

THE RESILIENCE OF PROPERTY

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Resilience is essential to the ability of property to face transforming social and environmental change. For centuries, property has responded to such change through a dialectical process that identifies emerging disciplinary perspectives and debates conflicting values and norms. This dialectic promotes the resilience of property, allowing it to adapt to changing conditions and needs. Today the mainstream economic theory dominating common law property is progressively being intertwined with constitutionally protected property, undermining its long-term resilience. The coupling of the economic vision of ordinary property with constitutional property embeds the assumptions, choices, and values of the economic theory into both realms of property without regard for property's other relational planes.

A real-life theory of property—one based on a theory–practice link—sees the property landscape as a function of interactions among possible property arrangements and other perspective-based systems, including natural systems. Understanding property as a function of those relational planes is important to preserving its resilience. Research on the dynamics of change in social–ecological systems provides important insight into how institutions, like property, that manage resources can promote resilience. The mainstream economic theory lacks the openness and interdisciplinary inclusion needed to handle complex disturbances, ignoring conflicting perspectives and alternative visions that have played a significant role in the evolution of property. Often presented as involving either/or choices, the mainstream theory takes a singular perspective that overlooks important dialectical interactions. As subsystems of larger natural systems, complex societies need a resilient property system open to different perspectives and new knowledge if they are to handle the serious challenges of the future.

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INTRODUCTION

In the late 1980s, a growing number of property owners began to resist the increasingly restrictive regulations governing the use of their property. Sometimes the resistance involved forming advocacy groups to advance the cause of property rights through the media or through lobbying efforts aimed at state and federal legislators. Other times the resistance revolved around challenges in court on constitutional and other grounds. The initial focus of the resistance was environmental law, particularly protections for wetlands and endangered species. As property owners and property rights groups won some impressive victories, challenges to traditional zoning regulations became more commonplace.¹ At the core of the resistance was the claim that government laws were illegitimately and

1. Michelle K. Walsh, Note, *Achieving the Proper Balance Between the Public and Private Property Interests: Closely Tailored Legislation as a Remedy*, 19 WM. & MARY ENVTL. L. & POL'Y REV. 317, 321 (1995); H. Jane Lehman, *Private Property Rights Proponents Gain Ground*, WASH. POST, Sept. 17, 1994, at E1.

unnecessarily infringing on constitutionally protected property rights—rights that are inseparably linked to liberty and freedom under the U.S. Constitution.²

The fight being waged by the property rights movement against environmental laws specifically, and government regulation more generally, is largely a grassroots effort. All of a sudden, environmentalists—who, for years, have used grassroots tactics to advance their cause—are facing serious challenges from another emerging grassroots movement: the property rights activists.³ In addition to thwarting congressional proposals supported by environmentalists,⁴ the movement has backed litigation resulting in decisions favorable to property owners⁵ and has successfully pushed pro-property rights legislation through a number of states.⁶ More recently, the movement has turned its sights on government efforts to deal with climate change and its impacts, challenging the

2. See, e.g., *An Examination of Section 211 of the Omnibus Appropriations Act of 1998: Hearing on S. 2373 Before the S. Comm. on the Judiciary*, 108th Cong. (2004) (statement of Nancie Marzulla, President, Defenders of Property Rights). A significant part of the resistance arose in western states having significant federally owned public lands. Along with private property supporters, those state governments claimed that the federal government had improperly and illegally retained title to public lands within the state instead of distributing them to private parties. The states also argued that wise use and control by private landowners would provide more effective environmental management. See generally PAUL W. GATES, *HISTORY OF PUBLIC LAND LAW DEVELOPMENT* (1968) (discussing, in a landmark study, the history of acquisition of public lands and the development of public land law); ROSS W. GORTE ET AL., CONG. RESEARCH SERVICE, R42346, *FEDERAL LAND OWNERSHIP: OVERVIEW AND DATA* (2012) (reviewing our system of federal land management as well as current issues).

3. As the movement has gained strength and prominence, though, it has become clear that wealthy landowners and corporations are contributing to the movement's cause. See, e.g., Keith Hammond, *Wingnuts in Sheep's Clothing*, MOTHER JONES (Dec. 4, 1997, 1:00 AM), <http://www.motherjones.com/politics/1997/12/wingnuts-sheeps-clothing> (listing the corporate funders of several property rights groups opposing environmental regulations).

4. See, e.g., Susan Eckles, *Interior Department: The Good, Bad, and Very Ugly*, OFF-ROAD.COM (Dec. 1, 2005), <http://www.off-road.com/trails-events/voice/interior-department-the-good-bad-and-very-ugly-16256.html> (advising readers of the nominees supported by the American Land Rights Association for the Secretary of the Interior position); Press Release, Pacific Legal Foundation, PLF Petitions Feds to End ESA Listing of the Orca in the Pacific Northwest (Aug. 2, 2012), <http://www.pacificlegal.org/releases/PLF-petitions-feds-to-end-ESA-listing-of-the-Orca-in-the-Pacific-Northwest>.

5. See, e.g., *Sackett v. EPA*, 132 S. Ct. 1367, 1369–71, 1374 (2012) (ruling that designating property as wetland was a final agency action, entitling a property owner to judicial review); *Rapanos v. United States*, 547 U.S. 715, 742–43 (2006) (limiting the bodies of water able to be regulated as wetlands under the Clean Water Act); *Palazzolo v. Rhode Island*, 533 U.S. 606, 626–30 (2001) (ruling that acquisition of property title after the effective date of regulations limiting use of land did not bar takings suit); *Schooner Harbor Ventures, Inc. v. United States*, 569 F.3d 1359, 1365 (Fed. Cir. 2009) (finding that plaintiff in a takings suit had alleged a cognizable property interest when challenging mitigation measures requested under the Endangered Species Act).

6. See Marc Mihaly & Turner Smith, *Kelo's Trail: A Survey of State and Federal Legislative and Judicial Activity Five Years Later*, 38 *ECOLOGY L.Q.* 703, 707–08 (2011).

conclusions of climate change scientists, questioning the legitimacy of federal regulation of greenhouse gases, and lobbying to allow oil and gas companies to drill without meeting standard disclosure obligations.⁷

How has the property rights movement been able to emerge so rapidly to a position of influence and begin to change property's constitutional landscape? The movement has gathered its strength, much as the environmental movement did, from the "power of its stories."⁸ The property rights movement may not have a figurehead as well known or prominent as Rachel Carson of the environmental movement, but it does have some powerful stories to tell—stories that reveal the outrage felt by its supporters and that immediately create a sympathetic audience.

Consider, for example, the "horror story" told by Representative Billy Tauzin when he discussed the impact of the Endangered Species Act on some California landowners.⁹ The tension between the Act and the landowners came to a head in the early 1990s during the California brush fires. "Many people watched in dismay as their homes burned down because they were not allowed to dig around them and create fire breaks. Why? Because the U.S. Fish & Wildlife Service summarily and arbitrarily determined that such precautions would disturb the habitat of the kangaroo rat."¹⁰ Protection of a rat trumped the protection of homes.

Other powerful stories have also been told. One tells the plight of a Maryland couple who were prohibited from preventing erosion on their property because the action might destroy the tiger beetles present on their land.¹¹ Because they could not act, "a fifteen-foot section of their property plunged into the bay. Their home . . . [thus became] the endangered species."¹² Another explains how hundreds of millions of dollars of Southern California construction projects, including a hospital, were held up by a tiny, endangered fly.¹³ The only known

7. See Brief for Respondents Alliance of Auto. Mfrs., Engine Mfrs. Ass'n, Nat'l Auto. Dealers Ass'n, Truck Mfrs. Ass'n at 9–13, 19–24, *Massachusetts v. EPA*, 549 U.S. 497 (2007) (No. 05-1120); Mike Soraghan, *Frack Study's Safety Findings Exaggerated, Bush EPA Official Says*, N.Y. TIMES (May 20, 2011), <http://www.nytimes.com/gwire/2011/05/20/20greenwire-frack-studys-safety-findings-exaggerated-bush-65374.html>. Much of the resistance to climate change solutions has its roots in the fear of a global government. To this day, some Americans believe that Agenda 21—the UN's Programme of Action for Sustainable Development adopted in 1992—represents a plan to subject the United States to a global ruling body. See, e.g., Tim Murphy, *Top Georgia GOP Lawmakers Host Briefing on Secret Obama Mind-Control Plot*, MOTHER JONES (Nov. 14, 2012, 2:11 PM), www.motherjones.com/mojo/2012/11/georgia-senate-gets-52-minute-briefing-united-nations-takeover; see also Richard Hofstadter, *The Paranoid Style in American Politics*, HARPER'S MAG., Nov. 1964, at 77 (discussing the impact that a small minority with an angry, suspicious mindset can have on the nation).

8. William Michael Treanor, *The Armstrong Principle, the Narratives of Takings, and Compensation Statutes*, 38 WM. & MARY L. REV. 1151, 1158 (1997).

9. *Id.*

10. *Id.*

11. *Id.* at 1159.

12. *Id.*

13. See Nat'l Ass'n of Home Builders v. Babbitt, 130 F.3d 1041, 1043 (D.C. Cir. 1997).

breeding grounds of this fly are the sand dunes in the desert east of Los Angeles.¹⁴ Private parties owned most of the dunes and found their development projects halted by the U.S. Fish and Wildlife Service because of the fly's placement on the endangered species list.¹⁵ At the time, the market value of the land in the region was as much as \$100,000 an acre.¹⁶

Until 2005, the stories being told by property rights activists were not common knowledge. Then the U.S. Supreme Court announced its decision in *Kelo v. City of New London*,¹⁷ holding that the City's economic development project promoted a public use as required under the Takings Clause of the federal Constitution. The Court explained that the project served a public purpose—and was not simply a transfer from one private party to another—because the economic development resulted from comprehensive planning; did not, from the onset, target a particular private party to be benefitted; and did not involve the conveyance of condemned property to only a few private parties. This decision galvanized the property rights movement, finally enabling it to transcend local and regional news stories and influence legislative bodies at all levels of government.¹⁸ The image of Suzanne Kelo's tidy pink house has become a rallying cry for the movement.¹⁹

The powerful narratives told by private property rights advocates have a number of common features. In each of the narratives, the affected property owner is not engaging in a noxious or harmful use, but rather is simply trying to conduct an ordinary and productive use. Further, because of government action, each landowner endures devastating loss. The narratives immediately convey a sense of unfairness, injustice, and individual hardship.²⁰ These feelings are often so intense that they sometimes hide a third common feature of the narratives: the promotion of a view of property that gives preeminence to the individual right holder over government and the public. That view stresses the importance of individual autonomy and seeks to limit the government's power to restrict the freedoms reflected in the private property concept. Government action that seriously restricts property rights, significantly diminishes their value, or adversely affects economic

14. *See id.*

15. *See* Lynda Gorov, *Protecting a Fly May Endanger Calif. Towns*, BOS. GLOBE, Sept. 25, 1999, at A1.

16. *Endangered Fly Stalls Some California Projects*, N.Y. TIMES, Dec. 1, 2002, at 40; Gorov, *supra* note 15. For further narratives, see Michael Allan Wolf, *Overtaking the Fifth Amendment: The Legislative Backlash Against Environmentalism*, 6 FORDHAM ENVTL. L.J. 637 (1995).

17. 545 U.S. 469 (2005).

18. *See, e.g.*, Tim Hearden, *Feds Consider De-listing Valley Elderberry Longhorn Beetle*, CAPITAL PRESS, <http://www.capitalpress.com/content/TH-velb-w-infobox-100312> (last updated Nov. 1, 2012) (discussing how a legal group with a focus on property rights has influenced federal endangered species listing decisions).

19. Family Water Alliance, *The Kelo Curse*, GREEN RIBBON REPORTS (Fall 2009), http://www.familywateralliance.com/farm_fall_09_kelo_curse.html (last visited Sept. 28, 2013).

20. Treanor, *supra* note 8, at 1161–62.

expectations generally is viewed as illegitimate. Over time, these popular narratives have even become part of judicial narratives in takings disputes.²¹

Although the narratives admittedly highlight some situations where government has gone too far in regulating property, the stories exaggerate the problem of excessive government regulation in a way that could distort the development of property law. In addition to denying the legitimacy of important environmental laws and public interests, many property rights advocates are ignoring alternative and competing visions of property that have impacted the development of constitutional and common law property.²² Along with the vision of property supported by property rights advocates, these overlooked alternative visions of property have played an important role in the property debate, interacting with one another over time through political, legal, and social processes to define and refine property rights in response to changing conditions, interests, and knowledge. In their desire to ensure the dominance and sole legitimacy of their vision of property, property rights advocates have failed to recognize not only the organic nature of property, but also the give-and-take process by which property law develops. They have failed to recognize that property is an evolving institution that engages multiple values and norms vetted through a dialectical process²³ involving political, moral, economic, scientific, social, and legal perspectives.

In that dialectical process, competing norms and values interact with one another, both at the margin and at the core, in political, economic, social, and legal forums, challenging existing approaches, informing the thinking on property, and sometimes evolving into new property rules, standards, and arrangements. These interactions are tempered and guided, at least in part, by the sense of order found in the rule of law, in the informal norms and practices of close-knit communities, and in the understandings brought by new knowledge.²⁴ Eventually, when tensions between formal rules and informal norms, customs, or conditions reveal one or more to be obsolete or irrational, legislative or judicial action changes them. Though one ideology may dominate the conception of property at any point in time, eventually other ideologies erode the support for the dominant view by targeting the weaknesses of the dominant perspective. Property rights have never been locked in time or thought, not even in the days of the founding fathers. To the contrary, the property conception has reflected resilience and fluidity at the margin, and relative stability at the core. This quality of stable dynamism is

21. For a discussion of some of these narratives, see Gregory S. Alexander, *Takings, Narratives, and Power*, 88 COLUM. L. REV. 1752 (1988).

22. Perhaps the best evidence of this danger of distortion can be found in the Court's plurality opinion of *Stop the Beach Renourishment*. See *infra* notes 309–14 and accompanying text.

23. See *infra* Part III for further discussion of this dialectical process.

24. See generally Robert C. Ellickson, *Property in Land*, 102 YALE L.J. 1315 (1993) (discussing the evolution of land regimes over time and explaining how close-knit groups use customary norms and rules to develop their regime). For an insightful essay offering a theory of change in collective behavior along the public–private dimension, see ALBERT O. HIRSCHMAN, *SHIFTING INVOLVEMENTS: PRIVATE INTEREST AND PUBLIC ACTION* (1982).

possible because of the deliberative, dialectical process traditionally used to define property rights, choose property regimes, and change property arrangements. If one vision of property were to control, the dialectical process shaping property would cease to function, and property would become a static institution. Property would lose its resilience.

This Article examines the movement to elevate the individual rights vision of property—driven and informed in large part by mainstream economics—to a controlling and determinative position. After highlighting key visions of property influencing property law, the Article examines how the individual rights vision is being elevated to a position of supremacy through constitutional principles and discusses the importance of decoupling property rights from a single vision. This movement is troubling because it ignores alternative visions of property that have served important roles in the property debate. The movement also does not account for the dialectical process that guides the evolution of property rights, values, and norms. That process serves important checking and corrective functions, ensuring that no single view acquires monopoly status and that changes are made as problems arise, weaknesses become apparent, or conditions change. The movement also ignores the role of informal norms in encouraging cooperation among property owners and fails to recognize the importance of the resilience of property to its ability to evolve.

I. COMPETING VISIONS OF PROPERTY: DEFINING PROPERTY'S RELATIONAL LANDSCAPE

Debate over the idea of property—its conceptual meaning and its normative justifications—has occupied the minds of scholars for centuries. Some scholars advocate for a comprehensive, monistic theory of property, defining property rights in terms of one core norm or foundational principle from which all second principles, standards, and rules flow.²⁵ Others see property as a collection of interests that may vary according to the circumstances but that otherwise gives the holder certain rights and powers.²⁶ Still others view property as a concept with a well-developed structure based on some defining feature.²⁷ A number of conceptions define property as a multidimensional idea that provides protective powers in various settings²⁸ or that promotes a pluralistic set of

25. See BRUCE A. ACKERMAN, *PRIVATE PROPERTY AND THE CONSTITUTION* 1–22 (1977); JAMES W. ELY, JR., *THE GUARDIAN OF EVERY OTHER RIGHT: A CONSTITUTIONAL HISTORY OF PROPERTY RIGHTS* 3–9, 172–75 (3d ed. 2008).

26. See Thomas C. Grey, *The Disintegration of Property*, in *PROPERTY: NOMOS XXII* 69, 69–71 (J. Roland Pennock & John W. Chapman eds., 1980); J.E. Penner, *The “Bundle of Rights” Picture of Property*, 43 *UCLA L. REV.* 711, 711–24 (1996).

27. See Larissa Katz, *Exclusion and Exclusivity in Property Law*, 58 *U. TORONTO L.J.* 275, 275–79 (2008); Thomas W. Merrill, *Property and the Right to Exclude*, 77 *NEB. L. REV.* 730, 730–31, 740–52 (1998); Margaret Jane Radin, *Property and Personhood*, 34 *STAN. L. REV.* 957, 957–61 (1982).

28. See LAURA S. UNDERKUFFLER, *THE IDEA OF PROPERTY: ITS MEANING AND POWER* 1–8, 37–51 (2003).

values.²⁹ Through all of these theories, scholars debate the foundational norms, defining features, key functions, and competing visions of property.

In modern times, mainstream economics has dominated this debate. The economic theory of property focuses on the individual property owner's right to use, manage, control, and exploit his or her property. Property rights in resources are recognized, under mainstream economic theory, when such recognition would promote efficiency and maximize social utility.³⁰ Though adherents of mainstream economics debate when that point is reached, they generally agree that resources subject to property rights become assets or commodities to be used, developed, and exploited through marketplace transactions for personal profit.³¹

For a number of reasons, this mainstream economic vision of property is slowly being constitutionalized. Constitutional property is now taking on a meaning that could fundamentally change the institution of property. This movement to give the economic vision constitutional dominance is ignoring the role that alternative visions of property have played in the development of property and of society more generally. It is ignoring, in other words, the resilience and evolution of property—how its norms, customs, and practices acquire legal legitimacy and change over time.³²

Because property rights exist in a resource—often a natural resource, interactions between property systems and natural systems play an important role in framing the debate over the proper vision of property. Key relationships that affect the nature of the interactions include the relationship between a property owner and the community (often represented by a political or government entity) and the relationship between the property owner and natural systems.³³ Two continua can be used to reflect the different views of property that result from

29. See Hanoch Dagan, *Pluralism and Perfectionism in Private Law*, 112 COLUM. L. REV. 1409, 1411–13, 1437–45 (2012). See generally GREGORY S. ALEXANDER & EDUARDO S. PENALVER, AN INTRODUCTION TO PROPERTY THEORY Pt. I (2012) (discussing various property theories).

30. See Harold Demsetz, *Toward a Theory of Property Rights*, 57 AM. ECON. REV. 347, 347–48, 350–53 (1967); James E. Krier, *Evolutionary Theory and the Origin of Property Rights*, 95 CORNELL L. REV. 139, 142 (2009); Carol M. Rose, *Evolution of Property Rights*, in 2 THE NEW PALGRAVE DICTIONARY OF ECONOMICS AND THE LAW 93, 93–94 (Peter Newman ed., 1998).

31. See generally GREGORY S. ALEXANDER, COMMODITY & PROPRIETY: COMPETING VISIONS OF PROPERTY IN AMERICAN LEGAL THOUGHT, 1776–1970 (1997) (discussing the development of the commodification view of property and its dialectic with the civic republican view). For further discussion of the debate among economists, see *infra* Part II.A.

32. For further discussion of the meaning of “evolution of property,” see Krier, *supra* note 30; Rose, *supra* note 30.

33. Though other relationships also have affected the development of property, see *infra* Part III, the concept of property is, at its core, about “the interface between individual and collective entitlements.” Lee Anne Fennell, *Ostrom's Law: Property Rights in the Commons*, 5 INT'L J. COMMONS 9, 17 (2011). For further discussion of the significance of the second relational dimension and the interface between property owners and natural systems, see *infra* Part III.

defining those relationships. One addresses the extent to which private rights trump community interests or public goods, while the other focuses on the degree to which human interests drive resource use and management decisions.

The private rights–public good continuum includes a wide range of views. At one end are those who believe in the primacy of the individual and private property rights over government or community interests. Individualism and autonomy are important values in this camp. On the other end are those who believe that property rights are created by government, held subject to the public good, and include a social or civic obligation. Although private property rights still are respected, followers of this view basically believe that property rights can and should be modified by government to promote important public interests, however those are defined.

The human–natural systems continuum contains views ranging from purely homocentric visions of property rights and resource use to ecological or green perspectives. Homocentric perspectives regard humans as the dominant species entitled to control allocation and use of natural resources. Ecologically oriented views recognize the value and importance of nonhuman interests, incorporating natural values into decisionmaking. At the extreme, these ecological views even label humans as “interlopers” and give priority to ecological interests over human interests.³⁴ This continuum captures the degree to which one is willing to accommodate preferences for property owners and humans over preferences for natural systems.

Parts I.A and I.B discuss these two relational continua in greater detail. As each continuum is explored, some important issues and lessons about the evolution of property will emerge. Part I.C then examines the relationship between the two continua, asking whether that relationship involves truly dichotomous and exclusive visions or instead dialectical interactions defining property’s relational plane with nature. The choice matters a lot in answering the questions: How does property evolve? Will it continue to do so in the future?

A. The Private Rights–Public Goods Continuum

Some of the tensions existing between the two continua, and within the private rights–public goods continuum in particular, are beautifully highlighted by Robert Frost’s poem *Mending Wall*.³⁵ The poem describes the sometimes futile lengths to which property owners go to separate their property from the rest of the world—futile because basic questions are not asked and important interactions are not considered, causing many of these efforts to fail over time. Landowners rarely ask, for example, what they are “walling in or walling out.” Nor do they ask, as Frost does, whether fences make good neighbors or instead “give offence,” serving no useful purpose at all.³⁶ Fences and other boundaries, in other words, try to

34. JANE JACOBS, *THE NATURE OF ECONOMIES* ix (2000).

35. ROBERT FROST, *Mending Wall*, in *COLLECTED POEMS OF ROBERT FROST* 47–48 (Henry Holt & Co. 1930).

36. Among other questions, Frost asks:

bound what is boundless,³⁷ despite the constant need to mend (or amend) boundaries due to external forces and interests, all in an effort to proclaim through physical structures the message of individual dominion and control. The fences symbolize property's sometimes misplaced effort to separate the owner from the rest of the world.

As Frost's poem hints, the ends of the private rights–public goods continuum reflect a fundamental debate over the appropriate balance between private entitlements and collective or third-party interests. Sections A.1 and A.2 examine both ends of this continuum. In addition to defining each end-state ideal, the discussion explores the implications of both ideals for constitutional and common law property.

1. The Private or Individual Rights Vision of Property

The individual rights vision of property generally is based on the notion that individual property owners should, as a matter of political and economic thinking, have the right to control the resources that they own. Under this vision, tangible natural resources are separated into discrete categories or parcels for purposes of ownership, management, and use, and the private owners of these resources owe little to society other than to avoid harming others.³⁸ Proponents of the individual rights vision disagree, though, on the weight that they attach to the core values of individualism and autonomy underlying the vision.³⁹ Some attach importance to both individualism and autonomy, coupling the two values with economic or political theory in ways that strengthen individual property rights.⁴⁰ Others stress the importance of individual growth over the importance of autonomy and take a more moderate view of individual rights, recognizing the need for greater accountability for negative spillovers caused by individual property owners.

*Why do they make good neighbors? Isn't it
Where there are cows? But here there are no cows.
Before I built a wall I'd ask to know
What I was walling in or walling out,
And to whom I was like to give offence.
Something there is that doesn't love a wall,
That wants it down.*

Id.

37. See ERIC T. FREYFOGLE, *ON PRIVATE PROPERTY: FINDING COMMON GROUND ON THE OWNERSHIP OF LAND* 5–6 (2007).

38. See Gregory S. Alexander, *Takings and the Post-Modern Dialectic of Property*, 9 CONST. COMMENT. 259, 262 (1992).

39. One of the best examples of property's separateness is the division and subdivision of land into "discrete parcels separated by rigid boundary lines." Stewart E. Sterk, *Neighbors in American Land Law*, 87 COLUM. L. REV. 55, 55 (1987). This geometric-box approach to allocation of land rights meshes well with "a society whose members highly value individualism and autonomy." *Id.* at 90.

40. See ALEXANDER, *supra* note 31, at 379; see also Lynda L. Butler, *The Pathology of Property Norms: Living Within Nature's Boundaries*, 73 S. CAL. L. REV. 927, 938 (2000).

Under the more extreme approach to the individual rights vision, proponents maintain that property owners should have near-absolute dominion and control over their property as against government and the rest of the world.⁴¹ They believe that the primary—if not sole—purpose of government is to protect private property against harmful interference from governmental or private action.⁴² To a “strict libertarian,” property’s primary function is to maximize the economic and political freedom of the property owner,⁴³ even when the promotion of that function conflicts with community needs.⁴⁴ The libertarian’s property conception defines “in material terms the legal and political sphere within which individuals are free to pursue their own private agendas and satisfy their own preferences, free from governmental coercion or other forms of external interference.”⁴⁵

Supporters of the strict libertarian view of property would read broadly the Takings Clause of the U.S. Constitution to protect private property from most government action that significantly restricts property rights without payment of just compensation. Under such a libertarian view, most of the surplus from cooperative efforts would be preserved for property owners.⁴⁶ Only when the landowner is engaging in a use that is clearly recognized as harmful to neighbors under objective readings of state common law would uncompensated regulation of the landowner’s property rights be permitted.⁴⁷ A strict libertarian interpretation of the Clause would limit, for example, government’s ability to regulate property in ways that significantly diminish or eliminate economically viable use absent a showing of an actual unlawful or harmful use by a regulated landowner or of preexisting limitations on the property owner’s title.⁴⁸ The strict libertarian view similarly would invalidate laws that prevented the alteration of privately owned land containing important wildlife habitats or environmentally sensitive resources unless the landowner’s use was a nuisance or unless preexisting limitations on the landowner’s title existed.

A strict libertarian approach thus would narrowly define the police power bases supporting regulation without compensation, looking primarily to traditional common law principles of property and nuisance. Yet those traditional principles generally do not address problems that modern science now understands are caused by alteration of environmentally sensitive resources or destruction of ecosystem services. Private nuisance law requires proof of substantial interference

41. See 2 WILLIAM BLACKSTONE, COMMENTARIES *1, *2; ERIC T. FREYFOGLE, BOUNDED PEOPLE, BOUNDLESS LANDS: ENVISIONING A NEW LAND ETHIC 98 (1998).

42. See Alexander, *supra* note 38, at 264–65.

43. See ALEXANDER, *supra* note 31, at 3–7; JOHN CHRISTMAN, THE MYTH OF PROPERTY: TOWARD AN EGALITARIAN THEORY OF OWNERSHIP 29–31 (1994); ELY, *supra* note 25, at 172–75.

44. See RICHARD A. EPSTEIN, TAKINGS: PRIVATE PROPERTY AND THE POWER OF EMINENT DOMAIN 334–35 (1985).

45. ALEXANDER, *supra* note 31, at 1; see also Butler, *supra* note 40, at 995.

46. See EPSTEIN, *supra* note 44, at 334–35.

47. See *Lucas v. S.C. Coastal Council*, 505 U.S. 1003, 1030 (1992); see also EPSTEIN, *supra* note 44, at 112–21.

48. See *Lucas*, 505 U.S. at 1030.

with the use and enjoyment of someone's property; such proof would be hard to establish when a landowner is simply altering resources on her own tract of land in a way that diminishes critical habitats or ecosystem services gradually over time or cumulatively in combination with similar changes on other tracts.⁴⁹ The interests of neighboring landowners in the ecosystem services of those environmental resources simply would not rise to the level of a superior, protected interest under traditional common law nuisance. Further, although public nuisance law arguably has sufficient breadth of coverage to include air and water pollution,⁵⁰ the public nuisance cause of action generally has not been extended to habitat, species, or wetlands destruction.⁵¹ Nor do traditional public rights theories provide sufficient justification, under the strict libertarian approach, for uncompensated regulation of private property to preserve critical environmental resources or ecosystem services. Most traditional public rights theories focus on affirmative public use of common resources (like navigable waters, adjacent shores, and submerged beds),⁵²

49. See generally Richard A. Epstein, *Nuisance Law: Corrective Justice and Its Utilitarian Constraints*, 8 J. LEGAL STUD. 49, 50–73 (1979) (explaining traditional principles governing liability for private nuisance).

50. See WILLIAM H. RODGERS, JR., ENVIRONMENTAL LAW 114–15 (2d ed. 1994) (discussing the broad scope of air and water pollution laws).

51. See 1 ENVTL. LAW INST., LAW OF ENVIRONMENTAL PROTECTION § 5:29 (Scott E. Schang et al. eds., 2013) (discussing the idea of using public nuisance to protect ecological resources). Before public nuisance liability can be imposed on the offending landowner, an individual plaintiff typically has to prove special harm attributable to the unreasonable conduct of the landowner, while the government has to establish interference with a right common to the public. See RESTATEMENT (SECOND) OF TORTS § 821B (1979); ROGER A. CUNNINGHAM ET AL., THE LAW OF PROPERTY § 7.2 (2d ed. 1993). See generally Joseph L. Sax, *Ownership, Property, and Sustainability*, 31 UTAH ENVTL. L. REV. 1 (2011) (discussing the mismatch between our private property system and environmental problems such as endangered species, biodiversity, and wetlands destruction).

52. Two key traditional public rights theories are the public trust doctrine and the commons concept. See generally LYNDA LEE BUTLER & MARGIT LIVINGSTON, VIRGINIA TIDAL AND COASTAL LAW chs. 5, 6 (1988) (discussing both theories); Robin Kundis Craig, *A Comparative Guide to the Eastern Public Trust Doctrines: Classification of States, Property Rights, and State Summaries*, 16 PENN. ST. ENVTL. L. REV. 1 (2007); Robin Kundis Craig, *A Comparative Guide to the Western States' Public Trust Doctrines: Public Values, Private Rights, and the Evolution Toward an Ecological Public Trust*, 37 ECOLOGY L.Q. 53 (2010). Traditional interpretation of those theories arguably would include affirmative uses of the public trust resource (such as navigation and fishing) but not more passive forms to prevent injury (such as harm to ecosystem services occurring from uses on private land). See *Ill. Cent. R.R. v. Illinois*, 146 U.S. 387, 452 (1892) (recognizing navigation and commerce related uses); *Commonwealth v. City of Newport News*, 164 S.E. 689, 693 (1932) (refusing to apply the public trust doctrine to block the dumping of untreated sewage into a navigable waterway); BUTLER & LIVINGSTON, *supra*, at 130–31, 142–47. Several scholars have advanced forceful cases for broadening the meaning and interpretation of the traditional theories. See generally Carol Rose, *The Comedy of the Commons: Custom, Commerce, and Inherently Public Property*, 53 U. CHI. L. REV. 711 (1986) (arguing persuasively for treating some natural resources as inherently public property); Joseph L. Sax, *The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention*, 68 MICH. L. REV. 471 (1970) (providing a powerful argument for

and would not, as a general matter, impose preexisting limitations on landowners seeking to alter critical habitats or otherwise diminish ecosystem services. Thus, because the strict view narrowly defines the police power justifications for government regulation without payment of just compensation, uncompensated government regulation of privately owned land for the purpose of preserving the land's environmental resources or ecosystem services would be in jeopardy under the Takings Clause.

Such government regulation of private property could, of course, occur with the payment of just compensation, assuming the government action is otherwise legitimate. Governments promoting more passive environmental interests, however, often lack the financial resources to pay private property owners for the adverse effect of regulations designed to protect ecosystem services for all. Even though the aggregate benefits of the program might be high, the interests of those benefitted by the program typically are too diffused, too small on an individual basis, or too difficult to value to make the case for using taxpayer funds obvious. The absence of an affirmative use creating the type of value that markets appreciate further aggravates the problem of government's limited ability to pay and of selling the program to taxpayers. In times of financial distress, governments can face large budget cuts, slumping economies, and a general lack of political will to raise taxes. The assumption of trickle-down economics does not fit the realities of such a situation. Thus, government may opt not to regulate if the strict libertarian approach was taken and compensation was required, not even to handle serious problems involving significant cumulative harms or serious adverse effects not easily observed or measured at a given point in time. Though an inability to pay should not be an excuse for avoiding constitutional obligations, it may be relevant to determining whether such an obligation actually exists or to choosing among different theories of constitutionally protected property. It also may be relevant to defining the proper scope of property rights when important common resources are being harmed.

Supporters of the strict libertarian view of property also draw strength from the foundational role that property played in the development of the American political system. They maintain that property is a fundamental right, closely tied to individual liberty and whose protection is the primary object of government.⁵³ They find support in the words of James Madison, who, in his famous paper on property, defined it broadly to exist not only in a person's land and goods but also "in his opinions and free communication of them . . . in the safety and liberty of his person, . . . [and] in the free use of his faculties."⁵⁴ In Madison's view the primary purpose of government was "to protect property of

recognizing public rights in environmental and natural resources under a revamped public trust doctrine).

53. See ROBERT NOZICK, *ANARCHY, STATE, AND UTOPIA* 33–35, 167–72, 174–78, 333–34 (1974); MORRIS R. COHEN, *Property and Sovereignty*, 13 *CORNELL L.Q.* 8, 11–14 (1927).

54. James Madison, *Property*, *NAT'L GAZETTE*, Mar. 29, 1792, reprinted in 14 *JAMES MADISON, THE PAPERS OF JAMES MADISON* 266, 266 (Robert Rutland et al. eds., 1983).

every sort[.]”⁵⁵ A government was unjust, according to Madison, when “the property which a man has in his personal safety and personal liberty, is violated by arbitrary seizures of one class of citizens for the service of the rest.”⁵⁶ Nor was government just when “arbitrary restrictions, exemptions, and monopolies deny to part of its citizens that free use of their faculties, and free choice of their occupations, which not only constitute their property in the general sense of the word; but are the means of acquiring property strictly so called.”⁵⁷

Despite the importance that Madison attached to property, he did not initially push for a specific provision in the Constitution preventing government from interfering with property rights, hoping instead that the Constitution’s political structure would provide sufficient protection for property.⁵⁸ The relatively large size of electoral districts favored the election of wealthy candidates because their social and economic status would mean that they would be better known.⁵⁹ Also, Madison and other federalists initially thought that the Constitution’s system of checks and balances, when combined with the enormity of the federal government, would minimize the development of factionalism and prevent the arbitrary elimination or redistribution of property rights.⁶⁰

By the time Madison introduced the Takings Clause, however, he recognized the vulnerability of property rights to aggressive state governments and property-less majorities.⁶¹ State legislatures had started to enact laws favoring debtors over creditors, causing a loss of faith in the ability of state legislatures to protect individual property rights from majoritarian exploitation.⁶² Although the framers’ concern for property rights did not result in a broad approach to the Takings Clause,⁶³ the efforts of Madison and other founding fathers to ensure constitutional protection of property rights have heavily influenced those scholars favoring a strict libertarian approach to property.⁶⁴

55. *Id.*

56. *Id.* at 267.

57. *Id.* For a contemporary view on how the economic concept of property corrupts the underlying political system, see Lewis H. Lapham, *Feast of Fools*, TRUTHDIG (Sept. 20, 2012), http://www.truthdig.com/report/item/feast_of_fools_20120920/.

58. See Jack N. Rakove, *The Madisonian Theory of Rights*, 31 WM. & MARY L. REV. 245, 246–47, 250–53 (1990).

59. JENNIFER NEDELSKY, PRIVATE PROPERTY AND THE LIMITS OF AMERICAN CONSTITUTIONALISM: THE MADISONIAN FRAMEWORK AND ITS LEGACY 53–57 (1990).

60. See *id.* at 35–37.

61. See *id.* at 22–25; Rakove, *supra* note 58, at 253–54. For a discussion of the different phases in the evolution of Madison’s thinking about property rights, see generally Rakove, *supra* note 58.

62. See William Michael Treanor, *The Origins and Original Significance of the Just Compensation Clause of the Fifth Amendment*, 94 YALE L.J. 694, 701, 704–05 (1985).

63. See *id.* at 708–13. See generally John F. Hart, *Land Use Law in the Early Republic and the Original Meaning of the Takings Clause*, 94 NW. U. L. REV. 1099 (2000) (discussing land use practices during the colonial and early statehood eras).

64. See generally ELY, *supra* note 25 (describing some of those influences).

The milder individual rights view of property also relies on the importance of property to the development of economic and political systems, but does not view property rights as absolute.⁶⁵ Though property still is viewed as a “source of separation” between the individual and society, greater concern for other rights and interests pervades this view.⁶⁶ Like strict libertarians, adherents to the more moderate traditional view believe in the fundamental importance of property rights.⁶⁷ Unlike strict libertarians, traditionalists take a more friendly view of uncompensated regulation of property to deal with spillover effects of use.⁶⁸ Whereas strict libertarians generally only recognize the legitimacy of regulating spillover effects that involve physical invasions of neighbors’ property, more moderate traditionalists understand the importance of regulating some indirect impacts on neighboring lands and on public health, welfare, and safety.⁶⁹ They recognize the importance of public goods, though they generally define that concept narrowly as existing when consumption is nonrivalrous and exclusion is difficult and costly.⁷⁰ One scholar has attributed the difference in view between strict libertarians and more moderate traditionalists to the fact that traditionalists seem to care more about an individual’s opportunity to own and use property than about the preeminence of the property owner’s dominion and control.⁷¹ To be sure, certain core property rights are so fundamental to political and economic freedom that the traditionalists also recognize the need for strong protection.⁷² Those core rights include the right to exclude, the right to transfer property interests free from unreasonable restraints on alienation, and the right to conduct an economically viable use.⁷³ When government action deprives a property owner of one of these rights, more moderate traditionalists generally will find a constitutional violation regardless of the importance of the public interest.⁷⁴ Absent such a deprivation or

65. See Alexander, *supra* note 38, at 264–65.

66. See *id.*

67. *Id.* at 265.

68. *Id.* at 265, 267–68.

69. See FREYFOGLE, *supra* note 41, at 102–03. Alexander describes the weaker version as seeking “to establish a parity between property and political rights rather than the supremacy of property rights.” Alexander, *supra* note 38, at 265.

70. See Lynda L. Butler, *Environmental Water Rights: An Evolving Concept of Public Property*, 9 VA. ENVTL. L.J. 323, 358–59 (1990) (discussing different definitions of public goods).

71. See FREYFOGLE, *supra* note 41, at 101–02.

72. See, e.g., *Home Bldg. & Loan Ass’n*, 290 U.S. 398 (1934) (upholding a moratorium on mortgage foreclosures and sales adopted as a response to the Great Depression); *Block v. Hirsch*, 256 U.S. 135 (1921) (upholding a statute affecting a landowner’s right to exclude because of the housing crisis caused by World War I).

73. See *Lucas v. S.C. Coastal Council*, 505 U.S. 1003, 1004 (1992); *Nollan v. Cal. Coastal Comm’n*, 483 U.S. 825, 831 (1987); *Kaiser Aetna v. United States*, 444 U.S. 164, 176 (1979); see also FREYFOGLE, *supra* note 41, at 102. See generally RICHARD A. POSNER, *ECONOMIC ANALYSIS OF LAW* § 3.1 (2011) (discussing the critical characteristics of property).

74. *Lucas*, 505 U.S. at 1075 (Stevens, J., dissenting) (highlighting the important public interest ignored under the majority approach—the minimization of damage caused by hurricanes and storm surges); see also Jonathan Federman, *Lucas v. South Carolina Coastal*

taking, however, traditionalists tend to allow regulation of property's spillover effects as long as the regulation is rational and does not unfairly single out an individual landowner.⁷⁵

In recent years, the individual rights view of property seems to have influenced the Supreme Court in resolving some takings claims.⁷⁶ Recent takings decisions have limited the power of government to enforce environmental and land use laws dealing with spillover effects on common resources. When South Carolina, for example, decided to prevent a landowner from building any permanent habitable structure on an ecologically fragile beach, the Court concluded that the action constituted an unconstitutional taking because it deprived the landowner of all economically viable use of his land.⁷⁷ That the landowner had already profited from developing other lots in the subdivision did not matter to the Court.⁷⁸ Nor was the importance of the public interest of consequence to the Court. Rather, what mattered was the total wipeout, assumed on appeal, of the right to a reasonable expectation of gain from using that particular lot.⁷⁹ Similarly, when the California Coastal Commission required landowners to grant the public lateral access across their beachfront lot in exchange for permission to build a larger home, the Court found the government action to be an unconstitutional taking.⁸⁰ This time the core property right that had been taken was the right to exclude.⁸¹ Although the Court recognized the legitimacy of public rights in the tidelands in front of the landowners' property, the Court did not believe that the requirement that the landowners provide lateral access to the public along the seawall was even reasonably related to the protection of the public rights.⁸²

Council: *An Antiquated Response to a Modern Problem*, 57 ALB. L. REV. 213, 215 (1993) (stating that erosion in the vicinity of Lucas's property was so bad that it required twelve emergency sand replacement orders).

75. See *Armstrong v. United States*, 364 U.S. 40, 44–46 (1960).

76. See, e.g., *Stop the Beach Renourishment, Inc. v. Fla. Dep't of Env'tl. Prot.*, 130 S. Ct. 2592, 2602, 2606–07, 2609 (2010) (plurality opinion) (asking whether a state court has eliminated an established property right and denying the power of state courts to change the common law of property); *Lucas*, 505 U.S. at 1015–16, 1022–29 (discussing the “historical compact” of the Takings Clause; the use of the per se approach, which does not consider the importance of the public interest; the rejection of the traditional noxious use test; and the importance of preexisting background principles of the state's common law); *Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419, 435 (1982) (describing the right to exclude as “one of the most treasured strands in an owner's bundle of property rights”).

77. See *Lucas*, 505 U.S. at 1003.

78. See Vicki Been, *Lucas v. The Green Machine: Using the Takings Clause to Promote More Efficient Regulation?*, in *PROPERTY STORIES* 299, 303–06 (Gerald Korngold & Andrew P. Morriss eds., 2d ed. 2009).

79. See *Lucas*, 505 U.S. at 1016. *But see* Federman, *supra* note 74, at 214–15 (stating that Lucas had been developing land in the area since the late 1970s).

80. See *Nollan v. Cal. Coastal Comm'n*, 483 U.S. 825, 825–26 (1987).

81. *Id.* at 831.

82. *Id.* at 837–41 (explaining that the condition of lateral access raised a “heightened risk that the purpose is avoidance of the compensation requirement” while

Over time, the individual rights view of property has focused more on property as an economic concept than a political one. This shift in focus largely has occurred as land lost its primacy as the dominant form of wealth and as our modern capitalist economy emerged.⁸³ For much of American history, land has been the backbone of America's economic and social systems, serving as the primary source of wealth and the main means of survival.⁸⁴ Because of land's importance during the early colonial and statehood years, owners tended to aggregate landholdings. As Alexis de Tocqueville once explained, American landowners needed large, intact tracts of land to support their families.⁸⁵ As the restraints on the division of land once observed by Tocqueville lost their hold, the incentives to divide, subdivide, and profit from land grew, and the subdivision and commodification of land became more common.⁸⁶

The growth of the capitalist economy has increasingly conflicted with the demands of a democratic government that puts a "premium on equality" as well as on liberty.⁸⁷ One contemporary commentator recognized this modern conflict as one identified long ago by ancient political philosophers. He observed that "[a]s wealth accumulates, men decay, and sooner or later an aristocracy that once might have aspired to an ideal of wisdom and virtue . . . becomes an oligarchy"; its members become "so besotted by their faith in money that 'they . . . imagine there is nothing that it cannot buy.'"⁸⁸ In the United States, the shift to more of an economic theory of property occurred as other constitutional provisions assumed some of the political functions traditionally performed by property. As will be explained later,⁸⁹ the evolution of property into primarily an economic concept ultimately could affect property's resilience—property's very ability to evolve.

providing a continuous public easement along the beach, and not easing the burdens of development on public access to the beach).

83. In early statehood, land was abundant, but as population increased and economic incentives were used to promote expansion, cultural and societal norms focused increasingly on individual freedom and rights. See David A. Thomas, *Anglo-American Land Law: Diverging Developments from a Shared History—Part II: How Anglo-American Land Law Diverged After American Colonization and Independence*, 34 REAL PROP. PROB. & TR. J. 295, 355 (1999).

84. See J. William Futrell, *The History of Environmental Law*, in ENVIRONMENTAL LAW: FROM RESOURCES TO RECOVERY 2, 8–10 (Celia Campbell-Mohn et al. eds., 1993); Thomas, *supra* note 83, at 298–99.

85. See 1 ALEXIS DE TOCQUEVILLE, DEMOCRACY IN AMERICA 293–94 (Phillips Bradley ed., 1945). See generally RUTHERFORD H. PLATT, LAND USE AND SOCIETY: GEOGRAPHY, LAW, AND PUBLIC POLICY 121–34 (rev. ed. 2004) (describing various land use patterns employed in early American cities).

86. As James Ely noted, the view of land as a commodity to be bought or sold was held even by land speculators in colonial times. James W. Ely, Jr., *Economic Liberties and the Original Meaning of the Constitution*, 45 SAN DIEGO L. REV. 673, 691–92 (2008).

87. See Lapham, *supra* note 57; see also NEDELSKY, *supra* note 59, at 1–3, 17–25 (discussing the distorting effect of property on constitutional rights).

88. Lapham, *supra* note 57 (internal citation omitted).

89. See *infra* Part II.B.

2. *The Public Good Vision of Property*

Under the public good vision of property, owners hold their property rights subject to the public interest or public good, however that is defined. Proponents of this view explain that property rights are created by the state and therefore can be regulated and restricted by the state in its effort to promote important public or societal goods.⁹⁰ One version of the public good vision, civil republicanism, views society as an organic whole and defines the primary ends of government as the promotion of virtue and the common good.⁹¹ As one historian observed, “the sacrifice of individual interests to the greater good of the whole formed the essence of republicanism.”⁹² Protection of individual rights was not as important to civic republicans because they “assumed an identity between individual liberty and the public good.”⁹³ They believed that “individuals living in a republican society would be willing to exercise a highly self-conscious form of self-restraint, subordinating their private interests to the good of the state.”⁹⁴ A second, more robust version of the public good vision recognizes that property owners have a social obligation to promote the development of those capabilities essential to human flourishing.⁹⁵ At the core of this theory is the “Aristotelian notion that the human being is a social and political animal and is not self-sufficient alone.”⁹⁶ Regardless of the version espoused, the public good theory of property encompasses a norm of civic virtue and responsibility not present in the individual rights vision.

The subordination of property rights to the public good, however, is not total or absolute under the public good vision. Part of the civic responsibility embraced by this vision focuses on the central role that property plays in our

90. As Ben Franklin explained: “[P]rivate property . . . is a creature of society and is subject to the calls of that society, whenever its necessities shall require it, even to its last farthing; its contribution therefore to the public exigencies are . . . to be considered . . . the return of an obligation previously received, or the payment of a just debt.” BENJAMIN FRANKLIN, *Queries and Remarks Respecting Alterations in the Constitution of Pennsylvania* (1789), in 10 THE WRITINGS OF BENJAMIN FRANKLIN 54, 59 (Albert H. Smyth ed., 1907). For a discussion about different definitions of public goods, see Butler, *supra* note 70, at 358–59.

91. See BERNARD BAILYN, *THE IDEOLOGICAL ORIGINS OF THE AMERICAN REVOLUTION* 85–104 (1967); GORDON S. WOOD, *THE CREATION OF THE AMERICAN REPUBLIC 1776–1787*, at 118–24 (1969).

92. WOOD, *supra* note 91, at 53.

93. Stanley N. Katz, *Thomas Jefferson and the Right to Property in Revolutionary America*, 19 J.L. & ECON. 467, 482 (1976).

94. *Id.* at 483. Frank Michelman is one of the leading modern proponents of the republican view of property as a foundation for personal identity and participation in civic life. See, e.g., Frank I. Michelman, *Welfare Rights in a Constitutional Democracy*, 1979 WASH. U. L.Q. 659.

95. Gregory S. Alexander, *The Social-Obligation Norm in American Property Law*, 94 CORNELL L. REV. 745, 760–73 (2009). See generally ALEXANDER & PENALVER, *supra* note 29, at 80–101 (discussing a theory of property rooted in Aristotelian notions of human flourishing).

96. Alexander, *supra* note 95, at 760.

political system. Through property, citizens become self-sufficient and independent—two conditions necessary for effective participation in government. Civic republican theorists reason that, as people become more independent, they can more effectively participate in and assume the responsibilities of government.⁹⁷ A person who is self-sufficient is better equipped to prevail over self interests and promote the greater public good than a person who depends on others to survive. As Jefferson also explained, property frees the owner from the “corruption of morals” that results from dependence.⁹⁸ Civic virtue flows from and requires the independence provided by property. Without sufficient private property, civic virtue and involvement would not exist.⁹⁹ Thus, property is, in Carol Rose’s words, “a vitally important institution for socializing self-interested human beings, and for allowing us to break through our self interest and work toward mutually desirable ends in a modestly cooperative fashion.”¹⁰⁰ In the American political system, that mutually desirable end is a functioning republican form of democracy.

As Greg Alexander further explains, the civic republican view of property reflects the notion that an individual is an “inherently social being, inevitably dependent on others not only to thrive but even just to survive. This irreducible interdependency means that individuals owe one another obligations, not by virtue of consent alone but as an inherent incident of the human condition.”¹⁰¹ The public good vision thus recognizes the centrality of property to social stability and civic virtue; it recognizes that property provides a basis for imposing social obligations for the good of the community.¹⁰² Instead of viewing property solely as a means for personal gain, commodification, and speculation, the public good perspective treats property as a basis for civic participation and social stability. Under the civic conception of property, then, the “core purpose of property is not to satisfy individual preferences or to increase wealth but to fulfill some prior normative vision of how society and the polity that governs it should be structured.”¹⁰³

A number of the early takings cases reflect and promote the public good or civic vision of property. For decades, the Supreme Court repeatedly upheld the power of government to regulate private property when the property owner’s use was harmful or had become incompatible with the surrounding community. A

97. See ALEXANDER, *supra* note 31, at 1–2, 12–13, 22–23, 40–41; Butler, *supra* note 40, at 995.

98. THOMAS JEFFERSON, NOTES ON THE STATE OF VIRGINIA 165 (William Peden ed., 1955).

99. See Katz, *supra* note 93, at 483. Civic republicans thus need private property—especially landed property—to prosper. See *id.* at 474–75 (discussing Jefferson’s views on the virtue of landed property).

100. Rose, *supra* note 30, at 97; see also *id.* at 95 (discussing factors supporting cooperation and individual self-restraint); cf. FREYFOGLE, *supra* note 41, at 6, 17–18 (discussing the tradition of cooperation among neighboring landowners).

101. ALEXANDER, *supra* note 31, at 1–2; see also Butler, *supra* note 40, at 1003.

102. ALEXANDER, *supra* note 31, at 4. In the days of the founding fathers, property also “anchored the citizen to his . . . rightful place in the proper social hierarchy.” *Id.*

103. *Id.* at 2.

brick manufacturing plant, for example, was found to be a noxious use, even though the plant had begun its operations lawfully at a time when the area was very rural, because the use had become harmful to residential areas that had subsequently developed around the plant.¹⁰⁴ Similarly, in another case, the Supreme Court allowed the Commonwealth of Virginia to choose between two incompatible uses on the basis of its economic utility to the region and the state; Virginia chose to protect apple orchards from nearby cedar trees that produced cedar rust fatal to the apple trees.¹⁰⁵

Over time, as an economic theory of property rights developed, economic thinking overshadowed the civic republican view of property. The Court declared the noxious use justification for police power regulation to be a crude, “early attempt” at distinguishing between compensable takings and valid, noncompensable police power regulation.¹⁰⁶ When the regulation deprived the property owner of all economically viable use, the Court would not even consider the public interest being promoted by the noxious use regulation unless preexisting background principles limited the owner’s rights.¹⁰⁷ This loss of influence may be due in part to the dialectical forces at play in property’s evolutionary process. The interactions of these forces involve a give-and-take, a conflict and compromise process that allows one main perspective or force to prevail for a while until its weaknesses lead to discord and change. If mainstream economic theory continues to take over the institution of property, especially constitutionally protected property, this dialectical process will cease to be effective, and property will lose its resilience.

B. The Human Versus Natural Systems Continuum

For centuries, humans have used the property conception to define their relationship with nature. Sometimes that relationship has reflected a respectful coexistence grounded in religious beliefs.¹⁰⁸ Other times the relationship has revolved around a search for human domination and exploitation.¹⁰⁹ Regardless of how the relationship is defined, it is clear that humans, through their exercise of property rights, have had profound and sometimes irreversible impacts on their environment. That is, in addition to playing a fundamental role in political and economic systems, the institution of property has performed a critical role in defining a society’s relationship with its foundation ecosystem. The recent economic focus on individual property rights has tended to lock us into a

104. Hadacheck v. Sebastian, 239 U.S. 394, 406–07 (1915).

105. Miller v. Schoene, 276 U.S. 272, 277 (1928).

106. Lucas v. S.C. Coastal Council, 505 U.S. 1003, 1022–23 (1992).

107. See *id.* at 1015.

108. See Susan Hanna & Svein Jentoft, *Human Use of the Natural Environment: An Overview of Social and Economic Dimensions*, in RIGHTS TO NATURE 35, 36–38 (Susan S. Hanna et al. eds., 1996).

109. See FREYFOGLE, *supra* note 41, at 95; RODERICK NASH, WILDERNESS AND THE AMERICAN MIND 8–10 (1973); Lynn White, Jr., *The Historical Roots of Our Ecological Crisis*, in ECOLOGY AND RELIGION IN HISTORY 15, 22–27 (David Spring & Eileen Spring eds., 1974).

homocentric view of the relationship between humans and nature that aggravates the adverse impacts of property use on the environment. This homocentric view runs counter to modern ecosystem science, which understands that humans are a subset of the larger natural system¹¹⁰ and that the earth is indeed full. Though our property system began developing at a time when nature was able to absorb the shocks and disruptions of human use, we now live in a world of finite natural resources and are borrowing against the future's natural resource stock. Stated slightly differently, today's global economy would need about 1.5 Earths simply to sustain itself.¹¹¹ More realistic views of the relationship between humans and their place in nature are needed to allow for more effective resource and ecosystem management.

Attempts to put monetary values on the natural system, such as through cost-benefit analysis, can cloud the relationship between the property system and biophysical elements of the larger natural system. Consider, for example, the market for lipstick. One key ingredient of lipstick is oil from the menhaden fish.¹¹² The demand for lipstick thus leads to the catching and harvesting of menhaden for their oil, a use that is captured through the market price for lipstick. The menhaden fish, however, is a key element of a complex food web, and removing that element through overfishing changes the food web relationships, making them vulnerable to collapse.¹¹³ Once the population of menhaden falls too low, the menhaden's key food source, phytoplankton, overproduce, and unhealthy eutrophic conditions develop.¹¹⁴ Further, as the menhaden population declines, top predator species like the striped bass lose an important food source and begin to starve.¹¹⁵ As the population of striped bass falls, economically valuable commercial and recreational fishing industries suffer.¹¹⁶ Economists are fairly good at measuring the value of the front-end product, the lipstick, and the back-end product, the striped bass, but generally do not know how to value the complex interrelationships that occur within the food chain and the ecosystem. They do not know how to capture the value of the menhaden as an herbivore feeding on

110. See JEREMY BENDIK-KEYMER, *THE ECOLOGICAL LIFE: DISCOVERING CITIZENSHIP AND A SENSE OF HUMANITY* 5, 64–66 (2006).

111. Paul Gilding, *Opinion, The Earth is Full*, CNN (Apr. 8, 2012, 9:39 AM), http://www.cnn.com/2012/04/08/opinion/gilding-earth-limits/index.html?hpt=hp_t2. See generally PAUL GILDING, *THE GREAT DISRUPTION* (2011) (discussing the great disruption that will occur in the world's economic systems because of their assumptions and limitations unless changes are made).

112. H. Bruce Franklin, *Net Losses: Declaring War on the Menhaden*, MOTHERJONES (Mar./Apr. 2006), <http://www.motherjones.com/environment/2006/03/net-losses-declaring-war-menhaden>.

113. *Id.*

114. Interview with Dennis Taylor, Professor Emeritus of Marine Science, College of William & Mary, in Williamsburg, Va. (Sept. 23, 2012).

115. Tom Tavee & H. Bruce Franklin, *The Most Important Fish in the Sea*, DISCOVER, Sept. 2001, at 44.

116. Interview with Dennis Taylor, *supra* note 114.

phytoplankton, the impact of overproduction of phytoplankton on the health of the ecosystem, or the importance of menhaden as a food source to predator species.¹¹⁷

One of the problems illustrated by this example is the failure of economic analysis to capture adequately the existence value of human and nonhuman species and of present and future generations. Economic analysis focuses on the utility of species and natural resources to humans in evaluating choices and use decisions. The value of simply existing is generally ignored.¹¹⁸ To put this in the context of human existence, climate scientists overwhelmingly agree that the global climate is changing because of human actions.¹¹⁹ They agree that, unless this trend is slowed and reversed, the earth's climate system will eventually reach a tipping point where recovery is not possible and the climate will be permanently altered in ways that will threaten the survival of humans.¹²⁰ Climate scientists unfortunately cannot identify what that tipping point is or when it will occur.¹²¹ Because many humans are risk averse in situations involving serious threats to their survival or to the survival of future generations, a straightforward cost-benefit analysis of that future threat would not accurately measure their concern about existence value. The human-natural system continuum should not, in other words, be collapsed and lost in cost-benefit analysis of utility to humans. Some of the different approaches to defining preferences for human versus natural systems are explored below, as well as their relationship with property and the private rights-public goods continuum.

1. Homocentric Views

Early in America's colonization, settlers viewed America as a "promised land"—a land of milk and honey like that which Moses sought or, better yet, a

117. *Id.*; see also James E. Kirkley et al., *An Assessment of the Social and Economic Importance of Menhaden* (*Brevoortia tyrannus*) (*Latrobe, 1802*) in *Chesapeake Bay Region*, i-ii, pts. 1, 5 (Va. Inst. of Marine Sci. Marine Rep. No. 2011-14, 2011), available at <http://web.vims.edu/GreyLit/VIMS/mrr11-14.pdf> (studying the social and economic importance of menhaden, including their ecological services).

118. See, e.g., Steven Kelman, *Cost-Benefit Analysis: An Ethical Critique*, REGULATION, Jan.-Feb. 1981, at 33, 40 (explaining how cost-benefit analysis does not capture the value attached to life); Mark Sagoff, *Economic Theory and Environmental Law*, 79 MICH. L. REV. 1393, 1409-10 (1981) (criticizing economic analysis of environmental problems).

119. See generally INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, CLIMATE CHANGE 2007: SYNTHESIS REPORT 1-22 (2007), available at http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4_syr.pdf [hereinafter IPCC SYNTHESIS REPORT].

120. See NICHOLAS STERN, THE STERN REVIEW ON THE ECONOMICS OF CLIMATE CHANGE 25-61 (2007) (discussing the limits of standard externalities and cost-benefit approaches in analyzing climate change); Douglas A. Kysar, *Climate Change, Cultural Transformation, and Comprehensive Rationality* 31 B.C. ENVTL. AFF. L. REV. 555, 555-62 (2004) (discussing critiques of economic cost-benefit analysis in climate change and other environmental areas).

121. See generally IPCC SYNTHESIS REPORT, *supra* note 119 (discussing long-term prospects and climate sensitivity).

land like the Garden of Eden.¹²² America was a boundless continent—a country of fertile soils, expansive rivers “teeming with fish,” lush forests full of wildlife, and a seemingly endless supply of land.¹²³ Captain John Smith was fascinated by the wild beauty and richness of the New World, once describing Virginia as a “country that may have the prerogative over the most pleasant places knowne . . . heaven & earth never agreed better to frame a place for man’s habitation.”¹²⁴ The early settlers thought that the New World would satisfy their needs forever.

Although the New World was a land of abundance, back-breaking labor was needed to tame the land and make it habitable. The legal system used the institution of property to encourage and reward this hard work.¹²⁵ Justification for this approach was found in the writings of Locke, who had explained that God gave the earth “to mankind in common . . . for the support and comfort of their being,”¹²⁶ commanding man “to labour . . . [and] . . . subdue the earth.”¹²⁷ Individuals must be allowed to remove natural resources “from the common state” and make them their own by mixing labor with the resources.¹²⁸ By adding labor, the individual created value that was significant enough to overcome the common interest.¹²⁹

Eventually the reality of the hard work and the dangers involved in settling America led to the development of a bias against wilderness.¹³⁰ This cultural bias involved a physical component that arose from the “formidable threat” posed by the wilderness to the settlers’ survival.¹³¹ The bias against wilderness also took on moral or religious overtones, with the wilderness becoming “a dark and sinister symbol.”¹³² The settlers “shared the long Western tradition of imagining wild country as a moral vacuum, a cursed and chaotic wasteland.”¹³³

The impact of the homocentric, antiwilderness tradition on the property concept has been far-reaching. Settlers viewed undeveloped wilderness areas as

122. FREYFOGLE, *supra* note 41, at 93.

123. *Id.*

124. John Smith, *The Generall Historie of Virginia, New-England, and the Summer Isles*, Book II, 21–22, microformed by University Microfilms, Inc. (1966).

125. See FREYFOGLE, *supra* note 41, at 93–96; Sax, *supra* note 51, at 6–15 (describing how the law was constructed to promote economic development).

126. JOHN LOCKE, *THE SECOND TREATISE OF GOVERNMENT AND A LETTER CONCERNING TOLERATION* 15 (J. W. Gough ed., MacMillan, new ed., corrected and rev. 1956).

127. *Id.* at 17. See generally KEITH THOMAS, *MAN AND THE NATURAL WORLD* (1983) (discussing the evolution of attitudes of the English and other Europeans towards nature from 1500–1800).

128. LOCKE, *supra* note 126, at 15.

129. See *id.* at 21–22.

130. See John G. Sprankling, *The Antiwilderness Bias in American Property Law*, 63 U. CHI. L. REV. 519, 528–30 (1996).

131. NASH, *supra* note 109, at 24.

132. *Id.*

133. *Id.*; see also THOMAS, *supra* note 127, at 17–50.

wastelands that needed civilization. Land laws encouraged the draining of swamps, the clearing of forests, and the promotion of economic development and westward expansion, all at the expense of ecosystems and natural resources.¹³⁴ Although most of those laws no longer apply, the legacy of the antiwilderness bias remains.¹³⁵ Many still view wetlands, old growth forests, and vast expanses of undeveloped public lands as lost economic opportunities. And some still view undeveloped wilderness areas as wasteful in a religious sense.¹³⁶

The antiwilderness, proconquest tradition also has contributed to the development of absolutist attitudes towards property rights, with landowners having little, if any, sense of accountability to the environment or to the common interests of the public.¹³⁷ Land repeatedly was divided into discrete parcels, and then fenced, seeded, or planted. The effects of land use activities on ecosystems were not considered. Trees were cut, wild animals hunted without limit, and sewage dumped into pristine waters.¹³⁸ Settlers practiced the “use-and-move-on” system of agriculture, planting crops until the land became impoverished and then moving on to new areas.¹³⁹ The seeds of excess were sown along with the crops, for subduing nature and providing more of life’s comforts were far higher priorities than minimizing environmental impacts or accounting for external costs of use. The drive to survive and prosper encouraged landowners to view nature as a collection of assets to be exploited and controlled.

2. Ecological or Natural System Views

Ecological or natural system views gained acceptance in the 1800s as more of America became settled and urbanized. An increasing number of Americans recognized that wilderness had value even without labor,¹⁴⁰ and a number of authors and commentators wrote about the breathtaking beauty of the American wilderness.¹⁴¹ Despite this nascent appreciation for nature, the

134. See, e.g., BUTLER & LIVINGSTON, *supra* note 52, at § 8.1; John F. Hart, *Colonial Land Use Law and Its Significance for Modern Takings Doctrine*, 109 HARV. L. REV. 1252, 1280–81 (1996). See generally Sax, *supra* note 51 (discussing how the rules of land ownership shaped the development of America).

135. See Lynda L. Butler, *Private Land Use, Changing Public Values, and Notions of Relativity*, 1992 BYU L. REV. 629, 636–40 (discussing the origins of private land use expectations, including the exploitative use expectation and the absolutist expectation).

136. Secretary of the Interior James Watt once declared that his “responsibility is to follow the Scriptures which call upon us to occupy the land until Jesus returns.” Colman McCarthy, *James Watt & the Puritan Ethic*, WASH. POST, May 24, 1981, at L5.

137. See Sax, *supra* note 51, at 5–7 (discussing the settlers’ transformative process); Sprankling, *supra* note 130, 521–85 (discussing the development of the antiwilderness bias of American property law).

138. See Sax, *supra* note 51, at 5–7.

139. *Id.* at 6–7 (describing the use-and-move-on philosophy).

140. See NASH, *supra* note 109, at 44; see also FREYFOGLE, *supra* note 41, at 96.

141. See, e.g., JOHN JAMES AUDUBON, WRITINGS AND DRAWINGS (Christoph Irmischer compilation, Literary Classics of the U.S., Inc. 1999) (detailing his journeys through the American wilderness in the 1800s through prose, letters, and bird biographies); WILLIAM BARTRAM, TRAVELS AND OTHER WRITINGS (Thomas P. Slaughter compilation,

antiwilderness tradition continued to dominate legal thought. Whatever appreciation for wilderness that emerged largely coexisted with—instead of displacing—the tradition.¹⁴² Eventually this appreciation led to the development of a green view of property that included a stewardship ethic.¹⁴³

In the mid-1900s the notion of an environmental or land ethic was given a major boost by Aldo Leopold. In his famous book *A Sand County Almanac*, Leopold wrote of the impending danger to Earth's remaining wilderness areas. Making a plea for their preservation, Leopold noted the change in the relationship between nature and Americans. While the wilderness may have been "an adversary" to the settlor in the "sweat of his labor," wilderness gave "definition and meaning" to the life of the settlor "in repose."¹⁴⁴ He explained how "[n]o living man will see again the long-grass prairie, where a sea of prairie flowers lapped at the stirrups of the pioneer."¹⁴⁵ Nor would they see "the virgin pineries of the Lake States, or the flat woods of the coastal plan, or the giant hardwoods."¹⁴⁶ Wilderness areas of short-grass prairies and other trees, however, still existed and could be preserved.¹⁴⁷

To make the case for preservation, Leopold argued that ethics had evolved over time to encompass nature. According to Leopold, all ethics "rest upon a single premise: that the individual is a member of a community of interdependent parts. His instincts prompt him to compete for his place in that community, but his ethics prompt him also to cooperate."¹⁴⁸ Leopold's land ethic recognizes that use of land involves the whole community, including the soils, waters, plants, and animals. Although the land ethic does not argue against the management and use of land, it affirms the right of the whole land community to continue to exist "at least in spots."¹⁴⁹ Leopold viewed the land ethic as an ecological necessity.¹⁵⁰ To continue to follow the conquest or antiwilderness approach would eventually be "self-defeating."¹⁵¹ Humans could not fully

Literary Classics of the U.S., Inc. 1996) (describing his journeys through the American wilderness from 1773–1776 in celebratory prose). *See generally* RODERICK FRAZIER NASH, *THE RIGHTS OF NATURE: A HISTORY OF ENVIRONMENTAL ETHICS* 55–86 (1989) (describing the development of modern environmental ethics in America).

142. *See* NASH, *supra* note 109, at 55.

143. The emergence of a sense of appreciation for nature helped to remove some of the old, negative attitudes about nature. *See id.* at 65–66; *see also* PAUL W. TAYLOR, *RESPECT FOR NATURE: A THEORY OF ENVIRONMENTAL ETHICS* 99–168 (1986) (setting forth the core beliefs of a biocentric view).

144. ALDO LEOPOLD, *A SAND COUNTY ALMANAC, AND SKETCHES HERE AND THERE* 188 (1987). For further discussion of Leopold's impact, *see* Eric T. Freyfogle, *Leopold's Last Talk*, 2 WASH. J. ENVTL. L. & POL. 236 (2012); Eric T. Freyfogle, *The Land Ethic and Pilgrim Leopold*, 61 U. COLO. L. REV. 217 (1990).

145. LEOPOLD, *supra* note 144, at 189.

146. *Id.*

147. *See id.*

148. *Id.* at 203–04.

149. *Id.* at 204.

150. *Id.* at 203.

151. *Id.* at 204.

understand what really makes an ecosystem tick—what parts are essential and what parts unimportant to the system.¹⁵² Further, the land ethic could not, in Leopold's view, be based solely on economic motives because they tend to ignore parts of the land community that lack clear commercial value but are essential to ecological well-being.¹⁵³ Rather, Leopold advocated that each use be evaluated “in terms of what is ethically and esthetically right, as well as what is economically expedient. A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise.”¹⁵⁴

This ecological and ethical view of the relationship between humans and nature has had some limited impact on the definition of property rights. In the classic 1972 case *Just v. Marinette County*, the Supreme Court of Wisconsin decided that a landowner “has no absolute and unlimited right to change the essential natural character of his land so as to use it for a purpose for which it was unsuited in its natural state and which injures the rights of others.”¹⁵⁵ In *Just* the landowner had asked the court to invalidate a shoreland zoning ordinance that prevented landowners from changing the natural character of their land within 1000 feet of a navigable lake and 300 feet of a navigable river without a permit.¹⁵⁶ The purpose of the ordinance was to protect navigable waters and accompanying public rights from degradation resulting from “uncontrolled use and development of shorelands.”¹⁵⁷ The court restricted the landowner to the use of his sensitive wetland area in its natural state, explaining that private property rights do not include the right to change the character of the land at the expense of existing public trust rights.¹⁵⁸ Government could prevent harm to public rights in navigable waters by limiting the use of private property to its natural uses.¹⁵⁹ Nature, in other words, imposes limits on a property owner's rights in land.

Although *Just* remains popular among environmentalists, most other courts have not adopted its natural use approach to property rights.¹⁶⁰ As admirable as the philosophy is, it commits a fatal error: It embraces nature totally and

152. *See id.*

153. *See id.* at 214.

154. *Id.* at 224–25.

155. 201 N.W.2d 761, 768 (Wis. 1972).

156. *See id.* at 765–66.

157. *Id.* at 764–65.

158. *Id.* at 768–71. The Justs had filled in wetlands without a permit after subdividing a larger tract and selling off other parcels. *Id.* at 766.

159. *See id.* at 768.

160. *See, e.g.,* Loveladies Harbor, Inc. v. United States, 15 Cl. Ct. 381, 395–96 (1988); Mark Sagoff, *Muddle or Muddle Through? Takings Jurisprudence Meets the Endangered Species Act*, 38 WM. & MARY L. REV. 825, 883 (1997). *But see* Graham v. Estuary Props., Inc., 399 So.2d 1374, 1382 (Fla. 1981) (“We agree with the Wisconsin Supreme Court’s observations in *Just v. Marinette County*, where that court pointed out the involvement of exceptional circumstances because of the interrelationship of the wetlands, swamps and natural environment to the purity of the water and natural resources such as fishing.”); *Sibson v. State*, 336 A.2d 239, 243 (N.H. 1975) (citing *Just* and finding that a denial of a permit to fill a saltmarsh did not constitute a taking), *overruled by* *Burrows v. City of Keene*, 121 A.2d 15 (N.H. 1981).

absolutely without regard for social institutions and human needs. The *Just* approach commits the same type of error as the strict libertarian approach, focusing on one ideal in the context of one system and ignoring the implications of that ideal for other systems critical to the definition of a successful relationship between humans and natural systems. To be acceptable and therefore have a chance at being effective, a system that defines the preferences for human interests and natural systems must be dynamic, recognizing the fluid nature of the relationship and its dependence on context.

C. Competing for Dominance Versus Dialectical Interactions

The ideals reflected at the end of each continuum are not very tolerant of one another. Proponents of a particular end-state ideal typically describe it in terms that suggest little room for accommodation or for functioning relations with other approaches. The proponents typically portray potential solutions as either/or choices, not as questions of degree or variable-driven situations. Competition for dominance, rather than compromise and accommodation, controls the resolution of conflicts and definition of property rights. This competition for dominance has become more telling in recent years with the emergence of the economic vision of property and its preference for individual, market-based choices occurring with minimal government regulation.

Although a system of end-state ideals competing for dominance may well reflect the language and nature of academic debate, it does not serve the institution of property or society well. Portrayal of each perspective in terms of pure, end-state ideals locked in a battle for dominance suggests that there is no room for competing ideals, not even in those gray situations existing in real life. Though it is important to describe the ideals that may define the norms of the property concept, it is also important to remember that no one end-state ideal can be the true and full measure of the property concept in a pluralistic society.¹⁶¹ No end-state ideal can adequately reflect the totality of the property landscape. End-state ideals may set outer limits or boundaries, but they cannot possibly capture the constant interactions over property occurring in the real world among government leaders, jurists, policymakers, and individual actors. At least in a democratic or pluralist society, the institution of property is a function of the interactions of different ideals or gradations of ideals, whether end-state, mid-state, or nascent. These interactions involve much give-and-take, pendulum swinging, and sometimes even plane-shifting among different theories of property. Flexibility, variety or diversity of perspective, and functional redundancy are all needed to ensure that the property concept evolves effectively over time.

Imagine, for the sake of discussion, that the private rights–public goods and the human–natural systems continua represent two axes of a Cartesian plane. Let's call the private rights–public goods continuum that reflects choices about property arrangements the x-axis, and the continuum about the degree of preference for human versus natural systems the y-axis. The four quadrants formed

161. See Nestor M. Davidson, *Standardization and Pluralism in Property Law*, 61 VAND. L. REV. 1597, 1600, 1637–44 (2008).

by the intersecting continua would include: Quadrant I, capturing the interactions of the private side of the property arrangements continuum with the homocentric views of the human versus natural systems continuum; Quadrant II, showing the interactions of preferences for the public goods side of the property arrangements continuum with preferences for homocentric views of the human versus nature continuum; Quadrant III, representing the interactions of various preferences moving toward the public good end-state ideal in relation to points moving toward the natural systems ideal; and Quadrant IV, reflecting the interactions among preferences for private rights property arrangements and for natural systems.

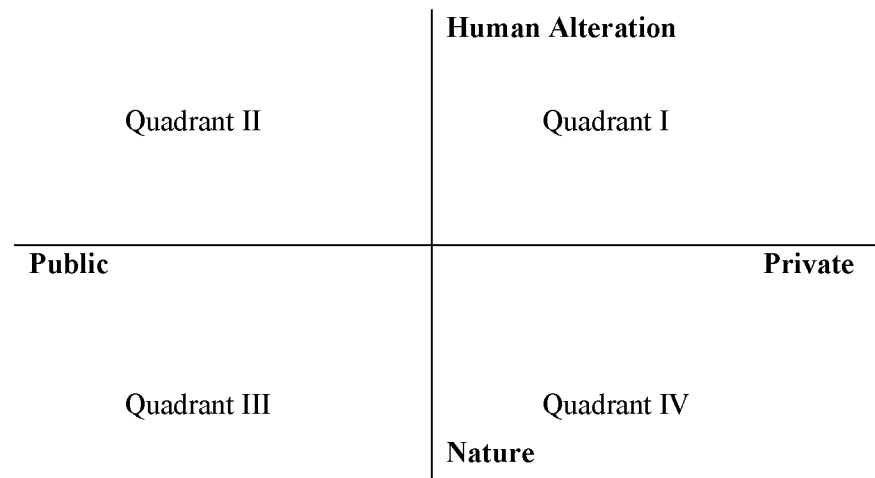


Figure 1. The Property Landscape as a Function of Preferences for Human versus Natural Systems

The end-state ideal of each continuum tends to restrict the property concept to a particular quadrant. The mainstream economic vision, for example, would not likely recognize the desirability of the property arrangements solidly in Quadrants II and III because some norms or characteristics critical to the economic vision would be altered or sacrificed if the ecological or public goods ideals prevailed or were promoted significantly. The mainstream economic vision assumes that the decisionmaker is a rational actor seeking to maximize his or her own net expected utility. In defining property rights, the mainstream vision favors giving the individual rational actor the right of exclusivity, the right to transfer and take economic risks, and the right to reap the rewards of adding labor to a resource.¹⁶² The economic vision would define Quadrant I as the area best defining the key traits of its ideal and would resist efforts to push property into other

162. See POSNER, *supra* note 73, § 3.1 (2011) (discussing essential characteristics of property rights under economic theory).

quadrants. Though private rights arrangements also could be found in Quadrant IV, where stronger preferences for natural systems appear, mainstream economics tends to assume the natural environment is an input and throughput for individually based economic activities and thus does not accurately value preferences for nature and the environment.

This tendency to view the property landscape from only one end-state ideal does not accurately reflect the development of the institution of property, especially common law property. Instead of tying the property concept to one ideal, the common law has allowed property to develop through a dialectical process of advocacy, deliberation, and reasoning. In that process one ideal or norm may control the definition of property for a time or in a particular context until that dominant ideal creates troubling conflicts with or unacceptable costs to other interests. Eventually, challenges to the ideal's dominant position begin to succeed, and other ideals are increasingly accommodated.¹⁶³ At any point in time, in other words, the property concept is a function of the interaction of different gradations of ideals along each continuum. The actual end-state ideals are just one part of the process of defining property—a necessary but insufficient part of the process. Rather, the full landscape of property includes functional relations from all four quadrants of a variable-based plane of property, with one continuum being the range of property arrangements, from private to public, and the other being a variable affecting the choice of property arrangements—here, the preference for human versus natural systems. As discussed later, other variables or constraints may also be involved.¹⁶⁴

Although the federal constitutional role of property admittedly could limit the quadrant areas available in defining the common law concept of property, such limitations have not arisen until recently for a number of reasons. First, the federal constitutional provisions protecting property simply are too few and too vague to provide compelling justifications for constraining the common law concept. Some scholars have argued that the Takings Clause reflects a particular view of property.¹⁶⁵ Though that view may have motivated some founding fathers to support the adoption of the Takings Clause, there is no compelling evidence that the Takings Clause itself reflects one interpretive view and excludes all others.¹⁶⁶ Second, the U.S. Constitution generally leaves the definition of property to the

163. See, e.g., Henry E. Smith, *Exclusion Versus Governance: Two Strategies for Delineating Property Rights*, 31 J. LEGAL STUD. 453, 456–57 (2002) (using trespass to discuss alternate approaches to defining property rights).

164. See *infra* Part III.B.

165. See, e.g., EPSTEIN, *supra* note 44, at 15–16. *But cf.* Marc R. Poirier, *The Virtue of Vagueness in Takings Doctrine*, 24 CARDOZO L. REV. 93 (2002) (describing and extolling the virtue of vagueness in takings).

166. See, e.g., *Lucas v. S.C. Coastal Council*, 505 U.S. 1003, 1003–04 (1992) (adopting a categorical approach to regulations that prevent environmental harm in a way that deprives the landowner of all economically viable use).

various states.¹⁶⁷ Under state common law, the landscape of property has included all four quadrants to varying degrees.¹⁶⁸ Part II will examine how the economic vision of property has led to the coupling of constitutional theory and common law property and will explain why this coupling is disturbing.

II. THE CONSTITUTIONAL COUPLING OF MAINSTREAM ECONOMICS AND PROPERTY

In recent years, the economic vision of property, with its focus on individual rights and autonomy, has been coupled with constitutional principles to produce a more forceful conception of property better able to withstand government regulation. This coupling, which has occurred primarily through the rubric of the Takings Clause, raises serious questions of validity about efforts to promote public goods, protect ecosystems and natural resources from degradation and depletion, and otherwise handle problems raised by significant changing conditions. By giving primacy to the individual autonomy interest in private property, especially landed property, the economic view is encouraging the commodification of natural resources through marketplace incentives and ignoring the long-term, cumulative costs of property use to ecosystems and societies. By focusing on individual rights at a microeconomic level, economic theory is ensuring that battles over environmental and resource management programs may be waged more easily on an ad hoc, individual basis as use decisions are made. By associating with constitutionally protected property, the economic view is making it easier for individual property owners to attack specific government regulations, which will no longer be reviewed summarily as normal and legitimate economic regulation.¹⁶⁹ If the economic view becomes solidified as the key theory of constitutional and common law property, the obstacles to environmental and resource protection, to land use regulation, and to the promotion of public goods will become monumental.

Even without its elevated constitutional status, the economic view of property makes it more difficult for government to promote public goods, protect ecosystems and natural resources, and pursue other activities that do not fit neatly within the analytical structure of mainstream economics. Not all schools of economic thought pose the same level of difficulty. Environmental economics, for example, agrees that market approaches do not work well for all situations and that

167. See *Stop the Beach Renourishment, Inc. v. Fla. Dep't of Env'tl. Prot.*, 130 S. Ct. 2592, 2615 (2010) (Kennedy, J., concurring) ("State courts generally operate under a common-law tradition that allows for incremental modifications to property law . . .").

168. For discussion about the full landscape of property, see generally Lee Anne Fennell, *Common Interest Tragedies*, 98 NW. U. L. REV. 907 (2004); Elinor Ostrom, *The Institutional Analysis and Development Framework and the Commons*, 95 CORNELL L. REV. 807 (2010); Carol M. Rose, *Rethinking Environmental Controls: Management Strategies for Common Resources*, 1991 DUKE L.J. 1 (1991).

169. See JULIAN CONRAD JUERGENSMEYER & THOMAS E. ROBERTS, *LAND USE PLANNING AND DEVELOPMENT REGULATION LAW* § 5.37 (2d ed. 2007) (discussing the deferential standard of judicial review traditionally applied to economic regulation of land use unless a fundamental right is involved).

government action might be needed to solve serious market failures involving negative externalities in the environmental area.¹⁷⁰ Behavioral economics recognizes that the rational actor assumption does not accurately capture how people make decisions in the real world.¹⁷¹ Ecological economics views the earth as full and challenges the assumption of continued growth, seeing the natural resource stock as a primary limitation.¹⁷² Mainstream economics, however, tends to be more restrictive in its thinking, assuming the decisionmaker is a rational actor, accepting the initial distribution of resources, treating all interests as having a dollar equivalency, and believing that more is possible as long as knowledge expands.¹⁷³ Even though mainstream economics agrees that government must provide public goods, it more narrowly defines that category to apply only when exclusion is difficult and costly to implement and consumption is nonrivalrous. Others taking a broader approach would recognize public goods (or inherently public property) when private markets predictably fail to produce needed goods and the costs of private negotiation are high or a serious land assembly problem exists.¹⁷⁴

Part II.A examines the coupling of mainstream economics and constitutional principles protecting property rights. After discussing how the coupling has occurred, Part II.B explores the impact of the coupling on the institution of property, particularly on its resilience and its ability to adapt. Part III will conclude with a discussion of the importance of decoupling economic theory and property, focusing in large part on the importance of the dialectical process used to define property through its relationships with other norms and variables.

A. The Coupling Problem

Two traits or aspects of traditional property rights have been used as a foundation for strengthening the relationship between the economic vision of

170. For a discussion of environmental economics, see generally CLIFFORD S. RUSSELL, *APPLYING ECONOMICS TO THE ENVIRONMENT* (2001).

171. See Christine Jolls, Cass R. Sunstein & Richard Thaler, *A Behavioral Approach to Law and Economics*, 50 *STAN. L. REV.* 1471, 1473–79 (1998). See generally *BEHAVIORAL LAW & ECONOMICS* (Cass R. Sunstein ed., 2001) (discussing how heuristics and biases affect decisionmaking, valuation, and risk regulation).

172. See HERMAN E. DALY, *BEYOND GROWTH* 3–5 (1996); Douglas A. Kysar, *Sustainability, Distribution, and the Macroeconomic Analysis of Law*, 43 *B.C. L. REV.* 1, 4–8 (2001) (discussing mainstream economics and its critics). See generally Robert Costanza et al., *Goals, Agenda, and Policy Recommendations for Ecological Economics*, in *ECOLOGICAL ECONOMICS: THE SCIENCE AND MANAGEMENT OF SUSTAINABILITY* 1, 3–7 (Robert Costanza ed., 1991) (explaining ecological economics and how it differs from conventional economic approaches).

173. See Mark Sagoff, *Carrying Capacity and Ecological Economics*, 45 *BIOSCIENCE* 610, 610–12 (1995) (comparing and contrasting mainstream economics and ecological economics). See generally Jack Hirshleifer, *The Expanding Domain of Economics*, 75 *AM. ECON. REV.* 53 (Dec. 1985) (describing the classical model and its limitations).

174. See Rose, *supra* note 52, at 774–81; see also Butler, *supra* note 70, at 323, 358–59 (discussing different definitions of public goods).

property and constitutional protection. One trait involves the absolutist/exclusion thinking that controlled early development of the common law concept of property and is still very much part of the debate over the core of property.¹⁷⁵ The second is the productive labor, exploitation perspective existing in property law since its early development.¹⁷⁶ Both have provided a basis for constitutionalizing the mainstream economic theory of property through the Takings Clause of the U.S. Constitution.

1. The Absolutist/Exclusion Hook

The absolutist, exclusion-based view of property controlled the early development of common law property. Blackstone, in his influential work *Commentaries*, famously described 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.”¹⁷⁷ Declaring property to be one of the “absolute” rights “inherent in every Englishman,”¹⁷⁸ Blackstone defined property broadly as the “free use, enjoyment, and disposal of all . . . acquisitions, without any control or diminution, save only by the laws of the land.”¹⁷⁹ Though Blackstone’s view of property was far more complex and nuanced than his bold statement suggests,¹⁸⁰ his description has come to epitomize the individual rights conception of property.¹⁸¹ At the core of the Blackstonian conception were the right to “despotic” or absolute dominion and the right to “sole” or exclusive control.¹⁸²

Blackstone’s approach to property reflected a physical model of property that stressed discrete tracts of land having distinct boundaries and including the surface, subsurface, and airspace falling within a column framed by those boundaries.¹⁸³ In the late nineteenth century, the physical model yielded to a more abstract model that viewed property rights as a bundle of sticks.¹⁸⁴ Though certain core attributes remained, any one stick in the bundle of rights might be severed and

175. See, e.g., Smith, *supra* note 163, at 455–57 (discussing the exclusion and governance strategies as two ways to define and enforce property rights).

176. See Sax, *supra* note 51, at 2–3 (also recognizing these two aspects of property as shaping our thinking).

177. 2 WILLIAM BLACKSTONE, COMMENTARIES *2.

178. 1 *id.* at *138.

179. *Id.*

180. For further discussion of Blackstone’s conception, see Carol M. Rose, *Canons of Property Talk, or, Blackstone’s Anxiety*, 108 YALE L.J. 601, 603–12 (1998); David B. Schorr, *How Blackstone Became a Blackstonian*, 10 THEORETICAL INQUIRIES L. 103, 106–17 (2009). See also Eric T. Freyfogle, *The Owning and Taking of Sensitive Lands*, 43 UCLA L. REV. 77, 99–102 (1995) (discussing the ambiguities and logical limitations of the Blackstonian conception of property).

181. Schorr, *supra* note 180, at 104.

182. See *id.* at 104–05.

183. See Freyfogle, *supra* note 180, at 97–98.

184. See *id.* at 98; Henry Hansmann & Reinier Kraakman, *Property, Contract, and Verification: The Numerus Clausus Problem and the Divisibility of Rights*, 31 J. LEGAL STUD. 373, 373–77 (2002); Krier, *supra* note 30, at 139–42; Rose, *supra* note 30, at 95.

transferred by the property owner or restricted by government. The development of the bundle of rights view allowed the owned property to be viewed as a commodity to be used, disaggregated, developed, or transferred in the marketplace.¹⁸⁵ As the bundle of rights view took hold and land development increased, the notion of absolute ownership eroded. Although the absolutist approach to property may have worked well in an agrarian society, it posed problems in a society that valued commercial and industrial development.¹⁸⁶ Millworks, railroads, and industrial uses imposed harmful effects on neighboring landowners yet provided significant benefits to society. Gradually the courts chose to protect the new industrial uses and public works by rejecting a truly absolutist perspective, adopting instead a relativity of property approach. Landowners no longer could count on stopping or even receiving compensation for harmful interferences that once could be remedied in court. Instead, the strength of property rights varied more according to the context and the competing interests.¹⁸⁷

Despite the common law's retreat from the absolutist approach, some of its core principles still find resonance in the contemporary exclusion strategy, which has been repackaged and strengthened using mainstream economics. It is this strategy that has played a significant role in the intertwining of economic theory, common law property, and, ultimately, constitutionally protected property. Viewed by many as the core of property,¹⁸⁸ the exclusion strategy recognizes the importance of giving decisionmaking power over a resource to its owner.¹⁸⁹ That power not only includes the right to exclude but also the right to take economic risks, to decide on uses, to transfer all or part of the property, to enjoy the property, and so on. Mainstream economics easily justifies the exclusion strategy as necessary to an efficient allocation of resources, giving property owners the incentives needed for productive use and maximization of welfare.¹⁹⁰

In recent years the right to exclude has become a rallying cry of property rights advocates, who describe it as fundamentally linked to personal and economic freedom.¹⁹¹ That cry has been increasingly persuasive in judicial and legislative settings¹⁹² because it highlights the autonomy interest inherent in the

185. See ALEXANDER, *supra* note 31, at 1–4, 319–23.

186. See Freyfogle, *supra* note 180, at 100–01.

187. See, e.g., *Boomer v. Atl. Cement Co.*, 257 N.E.2d 870, 873 (N.Y. 1970); see also Freyfogle, *supra* note 180, at 99–102 (discussing the evolution of an abstract conception of property). See generally MORTON J. HORWITZ, *THE TRANSFORMATION OF AMERICAN LAW, 1780–1860*, at 31–42, 47–53 (1979) (discussing the transformation of the property concept from the absolute view to one favoring economic development).

188. See, e.g., Merrill, *supra* note 27, at 734–35. But see Gregory S. Alexander, *The Complex Core of Property*, 94 CORNELL L. REV. 1063, 1063–66 (2009) (discussing an alternative view of property's core).

189. See Merrill, *supra* note 27, at 740–41.

190. See Smith, *supra* note 163, at 454–55, 468–71.

191. See, e.g., Jennifer Thompson, *Why Are Private Property Rights Important?*, PAC. LEGAL FOUND. LIBERTY BLOG (Aug. 17, 2012), <http://blog.pacificlegal.org/2012/why-are-private-property-rights-important/>.

192. See, e.g., *College Sav. Bank v. Fla. Prepaid Postsecondary Educ. Expense Bd.*, 527 U.S. 666, 673 (1999) (describing the right to exclude as the “hallmark of a

decisionmaking power of the property owner under the common law. By identifying with the autonomy interest, property advocates then are well positioned to take the leap by association¹⁹³ to the autonomy interests protected by the Takings Clause, bringing the exclusion strategy into the “constitutional history” of the Takings Clause.¹⁹⁴ The Court’s decision in *Loretto v. Teleprompter Manhattan CATV Corp.* to find a compensable taking any time a physical invasion occurs, no matter how small or how beneficial it is, demonstrates this reasoning.¹⁹⁵ In that case the Court concluded that mandating the installation of cable on rental buildings caused a physical invasion, and thus a deprivation of the right to exclude, even though the cable was placed on the exterior, only occupied a few inches, and made the rental premises more attractive to potential tenants. The freedom to say “no” reflected in the exclusion approach to property was violated. It did not matter that the law served important tenants’ interests in receiving news and other programming by cable. Once the law was viewed as a simple physical invasion violating the property owner’s power and right to exclude, a more accommodating approach was not allowed. Though some have disagreed with *Loretto*’s accounting of constitutional history and use of the categorical approach,¹⁹⁶ subsequent decisions of the Court have reaffirmed not only the use of the categorical approach for permanent physical occupations but also the description of constitutional history as always taking such an approach, no matter how small the invasion or how important the public interest.¹⁹⁷

It is the categorical approach of the Court’s decision in *Loretto* and reinforced in later opinions that reveals the seductive effect of mainstream economics. Because of the categorical approach, the speech interests of the tenants in receiving news and other cable programming are never considered. In some of her famous work on commons, Elinor Ostrom warns against the dangerous influence of fixed or categorical thinking, which frames the issue or discussion in terms of dichotomies, leading to misalignments and an inability to adapt.¹⁹⁸ Frank

constitutionally protected property interest”); *Kaiser Aetna v. United States*, 444 U.S. 164, 176 (1979) (describing the right to exclude as “one of the most essential sticks in the bundle of rights”); see also Mihaly & Smith, *supra* note 6, at 705–06; cf. Ilya Somin, *The Limits of Backlash: Assessing the Political Response to Kelo*, 93 MINN. L. REV. 2100, 2108–10 (2009) (discussing political reactions to the *Kelo* decision).

193. Cf. BEHAVIORAL LAW & ECONOMICS, *supra* note 171, at pt. II (discussing how heuristics and biases affect decisionmaking).

194. See *Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419, 426 (1982).

195. See *id.* at 434–35.

196. Justice Blackmun, for example, decried the use of such an “inherently suspect” approach in his dissenting opinion in *Loretto*. *Id.* at 447 (Blackmun, J., dissenting). He contended that the categorical approach was not consistent with constitutional history and did not further equity. *Id.* at 442–43.

197. See, e.g., *Lucas v. S.C. Coastal Council*, 505 U.S. 1003, 1015 (1992).

198. See ELINOR OSTROM, *GOVERNING THE COMMONS: THE EVOLUTION OF INSTITUTIONS FOR COLLECTIVE ACTION* 6–8, 13–15 (1990). Ostrom writes that the “power of a theory is exactly proportional to the diversity of situations it can explain” and admonishes policy analysts not to confuse a model with a theory. *Id.* at 24.

Michelman also warns against the use of such an approach because “its capacity to distinguish, even crudely, between significant and insignificant losses is too puny to be taken seriously.”¹⁹⁹ Mainstream economics enables the leap to constitutional property to occur because of its focus on the micro level—on the individual deal and the individual rights holder.²⁰⁰ Left out of the equation is the macro structure, the impact of the individual deal on that structure and on competing rights and interests. Categorical thinking allows mainstream economics to justify and solidify its micro focus. The beauty of the market is that it works efficiently without a central coordinator, without rules defining positions or players in the market, and without a defined or central purpose.²⁰¹ It is this efficient decisionmaking approach, however, that leads to individualistic thinking that ignores third-party and macro interests. Human systems are complex, fluid systems requiring much more.²⁰²

2. *The Productive Labor or Exploitation Hook*

The second important aspect used to bolster the tie between economic theory and the property concept involves the productive use or exploitation perspective of property law. Principles and policies governing property rights historically have stressed the importance of encouraging economic activities and promoting productive use.²⁰³ To the American settler, productive use meant an affirmative use that added value and created goods important not only to survival but also to a comfortable life. Donald Worster’s description of the conditions, culture, and practices leading up to the devastating Dust Bowl of the 1930s is most telling. He observes that from the moment the first tobacco crops were planted in the original colonies, “all-out production was a part of the New World way to farm. It was on this continent that the creed of maximization developed furthest, until it came eventually to dominate and characterize the American response to the land.”²⁰⁴ By the 1900s each key agricultural region in the United States followed the creed of maximization. Landowners found cash crops that worked in each environment and then followed a practice of “unlimited increase. . . . Produce, produce, produce” became the mantra of American land use.²⁰⁵

199. Frank I. Michelman, *Property, Utility, and Fairness: Comments on the Ethical Foundations of “Just Compensation” Law*, 80 HARV. L. REV. 1165, 1227 (1967).

200. See *supra* notes 170–74 and accompanying text.

201. See CHARLES E. LINDBLOM, *THE INTELLIGENCE OF DEMOCRACY* 3–6 (1965).

202. See John R. Nolon & Patricia E. Salkin, *Integrating Sustainable Development Planning and Climate Change Management: A Challenge to Planners and Land Use Attorneys*, 63 PLAN. & ENVTL. L. 3, 4 (2011); Poirier, *supra* note 165, at 93 (explaining the virtue of vagueness when a complex system like property is involved).

203. For discussion of how colonial and early statehood land laws promoted an exploitation perspective and economic development, see BUTLER & LIVINGSTON, *supra* note 52, § 8.1; MARSHALL HARRIS, *ORIGIN OF THE LAND TENURE SYSTEM IN THE UNITED STATES* 394–411 (1953); HORWITZ, *supra* note 187, at 31–62.

204. DONALD WORSTER, *DUST BOWL* 182 (1979) (25th anniv. ed. 2004).

205. *Id.* at 182; see also Sax, *supra* note 51, at 6 (describing how the law was constructed to drive the economy forward through a “use-and-move-on” philosophy). In the

So strong is the tradition of encouraging productive use that some Supreme Court Justices have described the right to conduct an economically viable use as part of the “historical compact” reflected in the Takings Clause.²⁰⁶ According to Justice Scalia’s majority opinion in *Lucas*, protection of this historical compact requires a categorical rule finding an unconstitutional taking whenever government action deprives a property owner of all economically viable use unless the government restriction “inhere[s] in the title itself.”²⁰⁷ Under this categorical rule, no inquiry is made into the importance of the public interest advanced in support of the government action.²⁰⁸ By creating a categorical rule, the Court confers constitutional stature equivalent to a physical taking on the economic interest underlying the private use that triggered the government regulation.

This conferral flows from the holding of *Pennsylvania Coal Co. v. Mahon*, which is widely acknowledged as the origin of the regulatory takings doctrine.²⁰⁹ In that decision, the Court announced that government regulation could go too far by restricting property so significantly that the regulation would be functionally equivalent to a physical appropriation or destruction of the property. A key factor used in deciding whether government regulation had gone too far was the extent of the diminution in value caused by the regulation. In determining whether the diminution in value was tantamount to a physical appropriation, only the private economic impact mattered; a legitimate public interest could not save the government action under the Takings Clause.²¹⁰ The functional equivalence reasoning of *Pennsylvania Coal Co. v. Mahon* elevates the private economic interest over the public interest in takings analysis and ties the economic interest directly to the physical takings concept. The implication is that the economic interest at stake in *Mahon*—the right to exploit or the right to an economically viable use—was equivalent to the autonomy interest protected in physical takings.

B. The Impact of Coupling and the Need for Resilience

The previous Section discussed how the economic vision of property is acquiring constitutional stature. A critical question to ask in evaluating the impact of that shift is: Why does this phenomenon matter? This Section will address that question, demonstrating that the intertwining of mainstream economics and property in both the common law and the constitutional setting will have adverse effects on the institution of property. The coupling ignores alternative visions of

context of the American Great Plains, the results were disastrous. For further description of those results, see generally Worster’s award-winning book, *supra* note 204.

206. *Lucas v. S.C. Coastal Council*, 505 U.S. 1003, 1028 (1992).

207. *Id.* at 1028–29.

208. *See id.* at 1015–17.

209. 260 U.S. 393 (1922). *See* Stewart E. Sterk, *The Federalist Dimension of Regulatory Takings Jurisprudence*, 114 *YALE L.J.* 203, 208–18 (2004) (discussing the impact of *Mahon*); *but see* J. Peter Byrne, *Ten Arguments for the Abolition of the Regulatory Takings Doctrine*, 22 *ECOLOGY L.Q.* 89, 97–106 (1995) (disputing the impact of *Mahon*).

210. *See Mahon*, 260 U.S. at 413.

property that have played important roles in the development of our social and political systems and in our normative structures. These alternative visions have been an important part of the property dialogue, and to exclude them now from that dialogue will produce significant skewing of property norms, principles, and policies. Rather than develop from a single normative theory, property rights have evolved slowly over time through a dialectical process of debate, deliberation, and adjustment dependent on the individual context, the prevailing social and physical conditions, and the cultural norms of a particular time and place. By coupling property to only one theory, lawmakers are opening the door to misalignments of property arrangements with norms and conditions (both socioeconomic and biophysical), and are threatening the resilience of property. Section II.B.1 discusses the dangers of this coupling process, while Section II.B.2 examines the importance of resilience to the institution of property.

1. The Dangers of Coupling

The coupling of the economic vision of property with constitutional theory poses significant dangers. One basic problem is that it retells the constitutional history of property in a way that is much clearer and simpler than what many scholars believe to be the case. Those scholars agree that, around the time of the passage of the Takings Clause, government extensively regulated private property without paying just compensation and that the only type of compensable government appropriation was a physical taking.²¹¹ Many scholars also agree that no single political ideology clearly controlled the revolutionary and early nationhood periods; rather, ideologies changed significantly over time and, even within particular camps, many different views of property flourished.²¹² In addition, decisions of early courts show that they considered the public interest

211. See HORWITZ, *supra* note 187, at 63–67 (noting that little compensation was given until the 1820s and 1830s and that the idea of compensation was only gradually accepted); Hart, *supra* note 134, at 1259–81 (surveying colonial land use laws that regularly regulated private land use for a broad array of purposes promoting the public good and concluding that the Court’s assumption of a historical practice of minimal land use regulation was unsupported); Treanor, *supra* note 62, at 695–98 (noting that colonial laws and early statehood constitutions did not recognize a right to just compensation); see also Hart, *supra* note 63, at 1099–101 (concluding that the conventional history of early American land use law is misplaced and wrong). For a discussion of the role of history, see Eric T. Freyfogle, *Ethics, Community, and Private Land*, 23 *ECOLOGY L.Q.* 631, 632–46 (1996).

212. See, e.g., NEDELSKY, *supra* note 59, at 92–93 (discussing some of the different views at play among the Federalists); Nestor M. Davidson, *Sketches for a Hamiltonian Vernacular as a Social Function of Property*, 80 *FORDHAM L. REV.* 1053, 1059–61 (2011) (linking Hamilton to a theory of property based on social function as well as entrepreneurship); William Michael Treanor, *The Original Understanding of the Takings Clause and the Political Process*, 95 *COLUM. L. REV.* 782, 819–25, 855–80 (1995) (examining different theories and understandings of the Takings Clause and proposing a process-based approach). For further discussion of the political theory debates surrounding property, see generally ALEXANDER, *supra* note 31.

important even in the context of claims of constitutionally protected property.²¹³ The constitutional focus was not just on the affected private property rights or their defensive need for protection.²¹⁴ History instead tells us that the story of property has involved a partnership and “continuing struggle . . . between public and private” ordering, not a separation into two different spheres.²¹⁵ The evolution of property has not been about either/or choices between private rights and collective interests but rather about the appropriate mix or “interface between individual and collective entitlements,”²¹⁶ given cultural, political, socioeconomic, and resource conditions. The “historical compact” of the Takings Clause that some Supreme Court Justices have espoused in recent years thus is not so clear or so certain as they suggest.²¹⁷

Further, if the coupling of the economic vision with constitutional theory continues, the relationship between common law property and constitutionally protected property will be fundamentally altered. The common law courts of each state have traditionally been the guardians of the institution of property. Those courts define the basic rules, standards, and policies governing property rights for daily use.²¹⁸ The U.S. Supreme Court may, at times, need to examine those state

213. The noxious use cases are good examples of this point. *See, e.g.*, *Hadacheck v. Sebastian*, 239 U.S. 394, 410–11 (1915); *Mugler v. Kansas*, 123 U.S. 623, 662–68 (1887); *see also* *Pa. Coal Co. v. Mahon*, 260 U.S. 393, 420–21 (1922) (Brandeis, J., dissenting) (discussing the importance of the public interest).

214. Horwitz attributes the gradual acceptance of the compensation principle to the development of the common law limitation on recovery of consequential damages in nuisance, the switch from jury to judge, and the need to allow public improvements without tremendous liability resulting from the impact of public works on private landowners. HORWITZ, *supra* note 187, at 66, 71–74, 84–85, 97–99. Treanor notes how the courts sometimes denied compensation for land taken to build roads because of the republican theory that regarded property as a creature of the state held subject to the public good. Treanor, *supra* note 62, at 695. For a discussion of the defensive nature of constitutionally protected property, see generally Frank I. Michelman, *Constitutional Protection for Property Rights and the Reasons Why: Distrust Revisited*, 1 BRIGHAM-KANNER PROP. RTS. CONF. J. 217 (2012).

215. David Kennedy, *Some Caution About Property Rights as a Recipe for Economic Development*, 1 ACCT., ECON., & L., Iss. 1, Art. 3, at 21–23 (2011), available at <http://www.law.harvard.edu/faculty/dkennedy/publications/Property%20Rights%20and%20Economic%20Development.pdf>; *see* OSTROM, *supra* note 198, at 14 (“Institutions are rarely either private or public—‘the market’ or ‘the state.’ Many successful . . . institutions are rich mixtures of ‘private-like’ and ‘public-like’ institutions defying classification in a sterile dichotomy.”).

216. Fennell, *supra* note 33, at 16–17. Although some scholars have made persuasive cases for a particular theory of constitutionally protected property, others have made similar cases for different theories. *Compare, e.g.*, Michelman, *supra* note 199, at 1227 with EPSTEIN, *supra* note 44, at 15–16. When there is room for reasoned debate, a one-dimensional view does not make sense—not given property’s dialectical process of evolution. *See generally* OSTROM, *supra* note 198.

217. *See, e.g.*, *Lucas v. S.C. Coastal Council*, 505 U.S. 1003, 1027–28 (1992).

218. *See Stop the Beach Renourishment, Inc. v. Fla. Dep’t of Env’tl. Prot.*, 130 S. Ct. 2592, 2597–99 (2010).

law principles to evaluate government action affecting property rights in light of constitutional protections for property.²¹⁹ Some Justices of the Supreme Court have questioned state courts' role in defining property, warning state courts to be careful to engage only in "*objectively reasonable application* of relevant precedents"²²⁰ and requiring a search for "background principles" grounded in the common law of property or nuisance in evaluating the validity of laws producing a loss of all economically viable use under the Takings Clause.²²¹ They have also decried the use of "nonexistent rules of state substantive law"²²² and directed state courts to require "some sort of individualized determination" in evaluating land use regulatory conditions.²²³ Rather than the bottom-up approach allowing property law to be defined at the ground level, a top-down process of defining property would control.²²⁴ Rather than applying a deferential standard of review, the Justices would narrow the discretion of state courts in reviewing conditions imposed in a land use regulatory process.

This less flexible, top-down approach represents a fundamental change in how the institution of property operates, limiting the ability of common law property to consider and adjust to interactions between formal rules and structures and informal norms, practices, and customs. Such interactions are needed to ensure that the formal side of property does not become too rigid or embedded with options and assumptions leading property down a singular path that may ignore important potential adjustments.²²⁵ Our property system has a number of options embedded in its structure that allow property to work well at the margin, with minimal judicial review, by making assumptions about strategic choices and default rules.²²⁶ Property's embedded options, for example, include assumptions about the allocation of risks of gains and losses between grantors and grantees and about the gatekeeper's or owner's flexibility to structure her own deals.²²⁷ Other

219. See, e.g., *id.*

220. *Lucas*, 505 U.S. at 1032 n.18.

221. *Id.* at 1029.

222. *Stevens v. City of Cannon Beach*, 510 U.S. 1207, 1211 (Scalia, J., dissenting from denial of certiorari).

223. *Dolan v. City of Tigard*, 512 U.S. 374, 391 (1994).

224. See Nestor M. Davidson & Rashmi Dyal-Chand, *Property in Crisis*, 78 *FORDHAM L. REV.* 1607, 1613–14 (2010) (discussing the top-down versus bottom-up debate).

225. See Kennedy, *supra* note 215, at 54 (expressing a similar view).

226. See Lee Anne Fennell, *Options for Owners and Outlaws*, 1 *BRIGHAM-KANNER PROP. RTS. CONF. J.* 239, 241–48 (2012); Fennell, *supra* note 33, at 17; Kennedy, *supra* note 215, at 4; see also Gregg P. Macey, *Coasean Blind Spots: Charting the Incomplete Institutionalism*, 98 *GEO. L.J.* 863, 884–89, 896–908 (2010) (discussing how embedded "scripts" result from and affect a firm's decisionmaking process and handling of strategic behavior transaction costs). See generally IAN AYRES, *OPTIONAL LAW: THE STRUCTURE OF LEGAL ENTITLEMENTS* (2005) (exploring the application of option theory to property law).

227. See Fennell, *supra* note 226, at 239–40. For cases dealing with allocation of risk under a lease, see, for example, *Smith v. McEnany*, 48 N.E. 781 (Mass. 1897), and *Paradine v. Jane*, 82 Eng. Rep. 897 (K.B. 1647).

embedded options include a preference for private ordering of property rights and a property analytic for choosing between private and public ordering by determining whether a property rule is market supporting or market distorting.²²⁸

The economic vision of property embeds choices and assumptions that direct property arrangements along certain normative paths, limiting interactions with and access to other paths. Efficiency, the guiding norm of the economic vision,²²⁹ has led to a focus on allocation of interests in resources and away from other important norms and factors. Because of this focus, distribution of resources has become at best an assumption of trickle-down economics²³⁰ and at worst an assumed responsibility of some other institution or system.²³¹ While a strategy of exclusion incentivizes property owners to maximize wealth, it also creates a “dichotomy of choices” that leads to inflexibility.²³² Rigidity tends to develop in a more formal structure of organization over time as behavioral patterns and cultural norms are used to deal with complex and uncertain situations.²³³ Over time the patterns and norms lose their connection to their original context and become drivers of behavior in and of themselves, “fram[ing] the shared meanings, norms, and identities.”²³⁴ Called “scripts” by one property scholar,²³⁵ these recurring patterns of interaction limit and obscure choices.²³⁶ Over time, the resulting rigidity and misalignments in operating procedures, rules, and structures can lead to inefficient decisions.²³⁷

By moving towards a top-down approach to defining the permissible norms and meaning of property, and by building the economic vision into the constitutional theory of property, the Supreme Court is also incorporating the scripts that produce rigidity and misalignments. The exclusion strategy, for example, is now being used to justify the Court’s per se approach to treating all permanent physical invasions by government as compensable takings, no matter how small the invasion, how beneficial the invasion to the private landowner, or how significant the public interest.²³⁸ In other words, the traditional meaning of the exclusion strategy, with all of its advantages and weaknesses, has become part of the constitutional history of property even though the institution of property has

228. See Kennedy, *supra* note 215, at 8.

229. See *supra* note 30 and accompanying text.

230. See, e.g., Paul Krugman, Opinion, *Corporate Cash Con*, N.Y. TIMES, July 4, 2011, at A19 (criticizing the idea of trickle-down economics).

231. See Kennedy, *supra* note 215, at 29, 38.

232. See Fennell, *supra* note 33, at 15.

233. See Macey, *supra* note 226, at 884–86, 889.

234. *Id.* at 905.

235. *Id.* at 885–86.

236. See Kennedy, *supra* note 215, at 54; see also Fennell, *supra* note 33, at 13–15.

237. See Macey, *supra* note 226, at 903–06 (discussing the types of script-based transaction costs, their causes, and impacts). For a discussion of the misalignments that can occur when the public interest is not considered in defining private rights in landed property, see generally Sax, *supra* note 51.

238. See, e.g., *Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419, 426 (1982).

evolved beyond a strict exclusion strategy of sole dominion and control. The institution of property has recognized that not all exclusion situations are equal and that some even lead to serious inefficiency problems. Elinor Ostrom, for example, demonstrated how the preference for exclusion and private property rights could cause decisionmakers to ignore mixed private/public arrangements that work much better in certain real-world settings.²³⁹ Robert Ellickson explained how community norms among close-knit groups could lead to cooperative efforts to control freeriding and monitor behavior.²⁴⁰ Michael Heller showed how having too many property decisionmakers with the power to exclude could lead to the tragedy of the anticommons, creating a serious collective action problem.²⁴¹ Formal structures and organizations need the ability to look beyond their internal rules, operations, and pathways to consider other choices. They need the ability to adapt. Human interactions with nature have exhibited a rich variety of property arrangements and practices. The traditional, exclusion approach to property is but one of many alternatives.

The preference for private ordering and individual rights found in the economic vision has also been used by the Court to impose stricter, clearer, and more formal takings rules. In two critical decisions, the Court adopted a categorical approach for evaluating the validity of conditions imposed in the regulatory process under the Takings Clause. The cases announced a two-part test to evaluate the degree of connection, under the Takings Clause, between the condition, the public interest, and the perceived public harms caused by the proposed use. The first test, set out in *Nollan v. California Coastal Commission*, required government to establish an essential nexus between the regulatory condition imposed on the landowner and a legitimate state interest being protected by the condition.²⁴² The second test, established in *Dolan v. City of Tigard*, required government to show that a rough proportionality existed between the regulatory condition and the projected impact of the proposed land development.²⁴³ Under these tests, the Court heightened and narrowed the standard of review, at least for the types of regulatory conditions in dispute, to focus on “harm causation

239. See OSTROM, *supra* note 198, at 12–13; Elinor Ostrom, *The Challenge of Crafting Rules to Change Open Access Resources into Managed Resources* 3 (Workshop in Political Theory & Policy Analysis, Working Paper No. W07-11, June 28, 2007), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1304827; see also Fennell, *supra* note 33, at 15–16. See generally Carol M. Rose, *Ostrom and the Lawyers: The Impact of Governing the Commons on the American Legal Academy*, 5 INT’L J. COMMONS 28 (2011) (discussing the influence of Ostrom’s work on legal scholars).

240. See ROBERT C. ELICKSON, ORDER WITHOUT LAW: HOW NEIGHBORS SETTLE DISPUTES 124–26 (1991); Robert C. Ellickson, *Of Coase and Cattle: Dispute Resolution Among Neighbors in Shasta County*, 38 STAN. L. REV. 623, 673–76 (1986).

241. Michael A. Heller, *The Tragedy of the Anticommons: Property in the Transition from Marx to Markets*, 111 HARV. L. REV. 621, 673–76 (1998). An anticommons can arise when multiple parties have the right to exclude others from a common or shared resource, resulting in underconsumption of the resource.

242. 483 U.S. 825, 836–37 (1987).

243. 512 U.S. 374, 386, 391 (1994).

and abatement.²⁴⁴ Both tests assume a “singular narrative of exploitation”²⁴⁵ and a “sufficiently robust” vision of constitutionally protected property that can control overreaching by government.²⁴⁶

Judicial resistance to the rules-based approach of *Nollan* and *Dolan* has been widespread among lower courts and even among subsequent Supreme Court decisions—at least until the Court’s 2013 decision in *Koontz v. St. Johns River Water Management District*.²⁴⁷ This resistance may be due to the difficulty of applying any single or formulistic vision of constitutional property to the complex and variable situations involving ordinary property.²⁴⁸ Clear rules generally do not work well when a lot of variety exists.²⁴⁹ In any event, the Court in *Koontz* clarified that *Nollan* and *Dolan* may apply even when a permit condition involves the payment of money²⁵⁰ and when a permit is denied after the applicant refuses to transfer property.²⁵¹ Writing for a 5-to-4 majority, Justice Alito explained that the key is not whether government has the power to deny a permit outright but whether a government condition “impermissibly burden[s] the right not to have property taken without just compensation.”²⁵²

This problem of rigid, embedded options or scripts compounds the built-in inertia of property,²⁵³ which results in large part because of its constitutional protection²⁵⁴ and increasingly because of the growing dominance of the economic vision. The mere presence of the Takings Clause in the Constitution provides a psychological lift to property owners, framing the way government regulations of property are viewed even when those regulations deal with public goods or serious problems with commons, like our global climate system. The problem of sea level rise, for example, is now being attacked as part of an agenda to undermine fundamental private property rights, regardless of the soundness of the science or the reason for the rise.²⁵⁵ The inertia flowing from the psychology of the Takings

244. Mark Fenster, *Takings Formalism and Regulatory Formulas: Exactions and the Consequences of Clarity*, 92 CALIF. L. REV. 609, 630 (2004).

245. *Id.* at 654.

246. *Id.* at 652.

247. See 133 S.Ct. 2586 (2013). Compare *id.*, with *Lingle v. Chevron USA Inc.*, 544 U.S. 528, 539–40 (2005) (limiting application of *Nollan* and *Dolan*). For further discussion of the consequences of takings formalism, see generally Fenster, *supra* note 244.

248. See Fenster, *supra* note 244, at 651–54.

249. See Poirier, *supra* note 165, at 124–33.

250. See *Koontz*, 133 S.Ct. at 2603.

251. See *id.* at 2595–96.

252. *Id.* at 2596.

253. One scholar has described the related problems of skewing and distortion resulting from the signaling function of property. See Nestor M. Davidson, *Property and Relative Status*, 107 MICH. L. REV. 757, 762 (2009).

254. See Eduardo Moises Penalver & Sonia K. Katyal, *Property Outlaws*, 155 U. PA. L. REV. 1095, 1133–35 (2007).

255. See Alon Harish, *New Law in North Carolina Bans Latest Scientific Predictions of Sea-Level Rise*, ABC NEWS (Aug. 2, 2012), <http://abcnews.go.com/US/north-carolina-bans-latest-science-rising-sea-level/story?id=16913782>; Rebecca Leber, *Virginia Lawmaker Says ‘Sea Level Rise’ Is a ‘Left Wing Term,’ Excises It from State Report on*

Clause impacts how government solves serious contemporary problems arising from new environmental or socioeconomic challenges. Economic views of property have led to repeated calls for clearer, stronger property rights, producing categorical approaches to constitutionally protected property that increase the costs of making changes affecting property rights even when those rights are part of the problem being addressed.²⁵⁶ Though clearer property rights provide important advantages, they are neither adaptive nor comprehensive.²⁵⁷ Clarity requires simpler thinking and rules, which in turn contributes to the problem of scripts-based costs. Over time, the scripts lose their context and speak for themselves, adding to the inertia and foreclosing choices.

The problem of rigid, embedded scripts also enhances the monopoly power of property owners. Because of their decisionmaking authority over their property, owners have the power to veto or block uses, transfers, or access to their property.²⁵⁸ The monopoly power of property owners inhibits the emergence of new property regimes, as well as the development of new patterns and scales of use that better reflect societal interests and resource supplies.²⁵⁹ The common law of property currently relies on some important checks on the monopoly power of property owners. One important safeguard arises from interactions occurring between the formal structure of property and informal customs and practices. To a large extent, the common law of property has embraced those interactions, recognizing that informal practices provide real-life context and information to fill in the gaps and inform the meaning and operation of formal rules.²⁶⁰ Without those interactions, the institution of property would lose an important feedback loop. Common law property also has developed a tolerance for “property outlaws,”²⁶¹ allowing some experimentation with extralegal arrangements and recognizing devices for eventually incorporating those arrangements into the formal property

Coastal Flooding, CLIMATEPROGRESS (June 10, 2012, 6:59 PM), <http://thinkprogress.org/climate/2012/06/10/496982/virginia-lawmaker-says-sea-level-rise-is-a-left-wing-term-excises-it-from-state-report-on-coastal-flooding/>.

256. See Kennedy, *supra* note 215, at 2.

257. See *id.* at 42–45, 54–55 (explaining how clear rules pose problems); Poirier, *supra* note 165, at 150–60 (extolling the virtues of vagueness).

258. See Lee Anne Fennell, *Order with Outlaws?*, 156 U. PA. L. REV. PENNUMBRA 269, 273–74 (2007); see also JEREMY WALDRON, *THE RULE OF LAW AND THE MEASURE OF PROPERTY* 14–21 (2012) (attributing the monopoly power of property to the view that the rule of law privileges property rights over other forms of law).

259. See Carol M. Rose, *Property and Emerging Environmental Issues—The Optimists vs. The Pessimists*, 1 BRIGHAM-KANNER PROP. RTS. CONF. J. 405, 417–18 (2012); Rose, *supra* note 30, at 95–97.

260. See ELLICKSON, *supra* note 240, at 124–26 (discussing the role of informal norms and practices); Henry E. Smith, *Community and Custom in Property*, 10 THEORETICAL INQUIRIES L. 5, 24–34 (2009) (discussing the role of custom).

261. EDUARDO MOISES PENALVER & SONIA K. KATYAL, *PROPERTY OUTLAWS: HOW SQUATTERS, PIRATES, AND PROTESTERS IMPROVE THE LAW OF OWNERSHIP* 30–32, 55–63 (2010).

structure under certain limited circumstances.²⁶² These extralegal arrangements give us important information about the formal property system, helping to encourage discourse about the arrangements, identify market problems, and, when compelling reasons have been presented, overcome political inertia.²⁶³

The checks allowed by common law property are important because property does not have an effective built-in monitoring system, other than its incremental, precedent-guided decisionmaking process that occurs at the margin. An internal monitoring system exists when a system's rules, principles, and processes cause the system to identify cheating and other performance problems and to self-correct. Property lacks a monitoring system because of its inherent promotion of self interest, its almost single-minded focus on allocation of interests, its failure to deal adequately with distribution of property interests, and its limited, micro-level approach to the management function of property. Without a monitoring system, property would not have a way to deal with one of its fundamental moral problems: property's lack of disinterestedness, one of the key norms enhancing a system's moral authority.²⁶⁴ Because private property rights are inherently self-promoting²⁶⁵ (and are even assumed to be so under the economic vision), property needs external checks to serve as monitoring systems and to push for correction and adaptation. Those systems preferably will have some redundancy to increase the chances of identifying errors and ensure effective checking. These monitoring systems help to give the institution of property some sense of moral authority and acceptance.²⁶⁶ If the economic vision of property continues to take over the constitutional theory of property, the checks on common law property and its overall resilience will be in danger.

262. *Id.* at 125–65. Hernando de Soto uses the phrase “extralegal arrangements” in his book on *The Mystery of Capital*. See HERNANDO DE SOTO, *THE MYSTERY OF CAPITAL* 108 (2000). In that book he identifies extralegal arrangements as an important distinction between our property law system and those of developing countries. *Id.* at 106–10. American property law learned how to incorporate extralegals into the system gradually and, in the process, strengthened its capitalist market. *Id.* at 148–50. Examples of such devices include adverse possession, mistaken improver, and prescriptive rights. See *id.* at 113–35.

263. See PENALVER & KATYAL, *supra* note 261, at 125–42.

264. Disinterestedness means a freedom from bias and self-interest. Inherently self-promoting, our system of private property lacks such impartiality. Cf. ROBERT K. MERTON, *THE SOCIOLOGY OF SCIENCE: THEORETICAL AND EMPIRICAL INVESTIGATIONS* 275–77 (1973) (describing disinterestedness and three other moral principles governing scientific inquiry). But see Thomas W. Merrill & Henry E. Smith, *The Morality of Property*, 48 WM. & MARY L. REV. 1849, 1849–52 (2007) (arguing that property has a moral core tied to its exclusion rights).

265. See Rose, *supra* note 30, at 93–94.

266. For further discussion of the moral authority of property, see Merrill & Smith, *supra* note 264; Carol M. Rose, *The Moral Subject of Property*, 48 WM. & MARY L. REV. 1897 (2007).

2. *The Importance of Resilience*

An effectively functioning property system needs resilience to adapt, to self-correct, to make the adjustments needed to handle changing socioeconomic, cultural, political, and biophysical conditions. Property needs resilience to avoid the problems caused by the coupling of the economic vision of property and the constitutional theory of property. Because of property's built-in inertia, its inherent monopoly power, its embedded options with their individualistic focus, and its lack of an effective internal monitoring system, we cannot afford to let our property system lose its resilience. It is only with a resilient system that we will get the back-and-forth, give-and-take, adjustments and readjustments—the dialectical and adaptive interactions—needed to handle the changes and the surprises that are inevitable.

Any perspective that thinks of property solely or mainly as a human system ignores important cross-system interactions and dependencies. Inherent in the very definition of property is an in rem relationship between the property owner and a resource (often physical) that has implications for the rest of the world. To the extent that the creation or use of property involves natural resources, the property relationship depends on those resources at least in the short term to thrive,²⁶⁷ and third parties are likely to be excluded from those resources or adversely affected by the relationship at some point in time. Property also is a subsystem of the larger, self-organizing natural system, and actions within the property system resonate as inputs and feedbacks, affecting the larger system's ability to self-adjust to change through interactions among its components. Property, in other words, is closely intertwined with our natural environment, and the resilience of our property system is closely tied to the resilience of natural systems. It is time to reorient our property system within the larger system framework and assume that the larger system reflects processes and interactions that we do not yet fully understand.

The concept of resilience is very important to the management of ecological systems.²⁶⁸ Scientists have used ecological resilience in at least two different ways. When the focus is the predictability and constancy of a particular equilibrium state, scientists have defined ecological resilience as the ability to return to that equilibrium state after a disturbance.²⁶⁹ If more than one stable or equilibrium state is assumed, then ecological resilience may be “measured by the magnitude of disturbance that can be absorbed before the system redefines its

267. In the long term, this dependency may turn on society by failing to account for serious harmful spillovers. See Rose, *supra* note 30, at 93 (discussing how property systems evolve in times of abundance and scarcity).

268. See Alyson C. Flournoy, *Protecting a Natural Resource Legacy While Promoting Resilience: Can It Be Done?*, 87 NEB. L. REV. 1008, 1024 (2009) (discussing the value of the resilience concept in informing a new approach to environmental law and policy). See generally BRIAN WALKER & DAVID SALT, *RESILIENCE THINKING* (2006) (discussing the importance of resilience thinking to environmental management).

269. See Lance Gunderson, *Resilience, Flexibility and Adaptive Management—Antidotes for Spurious Certitude?*, 3 CONSERVATION ECOL. No. 1, art. 7 (1999).

structure by changing the variables and processes that control behavior.”²⁷⁰ The resilience of the ecosystem thus would depend on its ability to cope or adapt to changes, whether abrupt or gradual.²⁷¹ Understood as “forcings,” these changes may affect the system’s stable equilibrium state, causing reactions that cascade throughout the system and subsystems and sometimes even result in a new system state or regime with a different trajectory of evolution in space and time.²⁷² When an ecosystem is unable to handle the changes and flips to another system state, the new state will have different structural and functional characteristics that may alter species’ composition and provide different ecosystem services.²⁷³ The crises could include unexpected changes in a locality caused by larger-scale processes that are not familiar to the local population, cross-scale surprises produced by the interaction of larger-scale processes and variables internal to the affected area, and novel surprises produced by new processes, factors, or states.²⁷⁴ Ensuring that ecosystems are resilient enough to deal with these changes is thus an integral part of modern management efforts.²⁷⁵

For decades scientists have been studying the management of natural systems by examining the dynamics of change in social–ecological systems. This focus on interactions among social and ecological systems recognizes that ecosystem management must take into account human intervention and integrate social with ecological goals. A social–ecological system is a multidisciplinary model of interactions among ecological and social components occurring at multiple levels and “emphasizes the ‘humans-in-nature’ perspective” integrating ecosystems and human society.²⁷⁶ Just as ecosystems tend to go through different stages of an adaptive cycle, social–ecological systems also have different phases of change.²⁷⁷ Understanding the change dynamics of a social–ecological system can provide insights into the timing and nature of effective management decisions of key governance institutions (like property) that link ecological and social systems. Rigid management systems, for example, may make decisions that can alter the space–time trajectory of the ecological systems. The disastrous ecological changes

270. *Id.*

271. *Id.*

272. *See* WALKER & SALT, *supra* note 268, at 53–55, 59, 85–87. *See generally* STEPHEN JAY GOULD, *THE STRUCTURE OF EVOLUTIONARY THEORY* (2002) (analyzing the evolutionary theory of punctuated equilibrium).

273. *See* LANCE GUNDERSON ET AL., *ASSESSING RESILIENCE IN SOCIAL–ECOLOGICAL SYSTEMS: WORKBOOK FOR PRACTITIONERS 5* (2.0 version, 2010), *available at* <http://www.redagres.org/Assessing%20Resilience%20in%20Social-Ecological%20Systems.pdf>; WALKER & SALT, *supra* note 268, at 93–94.

274. *See* Gunderson, *supra* note 269, at 2–3.

275. Earlier approaches to natural resource management focused on making those resources usable (e.g., cutting trees or draining wetlands) and controlling various characteristics of those resources (e.g., installing levees for flood control). *See* WALKER & SALT, *supra* note 268, at x–xi, 29–30; Butler, *supra* note 40, at 943–47.

276. GUNDERSON, *supra* note 273, at 6; *see also* WALKER & SALT, *supra* note 268, at 31–36.

277. *See* GUNDERSON, *supra* note 273, at 7, 22–23; WALKER & SALT, *supra* note 268, at 74–87.

resulting in the Dust Bowl provide excellent evidence of the altering of space–time trajectories because of a one-dimensional vision of property. Instead of seeing the stability provided by the complex alliances of the plains’ biological and physical systems, landowners simply saw fields of grass waiting to be plowed.²⁷⁸ When the coupled social or governance system lacks flexibility and is locked in time, adaptive management of ecological systems generally does not work.²⁷⁹

Research on complex social–ecological systems provides a framework for thinking about effective management strategies, including property regimes. That research highlights the complex and uncertain nature of ecological systems and of their interactions with social systems.²⁸⁰ To handle the uncertainty and complexity, decisionmakers must have the power to manage for resilience. This requires the flexibility to adapt to changing conditions, enough diversity in the social–ecological systems to stabilize and function after a disturbance, and sufficient redundancy of systems to cover loss of important functions or damage to components.²⁸¹ Management approaches are more likely to achieve long-term success if they recognize the importance of understanding the “dynamics of change,” as opposed to controlling the ecosystem for specific goals like short-term gain or maximum production.²⁸² In this context, “success” involves governance of “relationships between society and ecosystems in ways that sustain ecosystem services”²⁸³ while promoting social goals. By understanding the dynamics of change within social–ecological systems, management efforts can focus on allowing interactions that lead to adjustments or create “opportunities for recovering or reorganizing following a disturbance.”²⁸⁴ Treating social–ecological systems holistically focuses attention on how the parts contribute to the dynamics of the whole, not simply on acquiring a “detailed understanding” of each part.²⁸⁵ The abilities to adjust, to self-organize, and to interact are important aspects of resilient social–ecological systems.²⁸⁶ These functions require adaptive management that encourages diversity, flexibility, inclusiveness, and innovation.²⁸⁷

Using the lens of adaptive governance concepts developed for social–ecological systems, the resilience of property refers to the ability of a property

278. For a poignant description of this ecological disaster, see WORSTER, *supra* note 204, at 182.

279. See GUNDERSON, *supra* note 269, at 2; WALKER & SALT, *supra* note 268, at 69–72, 85–87.

280. See GUNDERSON, *supra* note 273, at 4; WALKER & SALT, *supra* note 268, at 31–36.

281. See WALKER & SALT, *supra* note 268, at 34–35, 59–63, 69–72, 145–48; see also Flournoy, *supra* note 268, at 1024. See generally WALKER & SALT, *supra* note 268 (discussing ecosystems crossing thresholds).

282. GUNDERSON, *supra* note 273, at 4; see also WALKER & SALT, *supra* note 268, at 28–38.

283. GUNDERSON, *supra* note 273, at 8.

284. *Id.* at 6.

285. *Id.*; see also WALKER & SALT, *supra* note 268, at 31–36.

286. See GUNDERSON, *supra* note 273, at 6.

287. See *id.* at 8; WALKER & SALT, *supra* note 268, at 69–72, 145–48.

system to absorb change and still thrive or persist—the capacity of the property system to handle disturbances without becoming too unstable to function effectively or without tipping over into a new property (and behavioral) regime. Functions critical to a resilient property system would include the ability to adjust or adapt, the capacity to interact with ecological and other systems to identify changing conditions and problems, and the power to self-organize and respond to change. A resilient property system thus would need to encourage flexibility to respond to change, innovation to develop methods of adaptation, inclusiveness to consider external forces and integrate external options, diversity to provide alternative paths and options for property arrangements, and redundancy to insure against the losses of key functions or components.²⁸⁸

What types of changes or disruptions would a property system need to absorb or handle over time? The changes could include local or cross-scale events that arise from larger-scale processes like sudden changes in Supreme Court decisions governing constitutionally protected property.²⁸⁹ A Supreme Court decision, for example, that suddenly shifts from a balancing test to a categorical approach in evaluating government action under the Takings Clause or that finds clarity in the historical compact of the Takings Clause when reasonable minds disagree could disrupt state and local governments; they understandably could be relying on the grayness of prior law or on their longstanding power to define property as a matter of state law.²⁹⁰ Supreme Court decisions that limit how state courts may define background principles of their own common law to that of a certain time or source also could disrupt state and local governments.²⁹¹ The changes could include cross-scale surprises resulting from interactions of larger-scale processes and internal variables. For instance, changes in federal laws

288. See GUNDERSON, *supra* note 273, at 8; WALKER & SALT, *supra* note 268, at 69–72, 145–48.

289. Changes in Supreme Court jurisprudence could be due to a number of factors—for example, a change in the composition of the Court. See, e.g., Scott R. Meinke & Kevin M. Scott, *Collegial Influence and Judicial Voting Change: The Effect of Membership Change on U.S. Supreme Court Justices*, 41 LAW & SOC'Y REV. 909, 909–12 (2007).

290. Scalia's statements in *Stop the Beach Renourishment* and *Lucas* about the clarity of the historical compact or meaning of the Takings Clause are arguably examples of the second situation. See *Stop the Beach Renourishment, Inc. v. Fla. Dept. of Env'tl. Prot.*, 130 S.Ct. 2592, 2606 (2010) (plurality opinion); *Lucas v. S.C. Coastal Council*, 505 U.S. 1003, 1015–18 (1992). Some would also view the Court's shift in *Lucas* from a factor balancing test to a per se approach to economic regulation as an example of the first, especially given the language in *Mahon* about the necessity of ad hoc inquiries. Compare *Lucas*, 505 U.S. at 1015–18, 1027–29 (taking a categorical approach whenever a regulation denies all economically beneficial use unless preexisting background principles exist), with *Penn Cent. Transp. Co. v. City of New York*, 438 U.S. 104, 124 (1978) (using a factor balancing approach for regulatory takings), and *Pa. Coal Co. v. Mahon*, 260 U.S. 393, 416 (1922) (stating that the matter of a confiscatory regulation is a “question of degree” that “cannot be resolved by general propositions”).

291. See *Lucas*, 505 U.S. at 1031 (directing the state court to “identify background principles of nuisance and property law that prohibit the uses he now intends in the circumstances in which the property is presently found”).

governing regulatory takings risk analysis²⁹² could conflict with physical conditions in particular areas, suddenly making management efforts to deal with serious resource or ecological crises very difficult or prohibitively expensive. Those same changes could conflict with the social or economic conditions of a particular place, like serious inequalities in the distribution of affordable housing, effectively preventing localized solutions. Local disruptions could arise from rigid adherence to traditional interpretations of the right to exclude in the landlord/tenant setting without consideration of an area's housing or worker conditions, effectively depriving classes of people of fundamental legal rights or of habitable premises.²⁹³ Novel changes most often result from advances in technology; the invention of the airplane, for instance, posed an unanticipated change for traditional courts defining land ownership rights under the *ad coelum* doctrine as extending up to the heavens and down to the depths of the earth.²⁹⁴

What features of a property system would promote its resilience? A good starting point is the variety or diversity that currently exists in the American property system. Because the states have always had the power to define, develop, and regulate property within their jurisdictions,²⁹⁵ our institution of property has a diversity of approaches built into it. At least 50 different property “experiments” are being conducted, perhaps more if local courts and legislative bodies are considered. Had the allocation of power over the development of property law been handled differently and had the federal government been given authority over all matters involving property, the experimentation among the state and local governments now occurring would not be possible. This experimentation allows states to test different approaches to natural resource and social problems involving property and to tailor solutions to local conditions. If the Supreme Court preempts some of this power over property by continuing to intertwine the economic vision of everyday property with constitutionally protected property, the

292. See Protecting the Property Rights of the American People, Exec. Order No. 13,406, 71 Fed. Reg. 36,973 (June 28, 2006); see also Lynda L. Butler, *The Politics of Takings: Choosing the Appropriate Decisionmaker*, 38 WM. & MARY L. REV. 749, 780–802 (1997) (discussing the impact of takings impact assessments under a predecessor, Exec. Order No. 12,630, 3 C.F.R. 554 (1989)).

293. For examples of courts refusing to take such a rigid approach, see *Javins v. First Nat. Realty Corp.*, 428 F.2d 1071, 1073 (D.C. Cir. 1970) (recognizing the need to reform traditional landlord/tenant principles to include a landlord's obligation to maintain habitable premises); *State v. Shack*, 277 A.2d 369, 372–74 (N.J. 1971) (defining the right to exclude in a more flexible way to balance the conflicting rights of a landowner and the migrant workers residing on his land).

294. See *Hinman v. Pac. Air Transp.*, 84 F.2d 755, 758 (9th Cir. 1936) (resolving a claim that plane flights posed a physical invasion violating the landowner's right to exclude from the airspace above his land, as recognized under the *ad coelum* doctrine, by revising the doctrine to accommodate technological advances like airplane flight).

295. See *Stop the Beach Renourishment, Inc. v. Fla. Dept. of Env'tl. Prot.*, 130 S.Ct. 2592, 2597 (2010).

ability to experiment—to diversify and develop alternative paths—could be significantly limited.²⁹⁶

The common law decisionmaking process underlying the development of property law also provides much needed flexibility. With its incremental decisionmaking approach, common law property has the ability to adapt more easily, at least at the margin, than a legislatively or constitutionally mandated system; even when a change in the common law of property occurs, the amount of the change tends to be smaller in scope and more tied to the facts of the dispute. For centuries courts have recognized the ability of the common law of property to adapt, to grow, to consider new information, and to meet changing conditions or needs.²⁹⁷ When developed areas became more crowded, for example, courts gradually changed the tests for determining whether a trespass or private nuisance existed; because of conditions on the ground, courts reconsidered and recalibrated the standards and rules defining the nature and scope of property rights.²⁹⁸ The courts also have developed property doctrines, like accretion, avulsion, and erosion, that are inherently flexible, making the choice of property rule and resolution of the dispute dependent on the nature of the shifting physical conditions underlying the dispute. For example, whereas the doctrines of erosion and accretion govern the allocation of title when slow, imperceptible changes are occurring to coastal land, the doctrine of avulsion applies when the changes are sudden and rapid.²⁹⁹

In recent years some judges and commentators have become increasingly vocal about the need to limit property's flexibility when constitutional principles are involved. Scholars, for example, have criticized those who favor an ad hoc, balancing approach over a more rigid categorical one, pointing to the benefits of crystalline rules over muddy standards.³⁰⁰ They also have stressed the need for

296. For discussions of the federalism implications of takings law, see generally Carol M. Rose, *What Federalism Tells Us About Takings Jurisprudence*, 54 UCLA L. REV. 1681 (2007), and Sterk, *supra* note 209.

297. See generally *Dimick v. Schiedt*, 293 U.S. 474 (1934); *Int'l News Serv. v. Associated Press*, 248 U.S. 215, 249–55, 262–64 (1918) (Brandeis, J., dissenting); *Javins*, 428 F.2d at 1074–79; *Hinman*, 84 F.2d at 758; *Prah v. Maretti*, 321 N.W.2d 182, 187–91 (Wis. 1982). *But see infra* notes 309–14 and accompanying text (discussing Scalia's views, expressed in *Stop the Beach Renourishment*, that early common law courts did not have the power to change property law).

298. See, e.g., *Hinman*, 84 F.2d at 758; *Fancher v. Fagella*, 650 S.E.2d 519, 555–56 (Va. 2007) (redefining ownership rights under the *ad coelum* doctrine to reject an absolute rights perspective and changing from a noxious plant test to a harm test).

299. See *Stop the Beach Renourishment, Inc.*, 130 S.Ct. at 2598–99; *Nebraska v. Iowa*, 143 U.S. 359, 361 (1892); 3 AMERICAN LAW OF PROPERTY § 15.26 (A. Casner ed., 1952).

300. See, e.g., Richard A. Epstein, *The Property Rights Decisions of Justice Sandra Day O'Connor: When Pragmatic Balancing Is Not Enough*, 1 BRIGHAM-KANNER PROP. RTS. CONF. J. 177, 177–80 (2012). *But see* Poirier, *supra* note 165, at 150–51 (discussing the benefits of vague, muddy rules). See generally Carol M. Rose, *Crystals and Mud in Property Law*, 40 STAN. L. REV. 577 (1988) (discussing the differences between muddy and clear approaches in property law).

adherence to what they see as the founding fathers' clear vision of property.³⁰¹ Similarly, in several cases involving takings challenges, Supreme Court Justices have suggested that property's ability to evolve—its elasticity—should be limited by what they see as a clear historical compact underlying the Takings Clause specifically and property's constitutional role more generally.³⁰² In his majority opinion in *Lucas v. South Carolina Coastal Council*, Justice Scalia was careful to circumscribe common law property's ability to handle changing conditions, limiting it to preexisting background principles in the common law of property and nuisance.³⁰³ Never mind that state legislative bodies have also played a role in developing property and regulating its spillovers. Never mind that such a time-and source-bound approach is impoverished by a lack of contemporary knowledge of the landscape scale of ecosystems. Never mind that such an approach basically rules out regulations aimed at long-term environmental or social harms, especially those suffered by future generations, cumulative in nature, or intensified by other conditions. Never mind that the regulations may be dealing with harm that arises indirectly and decades after interactions with other systems. In his dissent to a denial of certiorari in *Stevens v. City of Cannon Beach*, Justice Scalia confirmed the restrictiveness of his preexisting background principles approach when he issued a warning about a state court's interpretation of its common law of property; Joined by Justice O'Connor, he proclaimed that a state court could not invoke "nonexistent rules of state substantive law," nor retroactively develop and apply background principles that define away property rights as if they never existed.³⁰⁴

In his opinion in *Stop the Beach Renourishment v. Florida Department of Environmental Protection*, Justice Scalia provided further explanation.³⁰⁵ In *Stop the Beach Renourishment*, the Court faced the question of whether a judicial interpretation of property principles could constitute a taking. The Florida Supreme Court had interpreted its common law of property to allow the state to fill in its own seabed and restore beaches eroded by several hurricanes, even though the beach restoration added about 75 feet of dry sand between privately owned beachfront property and the water. The Florida court reasoned that the restoration resulted from sudden exposure of previously submerged lands, which belonged to the sovereign state under its common law.³⁰⁶ By concluding that the Florida Supreme Court's decision "did not contravene the established property rights" of beachfront landowners,³⁰⁷ a majority of the Supreme Court was able to sidestep the question of a judicial taking. Writing for the majority, Justice Scalia explained that the Florida Supreme Court's decision was consistent with its background

301. See, e.g., Richard A. Epstein, *More Fidelity, Less Translation: A Loyalist's Response to Professor Treanor*, 1 GREEN BAG 2D 185, 187–88 (1998).

302. See *infra* notes 303–14 and accompanying text.

303. See 505 U.S. 1003, 1029 (1992).

304. 510 U.S. 1207, 1211 (1994) (Scalia, J., dissenting).

305. See 130 S.Ct. 2592 (2010).

306. See *id.* at 2598–99.

307. *Id.* at 2613.

principles of property law.³⁰⁸ Elsewhere, however, in a section joined only by Justices Roberts, Thomas, and Alito, Justice Scalia soundly rejected the argument that common law judges need flexibility in defining property rights and resolving property disputes.³⁰⁹ He explained that the argument “has little appeal when directed against the enforcement of a constitutional guarantee adopted in an era when . . . courts had no power to ‘change’ the common law.”³¹⁰ In his view “courts have no peculiar need of flexibility”—no more than legislators.³¹¹ Disagreeing with Justice Kennedy’s view that the common law allows for incremental change, Justice Scalia stressed that when the Constitution was adopted, “courts had no power to ‘change’ the common law.”³¹² Further, even after they assumed this power in the nineteenth century, the “new ‘common-law tradition . . . [did not allow] for incremental modifications to property law.”³¹³ At most, all courts could do was “clarify and elaborate” on the meaning of common law property.³¹⁴

This more crystalline and more rigid approach to constitutional and thus common law property ignores a fundamental difference between the two. Common law property developed slowly over time through a dialectical process that evaluates property’s rules, standards, and policies in light of societal and biophysical conditions. In handling property disputes under the common law, courts generally recognize that they can consider new information, emerging technologies, and changing conditions.³¹⁵ The muddiness of common law property, in other words, encourages dialogue and inclusion of ideas.³¹⁶ Part of that dialogue involves the emergence of extralegal arrangements that challenge the status quo and question current rules. The common law’s tolerance for informal norms and “property outlaws” makes the property system more inclusive and open.³¹⁷ These norms, customs, and outlaw arrangements provide invaluable information about how property operates in the real world and about alternative approaches. They identify the pressure points within the property system—areas where property is not working well and where adjustments are needed.³¹⁸ They tell property owners where the paths of cooperation and neighborliness are and, through those paths, soften the harsh edges of the formal property system. Takings law does not have

308. *See id.* at 2612.

309. *See id.* at 2606–07, 2609 (plurality opinion).

310. *Id.* at 2609 (plurality opinion).

311. *Id.*

312. *Compare id.* at 2613–15 (Kennedy, J., concurring), *with id.* at 2606 (plurality opinion). Justice Kennedy disagreed, maintaining that state courts “operate under a common-law tradition that allows for incremental modifications to property law” and that the general constraint on this power is the due process clause. *Id.* at 2613–15 (Kennedy, J., concurring).

313. *Id.* at 2606 (plurality opinion).

314. *Id.* at 2609 (plurality opinion).

315. *See supra* notes 297–99 and accompanying text.

316. *See Poirier, supra* note 165, at 150–55.

317. *See* ELLICKSON, *supra* note 240, at 124–26 (discussing the role of informal norms and practices); Penalver & Katyal, *supra* note 254, at 1164–65 (discussing the role of outlaw arrangements); Smith, *supra* note 260, at 6 (discussing the role of custom).

318. *See* Fennell, *supra* note 258, at 271.

any paths of cooperation or tradition of neighborly relations in the eminent domain setting. No cooperative relationship can exist when government is forcing property owners to give up their property. No informal norms can be found in takings law to soften its hard edge. That absence is precisely why common law property needs to maintain its built-in flexibility and have the ability to rely on informal “relationship-preserving norms” to promote cooperation within the community.³¹⁹

Checks on a system are very important to its resilience. Because property lacks an effective internal monitoring system,³²⁰ those checks must include the existence of feedback loops or avenues of communication, as well as the tolerance for informal norms and outlaw arrangements discussed earlier. Because of the impact of mainstream economics on property law, individual property owners may lack the necessary incentives to manage their property for resilience. Checks on the property system help to correct that problem by providing information about the system’s operation and about conditions within which it operates. Information must flow back to those reevaluating property principles to enable the system to identify problems and pressure points. Custom, informal norms, and outlaw arrangements all act as feedback loops. Equity also acts as an important check on property, prompting—even demanding—change for the sake of fairness.³²¹ Without the constraint of equity, in particular, property probably would lack even a second-best moral authority to justify its effects on individual and collective interests.³²² The categorical approaches and time-restricted visions of property impede, if not eliminate, the exercise of discretion, the reliance on informal norms, and the consideration of new information and conditions.

The features that make property resilient and the checks that allow it to self-correct would not function effectively if property’s evolutionary process were not fluid and dynamic. The next Section discusses the dialectic process and relational planes that have shaped the evolution of property.

III. THE IMPORTANCE OF THE DIALECTICAL PROCESS AND RELATIONAL PLANES

Scholars have advanced a number of theories to explain the evolution of property.³²³ Demsetz, for example, posited that property rights develop in response to costs and benefits,³²⁴ while Coase famously observed that high transaction costs

319. Lisa Bernstein provided invaluable insights about the differences between “relationship-preserving norms” and “end-game norms” in the context of contract law. See Lisa Bernstein, *Merchant Law in a Merchant Court: Rethinking the Code’s Search for Immanent Business Norms*, 144 U. PA. L. REV. 1765, 1796–1814 (1996).

320. See *supra* notes 263–66 and accompanying text.

321. See, e.g., *Int’l News Serv. v. Associated Press*, 248 U.S. 215, 236–40 (1918); *Producers Lumber & Supply Co. v. Olney Building Co.*, 333 S.W.2d 619, 624 (Tex. App. 1960).

322. See Rose, *supra* note 266, at 1899–900. But cf. Merrill & Smith, *supra* note 264, at 1849–52 (arguing that property has a moral core tied to its exclusion rights).

323. For discussions of different theories, see Krier, *supra* note 30, at 145–46, 149; Rose, *supra* note 30, at 94–95.

324. See Demsetz, *supra* note 30, at 347.

could affect the cost-benefit calculus and should be considered in determining where to place the entitlement or property right.³²⁵ Locke linked the establishment of property rights to rewarding labor,³²⁶ and Hume theorized that behavioral conventions spontaneously arose from shared interests, leading to recognition of property rights as protection against exploitation.³²⁷ Many contemporary law professors agree that the efficiency norm is the key to an effective property system.³²⁸ Some also recognize the role of informal norms in the evolution of property.³²⁹ These theories help to define and test key perspectives that have shaped societies and their property regimes. Regardless of the theory of evolution subscribed to property, it is clear that the formation of property rights has involved a dialectical process that has helped to preserve the resilience of our property system. That process needs to continue if the institution of property is to handle the tough problems of tomorrow.

Part III.A discusses the nature, functions, and limitations of the dialectical process shaping property's evolution. Part III.B focuses on the relational planes of property: the planes of interacting perspectives that define the property landscape, or all the possible property arrangements in relation to particular perspective-based preferences.

A. The Nature, Functions, and Limitations of the Dialectical Process

To say common law property developed through a dialectical process is to acknowledge the complexities of a property system in a pluralistic society.³³⁰ Those complexities arise from competing visions of property and of its relationship with political, economic, social, and natural systems. Common law property handled the complexities and tensions through a dialectical process of give-and-take, adjustment and readjustment, debate and deliberation about property's role, norms, policies, and functions.³³¹ By its very nature, the common

325. See Ronald Coase, *The Problem of Social Cost*, 3 J.L. & ECON. 1, 13–19, 27–28 (1960).

326. See LOCKE, *supra* note 126, at ch. 5. For contemporary critiques of Locke's views on property, see Eric R. Claeys, *Productive Use in Acquisition, Accession, and Labour Theory*, in PHILOSOPHICAL FOUNDATIONS OF PROPERTY LAW (James E. Penner & Henry E. Smith eds., forthcoming Jan. 2014), available at <http://ssrn.com/abstract=2066166>; STEPHEN R. MUNZER, A THEORY OF PROPERTY 254–91 (1990); JEREMY WALDRON, THE RIGHT TO PRIVATE PROPERTY 137–252 (1988).

327. See Krier, *supra* note 30, at 145–46, 150–51.

328. See, e.g., NOZICK, *supra* note 53, at 18–19; Richard A. Epstein, *The Allocation of the Commons: Parking on Public Roads*, 31 J. LEGAL STUD. 515, 528–33 (2002).

329. See, e.g., ELLICKSON, *supra* note 240, at 124–26; Smith, *supra* note 260, at 7–10.

330. See Poirier, *supra* note 165, at 124–30 (discussing the complexities of property).

331. Other scholars have also discussed the evolution of property in terms of dialectics, especially the development of constitutional property. See, e.g., Alexander, *supra* note 38, at 261–62; Fennell, *supra* note 226, at 260 (describing how property is the result of an “iterative process”); Frank I. Michelman, *Possession vs. Distribution in the*

law resolves property conflicts incrementally through a process of reasoned deliberation one case at a time—at the margin—while maintaining its stability at the core. Even when the legislature has stepped in to resolve conflicts more comprehensively, the common law still controls much of the process of reform, defining the issues and conflicting interests as well as the legal principles at play. In some ways property is, as one scholar put it, “a never-ending dispute.”³³²

Elinor Ostrom’s work, in particular, provides evidence of this dialectical process in operation and helps to explain the fluid way property has evolved. Her work shows how property arrangements draw from real-life practices for the cultural, ecological, and behavioral details to make the theory work.³³³ Her methodology involves “moving back and forth from the world of theory to the world of action”³³⁴ and identifying institutional features that produce successful systems over the long term.³³⁵ As Fennell aptly explained, Ostrom’s working principle was: “A resource arrangement that works in practice can work in theory.”³³⁶

The sources of the tensions or surprises that affect the efficacy of a property system and guide its evolution are varied. The tensions and surprises may come from informal norms, customs, and practices happening on the ground despite—or in the absence of—a formal arrangement.³³⁷ They may reflect changing social or biophysical conditions that threaten the viability of some or all of the current system or that question its continued legitimacy. They may result from the emergence of a new ideology, perspective, technology, or understanding that demands readjustment in property’s formal rules or structure.³³⁸

The dialectical process enables our property system to handle these tensions and unexpected events. Interactions occurring through the process act as a check on any one view or theory becoming so extreme, excessive, or dominating that the efficacy of the system is challenged. The dialectical process also performs a corrective function, allowing the system to identify and address problems, ineffective arrangements, or outdated rules. Without the possibility of adjustments, pressure points would be ignored until too late. The process opens the property system to consideration of different views, making property more inclusive and

Constitutional Idea of Property, 72 IOWA L. REV. 1319, 1324–29, 1349–50 (1987); Poirier, *supra* note 165, at 160–61, 186–90. Cf. Carol M. Rose, *Property Rights, Regulatory Regimes and the New Takings Jurisprudence—an Evolutionary Approach*, 57 TENN. L. REV. 577 (1990) (discussing the evolution of property and regulatory regimes).

332. Poirier, *supra* note 165, at 190.

333. See Fennell, *supra* note 33, at 9–12.

334. OSTROM, *supra* note 198, at 45.

335. See Fennell, *supra* note 33, at 9–10, 21–22.

336. *Id.* at 10.

337. See ELLICKSON, *supra* note 240, at 124–26 (describing how society punishes or rewards certain behaviors based on their comportment with certain norms).

338. New advancements in telecommunications and the Internet, for example, continue to raise questions about how or whether to recognize property rights. See, e.g., James Grimmelmann, *The Internet Is a Semicommons*, 78 FORDHAM L. REV. 2799, 2799–801 (2010).

thus more varied—important features of a resilient system.³³⁹ Calls for greater clarity in defining property rights would, if taken as far as urged, undermine property's ability to have this dialogue.³⁴⁰ The functions of checking, adjustment, and inclusion all are important to protecting and promoting the resilience of property. They ensure that property is viewed with a healthy dose of skepticism, using tension, disagreement, and debate to flush out issues and point to needed reform.

The dialectical process admittedly has some limitations. Though the process may provide the most realistic assessment of how property evolves, the process embraces the complexities of property in an open-ended, almost infinite way. Most people have enough difficulty dealing with one or two variables, much less a seemingly endless supply. Economic and other theories of property tend to control real-world complexities by focusing only on a few variables, assuming away or holding the others constant.³⁴¹ A focus on the dialectical process does not allow for such assumptions. As Poirier pointed out in the context of constitutional property, it is difficult to think in terms of such an “unbounded process.”³⁴²

It is also difficult to talk about property as a constantly changing concept, on the one hand, and a source of stability, on the other. This type of talk puts property theorists in a “double bind” by claiming the importance of permanence while facing the reality of constant change.³⁴³ Yet true permanence in property would require an unwavering commitment to a limited number of foundational values and an adherence to clear rules that would belie the history of our property system and the pluralist nature of our society.³⁴⁴ Such permanence would “petrify property”³⁴⁵ and undermine its resilience. Such permanence would require an agreement on those foundational values that would exclude, by design, conflicting values and visions, very likely because of political or moral ideology.³⁴⁶

The incremental approach of common law decisionmaking, when combined with the tension-driven nature of the dialectical process, produces much uncertainty and back-and-forth. To those who prefer clarity and the quick path to a

339. As Nestor Davidson observed, property law “eschews singular narratives . . . , focusing instead on the varied and often competing normative and instrumental concerns embodied in the institution.” Davidson, *supra* note 161, at 1600.

340. See Poirier, *supra* note 165, at 186–87.

341. Economics, for example, assumes everyone is a rational actor, that more is better than less, and that all preferences have a monetary equivalence. See *supra* note 173 and accompanying text.

342. Poirier, *supra* note 165, at 190.

343. *Id.* at 187–88; see Laura S. Underkuffler-Freund, *Takings and the Nature of Property*, 9 CAN. J. L. & JURISPRUDENCE 161, 167–69, 191–92 (1996).

344. See Poirier, *supra* note 165, at 188–90.

345. *Id.* at 189.

346. See *id.* at 116–17 (discussing the political difficulties of implementing clear rules about takings); see also Joan Williams, *The Rhetoric of Property*, 83 IOWA L. REV. 277, 308–15 (1998) (providing examples of proponents of republicanism who moved toward a more egalitarian version of the theory based on what was more popularly acceptable).

certain end state, this leaves much to be desired. The problem is intensified in the constitutional setting when constitutional principles start off at the wrong place with the wrong set of legal rules and norms, producing a much longer period of constitutional harm. As Richard Epstein observed, a slow entrenchment on property rights under an incremental process is nevertheless an entrenchment producing harm.³⁴⁷ Missteps or errors in common law property decisions, of course, can be cured by legislative action. A legislature's hands are tied to a greater extent with constitutional property, but even here legislative action still may be able to provide greater protection to property rights in certain settings.³⁴⁸ Further, the calls for clarity in common law and constitutional property assume a universality of foundational principles that simply defies the evolutionary history and complexity of both. Such calls assume that property exists in a world of simplicity. Yet the path of evolution rarely is easy or certain.

Though the dialectical process poses problems for the management of property and the predictability of property arrangements, that process is critical to preserving the resilience of property. If that process is halted, if it is misdirected or contained, if it is misunderstood as undermining investment in property arrangements, property will lose its ability to evolve, to change, to deal with new conditions, problems, and challenges. If, instead, that process is allowed to continue, property will have the flexibility to handle those new problems and challenges by modernizing internal norms, redefining functions, or recognizing new relational perspectives. Part III.B explores some of the relational perspectives shaping property.

B. A More Comprehensive View of Property's Relational Planes

A number of key perspectives affect the evolution of property. When the continuum of possible property arrangements interacts with one of these perspectives, a relational plane defining the possible interactions between the property arrangements and the perspective-based preferences can be imagined. As more relational planes are added, the institution of property can be thought of as a series of stacked or rotating planes, with the x-axis of each plane always representing the continuum of possible property arrangements and the y-axis representing a continuum of preferences tied to a particular perspective. The dialectical process would move the institution of property among the different quadrants of a plane and among the different perspective-based planes, depending on the nature and resolution of conflicts and tensions. The image of a series of stacked or rotating planes would better reflect what the landscape of property resembles (or could resemble) because of the different value preferences

347. See Epstein, *supra* note 300, at 181–83.

348. Indeed, after the Court's decision in *Kelo*, many state legislatures adopted statutes that defined public use under their state constitutions to exclude economic development. See, e.g., Mihaly & Smith, *supra* note 6, at 707–08. See generally DANA BERLINER, *OPENING THE FLOODGATES: EMINENT DOMAIN ABUSE IN THE POST-KELO WORLD* (2006), available at <http://www.castlecoalition.org/pdf/publications/floodgates-report.pdf> (discussing how courts and legislatures reacted to the *Kelo* decision).

represented by each plane and the complex interactions within and among the planes.

Why is the image of a plane and of a series of planes so important? The image gets us out of dichotomous, either/or thinking, away from choosing between different end states and perspectives and toward a focus on interactions and more complex possibilities. The image is important because of the relationship between the institution of property and a number of key perspectives. Property, for example, is fundamentally linked to a country's political system, expressing and shaping core political values, and to the generation of wealth in its economic system. Property is linked to the social and cultural systems, which provide the humanistic details that can make or break the property system, and to natural systems that both provide vital inputs but also set limits on future growth.³⁴⁹ To recognize only one perspective would deny the importance of other perspectives to the evolution of property and could eventually lead to its destabilization. The recognition of key relational planes of property allows for a check on any particular perspective and builds in redundancy to ensure that property issues affecting the viability of human and natural systems are being examined from different perspectives.

Property scholarship has focused on a number of these relational planes in relative isolation. Much of that scholarship has forcefully made the case for the correctness of a particular perspective and sometimes even shown how that perspective accounts for and integrates other perspectives. Perhaps the best example of such scholarship advances the economic theory of property as the most likely explanation of property's evolution and as the best justification for its continued existence.³⁵⁰ This scholarship has been an invaluable part of the process of thinking about property's role in a modern society and has pushed the development of the economic theory of property from a single, one-way view of property's evolution (from commons to private property) to theories of multiple dimensions.³⁵¹ Now that the economic perspective has begun to affect and control the definition of constitutionally protected property, it is time to focus on the impact of that perspective on the resilience of property and on property's other relational planes.

One of those other relational planes involves the relationship between property arrangements and preferences for natural systems. The property–nature plane shown earlier provides a visual of two continua of interacting preferences as

349. See Rose, *supra* note 30, at 95–97. Greg Alexander has described takings law discourse as always dialectical, not linear or static, because of its ongoing social dialectic about the degree of responsibility an individual member owes to the community. See Alexander, *supra* note 38, at 262.

350. See *supra* notes 30–32, 188–202 and accompanying text.

351. Compare Demsetz, *supra* note 30, at 350 (focusing on the single, one-way path), with Abraham Bell & Gideon Parchomovsky, *The Evolution of Private and Open Access Property*, 10 THEORETICAL INQUIRIES L. 77, 78–79 (2009) (discussing three dimensions of property). See generally Krier, *supra* note 30 (discussing different theories of the origin and evolution of property rights).

a way to break the spell of dichotomous thinking and either/or end-state ideals. This Section now builds on that single plane image to propose an N-dimensional model of property, where N represents the number of distinct, independent, perspective-based preferences or variables. For example, another type of relational plane involves the relationship between property and political systems. Here the set of possible property arrangements would interact with the set of possible political arrangements, ranging from a preference for an extensive regulatory state to a laissez-faire approach.³⁵² Considering the dynamics between the plane's continua or axes helps to identify and highlight the range of possible preferences in a way that better reflects the relational complexities of humans, their property, and their government. Focusing only on the ends of each continuum instead results in a clash of end-state ideals that become oversimplified myths of the property-government dynamic.³⁵³ In the context of this dynamic, those myths could be summarized as: (1) property as evil (reflecting the end-state preferences for collective public rights and an extensive regulatory state); (2) property as good, as the centerpiece of a productive life (reflecting the end-state preferences for individual private property rights and limited, laissez-faire government); (3) property as vacillating between good and evil (reflecting the end-state preferences for an extensive regulatory state or individual private property rights, depending on the context); and (4) property as capricious and unpredictable (reflecting the end-state preferences for collective public rights and limited, laissez-faire government).³⁵⁴ The problem with these myths is that they do not even begin to capture the complexities of real-life situations or of possible individual preferences, and they ignore other relational planes. Though my N-dimensional model of property is much more complex than a one- or two-dimensional model, those who advocate for one perspective (and thus one relational plane) are grossly overselling and overestimating the power of their view.

A brief discussion of the evolution of land distribution laws demonstrates how property arrangements go back and forth between continua and relational planes. In feudal England, land was the main source of wealth and means of control over society. Feudal laws governing allocation and distribution of interests in land became tools for shaping the political, agricultural, social, tax, and military systems.³⁵⁵ The allocation of property interests was incidental to the support and

352. Somewhere on that continuum, for instance, would lay the "community-based democratic resolutions of property use." Poirier, *supra* note 165, at 186.

353. For examples of some myths of property ownership, see Eric T. Freyfogle, *Owning the Land: Four Contemporary Narratives*, 13 J. LAND USE & ENVTL. L. 279, 286–303 (1998).

354. These oversimplified end-state ideals or myths are adaptations of John Adams's model for studying individual response to risk and uncertainty. See JOHN ADAMS, RISK 40–41 (1995); see also MARK MASLIN, GLOBAL WARMING: A VERY SHORT INTRODUCTION 36–42 (2004) (discussing Adams's four myths of nature in the context of global warming).

355. See generally J.H. BAKER, AN INTRODUCTION TO ENGLISH LEGAL HISTORY (4th ed., 2002) (discussing the development of feudalism and the English legal system).

operation of these systems.³⁵⁶ In its prime, the feudal system reflected a preference for top-down control of the allocation of property interests by the Crown.³⁵⁷ Though private interests existed, the top-down approach allowed government to affect those interests with a sort of “public” or government interest (defined in this context as the interests of the Crown) by imposing conditions and restrictions designed to protect and promote the feudal system and its functions.³⁵⁸ The masses of people who did not receive any private property interests sometimes participated in an open-field system of agriculture involving a mix of lands worked in common for their lord as well as assigned plots.³⁵⁹ The property–government and property–social systems planes dominated the definition and evolution of property during this period.

In America, survival and economic development dominated land distribution laws soon after the first settlement in Jamestown. Because of the vast, untapped natural resources of America, much work had to be done to establish a thriving colony; land distribution laws were vital to that effort, providing incentives for settling the land, establishing a successful agricultural system, developing an economy, and expanding westward.³⁶⁰ Natural resources not only represented significant challenges for survival, but also targets of economic opportunity. Colonists resisted efforts by the Crown to transplant England’s feudal system.³⁶¹ Over time this resistance enabled the allocation function of property to focus more directly on individual interests and to become a prominent driver of the property-economic systems plane.³⁶² These trends continued in the early statehood period. Land distribution laws provided incentives for food production and economic development (for example, by requiring settlement and planting of crops) and promoted military and national security interests (for example, by

356. See *id.* at 223–29; see also Ellickson, *supra* note 24, at 1387–91 (discussing how the open-field system met the needs of villagers and lords).

357. See BAKER, *supra* note 355, at 224–26, 229–33.

358. Rules, for example, controlled the amount, nature and intensity of uses. See, e.g., *id.* at 59, 264–65, 546–47 (discussing different laws developed to control uses and prevent waste). Also, some fee simple ownership interests automatically terminated if a condition was violated and reverted to the government-approved nobleman imposing the condition. Further, feudal laws prevented free alienation of landed property interests, thus ensuring control of the identity of the landowner who would be performing various obligations for the Crown. See *id.* at 239, 253–54, 260–65.

359. See Ellickson, *supra* note 24, at 1388–91 (describing the open-field system).

360. See BUTLER & LIVINGSTON, *supra* note 52, at 245–46 (discussing how the communal system initially used in Jamestown led to disaster and was replaced in 1619 by the distribution of land rights); *id.* at 262–68 (discussing how land distribution laws were used to encourage economic activity, westward expansion, and other purposes).

361. See *id.* at 246–52.

362. See *id.* § 8.1 (discussing the development of land distribution laws in the Virginia colony and the tensions between colonists and the Crown). See generally HARRIS, *supra* note 203, at 394–411 (discussing the contributions of the original colonies to the development of general land policy).

encouraging enlistment and insulating more urban areas from Native Americans).³⁶³

During the revolutionary and early statehood periods, property also became part of the fabric of the American political system. While some prominent leaders proclaimed the protection of property to be the main goal of government, many also appeared to view property as including a civic or social obligation.³⁶⁴ Land distribution laws not only required certain conditions to be met before conveyance could occur but also provided for uncompensated forfeiture for failure to improve after conveyance.³⁶⁵ For a while, such forfeiture even appeared consistent with the intent and scope of the Takings Clause of the U.S. Constitution. As one commentator explained, forfeiture generally was viewed as “a comparatively extreme form of land use regulation” that was not subject to the Takings Clause instead of as an actual government appropriation of land that required compensation.³⁶⁶ Also, lawmakers in the early republic viewed land grants as benefitting not only the private landowner but also the community or general public.³⁶⁷ Over time, the practice of forfeiture stopped, and land distribution became mainly about allocating interests in land.

Today, land distribution generally occurs through marketplace transactions. This shift in transfer method parallels a greater emphasis on the economic function of property and a rejection of the natural law basis of property rights.³⁶⁸ The resulting explosion in land development has led to sprawling development and a diminishing supply of developable land. Remarkably, as land and natural resources have become scarcer, government has required greater accountability from landowners, and some scholars have advanced the need for reaffirmation of a social obligation theory of property.³⁶⁹ Courts have reinterpreted nuisance actions to allow recovery for certain forms of pollution, and localities have adopted zoning and environmental laws to protect wetlands, coastal dunes, flood-prone lands, historic properties, and even scenic views.³⁷⁰ As governmental

363. See, e.g., BUTLER & LIVINGSTON, *supra* note 52, at 268–79 (discussing Virginia’s early statehood land distribution laws).

364. See *supra* notes 51–60, 87–89 and accompanying text.

365. See, e.g., BUTLER & LIVINGSTON, *supra* note 52, at 245–303 (discussing the seating, cultivation, and other requirements of Virginia’s land distribution laws during the colonial and early statehood periods); John Hart, *Forfeiture of Unimproved Land in the Early Republic*, 1997 U. ILL. L. REV. 435, 435–39 (discussing forfeiture for nonimprovement of conveyed land). See generally HARRIS, *supra* note 203 (discussing the development of the land policy and laws in the United States).

366. Hart, *supra* note 365, at 439.

367. See BUTLER & LIVINGSTON, *supra* note 52, at 274–77, § 8.3; Hart, *supra* note 365, at 437.

368. See HORWITZ, *supra* note 187, at 31–53; Thomas, *supra* note 83, at 355–56.

369. See, e.g., Alexander, *supra* note 95.

370. See, e.g., *Adams v. Cleveland-Cliffs Iron Co.*, 602 N.W.2d 215, 219–21 (Mich. Ct. App. 1999) (allowing recovery in private nuisance but not trespass for airborne pollutants); see also RESTATEMENT (FIRST) OF TORTS §§ 822, 826 (1939). See generally 1–2 NICHOLAS A. ROBINSON, ENVIRONMENTAL REGULATION OF REAL PROPERTY (discussing environmental regulation of land use).

entities have realized that the earth is now full, the property–nature relational plane is being reconsidered in ways that implicate the civic or social obligation theory and that involve greater government intervention.

IV. SOME CONCLUDING REMARKS: THE PROPERTY DIALECTIC AND THE CHALLENGES AHEAD

To be effective, a property system needs to consider and account for the complexities of a modern society. An effective property system must be able to handle problems, challenges, and changing conditions—whether internal or external. If the system is too rigid, too one-dimensional, too defined by a single perspective, it will not have the ability to respond to future disruptions and surprises. The system will not be open to the other perspectives needed to understand a particular problem and the role of property rights in causing or solving the problem; nor will it have the information needed to confront the nature and scope of the real-life situation. Over the centuries the institution of property has dealt with changing conditions, knowledge, and societal needs through the dialectical process driving its consideration of issues, setting of priorities, and defining of preferences. Though this process may not be sufficient to solve complex problems, it is necessary. Common law property, in other words, has a resilience that allows it to adapt, through formal and informal means, to disturbances, disruptions, and changing conditions. The adaptation process may be slow, but it adapts nonetheless.

One of the reasons why a multi-perspective approach to property rights is needed is that the institution of property plays a vital role in the key systems of complex societies. The institution of property—that is, the set or collection of possible property arrangements—interacts with the other systems in complex ways that are important to understanding the source of a problem or the nature of a potential solution. A perspective that is too clear, too simple, too rigid will miss those complexities formed by the systems' relational planes. A property system that does not have interdisciplinary inclusion will not be able to develop solutions having interdisciplinary coherence. Rather, the thinking will be static and path dependent on the assumptions, values, and choices embedded in a particular perspective.

The mainstream economic perspective dominating property theory today makes too many assumptions and choices that limit the pathways to understanding problems and developing solutions. It ignores the full panoply of possible property arrangements and the interactions with other perspectives even when those arrangements or relational interactions better reflect real-life situations. To make matters worse, the mainstream economic vision is being coupled with constitutional protection of property, further locking in the assumptions, values, and choices of the singular perspective. Serious challenges, like climate change, that jeopardize the continued stability of complex societies will need a property system that has interdisciplinary inclusion and coherence, realistic assessment of ground conditions, and a broader view of the functions and goals of property.