Henry Smith have noted, for property to be successful as a coordination device, lay people must regard property rights, particularly the right to exclude, as moral rights. Thomas W. Merrill & Henry E. Smith, *The Morality of Property*, 48 WM. & MARY L. REV. 1849, 1850 (2007).

want to use owned resources would conflict with Blackstonian moral intuitions. ⁴ At the same time, imposing duties on owners for the benefit of prospective users constrains the right to exclude, and undermines the ability of owners to coordinate resource use. It is not surprising, then, that owner duties do not play a central role in most discussions of property.

Nevertheless, in a variety of circumstances, property law has developed doctrines that do treat owners as if they owe duties to users. I argue that these doctrines generally reflect moral intuitions. But because moral intuitions about owner duties are not nearly as well developed or universally shared as intuitions about owner rights, the doctrines are often applied inconsistently. In recent years, legislatures and courts have recognized some owner duties even in disputes between owners and strangers. The most common examples of owner duties, however, arise when owners are locked in continuing relationships, for instance, with neighbors or tenants. This difference in treatment itself reflects common moral intuitions. And imbuing these moral intuitions with legal significance does not interfere significantly with the efficiency of property as an institution.

I. OWNER DUTIES TO STRANGERS

Consider the obligations owners owe to strangers—to people seeking to acquire property rights. If a prospective buyer approaches me about buying my house, and offers me twice the market value because she believes the schools or the neighborhood are better than the rest of the market believes they are, do I have to insist that she pay less? Do I have to inform her about the market value of the house? Although individual sensibilities will differ, most of us would conclude that the "morals of the marketplace" should govern these questions. I don't have an obligation to warn the buyer about facts a reasonable buyer could easily discover. In what contract law calls arm's-length transactions, I don't have an obligation to correct my buyer's misimpressions.

Two familiar common law doctrines reflect traditional conceptions of owner dominion undiminished by duties to strangers. First,

^{4. 2} WILLIAM BLACKSTONE, COMMENTARIES *2 (Property is "that sole and despotic dominion which one man claims and exercises over the external things of the world, in total exclusion of the right of any other individual in the universe.").

owners have not generally been liable to trespassers for negligent maintenance of the owner's land, because owners owe no duty to trespassers. Second, the doctrine of *caveat emptor* has insulated owners from claims by buyers with respect to the condition of property sold. Over the course of the last half century, the scope of both doctrines has narrowed in many jurisdictions, creating owner obligations where none previously existed. The doctrinal changes undoubtedly reflect, at least in significant part, changing social or moral norms. Yet even with the changes, owner duties to strangers are generally limited to protecting strangers against pitfalls the strangers could not reasonably anticipate.

A. Duties to Trespassers (and Other Occupants)

Mendelowitz v. Neisner, decided by a unanimous New York Court of Appeals (including Cardozo) illustrates the common law rule that excused owners from liability for negligence to trespassers. A nineyear-old boy, while climbing on a retaining wall in an alley behind an apartment building, lost his leg when a capstone on the wall gave way, causing him to fall into the alley with the capstone on his leg. The trial court awarded damages to the boy, and the Appellate Division affirmed, but the Court of Appeals reversed and dismissed the complaint, invoking the rule that the only duty a landowner owes to trespassers "is to abstain from inflicting intentional, wanton, or willful injuries unless he maintains some hidden engine of destruction, such as spring guns or kindred devices, upon his property."8 The court applied the rule even though the boy was a tenant in the apartment building, emphasizing that tenant had no right to be in the alley, and landlord had repeatedly warned this boy, and others, to stay out of the alley.

A number of courts had developed a limited "attractive nuisance" exception to permit recovery by child trespassers. The *Mendelowitz*

^{5.} See, e.g., Restatement (Second) of Torts, \S 333 (1965).

^{6.} See, e.g., Bruce Farms, Inc. v. Coupe, 247 S.E.2d 400 (Va. 1978) (adhering to doctrine of caveat emptor in rejecting claim by house buyer against house builder).

^{7. 258} N.Y. 181, 179 N.E. 378 (1932).

^{8. 258} N.Y. at 184, 179 N.E. at 379 (1932).

^{9.} See, e.g., Barrett v. S. Pac. Co., 27 P. 666 (1891) (landowner liable to child injured while playing on a railroad turntable; court emphasizes the "immature judgment" of children, and

court acknowledged that a tentative draft of the Restatement of Torts, then in preparation, recognized the exception, but held the exception inapplicable because the wall from which the plaintiff fell did not involve an unreasonable risk of death or serious bodily injury.¹⁰

The basic rule exempting possessors of land from any duty of care to trespassers survived through the Restatement of Torts, 11 subject to a number of exceptions, including the exception for "artificial conditions highly dangerous to trespassing children."12 By contrast, the common law and the Restatement recognized that landowners owe at least some duty of care to "licensees" and "invitees," persons with whom an owner has established, or is trying to establish a social or business relationship.¹³ Even with licensees and invitees, the duty did not extend beyond a duty to warn. Thus, the Restatement provided that a possessor would be liable to invite for harm resulting from a failure to exercise reasonable care "if, but only if, he should expect that they will not discover or realize the danger, or will fail to protect themselves against it." With respect to licensees, the Restatement did not trigger a duty to warn unless the licensees "do not know or have reason to know of the possessor's activities and of the risk involved."15

This differentiation of landowner liability based on the status of the injury victim started to unravel in the 1960s and 1970s, when the

holds that it is "an act of negligence to leave unguarded and exposed to the observation of little children dangerous and attractive machinery which they would naturally be tempted to go about or upon.").

- 10. Mendelowitz, 258 N.Y. at 185-86, 179 N.E. at 380.
- 11. RESTATEMENT (SECOND) OF TORTS, §333 (1965) provides: Except as stated in §§ 334–339, a possessor of land is not liable to trespassers for physical harm caused by his failure to exercise reasonable care
 - (a) to put the land in a condition reasonably safe for their reception, or
 - (b) to carry on his activities so as not to endanger them.

^{12.} Id. § 339 (1965). A number of other exceptions apply for particularly dangerous activities that cause harm to "constant" or "known" trespassers—persons the owner either knew or should have known were trespassing. Id. §§ 334–338.

^{13.} The Restatement defined "invitee" to include either persons invited in connection with the land possessor's business interest or persons invited to remain "as a member of the public for a purpose for which the land is held open to the public." Id. § 332 (1965). By contrast, a "licensee" is a person "privileged to enter or remain on land only by virtue of the possessor's consent." Id. § 330. A social guest is deemed to be a licensee, but not an invitee. Id. § 330 cmt. h

^{14.} Id. § 341A.

^{15.} Id. § 341.

California Supreme Court, and then the New York Court of Appeals, abandoned the categories in favor of an all encompassing rule making landowners liable for injuries that occur as a result of "his want of ordinary care or skill in the management of his property." The Restatement (Third) of Torts has followed suit, opting for a unitary standard applicable to all landowners. ¹⁷

Few states, however, have followed California, New York, and the Restatement. Although the Restatement itself contends that states are evenly divided between those that retain the traditional categories and those that embrace a unitary standard, ¹⁸ it appears that many of the states counted by the Restatement as adopting a unitary standard apply standards to trespassers that are different from those applied to non-trespassers. ¹⁹ By one count, 41 states and the District of Columbia retain the traditional trespasser-rule structure. ²⁰ Moreover, even the new Restatement carves out an exception for "flagrant trespassers"—a term intentionally left undefined—and holds that a land possessor owes flagrant trespassers only a duty "not to act in an intentional, willful, or wanton manner." ²¹

Efficiency justifications are readily available for the traditional rule barring recovery by trespassers. First, the trespasser can avoid the injury at lowest cost by not trespassing. Second, the traditional rule almost certainly reduces litigation costs. The primary effect of adopting a unitary standard is to shift responsibility for determining landowner liability from court as law-interpreter to jury or other fact-finder. Under the categorical system, whether an injury victim is a trespasser, a licensee, or an invitee presents a question of law for the court; if the court determines that the victim is a trespasser, no issues remain for the jury; landowner, as in *Mendelowitz*, is entitled

^{16.} Rowland v. Christian, 443 P.2d 561 (Cal. 1968); see also Basso v. Miller, 40 N.Y.2d 233, 352 N.E.2d 868 (1976).

^{17.} Restatement (Third) of Torts, § 51 (2012).

^{18.} Id. at Reporters' Note, cmt a, tbl.

^{19.} See James A. Henderson, The Status of Trespassers on Land, 44 WAKE FOREST L. Rev. 1071, 1073 n.11 (2009).

^{20.} Id. at 1073, n. 13.

^{21.} Restatement (Third) of Torts, § 52 (2012).

^{22.} RICHARD A. POSNER, ECONOMIC ANALYSIS OF LAW 176 (7th ed. 2007).

^{23.} See Basso v. Miller, 352 N.E.2d 868, 874 (1976) (Breitel, J., concurring) (criticizing court's abandonment of traditional categories because the new rule "would delegate to the jury the responsibility to determine the applicable social policy, thus abdicating the judicial role \dots ").

to dismissal of the complaint. Under the unitary system, by contrast, claims brought by trespassers more often will go to juries.

On the other hand, a countervailing efficiency justification would support landowner liability to trespassers: if landowners take precautions to safeguard invited guests (to whom landowner owes a legal duty), the marginal cost to landowner of extending that protection to trespassers may be near zero. ²⁴ That is, if landowner already has a duty to protect the (invited) person who delivers newspapers from a broken railing, landowner can protect (trespassing) solicitors at no extra cost.

In light of the indeterminate efficiency case for either rule, it should not be surprising that notions of moral fault would play a significant role in premises liability doctrine. The traditional rule rests on a clear moral compass: a trespasser interferes with a landowner's right to exclude, and should not be entitled to recover for injuries suffered during the course of the wrongdoing. As the Iowa Supreme Court put it in retaining the traditional rule, "we remain unconvinced that the rights of property owners have so little value in today's society that those rights should be diminished in favor of persons trespassing on another's land."25 And the Supreme Judicial Court of Massachusetts, in rejecting a unitary standard, explicitly recognized "that any legal duty owed by a landowner to an entrant upon his land finds its source in existing social values and customs."26 Conversely, in those categories of cases in which courts have been most likely to hold landowners liable to trespassers—attractive nuisance cases involving child trespassers, the "fault" associated with trespassing appears less compelling, and the argument is stronger that landlord should have taken care not to maintain "traps" for unsuspecting children.

In considerable measure, the debate between the traditional rule barring trespasser liability and the unitary standard is a debate about whether courts should cede to juries the responsibility for ensuring

^{24.} Restatement (Third) of Torts, § 51 cmt. c(3) (2012).

^{25.} Alexander v. The Med. Assoc. Clinic, 646 N.W.2d 74, 79–80 (Iowa 2002). See also Tantimonico v. Allendale Mut. Ins. Co. 637 A.2d 1056, 1061 (R.I. 1994) ("Property owners have a basic right to be free from liability to those who engage in self-destructive activity on their premises without permission. The common-law rule developed over the centuries accomplishes this purpose clearly and without equivocation."). Heins v. Webster County, 552 N.W.2d 51, 57 (Neb. 1996) ("We retain a separate classification for trespassers because we conclude that one should not owe a duty to exercise reasonable care to those not lawfully on one's property."). 26. Schofield v. Merrill, 435 N.E.2d 339, 341 (Mass. 1982).

that liability determinations reflect social norms. While a number of courts and judges have expressed concern about delegating responsibility to juries, ²⁷ the new Restatement makes it clear that its general adoption of a unitary standard is motivated by a change in "social and cultural attitudes" towards land ownership—a change that would presumably be reflected in jury verdicts. ²⁸ The debate is not, however, about whether norms should play a critical role.

Moreover, even the Restatement's drafters were unwilling to delegate to juries all responsibility for articulating social norms and values. The Restatement precludes all recovery by "flagrant trespassers," and the Restatement's comments highlight the moral content of the flagrant trespasser rule: "the policy justifying the lesser duty owed to flagrant trespassers is protection of the rights of private-property owners, which would be unfairly diminished if possessors are subject to liability to flagrant trespassers based on ordinary negligence."²⁹

B. Duties to Prospective Purchasers

The common law doctrine of *caveat emptor* imposed on property owners no duties to disclose defects to prospective property purchasers. A purchaser was entitled to recover from an owner for damages resulting from the owner's affirmative misrepresentations, ³⁰

^{27.} *Id.* at 342 (rejecting the unitary standard because "[t]he jury would then be required to determine whether present community values call for the exercise of care for the safety of fore-seeable trespassers who are neither children nor known to be helplessly trapped. Such determinations are appropriately made by the court or the Legislature, as has heretofore been the practice, and not by juries"). *See also* Basso v. Miller, 352 N.E.2d 868, 877 (1976) (Breitel, J., concurring) ("The 'single standard' provides hospitable ground for the play of jury *ad hoc* promulgation of 'rules' of law, social policy, and sometimes humane but ungovernable sympathy."). *See generally* Henderson, *supra* note 19, at 1072 (2009) (complaining that unitary standard "gave trial courts a roving commission to deal with trespasser-plaintiffs in a discretionary, essentially lawless fashion.").

^{28.} RESTATEMENT (THIRD) OF TORTS, § 51 cmt. c(4) (2009) (noting that in times when land was the predominant form of wealth and large tracts of land were held by a few, "concomitant social and cultural attitudes privileged the owners of land and promoted the unfettered use of private property. Those conditions have changed in modern times.").

^{29.} Id. § 52 cmt. a (2012).

^{30.} See, e.g., Johnson v. Owens, 140 S.E.2d 311 (N.C. 1965) (caveat emptor does not apply in cases of fraud; buyer's claim for damages for defects in heating system should not have been dismissed when seller had fraudulently reassured buyer that heating system was in working order).

but not the owner's concealment of defects.³¹ Although the *caveat emptor* rule minimized litigation about whether the seller actually knew of defects, courts also justified the doctrine on moral grounds: a buyer who did not do enough inspection or seek a warranty from the seller did not *deserve* to recover for the defects.³²

Over the course of the last half century, however, courts and legislatures in most states have shifted away from a hard-edged *caveat emptor* rule. Although there is considerable variation among the states, most states now require residential sellers to disclose to purchasers the existence of hidden defects. In many states, courts have imposed this obligation as a matter of common law. In others, legislatures have mandated statutory disclosure forms. South the common law duties and the statutory duties, however, are limited in scope. As a result, *caveat emptor* is far from dead.

1. Limits on Common Law Obligations to Disclose

Common law doctrine in some states limits seller liability for defects to cases in which seller took affirmative steps to prevent buyer from finding the defects. For instance, in *Jablonski v. Rapalje*, ³⁶ a New York court, while generally adhering to the *caveat emptor* doctrine, held that questions of fact precluded summary judgment in favor of the seller when purchaser presented evidence that seller had actively concealed an infestation of bats in the home. ³⁷

^{31.} See, e.g., Phillips v. Homestake Consol. Placer Mines Co., 273 P. 657 (Nevada 1929) (purchaser of mining land has no claim for fraud where seller fails to inform purchaser that all ore and gravel have already been extracted).

^{32.} See id. at 659 ("A purchaser of . . . property must exercise common prudence, and, if he fails to avail himself of the ordinary means of information, the law gives him no redress."); Bruce Farms v. Coupe, 247 S.E.2d 400 (Va. 1978) ("Where ordinary care and prudence are sufficient for full protection, it is the duty of the party to make use of them. [I]f . . . the means of knowledge are at hand and equally available to both parties, and the party, instead of resorting to them, sees fit to trust himself in the hands of one whose interest it is to mislead him, the law, in general, will leave him where he has been placed by his own imprudent confidence.").

^{33.} See generally Florrie Young Roberts, Disclosure Duties in Real Estate Sales and Attempts to Reallocate the Risk, 34 CONN. L. REV. 1 (2001).

^{34.} See id. at 5-14.

^{35.} See id. at 14-18.

^{36. 788} N.Y.S.2d 158 (N.Y. App. 2005).

 $^{37.\} Id.$ at 160-61; see also Perez-Faringer v. Heilman, $844\ N.Y.S.2d\ 170\ (N.Y.$ App. 2012) (affirming grant of summary judgment to seller in the absence of evidence that seller had actively concealed the defect).

Even in states where common law doctrine imposes a broader disclosure obligation on sellers, the obligation typically extends only to defects the purchaser could not have discovered by conducting a reasonable investigation or inspection of the premises. For instance, in *Nelson v. Wiggs*, ³⁸ a Florida court denied relief to a home purchaser who claimed that seller had failed to disclose that the property flooded during the rainy season. The court noted that there is "nothing concealed about the fact that low-lying areas of the county flood during the rainy seasons, and nothing concealed about Dade County's regulations requiring that home in such areas be built on elevations to avoid interior flooding." Because reasonable investigation by the buyer would have revealed the possibility of flooding, seller was not required to reveal the fact of flooding.

Doctrine limits disclosure obligations in other ways as well. First, sellers are typically liable only when they have actual knowledge of hidden defects; doctrine does not impose on them an affirmative obligation to identify defects. Second, in many states, disclosure obligations apply only to residential sales; commercial sales remain governed by *caveat emptor*. ⁴⁰ Third, sellers can sometimes avoid liability to purchasers by requiring buyer, by contract, to accept the property "as is."

2. Limits on Statutory Obligations

A number of states have supplemented common law disclosure requirements by imposing statutory disclosure obligations. Some statutes require the seller to fill out a form making disclosure about

^{38. 699} So.2d. 258 (1997).

^{39.} Id. at 261.

^{40.} See, e.g., Savage v. KGE Assoc. Ltd. P'ship, 580 S.E.2d 591, 595 (Ga. App. 2003) (doctrine holding sellers liable for "passive concealment" has been "limited to controversies between residential homeowners and residential builder/sellers, and it does not apply to commercial transactions."); Hayim Real Estate Holdings, LLC v. Action Watercraft Int'l Inc., 15 So.2d. 724, 727 (Fla. App. 2009) (noting that in Florida commercial real estate transactions, nondisclosure of a known defect is a non-actionable offense, while active concealment is actionable). But see S. Dev. Co. v. Presidio N. Ltd. P'ship, 31 P.3d 123 (Ariz. App. 2001) (affirming award for commercial buyer based on negligent nondisclosure, despite "as is" clause in sale contract).

^{41.} The issue is a complicated one, and jurisdictions have adopted different rules on the effect of an "as is" clause on a seller's liability for failure to disclose known defects. *See generally* Roberts, *supra* note 33, at 21–27 (2001). By contrast, an "as is" clause is never a defense to a claim based on positive fraud or actual misrepresentation. *Id.* at 22.

particular structures and systems, 42 while others simply require disclosure of all material defects known to the seller. 43 These statutes furnish a basis for holding sellers liable for inaccurate or incomplete disclosure to the purchaser.

In many cases, however, the statutes themselves explicitly require the seller only to disclose defects of which the seller has actual knowledge, not to conduct an independent inspection. 44 When the statutes are not explicit, courts have construed the statutes to the same effect. 45

Moreover, even when the seller fails to disclose a defect about which seller does have actual knowledge, some courts have dismissed purchaser's statutory claim if the defect was one that seller could and should have discovered. For instance, in Riggins v. Bechtold, 46 an Ohio court dismissed a purchaser's claim against seller for violating the statutory disclosure statute by failing to disclose deficiencies in the 70-year-old brick home's mortar, deficiencies that contributed to water damage in the house. The court emphasized that the inspectors had labeled the mortar holes "obvious," and emphasized that purchasers had "unimpeded opportunity" to inspect that portion of the house before signing the purchase contract.⁴⁷

The New York statute even includes an express exemption from liability for sellers who agree to pay a \$500 credit to the buyer in lieu of completing the statutory disclosure form. 48 Further, in New

^{42.} See, e.g., IND. CODE § 32-21-5-7(1) (2013) (requiring disclosure of known conditions of items such as the roof, foundation, and water and sewer systems).

^{43.} Del. Code Ann. tit. 6, § 2572(a) (2013).

^{44.} See, e.g., IND. CODE § 32-21-5-11(1) (2013) (providing that owner is not liable for inaccuracies or omissions in disclosure form if "the error, inaccuracy, or omission was not within the actual knowledge of the owner,").

^{45.} See, e.g., Beall v. Archer, 1998 Miss. App. LEXIS 822 (Miss. App. 1998). In Beall, the court rejected the argument that seller failed to exercise ordinary care in making representations about mechanical systems in the house because

If that were to be the standard for "ordinary care" in reporting on the condition of the various mechanical systems in a house, then a seller would be required, in every case, to retain a qualified expert to inspect each item listed on the disclosure statement for potential defects not actually known to the seller and not readily apparent to the untrained eye.

^{46. 2002} Ohio App. LEXIS 3525 (Ohio App. 2002).

^{48.} See NY REAL PROP. L. § 465(1) (2013) (providing for credit); Gabberty v. Pisarz, 810 N.Y.S.2d 799 (Sup. Ct. 2005); Bishop v Graziano, 804 N.Y.S.2d 236 (Dist. Ct. 2005) (both dismissing claims by buyer).

York, as in many other jurisdictions, the statutory disclosure requirement applies only to small-scale residential sales, not to commercial property or apartment buildings.⁴⁹

3. Efficiency or Moral Norms?

As with premises liability, efficiency stories are available both for the *caveat emptor* rule, and for a rule requiring disclosure by sellers. Alex Johnson has recently outlined the efficiency case for *caveat emptor*, at least when the doctrine is placed in a historical context: in an agrarian, low-tech society, all defects would have been patent to the purchaser, obviating any need for disclosure by the seller.⁵⁰

Similarly, more than three decades ago, Anthony Kronman offered an economic rationale for a rule requiring disclosure. ⁵¹ Sellers, he argued, make no special investment in acquiring information about their homes; they acquire information casually, by living in the homes. ⁵² As a result, requiring sellers to disclose would not result in the creation of less information, and would reduce transaction costs by relieving buyers of the need to expend resources acquiring information sellers already possess. ⁵³

The efficiency case for current doctrine is not without its problems. First, as Kronman recognized, the logic of the argument might impose on seller an obligation to disclose all latent defects, whether or not he knows of their existence, because it will typically be cheaper for the seller, rather than the buyer, to discover those defects. ⁵⁴ Doctrine,

If, however, the seller completes the disclosure form, but "willfully" fails to perform statutory obligations, buyer is entitled to recover actual damages. NY REAL PROP. L. § 465(2) (2013).

^{49.} See NY REAL PROP. L. § 462(1) (2013) (imposing an obligation on "every seller of residential real property pursuant to a real estate purchase contract"; residential real property is defined to include "real property improved by a one to four family dwelling used or occupied, or intended to be used or occupied, wholly or partly, as the home or residence of one or more persons"). Id. § 461(5); see also, e.g., CAL. CIV. CODE § 1102 (a) (2013) (disclosure article applies to sales of real property "improved with or consisting of not less than one nor more than four dwelling units.").

^{50.} Alex M. Johnson, An Economic Analysis of the Duty to Disclose Information: Lessons Learned from the Caveat Emptor Doctrine, 45 SAN DIEGO L. REV. 79, 98 (2008).

^{51.} Anthony Kronman, Mistake, Disclosure, Information, and The Law of Contracts, 7 J. Legal Stud. 1, 25 (1978).

^{52.} Id.

^{53.} *Id*.

^{54.} Kronman, supra note 51, at 25.

however, consistently limits the disclosure obligation to defects about which the seller has actual knowledge. Second, because buyer must establish that seller had actual knowledge of the defect, current doctrine generates litigation costs that would be avoided under either the *caveat emptor* regime or a regime in which seller has an obligation to disclose all defects, known or unknown. ⁵⁵

Moreover, the efficiency gains current doctrine generates will not be great when the buyer is discerning or well-advised; even under a caveat emptor regime, a discerning buyer has every incentive to demand that the seller make affirmative representations that seller has no knowledge of any material defects. If seller refuses to make such representations, buyer has reason to assume the worst, and to discount the purchase price accordingly. To avoid that result, seller would have little incentive to hide material defects from discerning buyers.

In light of the uncertainty surrounding the efficiency case for current doctrine, it is at least as plausible that the move towards requiring disclosure by sellers represents a moral judgment that sellers should not take too much advantage of knowledge at their fingertips. As one court put it, "[t]here must be some evidence of the silent party's actual knowledge that the defect exists at the time of the sale from which his 'moral guilt' in concealing it can be inferred." Similarly, a number of courts have quoted an influential 1936 article by Keeton contending that the trend towards requiring disclosure reflects concerns about morality absent from the *caveat emptor* rule. ⁵⁷

When Lord Cairns stated . . . that there was no duty to disclose facts, however morally censurable their nondisclosure may be, he was stating the law as shaped by an individualistic philosophy based upon freedom of contract. It was not concerned with morals. In the present stage of the law, the decisions show a drawing away from this idea, and there can be seen an attempt by many courts to reach a just result in so far as possible, but yet maintaining the degree of certainty which the law must have. . . .

The attitude of the courts toward non-disclosure is undergoing a change and contrary to Lord Cairns' famous remark it would seem that the object of the law in these cases should be to impose on the parties to the transaction a duty to speak whenever justice, equity, and fair dealing demand it.

^{55.} See Roberts, supra note 33, at 19 (2001). As Roberts notes, current doctrine also generates litigation over which omissions are material. Id.

^{56.} Lively v. Garnick, 287 S.E.2d 553, 557 (Ga. App. 1981) (rejecting claim against sellers because there was no evidence that sellers had actual knowledge).

 $^{57.\} See, e.g.$, Russ v. Brown, $529\ P.2d\ 765$, 766-67 (Idaho 1974); Obde v. Schlemeyer, $353\ P.2d\ 672$, 675 (Wash. 1960).

Keeton had written:

W. Page Keeton, Fraud—Concealment and Non-Disclosure, 15 Tex. L. Rev. 1, 31 (1936).

II. OWNER DUTIES WITHIN ONGOING RELATIONSHIPS

The preceding section demonstrates that when property law imposes duties on owners for the benefit of strangers, those duties are largely limited to warning strangers about hidden defects—those the stranger could not reasonably have anticipated. The focus on differential access to information is explicit when courts or legislatures require owners to disclose defects to potential buyers, but it also appears with respect to premises liability. Although many, but not all, jurisdictions have abandoned the rule that landowner is not liable for "open and obvious" dangers, whether the danger is open and obvious remains a significant factor in assessing liability. ⁵⁸

Is the situation the same when an owner deals with a long-term tenant who has an option to renew for an additional ten years? Suppose, by the terms of the lease, tenant is obligated to exercise the option in writing. Tenant tells the owner orally that she is exercising the option, and starts spending money remodeling. Does the owner have an obligation to tell her that she needs to exercise the option in writing?

Or suppose my neighbor is building a swimming pool near our border, and I know the pool encroaches on my land. Do I have an obligation to tell my neighbor before she spends thousands of dollars putting in the pool, or can I wait, and then extract money from her in exchange for the right to maintain the pool?

For the person who practices what Carol Rose calls "middle ground morality," these are harder questions. Many would feel an obligation

^{58.} Many states have abandoned the open and obvious danger rule, either by statute or by common law. See, e.g., Vigil v. Franklin, 103 P.3d 322 (Colo. 2004) (statute displaces common law rule); Richardson v. Corvallis, 950 P.2d 748, 754 (Mont. 1997) (holding that landowner owes duty even though condition is open and obvious if landowner has reason to believe that injuries will nevertheless result). Richardson relied on RESTATEMENT (SECOND) OF TORTS, § 343A (1965), which provided that, even with respect to invitees, a possessor of land was not liable for harm "caused to them by any activity of condition on the land whose danger is known or obvious to them, unless the possessor should anticipate the harm despite such knowledge or obviousness." More recently, a tentative draft of the RESTATEMENT (THIRD) OF TORTS (Phys. & Emot. Harm), § 51 cmt. k (2012), suggests that "the fact that a dangerous condition is open and obvious bears on the assessment of whether reasonable care was employed." Nevertheless, some states have adhered to the rule that a possessor of land is not liable for injuries suffered as a result of exposure to open and obvious dangers. See Jones Food Co., Inc. v. Shipman, 981 So.2d 355 (Ala. 2006).

Carol M. Rose, The Moral Subject of Property, 48 Wm. & MARY L. REV. 1897, 1908, 1913 (2007).

to warn the tenant or the neighbor in a way we would not feel an obligation to warn the purchaser—although in many ways, the buyer, the tenant, and the neighbor are situated similarly: each could avoid financial loss by doing a bit more research before acting. Somehow, however, the morals of the marketplace may not be good enough when we are dealing with neighbors.

When these problems reach the courts, the results are disparate. Sometimes, courts hold that the property owner who acts opportunistically within the confines of an ongoing relationship cannot enforce his "legal" right, while other courts adhere to the letter of the deed, lease, or other document creating legal rights. The difference might reflect a disagreement about whether and how law should incorporate social or moral norms into property doctrine, or, just as likely, a difference in moral intuitions.

This part explores circumstances in which courts impose on owners who operate within an ongoing relationship a broader duty to safeguard the other party in the relationship, even when there is no apparent information imbalance between the parties.

A. Landlord, Tenants, and Renewal Options

Leases often confer on tenants an option to renew for an additional period. Typically, the renewal option requires tenant to take specified actions to exercise the option and requires that the option be exercised by a specified date. The renewal option is rarely boilerplate; it is often a critical provision in the lease. Moreover, because the lease is signed by both landlord and tenant, and both parties generally retain a copy of the lease, landlord and tenant always have equal access to the lease's terms. Ordinary contract principles, then, would suggest that tenant (and landlord) should be bound by the language of the lease. In fact, however, courts frequently excuse tenant from failure to comply with the conditions attached to the renewal option. In effect, what courts do in these cases is to impose an obligation on the landlord-owner to remind tenant about the conditions attached to the option, especially when the option is favorable to the tenant.

1. Method of Providing Notice

Often, a commercial lease will provide that tenant must exercise its option to renew "in writing" or by providing landlord notice by certified mail. Sometimes, tenant provides landlord with actual notice of its intent to renew, but not in compliance with the provisions of the lease. In these cases, courts commonly cite the absence of prejudice to the landlord, and give effect to tenant's exercise of the renewal option. ⁶⁰

These cases rest on the premise that tenant certainly would have renewed in accordance with the lease terms if tenant had been reminded about the content of these terms. Suppose, for instance, landlord, upon receiving oral notice of intent to renew, informs tenant that the lease requires written notice, which tenant then refuses to provide. Would a court hold that tenant's oral notice nevertheless was effective to exercise the renewal option? Such a result would appear unlikely. If landlord were to warn tenant, and tenant ignored the warning, courts would presumably determine that tenant's failure to comply with the provisions in the lease was intentional, and deny tenant the right to exercise the option. In other words, doctrine effectively requires a landlord to warn tenant about the impending loss of the renewal period, and the ways in which tenant can forestall that loss—even though that information was readily available to tenant from reading the lease.

2. Timeliness of Notice

When tenant attempts to exercise the option by using a method not permitted by the lease, the inference is strong that tenant's action reflects a mistaken understanding. By contrast, when tenant exercises past the deadline specified in the lease, a competing inference is available: tenant waited to see whether market conditions would

 $^{60.\} See, e.g., Linn Corp. v.$ LaSalle Nat'l Bank, 424 N.E.2d 676, 679 (Ill.1981) (tenant gave oral, but not written, notice on time, and court held exercise effective when "failure to give written notice on time did not cause any substantial hardship."); MER Properties-Salisbury v. Golden Palace, Inc., 382 S.E.2d 869 (N.C. App. 1989); cf. Suss Pontiac-GMC, Inc. v. Boddicker, 208 P.3d 269 (Colo. App. 2008) (lease included purchase option requiring exercise by certified mail; court held that tenant was entitled to exercise even though tenant sent notice by ordinary mail). Some courts, however, have held that oral notice, even when combined with landlord's acceptance of rent, is insufficient to exercise a renewal option when the lease requires exercise in writing. See, e.g., Royer v. Honrine, 316 S.E.2d 93 (N.C. App. 1984).

^{61.} *Cf. Linn Corp.*, 424 N.E.2d at 679 (distinguishing between intentional failure and failure due to the lessee's carelessness).

make exercise of the option advantageous. ⁶² Fear that tenants might act out of opportunism, rather than out of mistake, may explain, at least in part, the hostility a number of courts have evinced towards late exercise of renewal options. ⁶³

Nevertheless, a wide variety of courts have excused untimely exercise of renewal options. The practice is not new; *F.B. Fountain Co. v. Stein*, ⁶⁴ decided by the Connecticut Supreme Court in 1922, remains a leading case. Tenant's five-year lease made provision for four lease renewals, each for a five-year period, but required tenant to give written notice of the renewal at least 30 days before the beginning of a new renewal period. During the lease period, tenant and various subtenants made improvements to the leased premises and allegedly established good will at the leased location. At the expiration of the second five-year period, tenant failed to exercise its renewal right 30 days before expiration of the period, and, 26 days before expiration of the lease, landlord served notice on tenant to quit possession. When tenant brought an action for specific performance, the court remanded for a trial to determine how much hardship tenant would suffer, articulating an oft-cited rule:

[I]n case of mere neglect in fulfilling a condition precedent of a lease, which does not fall within accident or mistake, equity will relieve when the delay has been slight, the loss to the lessor small, and when not to grant relief would result in such hardship to the tenant as to make it unconscionable to enforce literally the condition precedent of the lease. 65

^{62.} See J.N.A. Realty Corp. v. Cross Bay Chelsea, 366 N.E. 2d 1313, 1321–22 (1977) (Breitel, C.J., dissenting):

[[]U]nder the guise of sheer inadvertence, a tenant could gamble with a fluctuating market, at the expense of his landlord, by delaying his decision beyond the time fixed in the agreement. The market having resolved in favor of exercising the option, the landlord, even though the day appointed in the agreement has passed, could be held to the return set out in the option, although if the market had resolved otherwise, the tenant could not be held to the renewal period.

^{63.} See, e.g., SDG Macerich Properties, L.P. v., Stanek Inc., 648 N.W.2d 581 (Iowa 2002): Utah Coal and Lumber Restaurant, Inc. v. Outdoor Endeavors Unlimited, 40 P.3d 581 (Utah 2001).

^{64. 118} A. 47 (Conn. 1922).

^{65.} Id. at 50.

Other courts have phrased the problem as one of protecting tenants against "forfeitures." ⁶⁶

These cases hold, in effect, that the owner has an obligation to rescue the tenant from the tenant's own improvidence when the owner should know—or at least should suspect—that tenant expects that the lease will be renewed. In virtually all of the cases that excuse tenant's failure to renew on time, tenant has made investments—either in improvements to the site or in site-specific good will—that make economic sense only if tenant intends to renew. ⁶⁷ In that circumstance, courts hold that landlord has an equitable obligation to excuse tenant's failure to renew on time. ⁶⁸

B. Disputes Between Neighbors

Landowners are locked into ongoing relationships with their neighbors. Sometimes the relationship may be social, but proximity alone ties landowners to their neighbors. When conflicts arise, courts often impose obligations on owners to look out for their neighbors' interests, even though the neighbors are not disabled in any way from protecting their own interests.

^{66.} See J.N.A., 366 N.E.2d at 1317 ("A tenant . . . should not be denied equitable relief from the consequences of his own neglect or inadvertence if a forfeiture would result."); Fletcher v. Frisbee, 404 A.2d 1106, 1109 (N.H. 1979) ("Courts of equity avoid enforcing a forfeiture").

 $^{67.\} See, e.g.,$ Aickin v. Oceanview Inv. Co., Inc., 935 P.2d 992 (Haw. 1997) (lease required tenant to spend at least \$50,000 in building improvements; tenant actually spent more than \$300,000 on improvements under lease that gave tenant the option of extending the lease for eight five-year terms); Fletcher v. Frisbee, 404 A.2d 1106 (N.H. 1979) (tenant would lose equipment that was not movable, incur costs for moving other equipment, and lose good will associated with strategic location); J.N.A., 366 N.E.2d at 1317 (tenant spent \$55,000 in improvements, and invested in good will); R & R of Conn., Inc. v. Stiegler, 493 A.2d 293 (Conn. App. 1985) (supermarket tenant invested \$40,000 and borrowed \$390,000, and would lose \$50,000 in fixtures and freezers if lease not renewed); Ward v. Washington Distrib., Inc., 425 N.E.2d 420, 424 (Ohio. App. 1980) (lessee made substantial improvements).

^{68.} Courts providing equitable relief to tenant often suggest that tenant is entitled to that relief only if "the delay has not prejudiced the landlord." See, e.g., Fletcher v. Frisbee, 404 A.2d 1106, 1108 (N.H. 1979). Sometimes, courts remand to determine whether landlord was prejudiced by tenant's untimely exercise. See, e.g., J.N.A., 366 N.E.2d at 1318. Sometimes, the suggestion is made that prejudice would arise if landlord "made other commitments for the premises." Id. But, of course, in some sense landlord is always prejudiced if landlord loses the right to relet the premises on more favorable terms—whether to the existing tenant or to a prospective tenant.

The statute of frauds generally requires that transfers of real property be reduced to writing. ⁶⁹ That is, a landowner can convey neither a fee interest nor an easement without a writing. Generally, if landowner has not made a conveyance consistent with the statute of frauds, landlord retains a broad right to exclude others.

If, however, a neighbor (rather than a stranger) begins to use an owner's land without express written authorization, doctrine has developed in ways that limit the scope of the statute—and the scope of owner rights. As within the landlord-tenant relationship, the relationship of neighbors imposes on landowners an obligation to warn neighbors whose own behavior places their interests in peril.

1. Oral Agreements

When neighbors face uncertainty about boundaries, one way to settle the controversy is by commissioning a survey. If, however, the neighbors forego the survey, and instead agree, orally, to establish a physical boundary between their parcels, courts typically honor the oral agreement. That is, despite the statute of frauds prohibition on oral transfers, once the parties reach an oral agreement, and one of the parties acts on the agreement by building a fence on the agreed-upon line, the true owner may no longer assert rights to the "true" boundary line.

Similar results arise when an owner orally authorizes a neighbor to use the owner's land for ingress and egress. If the owner watches the neighbor make improvements in reliance on oral permission, many courts hold that an easement by estoppel arises, and the neighbor acquires a permanent right to use the roadway despite the absence of any written deed.⁷¹

^{69.} See, e.g., VA. CODE ANN. § 11-1 (2012).

^{70.} See, e.g., Baker v. Imus, 250 P.3d 56, 60 (Utah 2011) (relying on boundary-by-agreement doctrine); Nunley v. Orsburn, 947 S.W.2d 702, 704–05 (Ark. 1993) (enforcing an "oral boundary line agreement.").

^{71.} See, e.g., Cleek v. Povia, 515 So.2d 1246 (Ala. 1987) (After two neighbors agree to build a road along their common boundary, and to split the cost, owner of one of the parcels sought to enjoin the neighbor from trespassing; the court dismissed the action, concluding that the owner was estopped to deny the existence of the easement.). See also Higgins v. Blankenship, 605 S.W.2d 493 (Ark. Ct. App. 1980) (holding that when landowner furnishes gravel for construction of roadway over neighbor's land, neighbor held estopped to deny easement); Kohlleppel v. Owens, 613 S.W.2d 168 (Mo. Ct. App. 1981) (holding that when landowner builds new road and fence based on oral agreement, part performance doctrine permits enforcement of agreement); Shrewsbury v. Humphrey, 395 S.E.2d 535 (W. Va. 1990) (finding easement by estoppel

In holding that an owner is estopped from denying an easement after making an oral agreement with a neighbor, some courts have highlighted the moral basis for departing from the statute of frauds. As an Ohio court put it in *Monroe Bowling Lanes v. Woodsfield Livestock Sales*⁷²: "Where an owner of land, without objection, permits another to expend money in reliance upon a supposed easement, when in justice and equity the former ought to have disclaimed his conflicting rights, he is estopped to deny the easement."⁷³

2. Improvements in the Face of Owner Silence

What if a neighbor makes improvements without oral permission from the landowner? In this situation, some but not all courts deny injunctive relief to the owner, invoking the doctrine of "relative hardship" to limit the owner to relatively trivial money damages. ⁷⁴ Similarly, when a neighbor who has an easement somewhere over an owner's parcel, but makes improvements at another location, where no easement exists, courts have denied injunctive relief to an owner who fails to act before the improvements are made. ⁷⁵

3. Improvements in the Face of Owner Objections

By contrast, when a neighbor makes improvements on an owner's land despite the owner's warnings, the neighbor proceeds at his own risk. If the neighbor's improvements encroach, the owner is entitled to injunctive relief even if the neighbor's investment in those

where landowner maintained roadway in winter, improved it with gravel, and used it for eight years; landowner also testified that he purchased the property on representation that he could use the disputed roadway).

^{72. 244} N.E.2d 762 (Ohio App. 1969).

^{73.} *Id.* at 765–66. For a recent reiteration and application of the principle, see White v. Emmons, 2012 Ohio App LEXIS 1769. The court in *White* emphasized that if the servient owners truly believed that neighbors were using a road with their permission, servient owners "had a duty to make that fact known."

^{74.} See, e.g., Stuttgart Elec. Co. v. Riceland Seed Co., 802 S.W.2d 484, 488–89 (Ark. App. 1991) (denying injunctive relief for a building encroachment when encroacher never conducted a survey); Hirshfield v. Schwartz, 110 Cal. Rptr. 2d. 861, 875–77 (denying injunctive relief when encroacher mistakenly believed that an existing fence represented the boundary line).

^{75.} See Vrazel v. Skrabanek, 725 S.W.2d 709 (Tex. 1987) (holding that neighbor acquired an easement by estoppel over roadway he had leveled and graded, even though the only easement he had acquired by grant was located elsewhere on the servient parcel).

improvements was substantial. For instance, in *Grant v. Warren Bros*, ⁷⁶ the Supreme Judicial Court of Maine held that an improver could not claim estoppel when the improver encroached after the record owner told him "You say the line's up there and I say that's not right."⁷⁷

4. Scope of the Owner's Duty

When courts invoke doctrines like estoppel, acquiescence, or relative hardship against a true owner who seeks to enforce good paper title, courts effectively impose on the owner a duty to warn neighbors about the consequences of making encroaching improvements. When the owner gives a neighbor an appropriate warning, as the owner did in *Grant*, the owner protects himself against the neighbor's claim. If the owner does not warn the neighbor, the owner takes a risk that the owner will forfeit property rights, even if the owner has not executed a deed that complies with the statute of frauds.

Sometimes, however, owners obtain injunctive relief against encroaching improvers even when the owner has not warned the improver. In many cases, the owner prevails because courts are understandably concerned about the effect an off-the-record right might have on subsequent purchasers of the owner's land. When the encroaching improvement is not obvious upon physical inspection, courts are more reluctant to invoke estoppel doctrine, even if the owner gave the improver express permission to make the improvement. For instance, if an owner gives a neighbor permission to use a well on the owner's land, and the neighbor then installs underground pipes in reliance on that permission, courts may nevertheless hold that the owner (or the owner's successor) is entitled to enjoin further use of the well.⁷⁸ The reasonable judicial concern might be that a subsequent purchaser would buy from the original owner without having any reasonable way to discover neighbor's use of the well.⁷⁹

^{76. 450} A.2d 213 (Me. 1979).

^{77.} Id. at 217.

^{78.} See, e.g., Doyle v. Peabody, 781 P.2d 957 (Alaska 1989) (license to use a will did not survive conveyance of servient land).

^{79.} Other courts have dealt with the problem by limiting the duration of an easement by estoppels to the time necessary for the dominant owner to recoup his investment, thus limiting the interference with future servient owners. See, e.g., Eliopulos v. Kondo Farms, Inc.,

In other cases, the award of injunctive relief to owners undoubtedly reflects different moral sensibilities. In particular, courts may be reluctant to reward neighbors who could have, but did not, protect themselves by obtaining a written deed to the interest they seek to acquire. These courts suggest ascribe blame to the neighbor for not obtaining an express grant permitting them to use the rights they seek. In the words of the Rhode Island Supreme Court, "[I]t is not hardship for one . . . to secure an easement in perpetuity in the manner provided by the statute, or, such being refused, to weigh the advantages inuring to them as against the uncertainty implicit in the making of expenditures on the basis of a revocable license."80 At the same time, they indicate that withholding information from a neighbor is not blameworthy if the neighbor has equal access to the information. As the Vermont Supreme Court put it in Tallarico v. Brett, 81 "[t]here is no breach of duty or culpability . . . associated with a failure to disclose information already in the possession of the party asserting the estoppel."82

C. The Impact on Efficiency

When courts refuse to apply equitable doctrines that embody moral norms, they often express the fear that applying those doctrines will adversely affect the ex ante behavior of owners or potential property owners. In particular, courts argue that they want people to reduce certain transactions to writing, ⁸³ or they want people to pay attention to the language in their leases and to be vigilant in complying with those lease requirements. ⁸⁴

⁶⁴³ P.2d 1085 (Idaho App 1982) (six years of draining waste water sufficient to recoup dominant owner's investment).

^{80.} Henry v. Dalton, 151 A.2d 362, 366 (1949).

^{81. 400} A.2d 959 (Vt. 1979).

^{82.} *Id.* at 964. The court quoted language from an earlier case indicating that "[i]t is only where there is an obligation to speak, and the duty is not performed, that the defense of estoppel by silence is property applied." *Id.*, quoting from Boston & Maine R.R. v. Howard Hardware Co., 186 A.2d 184, 191 (Vt. 1962).

^{83.} See, e.g., Patel v. Planning Board, 539 N.E.2d 544, 547 (Mass. App. 1989) (expressing concern that easement by estoppel doctrine "would detract from the integrity and reliability of land records.")

^{84.} See, e.g., Grisham v. Lowery, 621 S.W.2d 745, 751 (Tenn. App. 1981) ("The record discloses that plaintiffs did nothing to familiarize themselves with the terms of the option. They admit they did not read the lease, even though they had a copy of it."); cf. Roberts v. Agricredit

These objectives—reduce transactions to writing, pay attention to the language in your agreements—are designed to eliminate confusion and mistake. They make it easier on courts and on contract partners. In most substantial arm's-length transactions, these objectives promote efficiency.

With transactions between parties locked into an ongoing relationship, and particularly with smaller transactions, the efficiency gains associated with rules that hold parties to their bargains (or to their failure to bargain) are less clear. Two related problems undermine the argument that increased formality will promote efficiency.

First, within the context of ongoing relationships, legal rules may have less effect on the behavior of the parties. Consider the Oregon Supreme Court's language in *Shepard v. Purvine*: "These people were close friends and neighbors. . . . One's word was considered as good as his bond. . . . For plaintiffs to have insisted on a deed would have been embarrassing. . . ."⁸⁵ The import of the court's opinion is that these parties were not going to rely on law and lawyers, whatever the law might be. A rule requiring them to make their agreement more formal would have had no effect on their behavior, or on behavior of others like them.

Second, even if, somehow, parties within a relationship of trust did respond to legal rules and make their agreements more formal, increased formality would not necessarily promote efficiency. It is not always clear, especially with small scale transactions, that the social benefit of legal advice and accurate surveys exceeds the cost of the advice and the surveys. From the perspective of courts who see litigation in cases where an informal arrangement has gone sour, the advantages of increased formalities may seem self-evident. But those cases represent a small slice of all private transactions, and it is not at all clear that the occasional problem justifies increased formality in the vast bulk of cases. Moreover, increased formality also involves a non-pecuniary cost: formality threatens to degrade

Acceptance Corp., 764 N.E.2d 776, 779 (Ind. App. 2002) ("[O]ur system of jurisprudence requires the application of a principle that parties engaged in the negotiation of a contract or the sale and purchase of property be obligated to protect their interest by reading the attendant documents before signing.").

^{85.} Shepard v. Purvine, 248 P.2d 352, 361-62 (Or. 1952).

^{86.} See generally Stewart E. Sterk, Property Rules, Liability Rules, and Uncertainty About Property Rights, 106 MICH. L. REV. 1285, 1299–1301 (2008).

important trust relationships.⁸⁷ Again, as the court recognized in *Shepard v. Purvine*, to insist upon a deed "would have been expressing a doubt as to their friend's integrity."⁸⁸

The point, then, is that in many cases involving the obligations of property owners within the context of ongoing relationships, courts can enforce what they consider to be moral obligations without generating any clear inefficiencies. In effect, courts can and do develop equitable doctrines that reward parties for doing what courts think was morally right, or that punish parties for moral errors, without having any significant effect on future transactions.

CONCLUSION

The moral and economic foundations of property doctrine are often difficult to separate. If property doctrine does not comport with shared moral norms, doctrine will not achieve the efficiency objectives associated with property rights. Conversely, moral norms will often coalesce around doctrines that promote economic well-being. What has been called the core of property—the right of an owner to act as a gate-keeper of an owned thing—reflects widespread moral norms while also generating substantial efficiency gains.

My focus has been outside that core, on the obligations of property owners rather than their rights, where the efficiency consequences of legal rules are speculative at best. In those areas, judgments about the morality of owner behavior (and about the behavior of non-owners) become more transparent. My examination, although far from complete, reveals a strong sense that owners owe broader and deeper obligations within the context of ongoing relationships than they do when only strangers are involved.

 $^{87.\} See\ generally\ Melanie\ B.\ Leslie,\ Enforcing\ Family\ Promises:\ Reliance,\ Reciprocity,\ and\ Relational\ Contract,\ 77\ N.C.\ L.\ Rev.\ 551,\ 583-84\ (1999)\ (noting\ that\ implicit\ understandings\ sometimes\ stabilize\ relationships\ in\ ways\ that\ would\ be\ impossible\ if\ all\ understandings\ were\ reduced\ to\ express\ agreements).$

^{88. 248} P.2d 352 at 362.