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The Liberal Commons

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The Liberal Commons

Hanoch Dagan† and Michael A. Heller‡

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1. INTRODUCTION

Following the Civil War, black Americans began acquiring land in earnest; by 1920 almost one million black families owned farms. Since then, black rural landownership has dropped by more than 98% and continues in rapid decline—there are now fewer than 19,000 black-operated farms left in America. By contrast, white-operated farms dropped only by half, from about 5.5 million to 2.4 million. Commentators have offered as partial explanations the consolidation of inefficient small farms and intense racial discrimination in farm lending. However, even absent these factors, the unintended effects of old-fashioned American property law might have led to the same outcome. Because black farmers often did not make wills, their heirs took the land as co-owners. Over generations, co-owners multiplied, the farms became unmanageable, and the land was partitioned and sold, a seemingly inevitable “tragedy of the commons” in which too many owners waste a common resource. Black rural landownership may seem a dusty topic, peopled with hardscrabble tales of property past. Consider, though, the daunting possibility that property future—think biomedical research, post-apartheid restitution, hybrid residential associations, perhaps cyberspace—may have the same analytic structure, be subject to a similar punishing legal regime, and face the same fate as the black rural landowner.

Overcoming the tragic fate of commons property should not be so hard. Until now, however, legal theorists have often worked within a framework that makes happier solutions difficult to imagine. Typically, theorists have relied on a thin utilitarian language yoked to a narrow conceptual map of property. One school, worrying that rational owners will overconsume commons resources, has embraced the so-called Blackstonian image of private property with “sole and despotic dominion” at the core. Another school, after showing how small, close-knit groups can successfully conserve commons resources, has advocated a version of commons property. For both schools, the image of tragic

2. BLACK FARMING, supra note 1, at 2-3.
4. Garrett Hardin, The Tragedy of the Commons, 162 SCI. 1243, 1244-45 (1968) (introducing the metaphor); see also infra notes 36, 39 (discussing antecedents).
5. See, e.g., Harold Demsetz, Toward a Theory of Property Rights, 57 AM. ECON. REV. 347, 354 (1967). On private property, see 2 WILLIAM BLACKSTONE, COMMENTARIES *2; see also Carol M. Rose, The Several Futures of Property: Of Cyberspace and Folk Tales, Emission Trades and Ecosystems, 83 Minn. L. Rev. 129, 150-51 (1998), which discusses this image of private property.
6. See, e.g., ELINOR OSTROM, GOVERNING THE COMMONS: THE EVOLUTION OF INSTITUTIONS FOR COLLECTIVE ACTION 35-36 (1990); Margaret A. McKean, Success on the Commons: A
outcomes proves an ideal foil, one that implicitly points theorists toward their preferred normative solutions. Privatization seems inevitable for utilitarians with a liberal bent, because they believe that locking people together violates a fundamental concern for individual autonomy. By contrast, illiberal communitarian solutions seem relatively attractive to those who are ready to sacrifice individual autonomy for collective goals. While these underlying normative commitments drive the familiar debate over tragic outcomes, they never surface as the focus for analysis of commons resource management.

In this Article, we argue that linking the utilitarian vocabulary of economic success with the conceptual binary of private/commons property creates too paltry a framework when utility cannot be safely reduced to wealth alone, that is, when the social gains from cooperation are not just fringe benefits, but instead are a major part of what people seek. A better framework focuses more directly on the underlying normative commitments that animate the tragedy debate, and then challenges images that suggest their inevitable friction. Our approach also differentiates among resource dilemmas, for example, distinguishing "open access," in which anyone at all may use a resource and no one may be excluded, from "commons ownership," in which a bounded group, such as a farm family, controls access to a valuable resource. This Article does not discuss the often losing game of open access; rather, we focus exclusively on institutions for commons resource management where participation may be of the essence, the terms for exit matter, and the calculus of utility must account for incommensurable goals.

For this (substantial) subset of commons ownership settings—including, for example, marital property, partnerships, condominium associations, and close corporations—the polarizing vocabulary of the "tragedy of the commons" debate renders invisible the most difficult and important tradeoffs and unintentionally freezes legal imagination and innovation. There is no neutral, pre-political tragedy of the commons: The


7. See infra text accompanying notes 20-24 (discussing the mistaken conflation of open access and commons property). Though Garrett Hardin introduced the term "tragedy of the commons," Hardin, supra note 4, at 1244-45, each example he analyzed could more precisely, but less evocatively, have been described as a "tragedy of open access." Additionally, commons resource institutions may be evaluated along other salient axes, for example, whether restrictions on exit are property or contract based, infra text accompanying notes 79-83; creation is voluntary or involuntary, infra text accompanying note 134 and Subsection III.B.3.b; management is participatory or hierarchical, infra text accompanying note 180; and scope is limited or comprehensive, infra Subsection III.B.3.b.

metaphor itself assumes either open access (anarchy or no law) or law that is hostile to cooperation. Rightly considered, the problem of managing commons resources concerns not only tragic outcomes, but also tragic choices: Are we doomed to choose between our liberal commitments and the economic and social benefits available in a commons? No. Well-structured law can, and often does, mediate liberty and cooperation. Thus, we contest communitarian claims that elevate illiberal commons property and too quickly jettison individual autonomy; equally, we dispute the claims of privatizers who assert an exclusive preference for old-fashioned private property and who disparage cooperation.

For many resources, the most appealing ownership form proves to be a participatory commons regime that also allows members the freedom to come and go. We call this structure a "liberal commons"—an ideal type of ownership distinct from both private and commons property, but drawing elements from each. Any legal regime can qualify as a liberal commons when it enables a limited group of owners to capture the economic and social benefits from cooperative use of a scarce resource, while also ensuring autonomy to individual members who retain a secure right to exit. Constructing a successful liberal commons is always challenging, but it is not an inherently contradictory or practically unattainable goal.9

Legal regimes that account for a substantial and increasing share of social life—again, consider marital property, partnerships, condominiums, and close corporations—can be structured to be consonant with liberal commons goals. When well-tailored, these institutions encourage people voluntarily to come together to create limited-access and limited-purpose communities dedicated to shared management of a scarce resource. They offer internal governance mechanisms to facilitate participatory cooperation and the peaceable joint creation of wealth, while simultaneously limiting minority oppression and allowing exit. On their own, people are already creating pervasive, though unremarked variations on liberal commons themes. We provide a roadmap so law can better support their efforts.

The liberal commons construct should prove useful because it does not simply revisit ongoing liberty/community and private/commons debates. Instead, it reorganizes these debates altogether around a richer set of questions and answers. On the questions front, we expand the evaluative prism for commons resource management from a sole focus on economic success to a broader view that explicitly includes the liberal value of exit as well as noneconomic goals such as the intrinsic good of interpersonal cooperation. We offer a consistent analytic language engaging precisely the

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9. As Michael Walzer notes, "[i]f we want the mutual reinforcements of community and individuality to serve a common interest, we will have to act politically to make them effective. They require certain background or framing conditions that can only be provided by state action." MICHAEL WALZER, ON TOLERATION 111 (1997).
widely shared values that seem to animate our most important commons resource institutions. Also, on a descriptive level, our construct does better than existing property categories at explaining how these institutions work. On the answers front, an attractive feature of our approach is that it bounds the range of solutions consonant with liberal commons values: Our normative umbrella, while capacious, is not unlimited. We employ widely shared conceptions of autonomy (as including a commitment to free exit) and community (as both instrumentally and intrinsically valuable) to provide the liberal commons with a critical edge and normative yardstick. Across the wide variety of existing institutions where it may be deployed, our construct often yields persuasive arguments for legal reform. By rethinking the important questions and answers, and by intertwining descriptive and normative elements, our interpretive approach yields a strong result: We can help reconstruct many areas of law so they are more consistent with their animating values,10 and we can confine the tragedy of the commons metaphor to its proper, limited place in legal theory.

The goals of this Article are to advance a theory of the liberal commons and to demonstrate its usefulness. Part II introduces the problem of tragic choice. Relying on the private/commons dichotomy, theorists have chosen between liberal and communitarian solutions to commons tragedy. Because they have overlooked the liberal commons synthesis, they have missed how law can shift debate in a happier direction. Part III proposes a theory of the liberal commons that engages the problem of tragic choice. We explore the widely shared, often buried, and potentially competing goals that law must reconcile when people want to cooperate in managing a scarce resource but fear abuse. We then discuss the background role that law can play in guiding human behavior. Finally, we set out the three spheres of decisionmaking that characterize the general form of the liberal commons solution—the spheres of individual dominion, democratic self-governance, and cooperation-enhancing exit. These three spheres are the core innovation of our theory: They provide a coherent language for exploring the recurring problems that law must address whenever it mediates liberty and cooperation in commons ownership settings. Part IV rewards the reader's patience with legal theory by bringing the liberal commons down to earth. The example of declining black landownership is complex; we use it here for the limited purpose of suggesting how the American law of co-ownership may systematically thwart cooperation. Current law fails them, and us, because it lacks the three features of a liberal commons, features that, we show, exist in other developed legal systems and are potentially available in our own. While a liberal commons solution may be too late for black farmers, their example can still catalyze useful reforms.

10. See RONALD DWORKIN, LAW'S EMPIRE 52-53 (1986) (developing an interpretive method that "strives to make an object the best it can be").
Can a liberal legal regime facilitate economically and socially productive use of scarce resources in a crowded world where people want or need to work together but worry that others may take advantage of them? A theory of the liberal commons begins to provide an answer.

II. TRAGIC CHOICE IN PROPERTY THEORY

Most lawyers, economists, and other social scientists learn of the "tragedy of the commons" in the first weeks of school, and all are taught that commons property is the axiomatic example of a prisoner's dilemma. The usual economics-oriented reaction has been to build from tragedy to private property; political theorists, by contrast, often solve tragedy by focusing on thickly textured norms and the bonds of close-knit community. Neither camp gives much focused attention to the role of law or to any values other than economic success measured along a single metric. This Part shows how the existing conceptual map pushes theorists into these dichotomous approaches and renders invisible some of the most challenging dilemmas that underlie management of commons resources.

A. A Typology of Property Forms

1. The Standard Conceptual Map

Commons property takes its place alongside private property and state property as part of the well-worn trilogy of ownership forms that constitute the conceptual apparatus of property law. These three species of property are generally understood as ideal types, never present in pure form on the ground, but always available to channel the justificatory and normative debates that are of ultimate interest to legal theorists and reformers. The process of working from idealized types pervades property theory, stretching back past Locke's discussion of ownership and forward to modern images of the commons.

The trilogy is so entrenched as to seem almost natural, beyond serious contestation or elaboration. Even to suggest tinkering raises a red flag for
legal theorists. Nevertheless, the ground is shifting under these old categories to the point that they divert us from seeing new problems and opportunities. Before showing how modern theorists have crafted a crabbed version of the commons, we set commons property in its familiar habitat, nestled alongside private property and state property.

a. Private Property

Private property is a difficult idea to pin down precisely; its boundaries always fray at the edges. However, for legal theorists (and, even more so, for ordinary lay folk), the term seems reasonably coherent and capable of simple definition. For example, Jeremy Waldron defines rules of private property “around the idea that contested resources are to be regarded as separate objects each assigned to the decisional authority of some particular individual (or family or firm).” This simple definition can be multiplied many times over, but all such definitions partake of and help keep current William Blackstone’s oft-repeated definition of private 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.” The image of sole dominion has never adequately described any real-world property ownership, as Blackstone himself recognized. Nevertheless, his image endures through the ages and continues to serve as a focal point for thinking about property, even as people trade old-fashioned private property for the property arrangements that we here call the liberal commons.

b. Commons Property

Some theorists define commons property as a regime in which every individual may use an object of property and no individual has the right to

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15. See, e.g., Lawrence C. Becker, Too Much Property, 21 PHIL. & PUB. AFF. 196, 197-98 (1992). But even Becker notes that “we would lose a great deal of clarity and rigor if [the conceptual apparatus] were ignored.” Id. at 198.
17. Jeremy Waldron, Property Law, in A COMPANION TO PHILOSOPHY OF LAW AND LEGAL THEORY 3, 6 (Dennis Patterson ed., 1996). Frank Michelman focuses attention on his definition of rules for initial acquisition and reassignment. He focuses particularly on the ideas of sole ownership, defined to mean that “[t]he rules must allow that at least some objects of utility or desire can be fully owned by just one person,” and freedom of transfer, defined to mean that “[o]wners are both immune from involuntary deprivation or modification of their ownership rights and empowered to transfer their rights to others at will, in whole or in part.” Michelman, supra note 13, at 5.
18. 2 BLACKSTONE, supra note 5, at *2; see also JOHN LOCKE, TWO TREATISES OF GOVERNMENT 285-302 (Peter Laslett ed., Cambridge Univ. Press 1988) (1690) (basing a theory of private property on the principle that labor removes a resource from the commons and makes it the exclusive property of the laborer).
stop someone else from using the object.\textsuperscript{20} Commentators have repeatedly noted that this standard definition obscures an important distinction between commons property and open access.\textsuperscript{21} Open access (or anarchy or no law) is a "scheme of universally distributed, all-encompassing" privilege.\textsuperscript{22} By contrast, commons property designates resources that are owned or controlled by a \textit{finite} number of people who manage the resource together and exclude outsiders,\textsuperscript{23} what Carol Rose calls "commons on the inside, [private] property on the outside."\textsuperscript{24}

This important distinction notwithstanding, the image of open access still constitutes the core understanding of commons property, at least in Anglo-American jurisprudence. As in the open access case, commons property owners are often imagined to be entitled to unregulated use of the commons resource and entitled to a governance regime in which no control on resource use—no management or investment decision—can be imposed on any single commoner absent that individual’s consent.

c. \textit{State Property}

State property, also called collective property, has been equally central to standard narratives of property.\textsuperscript{25} As Waldron notes, state property can be defined as a property regime in which, "in principle, material resources are answerable to the needs and purposes of society as a whole, whatever they are and however they are determined, rather than to the needs and purposes of particular individuals considered on their own."\textsuperscript{26} Thus, a state property regime is similar to commons property in that no individual stands in a specially privileged position with regard to any resource, but it is

\begin{itemize}
  \item \textsuperscript{20} Thus, Frank Michelman defines a commons property regime as one where "there are never any exclusionary rights. All is privilege. People are legally free to do as they wish, and are able to do, with whatever objects (conceivably including persons) are in the [commons]." Michelman, \textit{supra} note 13, at 5.
  \item \textsuperscript{21} JAMES M. ACHESON, \textit{THE LOBSTER GANGS OF MAINE} 143 (1988); OSTROM, \textit{supra} note 6, at 48, 222 n.23; GLENN G. STEVENSON, \textit{COMMON PROPERTY ECONOMICS: A GENERAL THEORY AND LAND USE APPLICATIONS} 8-10, 39-40 (1991); Ellickson, \textit{supra} note 19, at 1322; Carol M. Rose, \textit{Rethinking Environmental Controls: Management Strategies for Common Resources}, 1991 DUKE L.J. 1, 3 n.4; Thralln Eggertsson, \textit{Open Access Versus Common Property} 8-9 (Oct. 2000) (unpublished manuscript, on file with \textit{The Yale Law Journal}) ("The treatment of common property in the literature is engulfed in confusion. The focal point of the confusion often is [Hardin's paper] that actually discusses open access and its consequences. . . . In retrospect, the confusion over the nature of common property probably was caused substantially by a mix-up of proper names and theoretical categories.").
  \item \textsuperscript{22} Michelman, \textit{supra} note 13, at 9 (discussing commons property).
  \item \textsuperscript{23} OSTROM, \textit{supra} note 6, at 48, 222 n.23.
  \item \textsuperscript{24} Rose, \textit{supra} note 5, at 155. In other words, despite the similarities between open access and commons property (multiple users and the resulting collective action difficulties), commons property is also characterized by an important feature similar to private ownership: In both cases, the users' group is strictly defined. STEVENSON, \textit{supra} note 21, at 57; Ellickson, \textit{supra} note 19, at 1322.
  \item \textsuperscript{25} E.g., Carol Rose, \textit{The Comedy of the Commons: Custom, Commerce, and Inherently Public Property}, 53 U. CHI. L. REV. 711 (1986).
  \item \textsuperscript{26} WALDRON, \textit{supra} note 13, at 40 & n.30.
\end{itemize}
distinguished from commons property because the state has a special status or distinct interest. Although state property has often been considered the main rival of private property, it has become a less and less important category, particularly since state socialism collapsed and privatization has prevailed more and more in theoretical and policy debates. Hence, the trility of property forms often reduces in practice to a dichotomy of private or commons.

2. **Focusing the Debate**

The familiar conceptual map has limited debate in three distinct ways. First, as Heller has shown, the categorization is incomplete, and adding new types such as anticommons property may help make visible previously overlooked problems. Second, as Dagan has argued, the existing categories, such as "private property," may themselves be renegotiated and a richer, alternative conception developed. Third, and the focus of this

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27. *Id.* at 41. Additionally, as Waldron suggests, state property is not just a special case of a private property regime, where the state just acts as another private owner. Instead, at a theoretical level, the state is somehow expressing the collective interest in determining how a state property resource is to be used. The collective, represented usually by the state, holds all rights of exclusion and is the unitary locus of decisionmaking regarding the use of resources. So, a subsidiary set of questions needs to be answered to specify fully a state property regime, including what the "collective interest" is and what procedures will be used to apply that conception to a particular resource. *Id.* at 40.

28. Indeed, part of the political science literature on the commons has come as a response to this "false dichotomy." OSTROM, supra note 6, at 8-13; Bonnie J. McCay & James M. Acheson, *Human Ecology of the Commons, in The Question of the Commons: The Culture and Ecology of Communal Resources* 1, 7, 9, 13 (Bonnie J. McCay & James M. Acheson eds., 1987).

29. To be sure, private property systems do contain, and it seems must contain, public elements, typically organized as state property, such as highways, streets, and public parks. Ellickson, *supra* note 19, at 1381 & n.342, 1397 n.413 (noting the scale and inevitability of public space in cities); Rose, *supra* note 25, at 723 (discussing the effect of state property in enhancing community wealth as well as sociability).

30. E.g., YORAM BARZEL, *ECONOMIC ANALYSIS OF PROPERTY RIGHTS* 99 (2d ed. 1997) (stating that the standard economic analysis of property "tended to classify ownership status into all-or-nothing categories, the latter being termed 'common property' —property that has no restrictions placed on its use").

31. See generally Heller, *supra* note 13 (elaborating this argument).

32. Michael A. Heller, *The Tragedy of the Anticommons: Property in the Transition from Marx to Markets, 111 Harv. L. Rev. 621, 622-26 (1998).* In an anticommons, too many owners may each exclude others from a resource, the mirror image of a commons with a mirror tragedy: Resources may be prone to waste through underuse, rather than from overuse. Heller's image of anticommons property, and the tragedy that can ensue, shows how breaking out of the old trilogy can crystallize emerging property relations that otherwise remain invisible. *Id.* at 633-42 (discussing the consequences of misguided privatization of state property in postsocialist economies); Michael A. Heller & Rebecca S. Eisenberg, *Can Patents Deter Innovation? The Anticommons in Biomedical Research, 280 Sci. 698, 698 (1998)* (showing how efforts to spur private investment in biomedical research by granting property rights may paradoxically result in fewer drugs that save lives).

33. Hanoch Dagan, *The Distributive Foundation of Corrective Justice, 98 Mich. L. Rev. 138,* 149 (1999). Dagan advocates a progressive conception of private property that incorporates our commitments to social responsibility and to equality. According to this conception, private property is not merely a bundle of rights, but also a social institution that creates bonds of commitment and
work, we show that there is significant analytic and normative traction to be gained from synthesizing features of existing types, private and commons, to create vigorous hybrids including the liberal commons.\textsuperscript{34} There is a subtle distinction to be made here: Our new construct is intended to reflect a distinct ideal type of ownership, one that operates at the same level of analysis as private or commons property; it does not refer to the opportunistic mix of private and commons elements that typically appears in any particularized resource management regime.\textsuperscript{35}

The seemingly immutable opposition of private and commons blinkers legal scholars from imagining hybrid legislative and judicial solutions; it presents the tragic but false choice of privatizing a resource or locking people together. Our liberal commons ideal type offers an analytic tool that deliberately elides the familiar legal opposition of private and commons, as well as the more fundamental normative orientation toward liberty or community.

B. Commons Tragedy as Privatization Foil

1. \textit{From Demsetz...}

Echoing a familiar Aristotelian theme,\textsuperscript{36} the conventional wisdom for many social scientists is that commons property generally leads to responsibility among owners and others who live or work with the owner, or are otherwise affected by the owner’s properties. Furthermore, private property necessarily entails distribution, since it is a source of economic and, therefore, also social, political, and cultural rights and powers, the correlative of which are other people’s duties and liabilities. Hanoch Dagan, \textit{Just Compensation, Incentives, and Social Meanings}, 99 \textit{MICH. L. REV.} (forthcoming Oct. 2000); Hanoch Dagan, \textit{Takings and Distributive Justice}, 85 \textit{VA. L. REV.} 741, 772-73, 779-81, 791-92 (1999).

\textsuperscript{34} See Carol M. Rose, \textit{Left Brain, Right Brain and History in the New Law and Economics of Property}, 79 \textit{OR. L. REV.} 479 (2000) (discussing limited commons property hybrids).

\textsuperscript{35} Robert Ellickson suggests two relevant types of organizational diversity, two manifestations of the eclecticism of land regimes: either variations in the “initial bundles of rights and transfer rules” or opportunistic mixtures of public and private ownership. Ellickson, \textit{supra} note 19, at 1387-88. The liberal commons construct relates only to the former type. For an example of the other type, consider Henry E. Smith, \textit{Semicommon Property Rights and Scattering in the Open Fields}, 29 \textit{J. LEGAL STUD.} 131, 131 (2000), which characterizes the medieval open-field system as a “semicommuns.” The resource is “owned and used in common for one major purpose, but, with respect to some other major purpose, individual economic units ... have property rights to separate pieces of the commons.” \textit{Id.}

\textsuperscript{36} ARISTOTLE, THE POLITICS (H. Rackham trans., 1932). A classic passage is:

\begin{quote}
Property that is common to the greatest number of owners receives the least attention; men care most for their private possessions, and for what they own in common less, or only so far as it falls to their own individual share; for in addition to the other reasons, they think less of it on the ground that someone else is thinking about it ....
\end{quote}

\textit{Id.} at bk. 2, ch. 1, § 10 (Bekker § 1261b30-35). Also consider:

\textit{[R]egulations for the common ownership of property would give more causes for discontent; for if both in the enjoyment of the produce and in the work of production they prove not equal but unequal, complaints are bound to arise between those who enjoy or take much but work little and those who take less but work more. And in
tragedy.\textsuperscript{37} This claim—a truism of first-year law classes—is usually introduced as one of the strongest justifications for the institution of private property.\textsuperscript{38} Although Garrett Hardin coined the term "the tragedy of the commons,"\textsuperscript{39} Harold Demsetz was the first theorist to conduct a cost-benefit analysis that aimed systematically to establish the long-run superiority of private property over commons property.\textsuperscript{40}

Demsetz discussed three types of costs from commons property regimes—increased negotiating costs because of holdouts; increased policing or monitoring costs; and the difficulties of too high a discount rate that lead commoners to fail to internalize fully the interests of future generations.\textsuperscript{41} Private property, he claimed, generally solves these problems.

\textsuperscript{37} Much influential recent thinking on property rights has itself been influenced by divergent camps of economists—such as Demsetz, Alchian, North, and others—who have extrapolated from the historical experience of Western European and American capitalism. For a sampling of classics, see BARZEL, supra note 30; DOUGLASS C. NORTH & ROBERT PAUL THOMAS, THE RISE OF THE WESTERN WORLD: A NEW ECONOMIC HISTORY (1973); Armen A. Alchian & Harold Demsetz, Production, Information Costs, and Economic Organization, 62 AM. ECON. REV. 777 (1972); Armer Alchian & Harold Demsetz, The Property Rights Paradigm, 33 J. ECON. HIST. 16 (1973); Demsetz, supra note 5; Eirik G. Furubotn & Svetozar Pejovich, Property Rights and Economic Theory: A Survey of Recent Literature, 10 J. ECON. LIT. 1137 (1972); Michael C. Jensen & William H. Meckling, Theory of the Firm: Managerial Behavior, Agency Costs and the Ownership Structure, 3 J. FIN. ECON. 305 (1976); and Svetozar Pejovich, Towards an Economic Theory of the Creation and Specification of Property Rights, 30 REV. SOC. ECON. 309 (1972).

\textsuperscript{38} Id. at ch. 2, § 2-3 (Bekker § 1263a10-17).

\textsuperscript{39} Id. at ch. 2, § 2-3 (Bekker § 1263a10-17).

\textsuperscript{39} Hardin, supra note 4. Before Hardin, H. Scott Gordon identified the tragedy without so labeling it. H. Scott Gordon, The Economic Theory of a Common-Property Resource: The Fishery, 62 J. POL. ECON. 124 (1954). Hardin claimed that rational co-owners are bound to underinvest in the common resource, while overexploiting it. Hardin, supra note 4, at 1244-45. But he never considered the costs of any other legal arrangement, in particular the establishment and maintenance of a private property regime. As Michael Taylor points out:

Every solution, every combination of property rights and controls, has its costs. Private property rights are not costlessly created, modified, and enforced; state regulation does not come free; and both may have effects which it is impossible to cost. What solution is best must surely depend to some extent on the relative costs of the possible solutions. Hardin ignores them.


\textsuperscript{40} Id.

\textsuperscript{41} Id. at 354-56. The difficulties posed by free riders for collective action were recognized by jurists long before the recent law-and-economics scholarship, as the following Jewish law example demonstrates. Rabbi Hayyim Yair Bachrach of Germany (d. 1701) addressed the validity of a stipulation in a contract between some members of a community and an expert in shofar (ram's horn) blowing, according to which the ritual service is to be performed only in the name of the paying members of the community. In his opinion, R. Bachrach noted that the stipulation should apparently be classified as the type in which "one benefits and the other sustains no loss" (Pareto superiority in modern language), a type to which the applicable Jewish law rule was "exemption," that is, the
by concentrating costs and benefits on owners, thus creating incentives to use resources more efficiently. Demsetz was fully aware that these costs do not disappear in a private property regime, but he insisted that they would be dramatically reduced. His account also includes an evolutionary story that explains how private property rights develop to internalize these externalities when pressure increases on the use of a resource. The evolutionary part of his celebrated contribution has been rightly criticized, and the problem remains a puzzle. But Demsetz's first proposition, that private property is more cost-beneficial once demand pressures are high enough, remains the conventional wisdom.

2. . . . to Recent Law and Economics

Over the years, Demsetz's account has been somewhat refined. Terry Anderson and P.J. Hill offer a more rigorous account of the benefits and costs of private property rights definition-and-enforcement activity. Variables such as the crime rate, population density, cultural and ethical attitudes, and the preexisting "rules of the game" of the institutional stipulation could not operate to deprive nonpaying members from the spiritual benefits of the contract. But R. Bachrach was also attentive to the detrimental incentive effects (free-riding) of applying the exemption rule in these circumstances. His result seems unavoidable: The contracting members were indeed allowed to restrict the group of spiritual beneficiaries of the shofar blowing to themselves only. R. HAYYIM YAIR BACHRACH, Responsum 186, in RESPONS A HAVAT YAIR (1997).

42. Demsetz, supra note 5, at 356-57.
43. Id. at 356.
44. Id. at 350-53. Private property rights "arise when it becomes economic for those affected by externalities to internalize benefits and costs." Id. at 354; see also Hardin, supra note 4, at 1245 (explaining the increasing negative effects of freedom in a commons).
45. James E. Krier, The Tragedy of the Commons, Part Two. 15 Harv. J.L. & PUB. POL'Y 325, 336-38 & n.44 (1992) (arguing that both Hardin and Demsetz end up begging the same question, assuming the same problem away, and implicitly arguing that a community plagued by noncooperation can improve its condition by cooperating); see also DUKEMINIER & KRIER, supra note 11, at 56, 59 (noting that theory and empirical evidence suggest that values and other variables prevent this evolutionary pattern from occurring in all situations); Carol M. Rose, Property as Storytelling: Perspectives from Game Theory, Narrative Theory, Feminist Theory, 2 Yale J.L. & Human. 37 (1990) (proposing that after-the-fact narratives are necessary to explain the development of property regimes, because they do not always unfold as logic predicts). Jim Krier has reported to us that Demsetz has replied to the many criticisms of his theory by saying, "That's why I called it 'Toward a Theory of Property Rights.'"
46. Terry L. Anderson & P.J. Hill, The Evolution of Property Rights: A Study of the American West, 18 J.L. & Econ. 163 (1975). They argue that increasing levels of definition-and-enforcement activity lead to benefits because of the increased probability that people will be able to appropriate an asset's worth. To elaborate, the benefit from property rights definition depends upon the value of the asset and the degree to which the activity ensures that the value will be captured by the owner. Any change in the price of the well-defined and well-enforced bundle of rights changes the return on resources devoted to property rights questions. Furthermore, any increase in the productivity of a definition-and-enforcement activity will shift the marginal benefit curve outward. An increase in the probability of loss of an asset will usually result in an increase in the productivity of property rights activity and thus will result in such a shift. Marginal benefits are also likely a declining function as definition-and-enforcement activity increases (for reasons similar to the declining marginal physical product of any input in general). Conversely, the marginal costs of property rights reorganization are increasing because of the opportunity cost of resources used in property rights definition activities. Id.; see also Smith, supra note 35, at 164 (making a similar claim).
structure affect the probability of securing benefits from better-defined private property rights. Anything that reduces the quantity of resources that is necessary for definition-and-enforcement activity or lowers the opportunity cost of such resources—such as changes in technology, in resource endowments, or in the scale of operation—will affect marginal costs. The equilibrium level of property rights definition-and-enforcement activity occurs where marginal benefit and cost curves intersect. Anderson and Hill argue that the contingency of factors influencing costs and benefits explains why we observe varying degrees of definition-and-enforcement activity and thus varying degrees of property arrangements covering the spectrum from commons to private. But their model does not dispute Demsetz’s most fundamental claim: that increasing demand requires a move away from commons property toward private property. Commons property may be temporarily efficient, but in time, as the demand for scarce resources inevitably increases, privatization prevails.

Robert Ellickson refines the cost-benefit analysis further, but implicitly still shares in the fundamental claim regarding the demise of commons property. Ellickson distinguishes among the advantages of individual ownership in what he terms “small,” “medium,” and “large” events, each with rather different cost-benefit analyses. He acknowledges the possible merits of commons property only with regard to one category, that of large events. Group ownership of land can sometimes be advantageous, he explains, because of “increasing returns to scale and the desirability of spreading risks.” But the examples he gives for cases in which economies of scale and risk-spreading favor commons property—three pioneer

47. Similarly, Steven Cheung has shown that various property arrangements may be efficient and that individuals therefore choose different contract arrangements under varying conditions, though he has also maintained that this variation must remain within a private property regime to achieve efficient outcomes. STEVEN N.S. CHEUNG, THE THEORY OF SHARE TENANCY 4, 158 (1969). Challenging other economists’ conclusions that share tenancy is a less efficient system than fixed rents, Cheung focuses on transaction costs and risk to develop a theory that explains the divergence of property arrangements. Id. at 30, 63-77.

48. See also JAMES E. PENNER, THE IDEA OF PROPERTY IN LAW 69 (1997) (arguing that although “in some situations commons work,” scarcity generally “give[s] rise to conflict,” and thus “the general point”—the “obvious solution”—is “to link rights of use with rights of exclusion,” namely, private property).

49. Ellickson, supra note 19.

50. Respecting small events, Ellickson identifies three basic reasons for the relative efficiency of individual private property in terms of monitoring costs: Self-control by one person is simpler than the multiperson coordination entailed by intragroup monitoring; detecting a trespasser is less demanding than evaluating the conduct of persons otherwise privileged to use a resource; and policing boundaries or carrying out other monitoring functions is easier for an individual landowner, who will be more highly motivated than a member of a commons group. Likewise, Ellickson identifies three advantages of individual ownership with regard to medium events: Excessive dependence on coordination through a large number of transactions can be avoided; cooperation becomes more probable because of relatively multiplex relationships among neighbors; and dispute settlement arising out of medium events can be relegated to those persons most likely to be informed about the controversy. Id. at 1327-32.

51. Id. at 1332.
settlements in the seventeenth and nineteenth centuries— are indeed exotic and almost idiosyncratic, especially from the perspective of a modern market economy.

Only a few economics-oriented authors have challenged Demsetz's underlying proposition, the most prominent of whom is Barry Field. Field's insight derives from recent research in European social history that strongly suggests that communal agricultural property was antedated by a system that was more individualistic, carried out on small, individual fields rather than in communal lots. Hence, Field suggests that property-rights economists need to explain two opposite changes using just one causal factor: They need to show how population growth in one period could produce a shift from individual to common tenures, and later produce a shift from commons to individual property. Field suggests that plausible circumstances could be identified where developmental pressures encourage greater use of common, rather than individual, property. His analysis generates some indeterminacy in the economic inevitability of shifting to private property with increasing pressure on a resource. While a challenge to the conventional economic wisdom, Field's move is only a first step for our purposes.

To develop a theory of a liberal commons, we must consider the possibility of successful management of commons resources not as an intermediate condition but as an end state, and we must learn the prerequisites for such success. Hardin, Demsetz, Anderson and Hill, Ellickson, and many others have helped to establish a sense of the inevitability of privatization and the necessary failure of commons ownership. The economic literature takes us only so far in countering that

52. Id. at 1335-41.
53. Barry C. Field, The Evolution of Property Rights, 42 KYKLOS 319 (1989); see also Fikret Berkes, Cooperation from the Perspective of Human Ecology, in COMMON PROPERTY RESOURCES: ECOLOGY AND COMMUNITY-BASED SUSTAINABLE DEVELOPMENT 70, 79-82, 84 (Fikret Birkes ed., 1989) (arguing that cycles in intensity of resource use can bring cycles of common-resource management, and describing Cree Amerindian hunting territories as an example of "the evolution, demise and subsequent recovery (more than once) of communal resource-management systems").
54. Field, supra note 53, at 319-20, 328. To see why, consider the impact of increases in demand on the costs and benefits of establishing and maintaining a private property regime. As Demsetz claims, the increasing value of output justifies some additional costs in creating and maintaining a system of private property; the higher returns possible in a system of private property justify the accompanying increase in exclusion costs. Demsetz, supra note 5. Field insists, however, that this analysis is incomplete because it takes exclusion costs as given. But the effectiveness of resources devoted to exclusion depends on the incentives that exist for encroachment, which are related to the derived value of the resource. If the resource has no value, there would be little incentive to encroach, and thus it would be relatively easy to exclude, other things being equal. So an increase in the value of output could be expected to increase the incentive for encroachment, which implies that additional resources are required to achieve the same effective level of exclusion that obtained before. If this effect is particularly strong, it may overcome the effect identified by Demsetz and lead to commons property as the ultimate outcome. Cf. Field, supra note 53, at 329 (demonstrating similar ambiguous effects with respect to population growth).
sentiment; political theorists push the debate further, perhaps too far in the other direction.

C. Commons Tragedy as Communitarian Foil

In sharp contrast to the role commons property plays in neoclassical economic-legal theory, many political scientists (and some new institutional economists) have come to celebrate another version of commons property. Political theorists have supplied a wealth of case studies of well-functioning commons property regimes around the globe, thus demonstrating empirically the falsity of claims (or assumptions) that commons property regimes are bound to generate tragic outcomes, defined in terms of wasted resources. They teach that neither privatization nor regulation is the only way to conserve scarce resources and manage them productively. However, these accounts also show—albeit often implicitly—that commons success stories typically compromise individuals' right to exit, and therefore they do not do much to help establish our claims for a liberal commons.

1. From Taylor . . .

A recent debate between two leading scholars of this group, Michael Taylor and Elinor Ostrom, illustrates our arguments. Taylor believes that "[c]ommunity with mutual vulnerability is what endows some groups with the means to regulate their commons endogenously." For him, a community is a more or less stable set of members with some shared beliefs, including normative beliefs and preferences beyond those constituting their collective action problem, who expect to continue interacting with one another for some time to come, and whose relations are direct (unmediated by third parties) and multiplex (concerning a range of issues on which there can be give and take). Stable membership, continuing interaction, and direct and multiplex relationships, Taylor explains, all make mutual monitoring easy and cheap.

55. One focal point for this group of scholars appears to be the International Association for the Study of Common Property (IASCP), which holds an annual convention drawing hundreds. McKean, supra note 6, at 250 n.4.
56. Of course, there are also numerous counterexamples, where locking people together to manage a resource has disastrous effects. To give one particularly poignant example, consider United States policy toward Native American land holdings, which has led to a classic tragedy of the anticommons. See Michael A. Heller, The Boundaries of Private Property, 108 YALE L.J. 1163, 1213-17 (1999) (discussing the consequences of a federal allotment policy that prohibited alienation yet did not provide any collective governance mechanism for managing land resources).
57. See, e.g., McCay & Acheson, supra note 28, at 7, 9, 13.
The success of commons property, in other words, comes exclusively from factors within the group and is premised on the group's social cohesion. Therefore, Taylor concludes, success also depends on a lack of great economic or social differences among the community members. Differences in income, wealth, or class positions, or in ethnicity, race, caste, language, or religion, weaken or undermine his conditions for community and thus threaten the success of commons property. 59

2. . . . to Ostrom

Ostrom claims, correctly in our view, that Taylor's story relegates the commons to a marginal status in contemporary circumstances, irrelevant for larger, heterogeneous, and changing sets of individuals. 60 Ostrom represents another genre of commons theorists who are more useful for our purposes. Strong community, she claims, is neither sufficient nor ex ante necessary for solving resource dilemmas in commons property. Even heterogenous sets of individuals may overcome the commons difficulties with the help of proper institutional innovation and design, although if they do not develop shared values, they will eventually fail. 61 Ostrom studies institutional arrangements that help groups break out of the commons trap. Thus, in her celebrated book Governing the Commons, she demonstrates how these arrangements may distinguish between cases of long-enduring commons and cases of failures and fragilities. 62

Any attempt to devise a theory of the liberal commons must take account of Ostrom's design principles. Before doing so, however, we must consider an important question of relevance that arises from her work. Notwithstanding her opposition to Taylor's extreme communitarianism,

59. MICHAEL TAYLOR, COMMUNITY, ANARCHY AND LIBERTY 104-29 (1982); Singleton & Taylor, supra note 58, at 316.
61. Ostrom, supra note 60, at 347-30; see also, e.g., Lawrence Taylor, “The River Would Run Red with Blood”: Community and Common Property in an Irish Fishing Settlement, in THE QUESTION OF THE COMMONS, supra note 28, at 290, 305-06 (distinguishing between “traditional communities,” which understand collective ownership as natural, rather than derived from discrete decisions to cooperate, and “contractual communities,” whose conceptions of community and common property have more specific origins, and noting that contractual communities frequently manage common resources through institutions and may be “equally ‘close-knit’”).
62. OSTROM, supra note 6, at 58-102, 143-81; see also Field, supra note 53, at 321, 335-40. Field argues that both the exclusion of noncommoners (the costs of private property) and the transactions among commoners (the costs of commons property) are carried out by the collectivity. Thus, “we can look on political innovations as also having a distinct role to play in determining efficient property institutions in a society.” Field, supra note 53, at 337. More specifically, innovations in institutions of internal common governance may facilitate commons property, whereas innovations in the institutions of boundary maintenance and exclusion support private property.
Ostrom’s genre also implies an important illiberal component that she does not confront because of her exclusive focus on rebutting the neoclassical economists’ “tragic outcome” story. Ostrom’s success stories, as well as most others reported in the literature, include strong limitations on alienability. In the purest case, there is no market in which rights to the commons can be bought, leased, or exchanged. Rights are conferred only on a particular class of eligible persons and may not be transferred to persons outside of that class. In a few systems, the sale of shares is allowed, but only to other eligible users of the commons, never to outsiders. These inalienabilities strengthen the bonds among co-owners and reinforce their rights in the commons, thus facilitating their cooperation.\(^{63}\)

Ostrom and her allies do not even consider that the price of their commons successes—which require locking people together in static communities—may be too dear, particularly for those who place a high value on individual liberty. If commons property can succeed only by giving up the right to exit, a liberal commons is indeed an oxymoron. While it is neither liberalism’s sole characteristic nor a goal beyond compromise, exit is nevertheless a crucial liberal value, as we discuss below. Because of the role exit plays in securing a free society, our theory of a liberal commons cannot just adopt the findings of political scientists like Taylor and Ostrom, although we will, to be sure, make extensive use of their work. Rather, we must show that ownership and management of commons resources is not doomed to tragedy as the neoclassical economists might suggest, nor are its successes limited to illiberal environments as the political theorists might imply.

III. A Theory of the Liberal Commons

We must show that a liberal commons offers something people want, that existing legal regimes can be modified in realistic ways that would get us there, and that the resulting commons ownership institutions can be, at the same time, both liberal and prosperous. The first Section of this Part explores the goals that a liberal commons must achieve: preserving exit while promoting the economic and social gains from cooperation. While these goals may appear to conflict, law can mediate them, but only if law is understood to operate as a set of background norms, a safety net that can catalyze trust in daily interactions. No individual legal rule matters so much as the cumulative effect of law that can help generate social expectations supportive of trust and cooperation. The second Section sets out the core of our theory, the three spheres of action that any legal regime must address and the rules it should adopt to achieve liberal commons goals. These three features—the sphere of individual dominion, the sphere of democratic self-

\(^{63}\) See McKean, supra note 6, at 261-62.
governance, and the sphere of cooperation-enhancing exit—constitute what we call the general form of the liberal commons.

A. Identifying the Goals

We focus here on what may be called "meso" or mid-level goals, those that are intrinsic to the general liberal commons form and that are amenable to law reform. Application of the liberal commons form to any particular institution, such as marital property, condominium associations, or close corporations, would require considering two other levels of normative goals. First, there may be "micro" nuanced values that inhere in the particular institution being considered for reform in a liberal commons direction. For example, any application of our theory to marital property must account for deep cultural concerns with the ultimate collective goods of marriage, such as intimacy, caring and commitment, and self-identification. Adapting the general liberal commons form to the marital context may require some fine-tuning that would allow the accommodation of these values. Other liberal commons settings, like condominium associations and close corporations, may require responding to widely held values particular to these settings. Second, there may be "macro" social commitments that transcend the liberal commons form but necessarily inform analysis of all such institutions. For example, concern for nonsubordination of women and nonexclusion of minorities will necessarily refine analyses across a wide range of institutions, including marital property and common interest communities. These macro values may be so widely shared and deeply held as to justify their imposition in a particular liberal commons form even when they differ from or perhaps conflict with the micro values of that form. Considered together, these three levels of values—micro, meso, and macro—can help frame existing institutions for commons resource management in their best light, and, by doing so, point toward normatively attractive reforms. In this Section, we focus only on meso goals, those that attach to the general form of the liberal commons.

1. Preserving Exit

a. Why Exit Matters

Exit is a bedrock liberal value, an essential element of a liberal commons, and a core term of art in political and legal theory. First defined

64. Carolyn Frantz and Hanoch Dagan are exploring these issues in an article currently in progress.
65. Michael Heller and Rick Hills will be considering the common interest community case in an upcoming article.
66. See DWORKIN, supra note 10, at 52-53 (developing such an interpretive method).
by Albert Hirschman, exit means "voluntarily leaving the effective jurisdiction of the group," whether that group is a nation, firm, or other type of organization. Exit stands for the right to withdraw or refuse to engage: the ability to dissociate, to cut oneself out of a relationship with other persons. At a minimum, exit serves a protective function: "If the group harms the interests of the member as the member sees them, then leaving is a form of a self-defense." In addition to its intrinsic importance, the possibility of exit is instrumentally important. The threat of exit is often one of the prominent mechanisms for disciplining social organizations and optimizing the use of the commons resource: "The possibility of exit may itself make the group responsive to the interests of its members," and conversely help make members become better cooperators within the group.

The multiple functions of exit in the commons resource context matter to liberals because they "enhance the capacity for a self-directed life, including the capacity to form, revise, and pursue our ends." Generally, liberals are committed to "open boundaries," that is, to the idea that people should be able to leave the groups with which they choose to associate (and sometimes they should also be able to abandon even their own current identities). In some accounts, liberalism may even be defined as a theory that adopts, justifies, and applies a strong commitment to geographical, social, familial, and political mobility—all in the name of promoting the individual freedom necessary to secure one's own personal happiness. No doubt, a moderate restraint on exit—either an exit tax or departure delay, for example—need not be considered offensive to liberalism. Indeed, consistent with liberal convictions, such soft constraints may well be necessary to ensure that the decision to leave is informed (not hasty and ignorant) and sincere (not opportunistic). But a regime that makes exit impractical through outright prohibitions or via rules that de facto prohibit exit (including rules that impose prohibitive exit costs) or that unreasonably

68. Leslie Green, Rights of Exit, 4 Legal Theory 165, 171 (1998) (emphasis omitted); see also id. at 177 (stating that "the core right of exit" is "the claim right that others not prevent one from leaving the jurisdiction of the group").
69. See Laurence H. Tribe, American Constitutional Law 1400-09 (2d ed. 1988) (describing the "dual character of associational rights," which include both the right to associate oneself with certain persons and the right to dissociate oneself from certain persons). See generally Hirschman, supra note 67, at 19-20 (suggesting the usefulness of economic concepts such as exit to political scientists, and the usefulness of political mechanisms such as voice to economists).
70. Green, supra note 68, at 171.
71. See Hirschman, supra note 67, at 22-25.
72. See infra.
73. See Isaiah Berlin, Two Concepts of Liberty 6-16 (1959) (discussing the concept of negative liberty and its consequences for individual behavior).
74. Green, supra note 68, at 176.
76. Id. at 21.
77. We develop this point in Subsection III.B.3 infra.
delay exit, is incompatible with the most fundamental liberal tenets.\(^7\) Exit restraints that just treat individuals instrumentally cannot be legitimate features of a liberal commons.

The critical virtues that exit enhances help to explain its status throughout liberal legal regimes.\(^7\) For example, property law is generally suspicious of restraints on alienation, even consensual restraints that limit mobility respecting any particular resource.\(^8\) Often, statutes prohibit and courts invalidate outright restraints on alienability; when faced with more moderate restraints, courts may impose time limits or otherwise protect an individual’s right to exit.\(^8\) People generally do not perceive interference with restrictions on alienability to be an unwarranted intrusion into freedom of contract. Rather, the interference protects against agreements that undermine a key purpose of contractual freedom, that is, securing individual autonomy.\(^8\)

To be sure, liberalism is also committed to favoring contractual freedom to craft whatever restraints by which people agree to abide. But one can and should distinguish ordinary contracts—where liberal values do not reject strong lock-ins—from property arrangements that encompass much more of an individual’s resources and social life. Regarding these latter arrangements, the initial election of an illiberal exit rule cannot cut off the liberal commitment to choice. Limiting people’s ability to waive their exit rights, in this context, is based only in part on a response to rationality deficiencies, such as excessive optimism and lack of foresight. These limits are also, and perhaps even primarily, premised on the commitment to a conception of individual liberty that puts a high value on people’s ability to “reinvent themselves.”

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79. Consider an example from outside the liberal commons context: Despite the tide of fundamentalism in some parts of the world, certain rights of exit—such as the right to emigrate from one’s homeland—are now considered basic human rights, which are, as such, inalienable and nonwaiveable. See, e.g., Universal Declaration of Human Rights, art. 13, G.A. Res. 217 (III)(A), U.N. GAOR, 3d Sess., pt. 1, at 71, U.N. Doc. A/810 (1948).

80. Admittedly, this is not the only justification for these inalienabilities. Another important justification comes from efficiency. See Heller, supra note 56, at 1199-201 (discussing the role of restrictions on restraint on alienability); see also Guido Calabresi & A. Douglas Melamed, Property Rules, Liability Rules, and Inalienability: One View of the Cathedral, 85 HARV. L. REV. 1089, 1111-15 (1972) (discussing the inefficiency of restraints on alienation but also suggesting “instances, perhaps many, in which economic efficiency is more closely approximated by such limitations”); Richard A. Epstein, Why Restrain Alienation?, 85 COLUM. L. REV. 970, 971-72 (1985) (setting out the efficiency argument for alienation and arguing against restraints on alienation to achieve distributional goals); Susan Rose-Ackerman, Inalienability and the Theory of Property Rights, 85 COLUM. L. REV. 931, 932 (1985) (accepting that “unencumbered market trades are desirable unless we can locate a valid reason for their restriction,” while broadening the range of efficient restrictions on alienability from the Calabresi and Melamed model).

81. See generally Heller, supra note 56, at 1199 n.174 (enumerating objections to restraints on alienation).

82. On contractual freedom and individual autonomy, see CHARLES FRIED, CONTRACT AS PROMISE: A THEORY OF CONTRACTUAL OBLIGATION 7-17 (1981).
We can safely sidestep ongoing disputes among liberal theorists regarding the precise role of exit, such as whether exit is, by itself, a sufficient condition to preserve individual autonomy.\textsuperscript{83} For our purposes, we assert only the modest, and we think uncontroversial, proposition that some strong version of exit is a fundamental, core right in any theory worth labeling as liberal.\textsuperscript{84} As we see it, exit enables individuals to determine their own group associations and to remain in the groups they choose out of their free choice only. In short, the possibility of exit allows individuals the mobility that is a prerequisite for liberty.

b. \textit{Is Entry Like Exit?}

Is free entry the mirror image of free exit, and as such also a core element of the liberal commons? Only to a limited extent. We believe that liberals should not be concerned with every limitation on entry. Insofar as liberals are committed to pluralism and diversity\textsuperscript{85} and recognize the significance of culture and community to personal identity,\textsuperscript{86} we must be careful not to condemn or criticize every homogeneous community and every exclusionary practice.\textsuperscript{87} Moreover, insofar as liberals are concerned with groups that tolerate cross-cutting affiliations (and thus only partially cover their members' associational worlds), a liberal commitment to pluralism requires a multiplicity of groups, which in turn calls for allowing groups autonomously to determine their own, divergent membership requirements.\textsuperscript{88} As Michael Walzer puts it, "we need to sustain and enhance associational ties, even if these ties connect some of us to some others and not everyone to everyone else."\textsuperscript{89}

\begin{itemize}
\item \textsuperscript{83} Compare Chandran Kukathas, \textit{Are There Any Cultural Rights?}, in \textit{THE RIGHTS OF MINORITY CULTURES} 228, 238 (Will Kymlicka ed., 1995) (highlighting the liberal view of cultural communities as voluntary associations), with Green, supra note 68 (arguing that exit is not sufficient to secure individual autonomy in groups).
\item \textsuperscript{84} Recall also that, even aside from liberal theory, exit is a value with many virtues, including, but not limited to, serving as a disciplinary limit on organizations.
\item \textsuperscript{87} See Roderick M. Hills, Jr., \textit{You Say You Want a Revolution? The Case Against the Transformation of Culture Through Antidiscrimination Laws}, 95 MICH. L. REV. 1588, 1592-614 (1997) (reviewing ANDREW KOPPELMAN, \textit{ANTIDISCRIMINATION LAW AND SOCIAL EQUALITY} (1996)).
\item \textsuperscript{88} See Roderick M. Hills, Jr., The Constitutional Rights of Private Government (Sept. 25, 2000) (unpublished manuscript, on file with The Yale Law Journal).
\item \textsuperscript{89} WALZER, supra note 9, at 105.
\end{itemize}
Accepting the asymmetry between exit and entry is important for our theory of the liberal commons. Although we believe, with Ostrom, that group homogeneity is not a sufficient or ex ante necessary condition for commons success, nevertheless, we also know that well-functioning commons regimes give paramount concern to nurturing shared values and excluding bad cooperators. Tolerance towards limitations on entry can help preserve the integrity and character (in terms of interests or values) of the commons’ existing members, and thus be instrumental to the success of liberal commons regimes.

Although a liberal theory does not require free entry, we think that there are two extreme types of entry limitations so troublesome that a regime allowing either cannot reasonably be said to embody the constellation of values generally considered to constitute liberalism. First, there are cases in which a limitation on entry so sweepingly restricts alienability that it is practically tantamount to a substantial limitation on exit. In these cases, the liberal commitment to free exit, rather than the more tempered commitment to free entry, condemns the limitation. Second, some exclusionary practices and criteria—for example, a systematic exclusion by communities of a minority group that is based on prejudice respecting issues such as race, ethnicity, or religion—may well infringe upon fundamental liberal values of equal concern and respect. Delineating the scope of such prohibited classifications, as well as of any surrogates of such classifications that should be likewise prohibited, is an important and complex task, but well outside the scope of our project. For our purposes here, it is enough to state that a liberal commons must always be careful not to cross the fine line between permitted homogeneity of purpose and prohibited discriminatory exclusion.

90. See supra Section II.C (discussing conditions for success on the commons).
91. See Gregory S. Alexander, Dilemmas of Group Autonomy: Residential Associations and Community, 75 CORNELL L. REV. 1, 50-53 (1989); Clayton P. Gillette, Courts, Covenants, and Communities, 61 U. CHI. L. REV. 1375, 1375 (1994) (arguing that, within limits, a polity should approve of the way residential associations “allow individuals with common preferences to gravitate to a common location where they can pursue their conception of the good life”).
92. For an example of such a limitation, see Samuel Issacharoff & Richard H. Pildes, Politics as Markets: Partisan Lockups of the Democratic Process, 50 STAN. L. REV. 643, 671-74 (1998) which describes how the Democrat-dominated Hawaiian government’s prohibition on crossover voting in election primaries, prohibition on write-in votes, and prevention of “party-raiding” constitute significant barriers to entry into political competition and create prohibitive costs for exiting the party.
93. E.g., Shelley v. Kraemer, 334 U.S. 1 (1948) (holding that state-court enforcement of a racially restrictive housing covenant violates the Equal Protection Clause of the Fourteenth Amendment); Alexander, supra note 91, at 38, 54-55.
94. Developing this point are Gillette, supra note 91, at 1397-99; and Hills, supra note 87, at 1592-614. See also Alexander, supra note 91, at 55-61 (advocating a legal regime of open-ended standards for governing the question of the limits of group autonomy, in order to “create opportunities for those inside and those outside to engage each other in dialogue”). See generally Rosen, supra note 78 (suggesting the outer limits of community self-governance that may be entailed by JOHN RAWLS, POLITICAL LIBERALISM (1993)).
95. Should there also be a right to eject a member who was mistakenly accepted or to protect against a member’s later change of heart? In most cases, it seems to us that such a right would do
2. Promoting Cooperation

a. Maximizing Economic Gains

While one goal of a liberal commons is to preserve the virtues that come from protecting exit, the other goal is to achieve the economic and social gains possible from cooperation. On the economic side, several types of efficiency gains may be available from joint management and pooling of resources in a commons, for example, economies of scale and risk-spreading. The familiar economic approach acknowledges that, in evaluating "whether the resources are common pool or amenable to privatization, particular natural resource configurations, technological constraints, and transactions costs may make common property a superior solution to private property." Thus, with landownership, larger parcels may sometimes be preferred over smaller ones: In the agricultural context, larger parcels may economize on fencing and cultivation costs (especially where specialized equipment is available); in urban contexts, larger parcels may allow construction of more valuable projects. In addition, where a number of people own land together, they may be able to divide the risks of ownership. Because most people are risk-averse, risk-spreading through common ownership may be efficiency-enhancing, as for example with land holdings that represent a large and otherwise undiversifiable part of individual wealth.

b. Recognizing Social Value

Alongside potential efficiency gains, people could prefer cooperation simply to receive the benefits of working together, of taking part in a successful collective enterprise. Cooperation, in other words, is a good, in

more harm than good: A group right to eject can easily be abused by the majority as an instrument for exploitation or retaliation for nonconformism. Granting such a power to the majority may upset the delicate balance between majority jurisdiction and the minority protection discussed below in Subsection III.B.2. To be sure, we do not want to downplay the harm a bad cooperator or a disgruntled commoner can inflict on a liberal commons. To some extent, this harm can be mitigated if the other commoners have already developed a thick fabric of cooperative social norms with corresponding social sanctions for violations. But we concede that this is no full cure. This difficulty is one good reason for adopting the relatively permissive approach to group-entry limitations that we suggest in the text above.

96. Ellickson, supra note 19, at 1332-44.
97. Stevenson, supra note 21, at 70.
99. See Jon Elster, The Cement of Society: A Study of Social Order 187 (1989). Jon Elster argues that successful collective action is produced by a "mix of motivations—selfish and normative, rational and irrational . . . Motivations that taken separately would not get collective action off the ground may interact, snowball and build upon each other so that the whole exceeds the sum of its parts." Id. Carol Rose has helpfully suggested to us that our emphasis on the social value
and of itself, in addition to its importance in facilitating economic success. People value interpersonal relationships—they form associations and take part in collective enterprises—not only for instrumental reasons as a means to some independently specified end: "We human beings are social creatures, and creatures with values. Among the things that we value are our relations with each other."  

Our relationships with spouses, children, friends, neighbors, co-workers, and other types of potential commoners have intrinsic value that we often strive to promote. Participants in a group with a joint commitment may perceive themselves as members of a "plural subject." This perception stimulates a sense of unity, even of intimacy or closeness, that human beings tend to find gratifying. Liberal commons settings are particularly suitable for furthering these types of social relationships because certain tasks, like the common management of a given resource, provide an opportunity to enrich and solidify the interpersonal capital that grows from cooperation, support, trust, and mutual responsibility. Indeed, of cooperation can be reframed in terms of the synergistic (rather than merely aggregative) benefits of cooperation.

100. Samuel Scheffler, Relationships and Responsibilities, 26 PHIL. & PUB. AFF. 189, 200 (1997). In a similar vein, Walzer notes, "Individuals are stronger, more confident, more savvy, when they are participants in a common life, when they are responsible to and for other people." WALZER, supra note 9, at 104.

101. See, e.g., Alexander, supra note 91, at 26, 41-42 (pointing to the intrinsic good of the experience of belonging that is based on a shared good or a shared resource); Ellickson, supra note 19, at 1345, 1395 (noting that companionship and the solidification of "mutual-aid relationships" are potential benefits of living in a multimember household, and pointing out the satisfaction of "living in a social environment that is consistent with [one's] ideology"); Henry Haasman, When Does Worker Ownership Work? ESOPs, Law Firms, Codetermination, and Economic Democracy, 99 YALE L.J. 1749, 1769-70 (1990) (concluding that worker ownership may bring noneconomic benefits: the satisfaction of engaging in a communal activity; the elimination of the potential conflict of interest between workers and owners; the psychological benefit of control over resources; and training for democratic participation that may benefit society generally as well as the workers themselves); Simon, supra note 6, at 1364 (praising cooperative housing as "creat[ing] a fairly strong form of interdependence, as well as opportunities for collective action").


103. See GILBERT, supra note 102, at 221.

104. Cf. PENNER, supra note 48, at 181 (arguing that exclusive use—the core feature of private property—suits an impersonal social situation).

105. Cf. GILBERT, supra note 102, at 222-23 (noting that marriage may produce an intensive, long-term fusion, ranging over an ever-increasing number of projects, and that it is exactly this intensity and continuity of intensity that stimulates unity, closeness, and mutual trust); Robert McC. Netting, What Alpine Peasants Have in Common: Observations on Communal Tenure in a Swiss Village, 4 HUM. ECOLOGY 135, 143 n.13 (1976). Netting notes that while most vineyards and grain fields in the Swiss village of Törbel were individually owned, the community as a whole owned a vineyard, a grain field, a church, and a dwelling where the priest lived. These resources were used to support the priest, as well as to compensate the fire brigade and others who provided special services for the community. Netting links the existence of this communal property to community cohesion: "In these cases, communal rights to land and buildings that would otherwise be private contribute directly to social solidarity and village integrity. In each instance, the token communal resources are used to support social services and village-wide celebrations that promote cooperation and emphasize unity." Netting, supra, at 143 n.13.
in certain settings, such as in some religious and cultural communities, the commons resource may even form the center of a way of life that profoundly affects the commoners' self-identity. 106

c. Reconciling Economic and Social Values

In many liberal commons contexts, economic gains and social values tend to reinforce one another. Interpersonal capital facilitates trust, which, in turn, gives rise to economic success. And economic success tends to strengthen trust and mutual responsibility. But we can imagine contexts in which the imperatives of economic success and social cohesion conflict. Any liberal commons must pay some attention to both fronts. Both are intrinsically valuable and thus neither should be abandoned. Furthermore, either total economic failure or the collapse of social cohesion will effectively end cooperative resource management and likely yield a tragic outcome.

But beyond this modest imperative, we do not attempt to come up with any general formula for solving such conflicts. It would be incredible to suggest that the relative importance of economic success and of social cohesion is constant over the vast realms of life—from families to close corporations—in which liberal commons regimes may be established. Rather, we believe that setting the balance between these two happy outcomes of cooperation—to the extent that they are in conflict—must be context-dependent; that is, the balance should be informed by the applicable micro and macro values. There are realms of life in which the commoners' economic success is likely to play a rather major role (a close corporation may be an example) and there are others (say, the family) in which a significant degree of inefficiency may be a tolerable price for securing the social goods of cooperation.

3. Do Exit and Cooperation Conflict?

The two goals of the liberal commons—preserving autonomy through exit and achieving economic and social gains through cooperation—may work at cross purposes. This simple, troubling observation lies at the core of the "tragedy of the commons" metaphor. The ownership and management of commons resources may exemplify the most familiar of all

106. See, e.g., ANDREW GRAY, INDIGENOUS RIGHTS AND DEVELOPMENT: SELF-DETERMINATION IN AN AMAZONIAN COMMUNITY 109-11 (1997) (describing the close identification of land and other resources with individuals and groups among the Arakmbut of the southeastern Peruvian rainforest); Angela R. Riley, Recovering Collectivity: Group Rights to Intellectual Property in Indigenous Communities, 18 CARDOZO ARTS & ENT. L.J. 175, 194 (2000) ("The group product in the indigenous society is the medium through which all tribal members, living, dead and unborn, speak their voice and become a part of the tribal way."); Jeremy Waldron, Superseding Historic Injustice, 103 ETHICS 4, 19-20 (1992) (claiming that for some tribes and communities, land forms the center of a present way of life and can be of religious and cultural significance).
collective action problems, one often formalized as a multiperson prisoner's dilemma with an incentive structure facilitating noncooperative behavior and generating tragic outcomes. If the story stopped there, it would be rather disappointing because there would be no way people could reach the economic and social gains potentially available from pooling resources in a commons.

However, where people have repeat dealings—typically the case with relationships among commoners—cooperation does prove possible, even likely. As Robert Axelrod famously demonstrated with his tit-for-tat strategy, people may cooperate even with prisoner's dilemma incentives (and without side communication) once their interactions are turned into an indefinite game. Axelrod defines his strategy to require “avoidance of unnecessary conflict by cooperating as long as the other player does, provocability in the face of an uncalled for defection by the other, forgiveness after responding to a provocation, and clarity of behavior so that the other player can adapt to your pattern of action.” As Axelrod explains, this happy result “requires that the players have a large enough chance of meeting again and that they do not discount the significance of their next meeting too greatly.” The ability to remember and retaliate makes noncooperative moves individually counterproductive, and thus may induce self-interested cooperation, even in a commons.

But this happy scenario may, in turn, pose a stumbling block for our theory. Previous commentators noted that, for cooperative results to emerge, the game must repeat indefinitely. A repeated interaction with a finite ending may still yield tragedy, because each participant knows that the last move will resemble a one-shot prisoner's dilemma, in which defection is the dominant strategy. Knowing that others will defect on their last move creates a domino effect through earlier interactions, so that defection becomes the dominant strategy for everyone from the outset.

107. “Collective action” is a generic term describing the difficulty faced by a group of self-interested individuals where the promotion of their self-interest requires cooperation. Even if they all agree on both their collective purpose and the best means to promote this purpose, they will still face difficulties in achieving it, since for each and every one of them, the individual interest supersedes their share of the collective good. MANCUR OLSON, THE LOGIC OF COLLECTIVE ACTION: PUBLIC GOODS AND THE THEORY OF GROUPS 2, 7-8, 10-11, 16, 21, 51, 60-61 (1971).
108. E.g., OSTROM, supra note 6, at 3-5; STEVENSON, supra note 21, at 20-27.
110. Id. at 174.
111. Id. at 126-32; see also RUSSELL HARDIN, COLLECTIVE ACTION 145-50, 164-67 (1982) (“[P]layers may rationally cooperate in iterated Prisoner's Dilemmas.”).
112. E.g., ANTHONY DE JASAY, SOCIAL CONTRACT, FREE RIDE: A STUDY OF THE PUBLIC GOODS PROBLEM 63-66 (1989) (noting that the individual-maximization calculus under which it works even better not to take advantage of others arises when there are continuing interactions with the same players); Rose, supra note 45, at 51 n.49 (noting that the possibility of retaliation preserves a cooperative regime on a basis of self-interest, but also pointing out difficulties with this theory).
113. See, e.g., R. DUNCAN LUCE & HOWARD RAIFFA, GAMES AND DECISIONS 94-102 (1957). For certain (partial) solutions, see HARDIN, supra note 111, at 173-87, 211-13, suggesting ways in which varied, but overlapping, interactions can provide opportunities for meaningful sanctions, the
Consider how a strong right of exit affects the likelihood of an efficient commons, at least within the artificial world of game theory (assuming, for the moment, voracious, unsocialized commoners).\textsuperscript{114} Strong exit allows each commoner an unwaiveable right to leave the commons at any moment. But each commoner also knows that others can leave at any moment, raising a serious concern for those who want to stay put. The stay-putters worry what may happen between the moment the foot-out-the-door folks decide to leave and the moment they actually exit. In the interim, the stay-putters may continue to cooperate, but the foot-out-the-door folks are now playing a transitory and short-lived game. The stay-putters may worry that, during the interim period, which can happen at any time, the foot-out-the-door folks will take advantage of them, either by overexploiting or underinvesting in the commons resource.

Still, in many contexts, unilateral uncertainty regarding when others might leave need not frustrate cooperation.\textsuperscript{115} Vigilant commoners can react to noncooperative moves by retaliating promptly, thus limiting the risk of exploitation and making cooperation stable. However, two features of long-term cooperation in managing commons resources make vigilant retaliation an unsatisfying response for our purposes. First, the benefits to commoners can vary substantially over time. Therefore, each potential stay-putter may suspect that the others (the potential foot-out-the-door folks) will defect precisely when they can realize particularly high benefits from the commons resource. If defection at a given moment proves more advantageous than continuous cooperation, then the possibility of retaliating later may not be able to mitigate the harm that foot-out-the-door folks can inflict with well-timed defections. Not wanting to be suckers, stay-putters may behave as if they too are foot-out-the-door folks.

There is a second, more prosaic reason why strong exit threatens commons prosperity. Commoners may have independent or exogenous reasons to exit; they may leave because of familial, professional, or other reasons that have nothing to do with timing advantageous defection. But after they decide to leave for such reasons, the erstwhile stay-putters may be tempted to behave like foot-out-the-door folks in timing their intended exit: Once they know that they will soon depart, their incentive to cooperate

\textsuperscript{114.} In the real world, commoners are not usually voracious and unsocialized. Indeed, the opposite seems true. But the always real possibility of abuse suggests the role of legal protection: It seems a necessary, but not sufficient, condition to sustain trust and cooperation in a liberal commons setting. Our simple game theory mode of analysis helps puzzle through these relationships.


\textsuperscript{116.} Players in long but transitory games, that is, where all parties know the end point, may be less prone to defecting because the symmetry of information somewhat eases the fear of exploitation. Hardin, supra note 111, at 145-50.
is greatly diminished.\textsuperscript{117} And all the other commoners face again the same troubling question: Why restrain yourself now if the other commoners may choose their moment to take the most and run? Again, even prompt retaliation may not solve the challenge that strong rights of exit pose to efficient use of a commons because retaliation cannot recoup all of the losses imposed by the foot-out-the-door folks.

A theory of a liberal commons requires two elements: strong (but not unlimited) exit and the possibility of realizing economic and social gains from shared use of scarce resources. But simple game theory reasoning helps formalize the familiar intuition that these elements may work at cross-purposes. The structure of interactions in a commons seems to offer only partial solutions to the threat posed by exit. If so, then an efficient and liberal commons may not be a realistic possibility. How can law resolve the seeming impasse?

4. Putting Law in Its Place

   a. Law as a Safety Net That Catalyzes Trust

Consider for a moment the seeming paradox that an efficient liberal regime of private property is itself, oddly, a type of commons held together by virtue of the law's facilitation.\textsuperscript{118} By constraining individual opportunism, law proves effective as one mode of social organization that helps overcome collective action problems inherent in creating and maintaining private property. Using law to build a liberal commons is not so different.

To start, we join with commons property scholars who have shown so persuasively how political and social institutions can affect the costs and benefits facing commons owners in their attempts to organize themselves.\textsuperscript{119} They show how "generalized institutional-choice and conflict-resolution" mechanisms together with "substantial local autonomy" can facilitate and sustain commons property regimes.\textsuperscript{120} After getting to this point, however,

\textsuperscript{117} Notice the difference between the two reasons that exit threatens successful commons property. The first reason requires a unique payoff structure in which the variations between gains at different times are so great that defection destabilizes cooperation. The second applies more broadly. If exit at a time between now and a given moment in the future is imposed (due to those external reasons), the domino effect applies, and the party who is about to leave is likely to exploit her superior information.

\textsuperscript{118} See Rose, supra note 45, at 51; see also EIRIK G. FURUBOTN & RUDOLF RICHTER, INSTITUTIONS AND ECONOMIC THEORY: THE CONTRIBUTION OF THE NEW INSTITUTIONAL ECONOMICS 76 (1997) ("[T]he existence of trust, reinforced with institutional safeguards, can lead to the convention of private property and its social protection."); TAYLOR, supra note 59, at 44-48 (characterizing the features of law that provide security of property as a public good); Krier, supra note 45, at 333 (observing the dependence of a private property regime on public regulation).

\textsuperscript{119} See OSTROM, supra note 6, at 190, 212.

\textsuperscript{120} Id. at 212.
the existing literature invariably compromises exit. Because we are committed, as we believe most people in our polity are, to the fundamental right of exit, our path leads instead through the thicket of law toward a theory of a liberal commons. Law can serve two functions: to provide the infrastructure of liberal commons institutions and to supply anti-opportunistic devices that reassure prospective commoners that they will not be abused for cooperating. By adopting a straightforward collection of substantive and procedural rules, liberal commons forms can encourage prosperity and cooperation without sacrificing exit.

Law should be understood to work as a set of background rules, always in operation, but seldom overtly manifest in the daily life of commons resource management. Formal law is often not powerful enough, by itself, to establish directly the trust, cooperation, and mutual reliance that any successful commons requires for the day-to-day routines of self-governance. Commoners generally will not deploy law on a regular basis with each other, both because it would be costly and because people often perceive recourse to law as unnecessary, unneighborly, or even hostile in ongoing relationships of trust and cooperation. The routine operation of a commons resource and the day-to-day cooperation among the commoners are directly governed usually through informal, social interactions—perhaps law-like in their own right—but not by formal legal rules. Social norms and other modes of social organization and structure, not formal law, govern most daily interactions.

With that caveat, well-designed background legal rules are nevertheless crucial for the success of any liberal commons. As we discussed above, the right of exit poses a fundamental challenge to commons success: For many resources, the unilateral right to leave may invite opportunistic behavior and cause people to be on their guard, distrustful, and overly quick to retaliate. The background rules we propose can temper these instincts primarily by creating a formal "safety net" that enables commoners, without taking prohibitive individual risks, to gain the benefits that flow from trusting one another. The simple existence of well-crafted background rules, rather than their daily invocation, facilitates commoners' efforts to establish and maintain liberal commons property.

121. See sources discussed supra Section II.C.
122. The background trust-building role we envision for law, as stated in the text, can only be postulated here. It is quite another project to address the undertheorized understanding of the way law generally (and not only the law regarding common ownership) affects people's everyday lives and constrains or enables their decisionmaking.
124. See generally Symposium, Law, Economics, and Norms, 144 U. PA. L. REV. 1643 (1996) (including articles describing a range of contexts in which such norms form and operate).
While commoners are unlikely to bother learning the rules of (low-visibility) law, their ignorance of the law does not diminish its modest but important role. The myriad details of the law do not matter individually, but jointly they produce practices and experiences that in turn generate social expectations. For law to affect behavior, we do not assume widespread knowledge of any doctrinal detail, only that people generally believe that if things turn ugly, the law will serve as one form of social organization that protects them against extreme abuse and exploitation.

More precisely, the constellation of background rules that should govern a liberal commons must minimize incentives to abuse the interpersonal trust and cooperation necessary for success. Thus, liberal commons property forms can enable individuals who appreciate the potential economic or social benefits of common management of scarce resources safely to enter into relationships of mutual reliance that they may otherwise perceive as too risky. In an imperfect world, where we can never absolutely trust one another, background legal rules can function as an effective social organizational form that reinforces each commoner’s trust in others and willingness to cooperate without focusing on the grave vulnerability that such trust can engender.125 By generating the so-called social capital of shared norms, including norms of self-control, trust reduces the costs of monitoring and sanctioning activities.126

Background law that catalyzes trust is, for us, one essential alternative to restrictions on exit that can also make commons ownership work effectively. Some initial measure of trust—generated from the commoners’ self-interest, associational ties, or desire to engage, as the case may be—is a precondition for a liberal commons. But building trust is also an outcome. Just as trust secures success, so does success reinforce trust—a virtuous circle in which trust, as Philip Pettit claims, “builds on trust” and may “grow with use.”127

125. HARDIN, supra note 111, at 186 (“[T]he possibility of sanction is valuable for letting the well-intentioned, who do not require sanctions, risk being cooperative on the secure knowledge that those with whom they come to interact are similarly well-intentioned.”); H.L.A. HART, THE CONCEPT OF LAW 193 (1961); JEREMY WALDRON, When Justice Replaces Affection: The Need for Rights, in LIBERAL RIGHTS 370, 373-74, 376, 385, 387 (1993); Lisa Bernstein, Merchant Law in a Merchant Court: Rethinking the Code's Search for Immanent Business Norms, 144 U. PA. L. REV. 1765, 1793 (1996) (“[T]he transactor may find it desirable to include terms in the contract that are the best terms if the other transactor turns out to be untrustworthy, while making extralegal commitments ... that will govern the relationship if the other party turns out to be trustworthy.”); Carol M. Rose, Trust in the Mirror of Betrayal, 75 B.U. L. REV. 531, 535, 537-38, 540-41, 546, 550 (1995) (discussing bases for, and betrayals of, “semi-rational” or “doubting” trust).

126. See OSTROM, supra note 6, at 36.

127. Philip Pettit, The Cunning of Trust, 24 PHIL. & PUB. AFF. 202, 209-10 (1995). Kahan elaborates: [The] behaviorally realistic model suggests the importance of promoting trust. Individuals who have faith in the willingness of others to contribute their fair share will voluntarily respond in kind. Spontaneous cooperation of this sort, moreover, breeds even more of the same, as individuals observe others contributing to public goods and are moved to reciprocate.

Kahan, supra note 123, at 2.
The Penalty Default Alternative

Consider for a moment one possible objection to using law as a safety net and as a catalyst: Facilitative default rules could be, in the long run, counterproductive. According to this view, by making cooperation relatively risk-free, facilitative default rules could induce cooperators into making suboptimal investments in screening other potential cooperators and in learning how to cooperate better among themselves. Restated, the law should not promote ownership and management of commons resources unless the commoners could agree up front on their governance structure, without the assistance of legal mediation. If the commoners could not agree on initial terms, it is unlikely they could agree on much else, and therefore it would be better from an ex ante perspective if potential cooperators did not invest in a cooperative scheme that would be doomed to fail, in any event. This objection is pertinent for us because we argue that liberal commons success must rely primarily on the parties' ability to cooperate without the daily summons of legal rules. If this claim is right, then penalty default rules—rules that make trust and reliance risky absent an explicit ex ante agreement regarding the terms of cooperation—would be better than the facilitative regime we advocate.

But insofar as commons resource ownership is concerned, the penalty default objection is probably wrong, and the contextual tradeoff between facilitating cooperation and encouraging caution leads us to prefer the facilitative regime. To see why, consider how these two competing regimes affect the behavior of ordinary, “mid-level” cooperators, the overwhelming majority of whom must be the main target of a legal regime that purports to encourage liberal commons property. Given that learning to cooperate better is itself a (second-order) collective good for the commoners, it is difficult to see how a regime of penalty default rules would ever generate happy outcomes; rather, such rules would exacerbate the downward cycle

128. We are grateful to our colleague Jim Krier for challenging us on this front and helping us respond to this challenge.
130. On penalty default rules, see Ian Ayres & Robert Gertner, Filling Gaps in Incomplete Contracts: An Economic Theory of Default Rules, 99 YALE L.J. 87, 91 (1989), which argues that “penalty defaults are purposefully set at what the parties would not want—in order to encourage the parties to reveal information to each other or to third parties.”
131. A regime that encourages ownership and management of commons resources must focus its effects mainly on mid-level cooperators, because especially good cooperators may well succeed in effectively working together irrespective of the legal regime, and uniquely bad cooperators would fail in any event. (Furthermore, to the extent that for mid-level cooperators cooperation is itself a reward, but for bad cooperators it is not, the latter are unlikely to bid as high as the former to join.) The only important prescription regarding bad cooperators is that the law should allow—maybe even encourage—the others to exclude them. As the text below explains, this exclusion can be achieved without adopting a regime of penalty default rules.
132. See Krier, supra note 45, at 337-39.
of distrust that such rules assume to begin with. On the other hand, contrary to the penalty default objection, even a facilitative regime actually does not guarantee risk-free cooperation because law is always imperfect and must always be invoked by an injured party. Thus, the level of underinvestment in caution and in self-education under the facilitative regime is lower than the penalty default objection assumes and is, in any event, outweighed by the benefit of allowing mid-level cooperators to play the game at all.

Perhaps the penalty default argument has more bite when people are involuntarily thrown together in a commons, as when inheritance leads to co-ownership. In this view, the ex ante expected level of cooperation and trust among involuntary commoners is much lower than that of voluntary commoners. Therefore, the argument goes, involuntary forms of commons should not presumptively include our ambitious apparatus for supporting cooperation. Instead, one should expect trust to be absent and cooperation to fail, and let failure take its course without intervention. Although we agree that involuntary commoners are likely to be less inclined toward pursuing cooperative goals, we disagree again with the penalty default conclusion. Our point is not to force cooperation but to provide support if the commoners want to give cooperation a chance. Preserving exit in such cases ensures that our apparatus does not coerce, but facilitates an otherwise remote likelihood of cooperation. We see no reason to make the choice for cooperation more difficult for initially involuntary commoners by requiring that they exit and reenter to gain the benefit of cooperation-facilitating, trust-building rules.

In all, we view the role of law as constrained but indispensable. If the goals of a liberal commons are to be achieved, law can play no more, but no less, than a background role, by serving to catalyze and protect the trust that governs day-to-day cooperation. With this understanding of the goals of the liberal commons, and the proper role of law, we now turn to the core of our theory.

B. The Three Spheres of a Liberal Commons

When people trade their precious, if illusory, "sole and despotic dominion" for a share in a liberal commons regime, what do they get? First, they generally retain the ability to make certain autonomous decisions regarding use of the commons resource, the feature we call the "sphere of individual dominion." Second, they gain a voice, along with their fellow commoners, in collective decisionmaking regarding use of the resource, the

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133. Rose, supra note 125, at 554-56.
134. Indeed, if failure is likely ex ante, one might understand cooperation, the failure to exit, as an affirmative decision to remain (though, admittedly, a contextual decision not to exit does not require affirmative action and therefore may be less weighty than an initial decision to enter into cooperative resource management).
feature we call the "sphere of democratic self-governance." And, third, they retain the secure right to exit modified to respect certain community concerns if they are dissatisfied or if they are no longer interested in cooperating, the feature we call the "sphere of cooperation-enhancing exit." These three features—the spheres of individual dominion, democratic self-governance, and cooperation-enhancing exit—constitute the ideal-typical or general form of any liberal commons.

It is the necessary confluence of these three features that the liberal commons form highlights and the existing private/commons and liberty/community binaries hide. No real-world institution incorporates all these features; rather, we see approximations, more or less well-adapted to the liberal commons goals of promoting the gains from cooperation while securing the benefits flowing from strong exit. Our discussion here of the ideal-typical form and the rules we suggest in each sphere are necessarily somewhat abstract because we are trying to unify analysis across a wide range of institutions for commons resource management. Refining this ideal type, then, becomes an iterative process: Part IV on co-ownership—and our future work on family law, common interest communities, etc.—uses the liberal commons form to evaluate the law, and that evaluation in turn helps refine the liberal commons framework itself.

1. The Sphere of Individual Dominion

In one sense or another, all three features of the liberal commons elaborated in the following pages are aimed at facilitating trust and cooperation (strengthening social values) and generating prosperous use (maximizing economic gain). For methodological reasons, we start with the most elementary background rules, describing a set of default rules that govern the domain of individual action. These rules seek to ensure that individual use of the commons resource does not yield tragic outcomes. More particularly, these rules counter three forms of inefficient behavior regarding commons resources: (1) overuse, (2) underinvestment, and (3) wasteful struggles regarding the fruits and revenues that a commons may produce. Together, these rules govern the sphere of autonomous decisionmaking reserved to each commoner—the actions he or she may take without seeking permission from fellow commoners. These rules apply only absent a majority decision and are thus intentionally minimalist in their scope and aspiration.

135. Recall that, to be analyzed usefully in the liberal commons framework, an institution must be one in which the calculus of utility comprises incommensurable goals, participation is of the essence, and the terms for exit matter. See supra text accompanying note 9. These admittance criteria circumscribe the problems that any liberal commons form must solve, and hence correspond with the three spheres we discuss in the text. The first sphere allows some divergence between individual and social use; the second sphere promotes participation; and the third sphere protects liberty.
We assume that the democratic self-governance institutions of the commons, discussed in the next Subsection, generate more refined injunctions for beneficial use, and that the default rules we describe here apply only to relatively marginal issues, those that do not justify or require the invocation of collective decisionmaking. It is nonetheless important to appreciate the way even these rules can facilitate trust, cooperation, and efficiency.

a. Policing Overuse

Let us start with mechanisms that protect against overuse (leaving aside nonlegal modes of social organization that may accomplish similar ends). We see two complementary approaches to intervention: first, directly regulating commoners' behavior through broad but vague default rules, and second, indirectly encouraging proper cost internalization by establishing tough default rules that give commoners the confidence to trust each other in daily interactions.

i. Direct Regulation

Successful commons property regimes often create detailed, explicit regulations restricting and channeling use. To ensure people take appropriate care in exploiting the commons environment, such rules typically are designed to be easily enforceable, for example, by imposing escalating punishments. Furthermore, these regulations tend to be cautious with regard to current exploitation of the commons resource.

136. An important question arises regarding the proper boundary between the sphere of individual dominion and the sphere of democratic self-governance. We cannot provide a precise answer to this question for all liberal commons settings because the outcome must depend on contextual macro and micro values. But in Subsection III.B.2.b infra, we provide our general guideline: The liberal commons favors majority rule in a broad realm of management and investment (or divestment) decisions so long as the majority's decisions are not purely redistributive, shifting utility from the minority to the majority. This general prescription signals some "bias" in favor of democratic self-governance: In a liberal commons, the sphere of individual dominion is residual whereas the sphere of democratic self-governance is dominant. Such a bias does not collapse the liberal commons into the communitarian ideals of commons property, however, because for the liberal commons, collective governance is democratic and exit is preserved.

137. As an aside, the success of the medieval open-field system seems due, in part, to communal regulation of the fields' use according to the two forms we explore in the text below. Cf. Smith, supra note 35, at 132, 136-37 (terming the open-field system a "semicommons" because of how it combines commons and private uses).

138. OSTROM, supra note 6, at 71-74 (detailing how access to a river for irrigation in villages in Valencia was controlled by consistent monitoring by the farmers themselves and by elected officials, with a tribunal determining violations and imposing fines); id. at 94-100 (addressing the importance of graduated sanctions); McKean, supra note 6, at 256 (describing escalating penalties—including exclusion or banishment in extreme cases—in the commons governance regimes of certain Japanese villages); id. at 272-75 (describing the need for easily enforceable rules).

139. McKean, supra note 6, at 272-75.
Conservative limits on exploitation may impose some current costs, but nevertheless result in overall efficiency gains. By shifting commoners' discount rates so that future returns become more valuable, these rules make continuous cooperation more attractive now.

A system of direct regulation requires detailed rules properly tailored to the specific resource and its particular environmental, economic, and social circumstances. Such a contextual and dynamic regulatory scheme can be best produced (and adapted periodically) by the commoners, and thus lies well within the sphere of democratic self-governance. The formal law, on the other hand, is less likely to provide a successful default regime of direct regulation that is sufficiently contextual and dynamic. If a default legal regime aims to regulate activity directly, the best it will be able to do is to handle a wide range of resources tolerably well. For example, direct regulation can set general standards of reasonable use, such as a rule restricting each commoner to uses that accord with the others' expectations, and then leave the door open to local adjustments the parties may make to tailor resource use to their specific circumstances. Practically, it can do no more. Usually, the default rule of the direct approach involves ratifying existing uses as a baseline and enjoining creation of major barriers to reasonable new uses. Such vague default rules, although theoretically plausible, are not likely to internalize costs very efficiently. Therefore, they will not likely be effective anti-opportunistic devices of the sort we seek.

ii. Indirect Encouragement

To be effective, the operative background rules that prevent overexploitation must be sharper and more precise. In particular, they must guarantee that if trust collapses, then the costs of each commoner's use will be properly internalized, neutralizing ex ante the incentives for overuse. One plausible rule can be simply stated: Every commoner is liable to the others for the fair market value of every use calculated pro rata (that is, according to ownership share). Alternatively, in settings where the underdeterrence concern is significant—notably where the visibility of exploitation efforts is low and monitoring is relaxed, as in marriage—then liberal commons goals may be better achieved using a more stringent remedy, for example, one based on recovering the benefits that the violator gained from overuse of the commons.  

140. Where the visibility of exploitation efforts is low, fair-market-value liability may not suffice to deter excessive use. There, potential violators can count on some measure of underenforcement. They may reasonably expect some probability that deviance will not be spotted if monitoring is relaxed, as we expect it to be, until eventually there is major deviance. Also, if the pattern of deviance is detected late, evidentiary problems may arise because the exact degree of earlier excess uses may be harder and more costly to identify, a cost that is aggravated if catching extreme exploiters also requires settling the accounts of other, less extreme exploiters.

141. HANOCH DAGAN, UNJUST ENRICHMENT: A STUDY OF PRIVATE LAW AND PUBLIC VALUES 18 (1997). Removing ex post the possibility of profit from detected infringements makes
At first glance, both the fair-market-value and profits-based formulae may seem impractical because calculating the liabilities for overuse would impose high administrative costs. But recall that we intend the liability rules to work in the background; we doubt that parties in a well-functioning commons would routinely turn to such strict accounting rules. Commoners would likely perceive a cold accounting for each use (or for each investment) to be inappropriate in an ongoing relationship of cooperative interaction, mutual trust, and group solidarity.\textsuperscript{142} It would also be quite expensive to administer. Rather, we expect to find, following Ellickson's account, that daily interactions would be governed by a more informal, rough mental account of outstanding credits and debits.\textsuperscript{143} So long as the aggregate account is not radically unbalanced and future interactions can provide adequate opportunities for evening up, commoners may not be concerned if particular subaccounts are not balanced.\textsuperscript{144}

So, the accounting mechanism we suggest is not intended to serve the commoners on a daily basis. Its purpose and method is different, consistent with our view of the trust-catalyzing role of law. Such a rule assures each commoner that even if the commons breaks down, no party will be too vulnerable to another's exploitation. By assuring enforcement of a precise accounting if the commons fails, the law can enable owners to trust one another and to rely on each other's cooperation in the meanwhile.\textsuperscript{145} This trust, to be sure, is not completely cost-free from the commoners' perspective. Invoking the anti-opportunistic mechanism requires the commoners to invest some amount in monitoring each other. Law can facilitate the parties' trust, but it cannot—and probably should not—entirely displace the need for each commoner to take some care not to trust others too much.\textsuperscript{146} This indirect legal mechanism, even if imperfect, plays its role by relaxing the parties' own monitoring reflexes, by making monitoring

\textsuperscript{142} Ellickson, supra note 123, at 234-36.
\textsuperscript{143} Id. at 56; see also Bernstein, supra note 125, at 1796-98 (arguing that trade association members rely on informal accounting during ongoing dealing but strict legal accounting during the endgame).
\textsuperscript{144} Ellickson, supra note 123, at 56.
\textsuperscript{145} Omri Ben-Shahar, Rights Eroding from Past Breach, 1 AM. L. & ECON. REV. 190 (2000). Contra McKean, supra note 6, at 273-74 (arguing that successful systems "betray an intense concern with... bookkeeping to keep track of contributions and withdrawals from the commons").
\textsuperscript{146} Rose, supra note 125, at 555.
cheaper,\textsuperscript{147} and by lessening a too quick resort to formal law, the types of actions that cause others to become suspicious and in turn undermine trust and cooperation.\textsuperscript{148}

b. Preventing Underinvestment

Anti-opportunistic mechanisms regarding the parties' investment decisions are the mirror image of "anti-overuse" rules. Investment in a commons can be a public good with respect to other commoners. Hence, it invites free-riding: Individuals may refuse to pay their share, motivated solely by the expectation that others' efforts will generate the same good free of charge (or at least more cheaply).\textsuperscript{149} Free-riding can generate underinvestment that would harm any commons and would demoralize any community.\textsuperscript{150} Therefore, unsurprisingly, well-functioning commons property regimes set norms that require commoners to contribute their proportional share for necessary services invested in the commons.\textsuperscript{151}

i. Preservation

A default legal regime seeking to facilitate liberal commons success should formalize investment-protection norms through a rule stating, first, that any commoner may unilaterally undertake any investment—even if not urgent and with no requirement of the other commoners' prior approval—reasonably required to prevent harm to the resource and to protect the commoners' continued ownership or possession; and second, that the

\textsuperscript{147} The mechanisms we suggest make monitoring cheaper indirectly: By supporting trust, they encourage the parties to spend less on monitoring, because each can expect the others to self-report potential overuses.

\textsuperscript{148} Rose, supra note 125, at 556-57. There is another possible objection to the accounting mechanism we propose. Our mechanism can never be perfect—and thus the overuse aspect of the tragedy of the commons can never be fully overcome—because potential defectors will always be able to get away with their opportunism if they overuse or damage the common resource in unobservable or unverifiable ways. Cf. Alan Schwartz, \textit{Relational Contracts in the Courts: An Analysis of Incomplete Agreements and Judicial Strategies}, 21 J. LEGAL STUD. 271, 279-80 (1992) (discussing the distinction between observable and verifiable information). This critique postulates that there are many acts of individual commoners that would be impossible—or, more likely, too costly—to observe or to prove in court (even if observed). The critique further implies that a regime of private property (the sole owner case) is free from this difficulty. We do not dispute that commons property regimes face the difficulty of unobservable or unverifiable infringements. Ellickson, supra note 19, at 1329 (comparing the effectiveness of barking dogs as a boundary-infringement device with the difficulty of designing commons-shirking detection mechanisms). But this difficulty is not wholly absent with private property: Trespassing must be policed and licensees monitored. Therefore, if—or, better, in those cases where—the default rules we propose can overcome the difficulties of collective action in controlling overuse by way of observable and verifiable acts, the liberal commons is not different, in this respect, from so-called Blackstonian private property.


\textsuperscript{150} See id. at 622.

\textsuperscript{151} Ellickson, supra note 123, at 71-75, 275; Ostrom, supra note 6, at 49; McKean, supra note 6, at 266-67.
investing party should be entitled to an immediate pro rata contribution from each one of the other commoners.

The rule protects a cooperating commoner from the others' possible opportunism by insuring that parties who invest today will not be exploited tomorrow. Like anti-overuse rules, our rule here serves a protective function: to encourage parties to give cooperation a chance. The rule would be too cumbersome to invoke on a daily basis, so such ongoing accounting would be handled through the ordinary informal norms that we usually see. Given the possibility of disputes regarding which preservation measures are "reasonably required," along with concern that some commoners may lack immediate ability to contribute, the law can back the contribution rule we propose with various structural devices, such as insurance-like funds collected in advance that provide some assurance of payment when disputes arise.

The investment-protection regime, like its anti-overuse complement (and for the same reasons elaborated above), is supposed to function as a background norm in the parties' relationship, so its mere existence simultaneously encourages efficient levels of investment (by inducing investments that would have otherwise been too risky and too open to free-riding) and inculcates productive trust among commoners.

ii. Improvements

In designing a liberal commons, we should take care before we impose any contribution obligation. As noted above, that obligation reasonably includes expenses aimed at preserving the commons as a whole. "Improvements," however, are different from simple "preservation"—though the line between them is murky. To the extent that improvements can be adequately defined, they seem more likely to deviate from the parties' original understanding of their common endeavor, so we cannot be sure that commoners who refuse to participate are trying to free-ride, rather than expressing their own subjective preferences and genuine valuations. Including improvements in a broad obligation to contribute could offend the notion of individual choice inherent in a liberal commons. We think that

152. See generally Dagan & White, supra note 141, at 385-90 (discussing restitutionary liability for unilateral conferment of unsolicited benefits).
153. As Saul Levmore explains, individual valuations are idiosyncratic because they depend on varying abilities to pay for a good and on personal tastes. Levmore gives three exceptions where the phenomenon of subjective devaluation would not occur: (1) the recipient has infinite wealth; (2) the recipient is a profit-making enterprise where subjective preferences have little role; or (3) the nonbargained benefit is easily translated into wealth. Unless those exceptions apply, one cannot easily refute the recipient's claim that the recipient preferred to invest money in the acquisition of some other benefit more clearly to the recipient's liking. Saul Levmore, Explaining Restitution, 71 VA. L. REV. 65, 74-79 (1985).
154. For the proposition that awarding restitution for unsolicited benefits in cases of varying subjective valuations insults the liberal commitment to individual free choice, see Peter Birks, An Introduction to the Law of Restitution 109-10, 228 (1985); 1 Dan B. Dobbs, Law of
such considerations justify postponing any obligation to contribute respecting improvements until exit, in particular exit that liquidates the commons and resolves concerns arising from conflicting subjective valuations.155

To be sure, these "anti-underinvestment" rules are minimal and, if applied broadly, rather crude and suboptimal. Thus, on the one hand, improvements may be part of the parties' original understanding. And even where they were not foreseen, improvements may be, in some cases, the most beneficial course of action (for example, investing in insurance now may be more efficient than covering uninsured liabilities later). Similarly, there are cases in which even repairing a resource is a losing proposition; such a resource is best left to deteriorate.156

These defects of our default rules would be fatal if they were intended to apply to a wide range of investment decisions. However, recall that these rules apply only in the sphere of individual dominion, that is, absent a majority decision on preservation or investment. They constitute the (limited) realm of action in which any single commoner can act autonomously on behalf of the group. Given that a more ambitious regime regarding investments and improvements is well within the sphere of democratic decisionmaking that we propose, it is reasonable to restrict the realm of individual choice only to undisputed investments.157 Crude as it is, the preservation-improvement divide seems good enough given its limited task.

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155. Levmore explains:

In partition the property is generally reduced to monetary terms, often by sale . . . . The recipient, whose share of the improvement's value is deducted from his share of the property's total value, cannot claim to have been forced to purchase a good that he does not value, because he has received in partition the monetary equivalent of his share of the improvement.

Levmore, supra note 153, at 78. This rule leaves a commoner who invests in improvements and exits early with no right of contribution. But, as the text above explains, any other rule would leave the other commoners too vulnerable to uncalled-for impositions of benefits. And, as we indicate below, a commoner who wishes to initiate a common investment in the resource can and should resort to democratic self-governance mechanisms.


157. In other words, until the community can reach some agreement on how risk-averse it is going to be, our rules should assume that it is maximally risk-averse, so that individual investment is reimbursable only when it can be characterized as a protection against erosion. In such a case, differences in subjective valuations are unlikely.
c. Sharing Fruits and Revenues

Finally, we take up the problem of distributing the products of a commons. A basic principle that complies with the injunctions against overuse and underinvestment is that fruits and revenues should be distributed in proportion to each commoner's ownership share. 158 But what should be the rule where the revenues or fruits are not produced by all the commoners, but rather by one (or a few) of them? How should fruits and revenues be divided when a commoner makes an autonomous decision to use the commons resource?

Three solutions come to mind as default rules. One rule would allow the laboring commoner to keep the entire net profit after paying the others the fair market value for the use of their shares. A second, diametrically opposed possibility is to give the laboring commoner a fair market return for the labor and distribute the net profits among all commoners (including the laborer) according to their respective ownership shares. Third, an intermediate possibility would be to allow the laborer to capture fair market value of the labor as well as a proportional share of net profits attributable to the labor, with all commoners (including the laborer) splitting the remaining surplus. 159

We see no general way to decide among these approaches. To the extent that we are concerned mostly with policing against underinvestment, the first rule seems preferable to the second (and, to a lesser degree, the third). 160 But, as we indicated above, the second rule performs best in ameliorating overuse. Also, the second rule (implicitly) conceptualizes the labor that any member invests in the commons as invested on behalf of the group, and thus seems better designed to inculcate the sense of common undertaking crucial for a well-functioning commons. While choosing among these choices requires the sort of context-dependent analysis attentive to micro and macro values that we discussed earlier, all the

158. Such is indeed the practice of successful commons regimes. McKean, supra note 6, at 264-65.

159. Assume, for example, that there are two commoners, that the fair market value for using the resource as a whole (say, a parcel of land) is 40, that the fair market value of the pertinent labor is 10, and that the resulting net profit is 100 (after deducting all expenses, including the 10 in labor paid back to the laboring commoner). The first option would give the passive commoner 20 (50% of the fair market value of the parcel's use), and leave the laborer 80. The second rule would give each party 50 of the profit (so that the laborer does not get any special benefit). The third rule would allocate 20% of the net profits to "work" and 80% to "land," thus allowing the passive commoner to receive 40 (50% of what has been allocated to "land") and the laborer 60 (50% of what has been allocated to "land" as well as that part of the net profits that has been allocated to "work").

choices can fall within the range bounded by the liberal commons framework.

2. The Sphere of Democratic Self-Governance

a. The Virtues of Mobilizing Voice

So far, we have focused on mechanisms that counteract the potentially devastating effects that individual autonomy may have on the efficiency—even the viability—of commons ownership. At a minimum, within a sphere of individual dominion, owners can benefit from the commons resource. Now we become more ambitious and explore affirmative ways to support the commoners' cooperation, starting with possible rules for democratic self-governance. These rules can help potential commoners capture both the economic benefits that a viable commons engenders (pooling, joint management, risk-spreading) and the social gratifications it generates (the psychological rewards of belonging, membership, and collective action). Recall that in many circumstances the economic and the social goods are intimately related because efficiency, trust, and cooperation tend to be mutually reinforcing.

Our prescriptions draw on findings from social science studies of successful, though illiberal, commons. These studies suggest to us that democratic self-governance with a large role for majority rule is preferable to unanimity rules. By requiring complete agreement on management issues and by emboldening holdouts, unanimity rules may lead to anticommons tragedy, that is, mutual vetoes that waste a resource through underuse.\(^{161}\) We believe a democratic regime—appropriately modified to work in our liberal framework—would best serve the individual and the group in managing a commons resource in a way that maximizes efficient use and enriches social relationships. Our regime gives voice to each individual commoner and gives the commoners as a group the power to tailor management and use of the commons resource to changing environmental, economic, and social circumstances.

The mechanisms we propose amplify each commoner's ability to change commons management from within. Resorting to "voice," rather than immediately moving to "exit," requires disgruntled parties to have some measure of loyalty toward their fellow commoners.\(^{162}\) The predisposition to loyalty, however, is not sufficient absent structural arrangements that facilitate effective voice.\(^{163}\) As Hirschman explains, "the decision whether to exit will often be taken in light of the prospects for the

\(^{161}\) Heller, supra note 32, at 622-26 (explaining how the anticommons tragedy operates).

\(^{162}\) HIRSCHMAN, supra note 67, at 77 (stating that loyalty makes exit less likely and increases the likelihood of voice).

\(^{163}\) Id. at 82 ("While loyalty postpones exit its very existence is predicated on the possibility of exit.")
effective use of voice." 164 Furthermore, he notes that “voice is essentially an art constantly evolving in new directions.” 165 Therefore, so long as strong exit is possible—and we insist that it always be possible—exit proves an easy response to dissatisfaction, and it tends to dominate voice. 166 A default regime of democratic self-governance that promotes participation is required to direct commoners to opt for voice first and to use exit only as a last resort.

Voice is also an important medium for community-building. Deliberation over daily decisions concerning the management of the commons resource affords commoners an opportunity to engage in dialogue. In this dialogue, the commoners may attempt to synthesize their divergent experiences and preferences while reaching a collective decision. 167 Such experience is a means of socialization, one that helps refine the commoners’ values and inculcates collective commitments. Thus, the sphere of democratic self-governance is significant not only because it may result instrumentally in more efficient decisions. Democratic self-governance is also important to inculcate the noneconomic goal of cooperation, enriching the commoners’ interpersonal relationships and solidifying their interpersonal capital. Democratic self-governance requires attention to both jurisdictional boundary norms and procedural rules.

b. Jurisdictional Boundary Norms

Successful commons regimes, Ostrom reports, are characterized by “collective-choice arrangements” that permit most affected individuals to “participate in modifying the operational rules.” 168 These arrangements allow that “the individuals who directly interact with one another and with the physical world can modify the rules over time so as to better fit them to the specific circumstances of their setting.” 169

Applying Ostrom’s prescription within a legal regime for a liberal commons is not easy. In particular, difficult decisions arise concerning how best to determine the boundaries of group jurisdiction, that is, the scope of decisions governed by a democratic governance regime. On one side, the need for dynamic management and the problem of anticommons tragedy both point toward a relatively broad majority-rule jurisdiction. Broad majority-rule jurisdiction also seems to correspond well with a social context of trust and cooperation, one that understands the group, rather than

164. Id. at 37.
165. Id. at 43.
166. See id. at 36-43.
168. Ostrom, supra note 6, at 93.
169. Id.
its individual members, as the ultimate owner of the commons resource. On the other side, however, a liberal commons—like liberal regimes generally—must be aware of the risks of majority rule and set jurisdictional boundaries to mitigate these risks. Broad majority rule easily turns into minority exploitation, especially if it extends the jurisdiction of the majority, as we think it should, to the most significant decisions concerning the management of the commons resource. And the risk of minority exploitation tends, as we have seen, to frustrate ab initio the possibility of trust and cooperation and instead to make exit the commoner’s dominant route to protecting autonomy. Therefore, a grant of broad jurisdictional scope to the majority must be limited by protections against abuses arising from that broad jurisdiction.

These two guidelines may seem vague and contradictory, but we think that they can be reasonably clarified. The goal is to prescribe jurisdictional boundaries that would minimize conflict between majority and minority interests. One approach could be to allow majority rule in a broad realm of management and investment decisions—including giving the majority the power to lease or mortgage the commons resource or to make extensive and substantial investments (or to decide upon divestment)—so long as the majority focuses on increasing the size of the collective utility pie. Such an increase in majority power, however, increases the risk that the majority will exploit the minority, so we would also prescribe sharper limits on majority sovereignty whenever decisions are more easily characterized as redistributive, particularly when they shift utility from the minority to the majority.

170. These boundaries have been extensively debated in many contexts, such as procedures for granting variances from public zoning schemes, for judicial review of decisions by residential associations, or for judicial review of decision rules in partnerships or close corporations. E.g., Nahrstedt v. Lakeside Vill. Condo. Ass’n, 878 P.2d 1275 (Cal. 1994) (clarifying the process for decisionmaking by condominium associations and the applicable standards of court review); RESTATEMENT (THIRD) OF PROPERTY: SERVITUDES § 6.13(2) & cmt. a (2000) (discussing the duties of a condominium association to its members and standards of judicial review of condominium association decisions).

171. Notice that the rule against purely distributive majority decisions protects both shifting and stable minorities. This rule would invalidate, in other words, not only decisions that seize an opportunity to rip off one or a few commoners who are, for some reason, isolated at a given moment. It also invalidates decisions with no sound utilitarian basis that systemically disfavor the preferences of a more stable minority. On the other hand, a stable minority is not protected, and should not be protected, where such a utilitarian basis exists. The meaning of majority rule is that, so long as the procedural safeguards discussed below are observed, the majority can, for example, legislate aggregate-utility maximizing rules regarding the use of the resource even if these rules systematically correspond to the majority’s preferences. Absent an intent to injure the minority, a majority is allowed to make decisions that benefit itself much more than they benefit the minority, even when an alternative decision would benefit all equally, but to a lesser extent. To be sure, there may be contexts in which micro or macro values outside the liberal commons framework could point toward more egalitarian solutions. In these contexts, applying a strict utilitarian test could undermine trust by giving the minority the impression that they are inferior or that they are the suckers. But in many other contexts—where egalitarian commitments are not in play—a utilitarian calculus seems to work tolerably well.
A knotty problem arises in evaluating the validity of a majority decision to leave the commons resource unused. What counts as the baseline of use or nonuse is a difficult question that has been extensively debated in the nuisance, takings, and land use literatures, and will not be recapitulated here. In most cases, however, a decision to stop using the commons can reasonably be deemed outside the domain of the majority rule, because it does not usually maximize the commoners' utility and is relatively more likely to be a strategically motivated move to impair the minority's welfare expectations. A distributive intention to freeze the minority out should render the majority's decision illegitimate; thus the application of majority decisionmaking there would be invalid. But a majority may be able to redeem its nonuse decision if it can show utility-maximizing reasons.

In many cases, a utility-maximizing reason could be based on an efficiency calculus, such as a showing that market conditions exist under which current use would generate losses, or a demonstration that a "time-out" is economically useful for paying off debts and searching for alternative low cost uses. Efficiency, to be sure, should not be the only consideration that can legitimate majority decisions. Other utility-maximizing considerations—such as environmental conservation, a simple preference for realizing revenue later, or different levels of risk tolerance—can also render majority decisions legitimate. But making an efficiency showing suggests, at least to a point, that the majority decision is not motivated by strategic exploitation of the minority. In those unusual cases where judges or other arbiters are called in, they may be able to improve on an efficiency analysis by also evaluating evidence more directly related to commoners' subjective utility functions. Judgments about subjective utility are bound to require complicated assessments because utility is both wealth-dependent and taste-dependent. But messy as these judgments are, they are no different from myriad other rules throughout the law that invoke—usually implicitly—utilitarian balancing.

Finally, we do not privilege the original intent of the founding commoners regarding the majority's decisionmaking jurisdiction (unless, of course, such intent has been enshrined by certain constitutional agreements). Success in the liberal commons context—as with private and commons property—requires dynamic adjustments to changing circumstances. Hence, there is always a chance that the preferences of the majority will, at some point, substantially shift away from those of certain


173. Furthermore, it may well be that in such a case it is the minority's insistence to continue an inefficient (and positively harmful) use that is strategic.
minority members. So long as the minority has not been exploited—in other words, absent prohibited redistributive motivations or consequences—and given the minority's ability to exit, we do not think that the jurisdictional boundaries for democratic self-governance should incorporate any conservative bias.

c. Procedural Norms

Margaret McKean provides a rich account of procedural norms for democratic self-governance. In successful commons regimes, she reports, commoners “convene regularly in a deliberative body to make decisions about opening and closing the commons,” set harvest dates, decide “rules governing the commons,” and also “adjudicate conflicts” among themselves. These bodies, as she describes them, seem to operate typically along republican democratic lines. Not only is power decentralized so that there is no hierarchy separating leadership (even if elected) from citizens, but also there often appears to be significant emphasis on collective deliberation. To ensure adherence to the decisions the group adopts, deliberative bodies pay attention to the views of all eligible users of the commons. Although formally majoritarian, these bodies in practice usually foster consensual decisionmaking. Democratic governance operates as a background rule, while daily decisionmaking in the absence of deeply held dissent is governed by a social norm of unanimity. This background/operational split legitimates and promotes consensus but does not create a formal anticommons structure, with its attendant tragedy.

Republican democratic governance can be viable only in social environments characterized by trust and cooperation. In other settings, such as the paradigm of a public corporation, republicanism may be both unnecessary and too costly. A hierarchical governance structure may better

174. See Gillette, supra note 91, at 1425 (describing how changing circumstances may frustrate some homeowners’ original expectations in a housing association).
175. McKean, supra note 6, at 258. These bodies had reasons to convene other than management of the commons. As McKean explains, this made management more efficient by lessening the transaction costs of assembling for these purposes. Id. at 260.
177. See Ellickson, supra note 19, at 1350.
178. McKean, supra note 6, at 260-61. As McKean explains: Disgruntled violators... could begin to free-ride... or to shirk... if they felt that the maintenance of the commons was no longer in their interest because the rules were unfair. And they could free-ride as individuals even if they could not overcome the collective action dilemma in order to demand changes in governance of the commons.
179. Id. at 261.
facilitate the parties' collective action. But notice again that republican governance in the appropriate social context is more likely to develop the trust and cooperation it requires and to facilitate and encourage members' participation. Participatory democracy can intensify the parties' interpersonal relations; so republicanism, with its attendant limitation on the size of the commoners' group, is an important institutional mechanism for community-building. Interpersonal relations and community, in turn, reinforce trust and facilitate cooperation.

These lessons can be incorporated into a legal regime of a liberal commons. Along with recourse to majority rule rather than to administration by elected officials, a liberal commons regime committed to republican democratic governance would require prescriptions respecting disclosure, consultation, and fair hearing. Before majorities act, they should disclose relevant facts that arguably justify the proposed action and make room for open discussion by dissenting parties in a forum where all sides must listen to opponents' views and give reasons for their stances. Finally, minority complaints of due process deprivations or substantive exploitation should be capable of triggering mediation or judicial intervention.

These mechanisms significantly facilitate successful liberal commons property. Procedural safeguards calm the concern of the parties that others will maneuver behind their backs. Such mechanisms also can recruit the judiciary to support the parties' cooperation by serving as a forum for dispute resolution that can "provide solutions that permit [them] to end their quarrels and to get on with their lives." And where no such reconciliation is possible, a court can be advised to order dissolution of the commons, because for hostile parties, ownership and management of commons resources is bound to yield tragedy. Finally, the requirement of open-minded consultation—although difficult to enforce because the majority can often carry it out in a purely superficial way—facilitates republican social norms because it provides commoners with standards and guidelines for conduct and judgment they each can expect the others will generally follow in a social context generally governed by cooperation and mutual trust.

180. See Henry Hansmann, Condominium and Cooperative Housing: Transactional Efficiency, Tax Subsidies, and Tenure Choice, 20 J. LEGAL STUD. 25, 34-36 (1991) (describing how landlords, contracting separately with each tenant, may be better able to maximize aggregate tenant preferences than cooperatives or condominiums).


d. Promoting Tailor-Made Adjustments

The rules we have discussed so far provide a starting point for people who inadvertently become commoners and for those who would voluntarily become commoners if they did not have to incur the costs of custom-tailoring their default legal regime through contract. But for commoners who can bear some contracting costs, background rules supporting freedom of contract can provide another, simple method of legal facilitation for a successful commons.

To prosper, the commoners must be relatively free from the authority of outside bodies in managing the commons, a freedom McKean calls "independent jurisdiction." Providing "substantial local autonomy" is an easy, but crucially important, way to supplement the more active methods of commons ownership facilitation we have already discussed. The web of default background rules—significant up to a point—cannot by its nature be sufficient for every case of liberal commons property, because each resource carries unique features.

Therefore, alongside the law's active support for commons ownership via anti-opportunistic and institution-building rules, the law should also offer what may be called passive support; that is, the law should reflect a liberal approach respecting the content of any private "constitutional arrangements" commoners may wish to adopt. So long as exit is appropriately preserved (within the limits set below), and provided third parties are not injured, the law should allow people to agree ex ante on whatever constitutional arrangements they prefer respecting rights and obligations regarding the resource, its management and use, or rules for dissolution. By adding a liberal approach to contracting, people can tailor their default rules so that they are ever more responsive to particular resource needs, technological changes, and evolving local norms.

3. The Sphere of Cooperation-Enhancing Exit

a. The Many Faces of Exit

Appropriate mechanisms of anti-opportunistic guarantees and democratic self-governance begin to move ownership and management of commons resources away from their seemingly tragic predicament; well-calibrated cooperation-enhancing exit completes the story. Unlike commons

183. McKean, supra note 6, at 259.
184. Ostrom, supra note 6, at 212.
185. A possible limitation could include protecting against the negative externalities that may arise from excessive fragmentation of property rights. See Heller, supra note 56, at 1173-74.
186. Private constitutions raise several questions that cannot properly be addressed here, regarding both the outer limits of freedom of contract (especially in contexts that may raise concerns of systematic exploitation) and the possibility of unwritten constitutions.
success stories that sacrifice exit to build community, a *liberal* commons preserves a commitment to individual exit. Indefinite restrictions on exit cannot be legitimized in a liberal commons.

Exit, however, is not a unitary concept, although it is frequently and mistakenly treated as such. Sometimes, freedom to alienate one’s share is sufficient to protect exit; other times, nothing short of dissolution will do—dissolution rules include, to name a few examples, partition in co-ownership law, divorce in family law, termination of trusts or partnerships, and liquidation of corporations. Furthermore, for both alienation and dissolution, there exists a range of mechanisms that serve community-preserving functions without substantially compromising liberal commitments. These mechanisms help insure that the exiter’s decision is informed (not hasty and ignorant) and sincere (not opportunistic), thus refining the class of exit decisions that are consistent with preserving cooperation and that should be protected from a liberal standpoint.

b. *Restraints Can Enhance Cooperation*

Just like rules governing daily life in a commons, exit rules do not serve as operative regulatory norms. But they can serve, as in the spheres of individual dominion and democratic self-governance, as background rules whose mere existence protects the commoners from defection, abuse of trust, and exploitation. If so, cooperation-promoting exit rules may be tuned so that they contribute to commons ownership success and perhaps even support its establishment ex ante. To function as anti-opportunistic mechanisms, alienation and dissolution rules should safeguard commoners from unjust deprivation of utility by other commoners. 187 Hence, these rules should contain an injunction against redistribution, ensuring a scrupulous allocation of the resource or its worth corresponding to the parties’ initial (and subsequent) investments.

Liberal commons settings include forms where the initial entry can range along a spectrum from involuntary to voluntary. For example, the classic involuntary forms are when heirs inherit property or when neighbors are locked into a riparian regime for stream use. By contrast, voluntary forms include any time people choose to enter into a property institution such as a marriage or condominium. Cooperation-enhancing limitations on exit become increasingly problematic when entry is involuntary, because they infringe more severely upon individual freedom of choice. As we shift along the spectrum toward voluntary entry, more intrusive cooperation-

187. Cf. Green, *supra* note 68, at 178-79 (discussing “principles of justice in dissolution, conditioned by the legitimate expectations of the members”). Attempts to deprive others unjustly can be initiated either by the majority or by the minority (or one individual commoner). In the former case, preventing unjust deprivation not only serves as an anti-opportunistic device, but also is crucial to securing practical (and not merely theoretical) exit. *See id.* In the latter case, preventing unjust deprivation safeguards against independent exploiters who want to take the money and run.
enhancing limitations on exit may nevertheless be consistent with liberal values.

Similarly, liberal commons settings include forms in which the "intensity" of membership ranges along a spectrum from limited to comprehensive. Thus, there are some forms—such as close corporations and condominium associations—where the common interest is relatively limited, so that the commoners preserve many other areas of individual control. Other forms are more comprehensive or inclusive—think of marriage—so that the sharing covers significant aspects of the commoners' lives. Cooperation-enhancing limitations on exit become increasingly problematic when membership is inclusive (as it is with the involuntary forms mentioned above) because they infringe more severely upon individual freedom of choice. As we shift along the spectrum back toward limited intensity, more intrusive cooperation-enhancing limitations on exit may nevertheless be consistent with liberal values.

c. Alienation vs. Dissolution

When is dissolution even necessary to preserve liberal exit? That is, when is a right of alienation not enough? Another way of posing the problem is to ask when a departing individual should be able to break up a liberal commons. For some property forms, such as the condominium association or perhaps the cooperative, sale may be a sufficient protection for liberal exit, and the repertoire of alienation restraints we discuss below is enough to protect cooperation values. In these cases, particularly where cooperation is based more on voluntary entry and its intensity is limited, a liberal commons does not require allowing the possibility of dissolution that has both community-destruction and private-benefit-destruction effects.188 Often, however, sale does not sufficiently protect exit, because it can be expected to undervalue the pro rata ownership share of the exiter. This undervaluation is increasingly likely and significant in settings where the noneconomic benefits of cooperation and the gains from participation are more central to use of the commons resource.189

d. Three Mechanisms

Regarding both alienation and dissolution, a range of mechanisms may promote cooperation-enhancing exit, for example, cooling-off periods, exit

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188. The private-benefit-destruction effect may arise in cases where one (or some) of the commoners developed private benefits related to her share in the commons (benefits that are not shared by everyone or not shared equally).

189. A typical example for this category is co-ownership of a family farm, discussed below in Part IV. Even in these cases, however, we believe that a majority that seeks to resist the breakup of the community should be able to buy out the party seeking exit, so long as that party is fully compensated for the value of her share. Seeinfra text accompanying note 197.
taxes, and rights of first refusal. However, our endorsement of these mechanisms is not unlimited. To remain consistent with a liberal framework, we must fine-tune these mechanisms so that they continue to protect a certain class of exit decisions, those that are informed and sincere.190

i. Cooling-Off Periods

An unlimited right to exit can threaten cooperation and efficiency by generating a domino effect, a problem especially severe because of the asymmetrical information inherent in the decision to exit. Insights from cognitive psychology help refine this seemingly unequivocal conclusion. In game-theoretic terms, they teach us that when people repeat interactions, they typically come to view their relationship as if it were of endless or unknown duration, a conception that can lead them to switch to voluntary cooperation. Even when the horizon is definite, cooperation may be possible so long as the horizon is distant enough. The domino effect, with defection as a dominant strategy, operates only for certain short-time-horizon games.191

This cognitive psychology finding suggests that law can provide a useful role in facilitating cooperation and efficiency by allowing temporary restraints on exit. Limited restraints on alienation and on rights to call for dissolution can help create a brief "grace period" that may extend the horizon of exit enough to catalyze mutual long-term cooperation. This marginal compromise on exit, allowing parties to lock themselves in a commons for a time, may help lead them to adopt a strategy of tit-for-tat which fully "rational" parties would adopt only in indefinite games. And once cooperation begins, it will arguably yield social and efficiency gains that would, as we have seen, support the parties' continued trust and cooperation. Hence, tweaking exit may turn the tide against the pessimistic scenario of the tragedy of the commons and build momentum toward the types of successful cooperation that can carry the day.192

190. Note that this approach, which disfavors opportunistic exit, requires a measure of instrumental reasoning. However, the instrumental analysis is deployed here to refine the class of exit decisions protected from a liberal standpoint, not as an end in itself.

191. See MARTIN J. OSBORNE & ARIEL RUBINSTEIN, A COURSE IN GAME THEORY 135 (1994). As an aside, recall that in all these cases, the norms of well-socialized commoners can override law-created incentives.

192. Cf. Scott & Scott, supra note 123, at 1283 (arguing that a cooling-off period "reduces the risk of asymmetric investment" by reducing the risk of strategic exit or threats of exit and encourages the parties to invest in the relationship even where the expected reciprocity is long-term). Some may object to our reliance on people's irrationality as a means for driving the right outcome, suggesting that our solution offends transparency, which is another important liberal value, and—even more importantly—is disrespectful of people. But both of these objections must be wrong. People's cognitive biases do not necessarily disappear if they are exposed, and thus there is no need to conceal the law's reliance on these failures. Further, there is no reason to think of such deviations from the rational-actor model in derogatory terms. Some of the most rewarding goods in life cannot and should not be reduced to market rationality. See generally ANDERSON, supra note 123, at 141-67 (discussing the ethical limitations of market rationality).
In most, if not all, cases, a cooling-off period corresponds to, rather than undermines, our liberal commitments, because it helps ensure that a decision to exit is informed and sincere. A cooling-off period gives more time for the benefits of cooperation to be perceived and allows transitory emotions to cool. Even if at the end exit still occurs, the cooling-off period allows a departing exploiter—namely, an insincere exiter—to be caught more readily and compelled to disgorge unjust profits.

ii. Exit Taxes

If prohibitive, exit taxes are incompatible with our liberal commitments, in part because they can thwart the desires of commoners who want to flee majority exploitation. But if reasonable, exit taxes can serve as an important cooperation-enhancing device, as well as ensure that the exiter's decision is informed and sincere. The dividing line between the prohibitive and the reasonable is imprecise, but by no means arbitrary. Exit taxes are reasonable and thus legitimate if they serve either a protective function or a deterrence function, but only up to a point.

As a protective device, exit taxes ensure that people will not decide to exit too casually, and help protect innocent commoners from the potential harm caused by one member's exit. In this role, exit taxes should monetize the destructive effects of exit, targeting, in the alienation example, the costs of recruitment and socialization of a replacement commoner who can effectively replace the exiter (including the associated monitoring costs), and, in the dissolution case, ameliorating the costs of community breakup.

As a deterrence device, exit taxes should set a limit on incentives to defect, thus deterring opportunistic departure. In this context, an arguably appropriate measure (balancing administrative costs against potential underdeterrence) is the present value of the benefits to the exiter that the commoners conferred assuming that the exiter would remain in a long-term relationship with the other commoners. Restitution of such noncash benefits does not violate liberal commitments to free choice if, but only if, these benefits were willingly accepted by the member, or can be easily reduced into wealth.

193. One concern with exit taxes is that, by increasing the incentive needed before exit becomes rational, they may induce opportunists to exploit even more to justify their costs on exit. If so, then exit taxes would not ameliorate, but rather exacerbate exploitation. But by pushing potential exploiters to be so greedy, exit taxes can also significantly increase the likelihood of detection. This effect is likely to (at least) counterbalance the concern of exacerbating exploitation.


195. Dagan & White, supra note 141, at 387-89. But see Rosen, supra note 78, at 1101. Rosen's only stipulation on this matter is that "[r]ules requiring disgorgement of particular economic benefits allocated to the community member on the assumption that he or she would be a lifetime member
A problem may arise even if exit taxes are appropriately set to address either the protective or the deterrence functions. A correctly set exit tax may nevertheless be so high that it has the effect of practically locking members into their current communities. In such a case, there is an unavoidable choice between the commitment to enhance cooperation and the liberal value of preserving exit. We would lean toward a more cautious attitude, by which we mean one that requires both justification under the protective or deterrence rationales and assurance that members can leave. 196

iii. Rights of First Refusal

Rights of first refusal may represent another modest limitation on exit aimed at facilitating cooperation. 197 For alienation, such rights target the commoners' often reasonable concern regarding the possibility of undesirable entrants. 198 Rights of first refusal allow the group some degree of control over the identity of future transferees of the current commoners. More importantly, these rights provide a mechanism for preventing the entry of noncooperative parties as well as for preventing exploitation by exiters who may be motivated either by spite or by the possibility of side payments from remaining members to ensure cooperative replacements.

Regarding dissolution, rights of first refusal may be an effective means of preserving community where a subset of members resist breaking up the community and are willing to buy out the party seeking exit. To preserve exit given such a buy-out right, the price should be set according to the fair market value of the exiter's share (minus the exit taxes, if they apply) if the commons resource were dissolved. 199 Only when the majority is not willing or able to exercise its buy-out option should dissolution be necessary.

* * *

should be presumptively valid to the extent such provisions do not make exit an impossibility." Id. Our approach above is more careful about autonomy.

196. Ideally, exit taxes should be calibrated in utility terms, which requires that they take into account wealth disparities. In some settings this fine-tuning may prove, however, to be too cumbersome from an administrative standpoint.

197. The conventional wisdom has long been that these rights have, at most, a minimal effect on property value because they do not impede alienation. E.g., 3 ERIC MILLS HOLMES, CORBIN ON CONTRACTS § 11.3, at 484-85 (Joseph M. Perillo ed., rev. ed. 1996). Recent work, though, suggests that, because of the high search and negotiation costs of bidding on unique property subject to first refusal rights, alienation (and hence owner exit) may be significantly burdened. David I. Walker, Rethinking Rights of First Refusal, 5 STAN. J.L. BUS. & FIN. I, 16-18, 43-46 (1999); see also Marcel Kahan, An Economic Analysis of Rights of First Refusal (June 1999) (unpublished manuscript, on file with The Yale Law Journal) (modeling the value of rights of first refusal and rights of first offer).

198. See McKean, supra note 6, at 263 (noting that successful commons regimes tend to have careful eligibility screening for individual households).

199. As an aside, rights of first refusal may raise issues of discrimination when existing insiders restrict entry, but these issues are better policed through familiar antidiscrimination mechanisms. On this point, see sources cited supra note 94.
The three spheres of a liberal commons work together, as Table 1 summarizes. The sphere of individual dominion provides anti-opportunism mechanisms that can yield economic and social gains over private property. The sphere of democratic self-governance can make voice effective by facilitating trust and participation, thus allowing dynamic, satisfying, and prosperous management of the commons resource. Finally, well-calibrated cooperation-enhancing exit can build momentum for continuity in a commons while preserving individual autonomy. This synthesis holds, at least in theory. The next Part examines whether the liberal commons template helps one understand a case study in law and practice.

### TABLE 1. A THEORY OF THE LIBERAL COMMONS

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### IV. TRAGIC CHOICE IN AMERICAN CO-OWNERSHIP

Modern property law is a story of introducing and refining new liberal commons types, from versions of the close corporation, to common-interest communities, all the way to versions of marital property law, with each
variant spelling out default settings for the three spheres of action, and then encouraging experimentation and custom-tailoring. Even old-fashioned law has pockets of highly articulated solutions to the problems of shared ownership, usually regimes addressed to particular natural resources, such as riparian law regarding running water, or unitization rules for oil fields. While our future work will show how the liberal commons helps make sense of numerous legal institutions—and in turn how understanding these institutions refines the liberal commons framework—here we explore a fraught story drawn from old-fashioned default rules, rules that have proven poorly tailored to liberal commons goals.

The default American law of co-ownership invites tragedy: It undermines cooperation even when co-owners seek to work together, encourages distrust and misuse that may delay or even prevent use of emerging resources, and, more generally, imposes enduring losses whenever strategic behaviors or transaction costs deter people from voluntarily adopting a more tailored liberal commons form. American law currently forces people to choose between laboriously contracting for their own liberal commons or suffering under existing background rules that encourage conflict, mismanagement, and division. Property law can do better.

The decline in black rural landownership detailed in the first Section of this Part forms the backdrop for our co-ownership case study. The decline in black landownership that has frequently been understood as an inevitable result of the workings of ownership and management of commons resources may instead be, in some part, the contingent result of discrete legal choices. The second Section shows that the American law of co-ownership incorporates choices in each sphere of action that disfavor effective commons ownership. For each choice that American law makes, we counterpose choices made by other developed legal systems that are more supportive of liberal commons goals. Seen from this global perspective, the American system is an outlier on a spectrum. To the extent law matters in shaping behavior, the comparative approach suggests some room for useful legal reform.

A. The Disappearance of Black Rural Landowners

1. An Initial Caveat to This Fraught Example

As an initial caveat, we should note that this Section does not make any of several possible claims regarding declining black farmland ownership.


201. The next two articles planned in this series will be authored by Carolyn Frantz and Hanoch Dagan, see supra note 64, and Michael Heller and Rick Hills, see supra note 65.
First, we do not claim, or believe, that the law of co-ownership accounts, in a strong sense, for declining black ownership rates. Rather, we suspect that in a regression analysis, farm size would statistically explain most of the decline: Similar-sized white-owned farms and solely-owned black farms have also largely disappeared. Second, and relatedly, we do not claim that comprehensive reform of co-ownership law, if made in previous generations, would have operated directly to preserve black farms. The effects of poverty and race discrimination have been such that black farmers would likely have been done out of their land (by loan sharks and other scam artists) even if the law of co-ownership had been more favorable. Third, we do not claim that any individual legal change would make a difference for potential black farmers. Given our view of how law operates to affect behavior, farmers would be unlikely to act on, or even be aware of, any discrete law reform. Finally, we do not claim that remaining on uneconomic farms would necessarily have been a good outcome. For many black families, the best use of heir ownership shares often was precisely to finance education and escape from a hostile and hopeless social milieu.

Instead, we raise the black land case in a more tentative spirit, meant to illustrate how the liberal commons approach helps frame new questions, provoke research, and suggest attractive reforms. The material provides a backdrop for, and gives some texture to the evaluation of, the law reforms we discuss in the following Section. Had the law been supportive of cooperation in the spirit of the liberal commons, its behavioral and expressive effects might have helped to change the outcome for at least some black farm families, those who wanted to maintain their farms but were driven off in part by the unintended consequences of bad law.\(^{202}\) While no individual law reform would seem likely to have mattered much in this example, collectively, the package of reforms we propose might have made some difference, and may yet matter for emerging resources with the same analytic structure that are subject to a similar legal regime.

2. The Rise and Fall of Heir Property

Consider a common tale of commons property: In 1887, John Brown, a black man, bought eighty acres of land in Rankin County, Mississippi; in 1935, he died intestate, leaving his wife and children as heirs who in turn also died intestate, leaving the land to their children and grandchildren.\(^{203}\)

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202. For another exploration of the interaction of race and political/legal structure, see Issacharoff & Pildes, supra note 92. While race discrimination was undeniably an integral aspect of blacks' exclusion from southern primaries, Issacharoff and Pildes show that this argument misses the structural reasons for all-white primaries. Id. at 662-64.

203. See EMERGENCY LAND FUND, THE IMPACT OF HEIR PROPERTY ON BLACK RURAL LAND TENURE IN THE SOUTHEASTERN REGION OF THE UNITED STATES 283-86 (1980) [hereinafter HEIR PROPERTY]. See generally Thomas W. Mitchell, From Reconstruction to Deconstruction:
One of these grandchildren, Willie Brown, began consolidating ownership in the land by buying the interests of five of John's nine children: Frances, Minnie, Adda, Joe, and Lizzie. By the time Willie died, he had accumulated an undivided 41/72d interest, which he left to his wife Ruth. In 1978, Ruth filed for partition in kind of the farm, asking that her interest be physically separated from the remainder held by sixty-six other Brown heirs, whose interests ranged from 1/18th down to 1/19,440th of the farm. The court, however, ordered the land partitioned by sale with the proceeds divided among the heirs. At the sale, a white-owned lumber company outbid Ruth. Ruth got some cash—more than she was willing or able to pay, but perhaps less than she would have demanded to compensate her for the farm's subjective value in preserving her family's cohesion and traditions. Just after the Civil War, when John Brown bought his eighty acres, black landownership in America began a steep rise. Nearly a century later, Ruth Brown lost her family land, and black landownership had nearly disappeared.

The uprooting of landed heirs is an oft-repeated tale in black America, particularly in the rural South. From 1920 to 1978, the number of black-operated farms in the United States dropped 94%, from almost one million to just over 57,000; by comparison, white-operated farms dropped 56%, from about 5.4 million to 2.4 million. In absolute terms, there are fewer than 19,000 black farmers in America today—less than 1% of American farmers—and black Americans continue to abandon farms at a rate three times that of white Americans. Why? Leave aside racial discrimination and wealth effects for the moment, factors that matter in this story and to which we return. Some scholarly explanations for the precipitous decline of black landownership have focused on the role of partition sales, which


204. HEIR PROPERTY, supra note 203, at 284-86 (listing the heirs' interests and reproducing the Brown family tree).
205. Id. at 283.
206. Id.
207. See BLACK FARMING, supra note 1, at 45. In 1982, 85% of all black farmers were concentrated in the South, but they were rare even there, totaling only about 6% of Southern farmers. Id.
208. Id. at 2-3. Between 1959 and 1969, the number of black commercial farm operators declined by 84%, compared to 26% for white operators. Id. at 40. Between 1970 and 1980, the black farm population dropped 65%, compared to 22% for the white population. Id. at 44. For state-by-state data on declining black landownership, see OFFICE OF MINORITY BUS. ENTER., U.S. DEP'T OF COMMERCE, LAND AND MINORITY ENTERPRISE: THE CRISIS AND THE OPPORTUNITY (1976). For a county-by-county breakdown of black landownership in the South, see BROWN, supra note 3, at apps. Q-W.
209. Settlement, supra note 1; see also BLACK FARMING, supra note 1, at 44 (indicating that, of America's six million farm residents in 1982, 4% were black Americans).
210. Settlement, supra note 1 (discussing decades of routine discrimination by the Department of Agriculture in denying crucial loans to black farmers); see also infra text accompanying notes 225-226.
are the background legal mechanism governing disposition of co-owned land in the Brown family saga.\(^\text{211}\) Over a quarter of remaining black-owned land in the Southeast is now "heir property" averaging eight co-owners, five of whom live outside the Southeast.\(^\text{212}\) By 1986, "more Mississippi land [was] owned by blacks in Chicago than by blacks in Mississippi."\(^\text{213}\) As one study concludes, partition laws "are unquestionably the judicial method by which most heir property is lost."\(^\text{214}\)

Heir property is just co-owned property arguably rendered ungovernable because of repeated rounds of intestate succession—a particular issue for Southern rural black landowners with "superstitions about making wills,"\(^\text{215}\) but no desire to have their family farmland broken up or sold. In general, when a landowner dies intestate (that is, without a will), the heirs at law receive fractional undivided interests in the land. For example, each of John Brown’s nine children received a 1/9th undivided interest in the eighty acres. Often, this first generation of heirs successfully manages their parents’ property, but second and third generations multiply quickly and prove less and less able collectively to cope.\(^\text{216}\)

Over time, practical problems become unresolvable. Under the American law of co-ownership, unless fractional owners unanimously consent, the underlying land cannot be managed in any useful way; nor can it be mortgaged; nor can any discrete fraction of the land be sold. Without effective democratic self-governance mechanisms for co-owned property, "[h]eir property is rarely improved or developed, due to the threat of partition sales and the difficulty of obtaining credit on partial interests in the property. 'In fact, a third more heir than non-heir property is not being used at all.'"\(^\text{217}\) Thus, "[t]he sale of the land, usually precipitated by an heir who is more than one generation removed from the originating source, becomes inevitable."\(^\text{218}\)

3. Community-Destroying Exit

What are the paths that lead to the end of black landownership? First, as with the Brown example, resident heirs may bring suit to quiet title

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\(^{211}\) Heir Property, supra note 203, at 282; see, e.g., Mitchell, supra note 203, at 4-7.

\(^{212}\) Heir Property, supra note 203, at 62.


\(^{214}\) Heir Property, supra note 203, at 282.


\(^{216}\) Heir Property, supra note 203, at 282-83. See generally Browne, supra note 3, at 54 (describing the obstacles to effective governance created by the multiplying number of owners as land passes through several generations). Governance difficulties are compounded because identifying heirs with legal interests becomes a more complex and expensive project with each passing generation. Id

\(^{217}\) Black Farming, supra note 1, at 68 (quoting Heir Property, supra note 203, at 75).

\(^{218}\) Heir Property, supra note 203, at 282-83.
intending to acquire ownership in severalty of part of the farm. By seeking a partition in kind, these heirs express their preference to stay on the land and to gain access to mortgages and other ordinary incidents of sole private ownership. Despite the heirs’ request, and the law’s nominal preference for partition in kind, courts usually order a partition sale because the number of heirs and limited size of the property make physical division impracticable. The second, more sinister, path to partition sales originates with nonresident heirs. A non-family-member may acquire a distant nonresident heir’s fractional share in a family farm specifically for the purpose of forcing a partition sale at which the outsider can buy the whole tract. Because heir property is very common among rural blacks, “the black community is particularly vulnerable to the unscrupulous partition sale brought about by someone buying out the interest of a single heir and then demanding that the land be sold.”

Partition sales, like foreclosure and tax sales, prove to be poor, often rigged markets with little information and few buyers: “[T]he purchaser[s] at these [partition and] tax sales are almost always white persons, frequently local lawyers or relatives of the local officials, who make it their business to keep abreast of what properties are going to auction and who attend the auctions prepared to buy.” Given wealth disparities, widespread discrimination in access to credit for rural black households, and the ordinary imperfections of these rural auctions, partition sales in practice mean the transfer of the land from resident black heirs with fractional interests to white purchasers who often pay below market value and pay nothing for the farm’s intangible value in preserving family cohesion.

Farming, from all reports, is a chancy business. If cashing out simply improves blacks’ overall position and consolidates economically obsolete

219. See BROWNE, supra note 3, at 54.
220. As an aside, filing suit often turns out to be a significant strategic error based on the mistaken belief held by most southern rural black landowners (according to surveys) that “an heir’s interest cannot be sold without the consent of all the heirs, and that heirs in possession of the land have superior rights to the land.” BLACK FARMING, supra note 1, at 69 (reporting a survey of black landowners).
221. Even when partition in kind is possible and perhaps even practical, courts favor partition sales. See RICHARD R. POWELL, POWELL ON REAL PROPERTY ¶ 612 (Richard R. Powell & Patrick J. Rohan eds., abr. ed. 1968).
222. See BROWNE, supra note 3, at 55.
223. Brooks, supra note 215, at 121.
224. See BROWNE, supra note 3, at 53. Indeed, these bidders may well be the people who induced the action for partition. Id. at 55 (“A variation of this procedure, where the white man instigates the partition after having gained a small interest, has been used, especially in the past, to gain black-owned land.”).
225. Criticizing the prevalence of forced partition sales, one note argues that judges have “misapplied the statutes and allowed private interests to use the statutory process as a land acquisition tool at the expense of cotenant landowners.” John G. Casagrande, Jr., Note, Acquiring Property Through Forced Partitioning Sales: Abuses and Remedies, 27 B.C. L. REV. 755, 772 (1986).
farms, then the decline in black landownership may not be a serious problem, notwithstanding the congressional studies and private initiatives concerned with halting this trend. However, declining black landownership also can be traced in part, perhaps, to the difficulty of governing fractionated land, resulting in partition sales initiated either by resident heirs seeking to improve land management or by nonresident heirs and their purchasers seeking to acquire the whole farm at bargain prices. The hostility of American law toward co-ownership appears to impose several costs, not only on individual black families, but perhaps on farm communities more broadly.

Landownership provides benefits other than just farm income. Commoners may prefer not to sell because they identify alternative economic uses or they place a high subjective value on keeping the land in the family. For example, one study of a rural North Carolina community showed how landownership provides reciprocal benefits within black families: Older owners can obligate children by allowing them to settle on the land, and the children then provide support for the elderly landowner in this residential enclave. By contrast, the study notes, landless elderly people are less likely to be able to mobilize informal support and more likely to suffer lower living standards. Along with simple economic reasons, there may also be cognitive framing issues for sales: A farm might stay in the family because the family would not be “willing to accept” the market price, but if forced to bid at auction, that same family might only be...

226. In 1982, the average commercial black-owned farm in the South was 128 acres, while the average white-owned farm was 428 acres. BLACK FARMING, supra note 1, at 50. “Economies of scale, research and technology, tax benefits, government price and income supports, and commercial lending all militate against the survival of black-operated small farms.” Id. (footnote omitted).


228. The most significant private initiative is the Emergency Land Fund, a private, nonprofit organization founded in 1971 to counter black land loss. See Brooks, supra note 215, at 117.

229. There are incentives outside of property law that also encourage partition. For example, attorney fee structures often award lawyers 10% of the land value on partition sale, but not if the title problem is informally resolved. There are many stories of lawyers who have initiated partition suits for heirs over the objection of the heirs’ families. In one case, a New York heir asked her lawyer to provide deeds to the family property, but the lawyer instead filed an action for sale and partition. When the heir fired the lawyer, the lawyer then found another heir to prosecute the suit. HEIR PROPERTY, supra note 203, at 292-93. Also, the tax system encourages partition sales by favoring wealthy investors who can write off certain losses in ways not available to low- or moderate-income farmers. See BLACK FARMING, supra note 1, at 4.

230. See, e.g., William E. Nelson, Jr., Black Rural Land Decline and Political Power, in THE BLACK RURAL LANDOWNER—ENDANGERED SPECIES, supra note 215, at 83, 93 (“The absence of a viable equity base has been costly to the black community both economically and politically. Black dependency on white economic support has served to rob the black community of its autonomous decision-making potential.”).


232. Id. at 205, 217; cf. Lisa A. Kelly, Race and Place: Geographic and Transcendent Community in the Post-Shaw Era, 49 VAND. L. REV. 227, 243 n.56 (1996) (discussing varying levels of ability of landless elders to mobilize informal support).
"willing to pay" a lower amount and would thus lose the farm. Finally, when commoners do decide to sell nonviable farms, they get only distressed prices for individual share sales or at partition auctions. They could do better by marketing the property cooperatively, but if the law facilitated cooperation, then they might not want to sell in the first instance.

We cannot know how much of the sharp decline of black landownership should be attributed to race and class discrimination, or to market forces that make small farms not economically viable. Encouraging and enabling black farmers to write wills and improving the integrity of partition auctions may have ameliorated the decline to an extent. It seems plausible, however, that, at least on the margin, some of this decline might have resulted from a particular default legal regime that does not support commons ownership and instead actively undermines any possibility for its success, even when the family deeply desires to continue working together, to keep land in the family, and to give family members a fair share when they leave.

B. How Law Can Dissolve Tragic Choice

The American law of co-ownership shrinks from any attempt to facilitate management of co-owned resources. Instead, by providing incentives for mismanagement, the default rules of the common law make the continuing existence of a commons a risky enterprise for commoners (technically, usually cotenants). Over time and in many ways, the American law of co-ownership dilutes the value of interests in commons ownership, making them less and less usable for the commoners. Combined, the rules promote underuse, overuse, and underinvestment—anything but the actions of an ordinary sole owner managing his or her own

233. This phenomenon of cognitive psychology was hypothesized by Mark Kelman, Consumption Theory, Production Theory, and Ideology in the Coase Theorem, 52 S. CAL. L. REV. 669 (1979). Later studies confirmed the effect. Loss aversion may at least partially explain this difference. Amos Tversky & Daniel Kahneman, Rational Choice and the Framing of Decisions, 59 J. BUS. 251, 258 (1986).

234. Perhaps locking people together by preventing alienation, the no-exit illiberal solution, would have kept more farms within the family. But such a solution, even if it achieved community-preserving goals, would still be tragic, because it sacrifices each heir's liberty to exit. Further, we question whether preventing alienability would necessarily achieve even instrumental community-building goals. Consider the disastrous consequences of the federal allotment policy for Native Americans that locked people together without providing effective internal self-governance mechanisms. See Heller, supra note 56, at 1213-17 (discussing the tragedy of the anticommons resulting from these policies).

235. Cotenants are those who share land under the common-law regime of tenancy in common. Each individual tenant has an interest in the same undivided piece of property. Unlike joint tenants, cotenants have no right of survivorship. See DUKEMINIER & KRIER, supra note 11, at 322. In all states where it existed, the presumption in favor of joint tenancy has been abolished almost completely, id. at 323, so, on death and in the absence of a will, heirs hold property as tenants in common. Abolishing the presumption of joint tenancy thus may have had the unintended effect of accelerating fractionation.
property. Given the penalty default legal regime of the common law, the tragedy of the commons turns out to be a self-fulfilling prophecy.

By contrast, Continental legal regimes do a better job of supporting the goals of a liberal commons, although some fall short in significant ways. Legal regimes that descend more from the French side of the tradition (France and Belgium) diverge in a few places from those on the German side (Germany, Austria, Switzerland, and in this context, Israel\textsuperscript{236}). One of these divergences—the requirement of unanimity in democratic self-governance—makes the French tradition significantly less supportive of the liberal commons than its Germanic counterpart. But viewed broadly, Continental legal systems possess most of the features we identified as supporting the liberal commons: facilitating the flourishing of the common use of property while still allowing meaningful exit. Even those Continental legal systems of the French tradition that carry the uncomfortable baggage of unanimity (creating the conditions for anticommons tragedy) are still considerably more supportive of liberal commons values than the American law. Recently, England. America's common-law parent, passed a law reform that significantly aligns its law with liberal commons goals.\textsuperscript{237}

The differences between the American and Continental laws of co-ownership are quite tedious. But, over time, it is the collective impact of just those tedious details that helps shape the norms of communities of co-owners, and tilts co-owners' attempts to cooperate toward success or failure. Whether something more like the Continental law would have made a difference for the black landowner is difficult to gauge in retrospect, as we mentioned earlier. Perhaps it would not have. And no single change would likely have made any difference. The decline may have been overdetermined, with racism in lending and changes in technology dwarfing subtle changes in the formal law. There is no way now to tease out the causal links between formal law and the informal norms and practices among black farm families and surrounding communities.

Nevertheless, the possibility that European farm families can now stay more easily on their land when family members depart suggests at least a

\textsuperscript{236} In many respects, Israel is usually considered a common-law jurisdiction. But the Israeli Land Law is part of a codification that was heavily influenced by the Continental tradition. See Yoram Shachar, History and Sources of Israeli Law, in INTRODUCTION TO THE LAW OF ISRAEL 1, 5-6 (Amos Shapira & Karen C. DeWitt-Arar eds., 1995).

\textsuperscript{237} The reason for the traditional common-law hostility towards co-ownership is somewhat of a puzzle, especially if we are correct in our claim that co-ownership is not an institution that necessarily fails. One possibility is that an outdated hostility toward feudal forms drove the development of co-ownership law. Consider W.W. Buckland & Arnold D. McNair, Roman Law & Common Law: A Comparison in Outline 106 (2d ed. 1952), which states: The inconvenience of common ownership was so great that a power of division was from early times inherent in the institution. . . . The contrary rule of our earlier law, till Henry VIII, under which no partition could be compelled (except as between coparceners, who became joint owners by operation of law, so that the position was not voluntarily assumed), rests, no doubt, in reality more on the interest of the chief lord in having the services undivided than on this ground . . . .
testable proposition. Perhaps the formal law matters occasionally even in rural farm communities and operates as the liberal commons theory predicts. Whether German farm families respond to supportive co-ownership law (or whether regression modeling would point wholly to government price supports) then becomes an interesting question for fieldwork and empirical testing. For emerging and “new economy” resources today, perhaps a default co-ownership law supportive of liberal commons goals could be even more important in catalyzing a virtuous circle of trust and cooperation.

1. The Sphere of Individual Dominion

   a. American Law

The common law facilitates a race to overuse—the classic image of a tragedy of the commons. Each commoner is entitled to full possession and, more importantly, in most states, the commoner can possess and use the commons without paying any rental value to the nonpossessors (so long as the nonpossessors are not excluded or ousted from possession). These rules provide an incentive for overuse because each commoner must make affirmative uses, or else receive no rents from the resource.

In the farm context, the common-law incentives for underinvestment are probably much more salient. As an initial matter, the law is relatively receptive to claims for accounting or contribution for payments of taxes, 238. In some circumstances, family farms can be a rather efficient scale of agricultural production. See generally HENRY HANSMANN, THE OWNERSHIP OF ENTERPRISE 141-42 (1996) (contrasting the success of family farms with the failure of vertically organized agricultural cooperatives).

239. See, e.g., Alison Maitland, Shrewd Farmers See the Way the Wind Is Blowing, FIN. TIMES, Mar. 17, 1998, at 2 (discussing German farmers’ support for extensive price subsidies). 240. 2 AMERICAN LAW OF PROPERTY § 6.14, at 57 (A. James Casner ed., 1952); DUKEMINIER & KRIER, supra note 11, at 351; W.W. Allen, Annotation, Accountability of Cotenants for Rents and Profits or Use and Occupation, 51 A.L.R.2d 388, 395 (1957). There are, however, jurisdictions that have adopted other rules. For example, some jurisdictions have statutes or common law that specifically require tenants in possession to compensate nonpossessory commoners for the value of possession, usually calculated as the nonpossessing tenant’s proportionate share of rent, as if the property were rented to a third party. R. Cunningham ET AL., THE LAW OF PROPERTY § 5.8, at 214 & n.22 (2d ed. 1993); Evelyn Alicia Lewis, Struggling with Quicksand: The Ins and Outs of Cotenant Possession Value Liability and a Call for Default Rule Reform, 1994 Wis. L. REV. 331, 351. Other jurisdictions hold the duty to account applicable whenever a “cotenant derives any income from the sole possession of the property in the form of rents or otherwise.” Cunningham ET AL., supra, § 5.8, at 213-14.

241. See Cunningham ET AL., supra note 240, § 5.8, at 211-12. 242. In theory, but not in practice, the law of waste might penalize a cotenant for overuse, such as clear-cutting timber from property today if the timber would be more valuable in later years. While the law of waste is designed to avoid property use that fails to maximize the property’s value, see RICHARD A. POSNER, ECONOMIC ANALYSIS OF LAW 73 (4th ed. 1992), the law is sufficiently confused and the penalties sufficiently light that overuse is encouraged. Cunningham ET AL., supra note 240, § 5.8, at 214-15. Courts are divided over the question of whether cutting timber or drilling for oil constitutes waste (activities that the law may well want to encourage on the appropriate scale). 2 AMERICAN LAW OF PROPERTY, supra note 240, § 6.15, at 65-66.
mortgages, and other necessary charges made by one commoner on behalf of the others.\footnote{243} But if one commoner makes necessary repairs without the others' consent, most courts are much less forthcoming, allowing the investing commoner to receive contribution only at partition, or through a setoff in the (rare) case where a court requires an investing commoner to account for rents and profits.\footnote{244} This rule has been rationalized as necessary because questions "of how much should be expended on repairs, their character and extent, and whether as a matter of business judgment such expenditures are justified" are too uncertain for the law to settle.\footnote{245} Thus, commoners who make repairs take a significant risk that they will not be reimbursed; alternatively, they are led to partition as the only available avenue to recoup their investment expenditures.\footnote{246}
b. *Comparative Perspective*

The Continental traditions have desirable rules for discouraging both overuse and underinvestment. For example, to avoid overuse, Israel makes the user liable to the other co-owners for the cost of use.\(^{247}\) Further, countries in the Continental traditions distribute the net fruits and revenues of the property on the basis of the commoners' shares in the property, thus helping both to discourage overuse and to inculcate a sense of community among the commoners.\(^{248}\)

Likewise, Germany and Israel require immediate reimbursement for expenses reasonably required for maintenance and management of the commons resource, while denying compensation for improvements (whose value is less clearly shared by all commoners).\(^{249}\) This relatively broad provision for immediate reimbursement for noncontestable (reasonable) collective goods bestowed upon the land discourages the sort of underinvestment that can make commons ownership inefficient. Furthermore, such a regime of instantaneous contribution assumes that dissolution is not a satisfying first or best solution but should be, indeed, a solution of last resort.\(^{250}\)

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\(^{247}\) For Israel, see Israel Land Law § 33, 1959, 23 L.S.I. 288 (1968-1969); consider also the Louisiana Civil Code, L.A. CIV. CODE ANN. art. 806 (West Supp. 2000).

\(^{248}\) Section 35 of the Israeli Land Law provides, "Every joint owner is entitled to a share in the proceeds of the joint property in accordance with his share in the property." In the *Yotzer* case, the court declined to give this passage a narrowing interpretation that would have applied it only to situations in which the proceeds were created through no particular owner's labor, or even to adopt our complex intermediate approach. C.A. 274/82, *Yotzer v. Yotzer*, 39(1) P.D. 53, 55-56 (Isr.). For similar rules in Germany and Austria, see § 839 ALLGEMEINES BÜRGERLICHES GESETZBUCH [ABGB] (Aus.); §743 Nr. 1 BÜRGERLICHES GESETZBUCH [BGB] (F.R.G.); Gerd-Hinrich Langhein, [*Commentary*], in J. VON STUDINGERS KOMMENTAR ZUM BÜRGERLICHEN GESETZBUCH 126-27 (Norbert Horn ed., 13th ed. 1996); and Karsten Schmidt, [*Commentary*], in MÜNCHENER KOMMENTAR ZUM BÜRGERLICHEN GESETZBUCH §§ 743-47 (Peter Ulmer ed., 3d ed. 1997). Thus, these countries use the second of the three plausible rules for sharing fruits and revenues we discuss *supra* at text accompanying note 159. In a unique case, a German court allocated 100% of the profits from advertising to one co-owner of a gable wall who had allowed his side of the wall to be used for these purposes. Entscheidungen des Bundesgerichtshofes in Zivilsachen [BGHZ] [Supreme Court] 43, 127 (133-34). This outcome has been explained by the fact that, although a gable wall is jointly owned, each side is intended to be used exclusively by one owner. See Langhein, *supra*, at 127.

\(^{249}\) For Germany, see § 748 BGB, translated in *THE GERMAN CIVIL CODE* 122 (Ian S. Forrester et al., trans., 1975), which states, "Each participant is bound as against the other participants to bear the burdens of the common object and the costs of maintenance, management, and common use in proportion to his share." See also Langhein, *supra* note 248, at 219 (indicating that there is no compensation for improvements). This rule also holds in Israel. See Israel Land Law § 32. Interestingly, Swiss law, which generally follows the German Continental tradition, seems more like American law in this respect, granting the co-owner only the right to "take on his own the necessary steps which have to be taken without loss of time in order to preserve the object from imminent or increasing damage." SCHWEIZERISCHES ZIVILGESETZBUCH [ZGB] art. 647 (Switz.).

\(^{250}\) The Continental tradition also prohibits individuals from making use of the resource in a manner that interferes with the reasonable use of other co-owners. See § 828 ABGB (Aus.); CODE CIVIL [C. Civ.] art. 815-9 (Fr.); § 743 Nr. 2 BGB (F.R.G.); Israel Land Law § 31(a)(1); see also L.A. CIV. CODE ANN. art. 802. These codes employ flexible guidelines to restrict use to what may reasonably be expected by other commoners, typically by reference to the nature of the property and its previous uses. Of course, state law in the United States, apart from Louisiana, and the law
2. The Sphere of Democratic Self-Governance

a. American Law

As one commentator aptly notes, "cotenant conflicts are for the most part hidden dramas."\(^{251}\) Co-owned property in the American common law is governed by a rule of unanimity: Each commoner has veto power over the decisions of the other commoners regarding property management. A leading text notes that "[i]f the cotenants cannot agree neither law nor equity can settle such differences; nor can they specifically settle how the property shall be used and enjoyed. The law's remedy in all such cases is partition . . . ."\(^{252}\) For example, if differences arise among commoners about whether to enter jointly into a transaction such as borrowing money against the property or leasing it to outsiders, the law does not provide any guidance or facilitation. Absent partition, the veto power each commoner enjoys leads to a tragedy of the anticommons, with wasteful underuse and eventual division, as suggested by the black landownership saga.

Given these doctrines, it is unsurprising that "[m]ost lending institutions will not lend money on a partial interest in real property, even if the exact amount of the partial interest is known."\(^{253}\) Thus, a commoner cannot get a mortgage on an individual fractional interest; and for groups, unanimity rules prevent commoners from easily combining to get a mortgage on the whole. Without access to financing—because of a missing market—the sum of the parts proves less than the value of the whole and commoners face a significant additional incentive to partition the land by sale.
b. **Comparative Perspective**

Focusing on the Germanic legal regimes, at the supportive end of the Continental spectrum, we can see that the most important way they support the liberal commons, by contrast with the American common law, is by granting a wide jurisdiction for majority rule in the sphere of self-governance and reserving a relatively small sphere for unanimity. However, the threshold that German tradition sets between majority rule and unanimity is more restrictive than the threshold our theoretical discussion would suggest. We recommended that majority rule be available for decisions that tend to increase the size of the pie and unanimity ought to be required when decisions merely redistribute within a same-sized pie. Instead, Germanic legal systems draw the distinction based on the expectations of the parties. Majority rule is allowed when the decisions do not change the parties’ expectations for how the property will be used; unanimity is required for decisions that depart significantly from these expectations.

One may speculate that this rule is based on the concern about the risk of court errors in complicated disputes as to the utility of conflicting uses. We appreciate this concern. Nevertheless, we believe that adopting such a conservative attitude toward the scope of majority rule may suffocate the ability of the commons to adapt and grow with changing times. Interestingly enough, Swiss law incorporates our approach into the

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254. Not all Continental legal traditions have adopted this supportive rule: In general, those countries that are more closely related to German law have majority rule, while the legal traditions more closely related to France share the less desirable American requirement of unanimity. CODE CIVIL [C. CIV.] art. 577bis § 6 (Belg.); C. CIV. art. 815-3 (Fr.); see also LA. CIV. CODE ANN. arts. 801, 803 (requiring unanimity for decisions regarding use and management, except that, in the absence of agreement, a court may make decisions upon petition by a co-owner); Symeon C. Symeonides & Nicole Duarte Martin, *The New Law of Co-Ownership: A Kommentar*, 68 TUL. L. REV. 69, 130 (1993) (identifying partition as the solution where unanimity cannot be reached).

255. German law itself allows for majority rule for decisions “corresponding to the character of the common object,” but requires unanimity for “essential alteration[s] of the object.” § 745 BGB. Israeli law is essentially the same. Israel Land Law § 30(a) (stating that majority rule is sufficient for “all matters relating to the ordinary management and use”); id. § 30(c) (stating that unanimity is required for “any matter outside the scope of ordinary management and use”); C.A. 810/82, Zol Bo Ltd. v. Zeida, 37(4) P.D. 737 (Isr.). Austrian and Swiss law, with minor alterations, have the same system. § 833 ABGB (Aus.) (stating that majority rule is sufficient for ordinary management and use); id. §§ 834-35 (stating that in the absence of unanimity for significant alterations, dissenters may make specific demands or refer the matter to a judge); ZGB arts. 647a, 647b, 647d (Switz.) (stating that majority rule is sufficient for most administrative acts, useful and necessary repairs); id. art. 647e (stating that unanimity is required for improvements merely to improve beauty or comfort). An aside, other legal systems influenced by the German tradition also provide for majority rule in approximately these situations. E.g., SBIRKA ZAKONU [SB.] art. 139 (Czech Rep.) (stating that majority rule is sufficient for all decisions with the ability to appeal to the court to reconsider important decisions); ASTIKOS KODIX arts. 789, 792-93 (Greece); FOLGARI TORVENYKONYV [PTK.] arts. 140, 144 (Hung.) (specifying majority rule for issues “not exceeding standard measures,” but unanimity for others); CODICE CIVILE arts. 1105-06, 1108 (Italy); MINPO arts. 251, 252 (Japan) (specifying majority by value for acts of administration, but unanimity for alterations).
expectations-based test by closely scrutinizing the distribution of the benefits of such majority decisions. 256

Procedural norms of democratic self-governance also distinguish relatively supportive Continental traditions for liberal commons property regimes from the less supportive American law. 257 Both jurisdictional and procedural norms help make participation in systems of majority governance more meaningful.

3. The Sphere of Cooperation-Enhancing Exit

a. American Law

How to manage the freedom to exit poses a challenge for the liberal commons. In this sphere, the American and Continental laws overlap substantially, with a mixed record and few cooperation-enhancing mechanisms. For example, both have similar provisions regarding restraints on alienation of co-owned interests and on the choice between partition by sale and partition in kind. In American law, the limited mechanisms for cooperation-enhancing exit must be voluntarily agreed upon in advance by the co-owners. For example, agreements by co-owners not to partition are generally enforceable so long as they do not amount to a restraint on alienation and remain in force only for a reasonable time (which can turn out to be quite a long period, indeed). 258 On the other hand, American law disfavors agreements to restrain the sale of co-ownership interests, 259 so co-owners are, in general, unable to block sales to outsiders.

Partition is the dominant exit mechanism. 260 Nominally, partition in kind is the preferred common law method, 261 but it is complex to implement

256. For instance, if the agreed-upon alteration requires an unfair contribution by one commoner (for example, paying 1/4, but getting 1/10 of the value) who voted against the contribution, then that commoner must be compensated. ZGB art. 647d(3).

257. Germany provides each co-owner a right to "adequate" participation in the decision-making process, which includes access to adequate information and a right that each co-owner's opinion be adequately taken into account: § 744 Nr. 1 BGB; Langhein, supra note 248, at 163-64; Schmidt, supra note 248, §§ 744, 745 ¶¶ 14-17. In Israel, there are requirements of disclosure and consultation, Zol Bo Ltd., 37(4) P.D. 49 (Isr.), as well as requirements that parties approach the consultation open to suggestions. Violations of these requirements void the majority decision. C.A. 458/82, Vilner v. Golani, 42(1) P.D. 49 (Isr.).

258. 2 AMERICAN LAW OF PROPERTY, supra note 240, § 6.26, at 116; CRIBBET & JOHNSON, supra note 200, at 114; WILLIAM B. STOEBUCK & DALE A. WHITMAN, THE LAW OF PROPERTY 216-17 (3d ed. 2000) (noting that a reasonable time is typically defined as being a time within the period of the rule against perpetuities). The waivability of the right to call for partition proves to be one of the central features that distinguishes co-ownership from condominium law in general. Unlike co-ownership, condominium statutes or agreements prohibit action by unit owners to compel partition of the co-owned elements, so exit is by sale of the unit only. See STOEBUCK & WHITMAN, supra, at 181, 217.

259. STOEBUCK & WHITMAN, supra note 258, at 178 & n.19.

260. But it was not during the earliest days of the tenancy in common form. CRIBBET & JOHNSON, supra note 200, at 127 (noting that at early common law, only coparceners, but not cotenants, had the right to demand partition).
when co-owners cannot agree voluntarily on division. To even out the share values, courts impose equitable adjustments, such as payments of "owelty" or easements among the new parcels. Physical division often proves impossible for a minority of the commoners or significantly diminishes the value of their shares. In most cases now, partition is by sale, with the proceeds distributed pro rata according to ownership shares. However, as we have shown, auction sales often result in opportunistic exploitation by one commoner, because the auctions are such poor markets. While the choice between partition in kind and by sale may be complex—driven by "personhood" or utilitarian concerns—neither seems well-tailored by itself to achieving cooperation-enhancing exit.

Some reforms have been attempted. For example, Alabama passed a statute that gave co-owners the right to purchase the interests of the co-owner who petitioned for partition (but this provision was struck down in 1985). Other states allow courts to order a partial partition, thus respecting the desires of those who wish to remain in cotenancy. Both of these reforms seem to us to be aimed at ameliorating the community-destroying effect of the current law of partition. But the reforming states are not careful enough about the distributive effects of the reforms. The former reform offers an even thinner market than auction sales do. The latter—the procedure of "partial partition"—is also problematic. Allowing a subset of the commoners to carve out a share by physical division absent general consent is likely to injure the remaining commoners who may be left with a larger share of a smaller and less valuable piece of property.


262. Eli v. Eli, 557 N.W.2d 405, 408-11 (S.D. 1997) (remanding for the application of rules of owelty and creation of easements to ensure equitable partition in kind); STOEBUCK & WHITMAN, supra note 258, at 215 (defining owelty).

263. 7 POWELL, supra note 221, ¶ 612; STOEBUCK & WHITMAN, supra note 258, at 222-24.

264. See generally DAGAN, supra note 140, at 41-47 (discussing theories of personhood, resources, and property); MARGARET JANE RADIN, REINTERPRETING PROPERTY 35 (1993) (discussing personhood and property); WALDRON, supra note 13, at 343-89 (discussing theories of property and personhood). In the recent case of Eli, the court noted that partition in kind should trump monetary considerations, especially when "the land in question has descended from generation to generation." 557 N.W.2d at 410.

265. ALA. CODE § 35-6-100 (1975); Jolly v. Knopf, 463 So. 2d 150, 153 (Ala. 1985) (holding that the statute violated the equal protection provisions of the federal and state constitutions).


267. Cases construing the Alabama right-of-first-refusal statute, however, often articulated its purpose to be the protection of a co-owner against involuntary divestment of her property interest; thus these courts seemed to focus attention on the liberal rather than the cooperation interest of remaining co-owners. See, e.g., Williams v. McIntyre, 632 So. 2d 446, 449 (Ala. 1992); Jolly, 463 So. 2d at 153; Black v. McCorvey, 428 So. 2d 607, 608 (Ala. 1983); Ragland v. Walker, 387 So. 2d 184, 185 (Ala. 1980).
Hence, both reforms may exacerbate the potential minority oppression of current law and thus paradoxically undermine cooperation.

Perhaps one direction for a more successful reform would be to give commoners supporting and opposing partition a period of time to secure a sale on the open market, with the partition auction as a backstop. Or, in a solution adapted from the law of condominium associations, co-owners who wish to remain on the land following an auction could be given limited rights of first refusal (also called preemption rights). 268

b. Comparative Perspective

The countries in the Continental tradition generally provide for the right both to alienate one’s share in the property and to call for partition of it. 269 Commons success is enhanced, however, by allowing a cooling-off period, namely, by enforcing party agreements that restrain exit (both in the sense of alienation of one’s share and also in the sense of partition) for a limited time period. This cooling-off period is generally accomplished by declaring the complete invalidity of agreements to restrain alienation that exceed a certain number of years, or by subjecting the restraint after a limited period of time to the broad discretion of the court. 270

Some provisions of the Germanic systems relating to agreements to restrain exit go too far, in our view, in supporting the flourishing of the commons, threatening the liberal premises upon which desirable commons regimes are based. For instance, German law allows agreements to restrain alienation of one’s share to last perpetually, not mitigated by the authority

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268. Cribbet & Johnson, supra note 200, at 130 (discussing rights of first refusal as a mechanism to give condominium owners a voice in selecting their neighbors); Stoebuck & Whitman, supra note 258, at 123-24, 182, 203 (discussing rights of first refusal for condominium associations).

269. See, e.g., ABGB art. 829 (Aus.) (alienation); id. art. 830 (partition); C. Civ. art. 815 (Belg.) (partition); C. Civ. art. 815 (Fr.) (partition); § 747 BGB (F.R.G.) (alienation); § 749 Nr. 1 id. (partition); Israel Land Law § 34(a), 1959, 23 L.S.I. 288 (1968-1969) (alienation); id. § 37(a) (partition); ZGB art. 646(3) (Switz.) (alienation); id. art. 650(1) (partition); see also LA. CIV. CODE ANN. art. 805 (West Supp. 2000) (alienation). The French law allows for a court-ordered delay of the exercise of this right for a maximum of two years if immediate partition would depreciate the value of the property. C. Civ. art. 815. If used too frequently, this provision could represent a troubling inroad on the availability of exit. Used sparingly, however, and for such a limited period, it may be an acceptable compromise between the parties’ interests in preserving the value of their property and their right to exit.

Note that countries that did not provide generally for the right to partition without court approval are excluded from this comparative discussion. See infra note 275.

270. In Israel, the time limitation for agreements restraining alienation is five years, Israel Land Law § 34(b), and the time limit on agreements restraining partition is left to the discretion of the court—after three years, the court may order partition despite the agreement if the court deems it just to do so. Israel Land Law § 37(b). Many Continental regimes limit agreements to restrain partition to five years. E.g., C. Civ. art. 815 (Belg.); C. Civ. art. 815 (Fr.). Japan also does so. MINPO art. 256. In Louisiana, parties may agree to restrain alienation and partition for a period of up to fifteen years. La. Rev. Stat. Ann. § 9:1112 (West 1991).
of any court to invalidate the agreement, as in the case of German partition agreements. The Swiss law places a thirty-year time limit on the validity of agreements to restrain partition, but this time limit is arguably excessive. The only limit Austria places on agreements to restrain partition is termination upon transfer of the property. In their desire to support commons ownership, some of the countries in this tradition have failed to provide adequately for the relatively free exit that is essential to the functioning of a liberal commons.

How partition is accomplished is also important to support a liberal commons. Countries in the Continental tradition use two methods to achieve distributive equality. The first is scrupulously fair distribution of the value of the property on partition. Like the American law, most favor partition in kind (unless this form of division would seriously compromise the value of the property distributed to the parties). Accordingly, such

271. § 747 BGB (providing the general right to alienate one's share). This right may not be limited by any juristic act. § 137 c.1 id.

272. German law allows agreements to restrain partition to remain in force indefinitely, subject to invalidation by the court for "serious cause." § 749 Nr. 2 BGB. This provision seems to contemplate the possibility of permanent agreements to restrain partition in some circumstances. §§ 749, 751 id. (referring to the power to exclude "permanently"). Such restrictions potentially outlast transfers of the property, § 751 id. Although this criterion at first sounds like it may be too great a restraint on exit—a requirement of "serious cause" sounds much more restrictive than the broad discretion sometimes placed in courts to invalidate agreements—there is reason to believe that it is not, in fact, applied so rigidly in Germany. In particular, counterbalancing the concern that such an agreement will unduly burden the parties' ability to exit is the likelihood that a restraint on partition that lasts for an "unreasonably" long time, along with other causes that approximate concerns about restrictions on exit, will count as sufficient "serious cause." Schmidt, supra note 248, § 749 ¶ 8. Other causes for invalidating these agreements include a violation of the minority's procedural rights in decisionmaking or a breakdown in the personal relations of the commoners, Langhein, supra note 248, § 745, at 20; Schmidt, supra note 248, § 749 ¶ 11, and hostility among the commoners such that joint use is impossible, BGH [Supreme Court], NJW- Rechtsprechungs-Report Zivilrecht [NJW-R-RZ], 10 (1995), 334 (335). Conversely, a good opportunity to sell the common property is generally not considered a good cause. Schmidt, supra note 248, § 749 ¶ 11.

273. ZGB art. 650(2). On this point, Hungary is even more protective of exit, disallowing agreements restraining partition altogether. PTK. art. 147.

274. § 831 ABGB; see also §§ 832 id. (stating that a third-party disposition of property in common can bind the first parties to the disposition, but not their heirs). As an aside, a similar regime is in place in India, where agreements in perpetuity are allowed, but they have been held not to bind heirs, on the grounds of public policy concerns with alienation of land. SHAMBHUDAS MITRA, MITRA'S CO-OWNERSHIP AND PARTITION 173-74 (1994).

275. There are, of course, much more extreme examples of sacrificing the liberal aspect of the liberal commons by creating serious barriers to exit. For instance, several Middle Eastern countries do not have an express right to partition. In Iran, partition is not available if it leads to a loss in value of the land. QUANUN-1 MADANI art. 595 (Iran). In Jordan, partition may only be had by means of a petition to the court which, presumably, may be rejected. QUANUN AL-MADANI § 1040 (Jordan). In Nigeria, as well, partition of jointly owned family land—where "family" appears to be defined quite broadly—is available only for cause, and, when deciding whether or not to partition, the court must consider the best interest of the family as a whole. T.O. ELIAS, NIGERIAN LAND LAW 126-27 (1971).

276. E.g., § 843 ABGB (Aus.); Israel Land Law §§ 39, 40, 1959, 23 L.S.I. 288 (1968-1969); ZGB art. 651(2) (Switz.); C.A.101797, Ridlevich v. Moda'i, 52(4) P.D. 625 (Isr.). This is also the law in many other countries influenced by this tradition, including several postsocialist systems. Sz. art. 142 (Czech Rep.); PTK. art. 148 (Hung.); MINPO art. 258 (Japan); GRAZHDANSKII KODEKS [GRAZH. K.] art. 218 (Kaz.); BÔ LUẬT DÂN SU [BÔ L.] art. 238 (Vietnam). Interestingly, England
countries pay careful attention to ensuring that each party gets a fair share using the mechanism of owelty payments. A second approach, used by Germany, is to limit partition in kind to situations where physical partition can lead to identical values going to each owner. Germany provides further security against the possibility that the physical portions will be unfairly divided by prescribing that after division is made, distribution of the parts is made by lot. "Partial partition" is allowed only when the commoners provide unanimous consent.

Our discussion of the advantages and disadvantages of rights of first refusal suggested that providing such a right as a default may benefit a liberal commons regime. French law provides for a right of first refusal; the Germanic countries do not.

4. A Final Comparison: The British Turn

The American law of co-ownership took its lead from the English common law. So where does England stand? Until recently, the English law was uniquely unsupportive of co-owned property. Not surprisingly,
when the American law of co-ownership was formed, it followed the British preference for ending co-ownership rather than supporting its continuation, even if the two systems did not use the same technical forms. In 1996, however, England passed the Trusts of Land and Appointment of Trustees Act, moving England significantly closer to a supportive regime. The details are complex, but, in some ways, the English law now surpasses its American progeny in supporting the goals of a successful liberal commons.

Despite these changes, English law still does not go as far as the Continental systems. To give one example, immediate contribution is not available, even for basic maintenance and other necessary expenses, and as we have argued, delaying such recovery until dissolution increases

was not required to investigate all of the interests in common property; she only needed to deal with the trustees. MEGARRY & THOMPSON, supra note 281, at 291-92. Before 1996, the trust itself was referred to as a “trust for sale” and the trustees were under a statutory duty to sell the property at the earliest convenience. Id. at 289. Under the equitable doctrine of conversion, a beneficiary was considered to have an interest only in the proceeds of the sale of the co-owned property, and not the land itself, as equity regarded as “done that which ought to be done” (in this case, sale). Id. at 257. Trustees could postpone sale, but only if they all agreed to do so (even one trustee favoring sale was enough to trigger the duty). Id. at 289. Furthermore, alienation of the property was also facilitated by the power of two trustees validly to sell the land to a bona fide purchaser, overriding the equitable interests of the co-owners of the property. LPA §§ 2(1)(ii), 27(2). The only major exception to the duty to sell came for property that, like the family home, had a “purpose” other than sale, and this development came rather far along in the history of the law. See Williams & Glyn’s Bank Ltd. v. Boland, 1981 App. Cas. 487 (appeal taken from Ch.); BURN, supra note 281, at 236-37. The preference for sale and the ease with which sale could be accomplished demonstrate the degree to which the common law considered commons property to be pathological—an arrangement to be ended as quickly as possible.

283. Interestingly, American law rejected the English common-law view of the sale of the undivided property as the primary means of ending commons property and instead focused on the right to partition, a much more standard approach globally. Because of its focus on alienating the undivided property, the English common law actually made it more difficult to obtain partition than its Continental counterparts. This effectively resulted in an incentive to partition by sale (without consent of the parties) rather than in kind. Under the present English law, partition of the property by the trustees requires the consent of all of the beneficiaries, a task much more difficult than eliminating their interests in the co-owned land through sale and then distributing the proceeds. Trusts of Land and Appointment of Trustees Act (TLATA), 1996, c. 47, § 7.

284. The trust structure has been maintained, but its ingrained preference for sale has been significantly eroded. The automatic duty to sell and the equitable doctrine of conversion have both been abolished. TLATA § 3(3) (abolishing the doctrine of conversion); id. § 5(1) (abolishing the duty to sell). And, although two trustees can still sell the property to a bona fide purchaser and thus override the equitable interests of the co-beneficiaries, LPA §§ 2(1)(ii), 27(2); TLATA § 8(2), the co-beneficiaries are now empowered to petition the court to stop such a sale, see TLATA § 14. Also, the TLATA adds some procedural norms that enable greater participants by nontrustees, such as the requirement that, if practicable, the beneficiaries of the trust must be consulted and the wishes of the majority followed, at least insofar as these coincide “with the general interest of the trust.” TLATA § 11.

285. Leigh v. Dickeson, [1884–1885] 15 Q.B.D. 60; see also GRAY, supra note 281, at 479. To give another example, agreements to restrain partition and alienation are allowed, but only if they are a part of the instrument creating the trust, TLATA § 8, and two trustees may override the agreement by selling the land to a bona fide purchaser for value, id. § 16. These trustee powers decrease the effectiveness of nonpartition and nonalienation agreements as tools to enable long-term cooperation. Also, the trustees themselves must be unanimous in exercising their powers, Luke v. South Kensington Hotel Co., [1879] 11 Ch. D. 121, 125, which can make governance of the commons more difficult.
incentives for ending commons ownership. On balance, though, England has moved substantially toward greater support of a liberal commons regime, and has left American law behind.

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The American law of co-ownership shows what happens when people are faced with a particularly hostile legal regime, one that assumes shared management cannot work, and then interposes law that guarantees failure. It may be too late to reverse the tide for black rural landowners: Too few are left, and the legacy of discrimination weighs too heavily. But the lessons of their experience have wide applicability everywhere along the frontiers of property—cyberspace, genetic research, environmental conservation—anywhere people want and need to work together, but each individual reasonably fears exploitation by the others. While the American law of co-ownership now fails, it can do better; the liberal commons points the way.

V. Coda

Any legal regime for commons resource management must grapple with three spheres of decisionmaking: what we call the spheres of individual dominion, democratic self-governance, and cooperation-enhancing exit. When law addresses all three spheres successfully, the resulting ownership form, a liberal commons, helps people achieve the goals of preserving autonomy through exit while promoting the economic and social gains from cooperation. Sympathizers of privatization and communitarian approaches have seen conflict where there can be—and from a global perspective, often is—harmony. All have overlooked the facilitative role that law can play in overcoming tragic choice, in particular by using law to help catalyze and inculcate the social norms that make the liberal commons into a viable, indeed ordinary, way to own property. More

286. See, e.g., Rochelle Cooper Dreyfuss, Collaborative Research: Conflicts on Authorship, Ownership, and Accountability, 53 VAND. L. REV. 1162 (2000). Dreyfuss explains,

The artist, starving in a garret; the dedicated scientist, experimenting in a garage; the reclusive professor, burning midnight oil in the office—these are becoming endangered species. The creative industries have evolved: collaborative production is replacing individual effort. . . . [Y]et[,] the intellectual property literature has focused so little on the special problems of collaborative work. . . . Allocating the incidents of ownership is not a part of the “mental furniture” of many collaborators; left on their own, parties can and do run into significant difficulties. . . . Redesigning the intellectual property system to take explicit account of collaborative production would have significant advantages. Well-designed rules reduce transaction costs by functioning as off-the-shelf arrangements or starting points for ex ante negotiations. They also serve as default rules for situations in which the parties discover that they have omitted key terms from their agreements.

Id. at 1162, 1164-66. These and similar examples give us confidence that the liberal commons construct will have wide scope for further theoretical development and useful application.
and more, as "sole and despotic dominion" fades from economic life, versions of liberal commons regimes are becoming the dominant form of ownership, though a form that has not yet been recognized, studied, and supported in a unified way. The metaphor of the "tragedy of the commons" has blocked legal imagination and innovation; beyond tragedy, there await liberal commons solutions.