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FEE SIMPLE OBSOLETE

*Lee Anne Fennell**

Urbanization has dramatically altered the way in which land generates and forfeits value. The dominant economic significance of patterns of land use and the opportunity costs of foregone complementarities have made the capacity to reconfigure urban property essential. Yet the architecture of our workhorse tenure form—the fee simple—is ill-suited to meet these challenges. The fee simple grants a perpetual monopoly on a piece of physical space—an ideal strategy when temporal spillovers loom large, interdependence among parcels is low, most value is produced within the four corners of the property and cross-boundary externalities come in forms that governance strategies can readily reach. But times have changed. Categories of externalities that were once properly ignored by the fee simple have become too important to continue neglecting. This paper argues for alternative tenure forms that would move away from the endless duration and physical rootedness of the fee simple.

Nearly all privately owned real estate in the United States is held in fee simple absolute, or fee simple (FS) for short.¹ Every law student learns that the FS is the most extensive of all the estates in land—endless in duration, unencumbered by future interests, alienable, bequeathable, and inheritable.² Behind these descriptive elements lies the implicit normative message that the FS represents the endpoint of real property’s evolution, a more or less final answer to the question of how a modern society should structure

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¹ See, e.g., JOHN G. SPRANKLING, UNDERSTANDING PROPERTY LAW § 9.05(B)(1) (2012) (placing the percentage of privately owned land in the United States that is held in fee simple absolute at “[o]ver 99%”). Although the designation “absolute” is sometimes used to distinguish the full-strength fee simple from defeasible fees like the fee simple determinable or the fee simple subject to condition subsequent, the term “fee simple” without any modifiers carries the same meaning.

² See, e.g., JESSE DUKEMINIER ET AL., PROPERTY 214 n.7 (8th ed. 2014) (characterizing the fee simple as “the greatest modern estate known to law”); id. at 218 (describing the fee simple absolute as “as close to unlimited ownership as our law recognizes” and as the “largest estate in terms of duration” which may “endure forever”); ROBERT LAURENCE & PAMELA MINZNER, A STUDENT’S GUIDE TO ESTATES IN LAND AND FUTURE INTERESTS 4 (1993) (“The fee simple absolute is the most complete form of ownership recognized at common law . . . there are no conditions on possession, inheritance, or survivorship. The fee simple continues forever.”); Kevin Gray, *Property in Thin Air*, 50 CAMBRIDGE L.J. 252, 252 (1991) (describing rights in the fee simple as “the nearest approximation to absolute ownership known in our modern system of law”).

access to land.³ This paper challenges that message.

Property is a mechanism for delivering access to resources.⁴ The FS embodies a particular way of packaging and characterizing that access, one that resonates with a “thing-based” property paradigm.⁵ It purports to grant a chunk of the physical world—a unique piece of the earth’s surface and atmosphere—indefinitely to the party designated as owner. This formulation provided a useful shorthand for pairing inputs and outcomes in the mostly agrarian society in which the FS developed.⁶ Over time, however, it has become an anachronistic fiction that misses most of how urban property creates value.⁷

In mediating access to resources, every property system must decide when to employ boundaries that correspond to the physical world, when to engage in finer-grained forms of governance, and—most foundationally—when to simply ignore resources and impacts, effectively leaving them in the commons.⁸ The optimal mix of approaches cannot be determined for all times and places; it depends on which resources and effects are presently most economically significant.⁹ Granting a perpetual monopoly on a piece of physical space, as the FS does, is an unbeatable strategy when temporal

³ See, e.g., Robert C. Ellickson, *Property in Land*, 102 YALE L.J. 1316, 1398 (1993) (“As a group becomes literate and its lands become more scarce, its standard bundle of private land rights tends to evolve from the time-limited and inalienable usufruct to something like the perpetual and alienable fee simple.”). However, Ellickson notes the significance of different local conditions and acknowledges that “a private-property regime is not always best.” *Id.*

⁴ See Lee Anne Fennell, *The Problem of Resource Access*, 126 HARV. L. REV. 1471 (2013).

⁵ See, e.g., Henry E. Smith, *Property as the Law of Things*, 125 HARV. L. REV. 1691 (2012).

⁶ The development and ascendance of the modern fee simple occurred over a series of centuries, but the watershed event was the enactment of Quia Emptores in 1290. See, e.g., Ellickson, *supra* note 3, at 1376 n.308. This statute, which prohibited subinfeudation of fee interests while allowing substitution, had the effect of making land holdings more freely alienable. See DUKEMINIER ET AL., *supra* note 2, at 214-15. Heritability was established earlier, although the date is difficult to pinpoint, and elements of the feudal system made the process less than automatic. A.W. BRIAN SIMPSON, AN INTRODUCTION TO THE HISTORY OF THE LAND LAW 49-51 (2d. ed. 1986). In 1540, the Statute of Wills made the fee simple devisable as well. *Id.* at 191. Entailments and other impediments to alienability were addressed over time. *Id.* at 89-90; see also Claire Priest, *Creating an American Property Law: Alienability and Its Limits in American History*, 120 HARV. L. REV. 385 (2006) (tracing the removal of certain limits relating to creditors in the eighteenth century).

⁷ There have been other recent complaints about the anachronistic nature of certain strains of property theory and doctrine. See, e.g., Roderick M. Hills, Jr. & David Schleicher, *Planning an Affordable City*, 101 IOWA L. REV. 91, 134-35 (2015) (observing that Thomas Merrill and Henry Smith’s pathbreaking work “paid no attention to public law, instead focusing on hoary common-law doctrines to the neglect of zoning, subdivision law, environmental impact review, and other procedures through which agencies and legislatures impose ad hoc conditions on development” despite the far greater modern significance of the latter); Joseph Singer, *Property as the Law of Democracy*, 63 DUKE L.J. 1287, 1290 (2014) (arguing that “traditional legal doctrines governing estates in land” represent a “hypertechnical, abstruse set of rules [that] appears removed from modern policy concerns or values and increasingly lacks any understandable justification”).

⁸ Henry Smith develops the idea that property law employs a mix of governance and exclusion strategies in Henry E. Smith, *Exclusion Versus Governance: Two Strategies for Delineating Property Rights*, 31 J. LEGAL STUD. S453 (2002). The point that many impacts are best ignored follows from Demsetz, *supra* note 9. For the idea that ignoring the impacts of resource related decisions amounts to leaving certain elements in the commons, see YORAM BARZEL, *ECONOMIC ANALYSIS OF PROPERTY RIGHTS* 92-96 (2d ed. 1997) (explaining how an “imperfect delineation of rights” amounts to “plac[ing] attributes in the public domain”). See also Part I *infra* (discussing property’s choices among the three strategies of exclusion, governance, and tolerance).

⁹ See generally Harold Demsetz, *Toward a Theory of Property Rights*, 57 AM. ECON. REV. (PAPERS & PROC.) 347 (1967).

spillovers loom large, interdependence among parcels is low, most value is produced within the four corners of the property (through crops or herding, say), and cross-boundary externalities come in forms that governance strategies can readily reach. But conditions have changed.

We now live in a deeply interdependent society that is overwhelmingly urban. Eighty percent of the U.S. population lives in urban areas.¹⁰ Spatial externalities are no longer confined to problems of wandering cattle or wafting factory smoke; rather, the relative position and aggregate configuration of urban space now represents the primary way in which real property delivers and forfeits value.¹¹ Spatially rooted estates of endless duration deal poorly with the problem of optimizing urban land use because they scatter everlasting vetoes among individual landowners over the most critical source of value in a metropolitan environment—the patterns in which land uses and land users are assembled in space.

These patterns have become too important to ignore, but optimizing them over time requires a capacity for large-scale revision that the atomistic FS cannot provide. Holdouts—and the prospect of holdouts—routinely shut down socially valuable shifts in land use. To be sure, we have the brute force strategy of eminent domain available to rearrange things when the loss in value associated with existing land use combinations becomes intolerable. But if the need for flexible reconfiguration has become the rule rather than the exception in urban areas, we should reexamine the baseline property estate itself. Our predominantly urban society calls for new forms of property, ones that can relax either the endless time horizon of the FS or its rigid anchoring to a particular map point.

The idea that property should adapt to match the ways in which value is produced is hardly new or radical. Following Harold Demsetz's analysis, property should internalize externalities when doing so is worth the cost of defining and enforcing the relevant property rights.¹² A corollary to this

¹⁰ U.S. Census Bureau Newsroom, *Growth in Urban Population Outpaces Rest of Nation*, Census Bureau Reports (Mar. 26, 2012), http://www.census.gov/newsroom/releases/archives/2010_census/cb12-50.html (reporting, based on data from the 2010 Census, that “[u]rban areas — defined as densely developed residential, commercial and other nonresidential areas -- now account for 80.7 percent of the U.S. population, up from 79.0 percent in 2000”). In 1790, the figure was 5.1 percent. U.S. Census Bureau, *Population: 1790 to 1990, United States, Urban and Rural*, <http://www.census.gov/population/censusdata/table-4.pdf>. The Census Bureau began using a new definition of “urban” in 1950, which somewhat increased (in that year, from 59.6 to 64.0) the percentage reported as falling in that category. *Id.*; see also U.S. Census Bureau, *History: Urban and Rural Areas* http://www.census.gov/history/www/programs/geography/urban_and_rural_areas.html (detailing definitional changes over the years in the meaning of “urban”). Urbanization is a worldwide phenomenon. See United Nations, Department of Economic and Social Affairs, Population Division, 2014 Revision of the World Urbanization Prospects, Highlights 1 (2014), available at <http://esa.un.org/unpd/wup/Highlights/WUP2014-Highlights.pdf> (reporting that “54 per cent of the world’s population resid[es] in urban areas in 2014 . . . and by 2050, 66 per cent of the world’s population is projected to be urban.”).

¹¹ HUGH STRETTON, *URBAN PLANNING IN RICH AND POOR COUNTRIES* (1978) (“Urban land gets most of its market value not from its physical nature or its owner’s outlays, but from the presence of other people and private investments around it.”).

¹² See Demsetz, *supra* note 9, at 350.

principle is that property's boundaries—the primary technology it uses for internalizing externalities—should change if the costs or benefits of maintaining those boundaries change. And there is a long history of property doing exactly that. When commercial air travel became an important generator of value, the previously harmless conceit that landowners owned to the heavens suddenly became too expensive to countenance, and estates were revised accordingly.¹³

Similarly, urbanization has raised the costs and lowered the benefits of granting individual owners perpetual monopolies on rooted fragments of space. What were once nearly stand-alone production sites have now become integral parts of a dynamic, interdependent, urban value-production machine.¹⁴ Markets cannot accomplish shifts from less valuable to more valuable urban configurations because of the need to synchronize many complementary changes at one time. Yet the land use controls that have emerged in an effort to manage interdependencies are not designed to facilitate these sorts of large-scale coordinated moves. Indeed, they are not even well-designed to harness information about the relative values of different land uses at the parcel level.

It is becoming increasingly evident that current methods of managing urban land use carry a tremendous opportunity cost. A recent article estimated that “[l]ifting all the barriers to urban growth in America could raise the country's GDP by between 6.5% and 13.5%, or by about \$1 trillion-\$2 trillion.”¹⁵ Unlocking the potential of urban land requires shedding not only *regulatory* impediments, however, but also impediments that are built into the very fabric of our dominant tenure form. To capture more value from urban land use patterns will require creative thinking, including a willingness to rethink the rooted, perpetual nature of standard-

¹³ Eric Claeys has recently questioned whether property owners ever held an absolute right to the airspace far above their properties, suggesting instead that the *ad coelum* doctrine served as “one of several heuristics” that were aimed at giving owners rights over areas that they could feasibly put to beneficial use. Eric R. Claeys, *On the Use and Abuse of Overflight Column Doctrine*, 2 BRIGHAM-KANNER PROPERTY RIGHTS CONF. J. 61, 63, 79-82 (2013). Regardless, the history suggests that commercial overflights raised a question that had to be resolved about the landowners' rights. *See id.* at 62 (“No doubt, there was a period of time when landowners, airlines, and lawyers were all genuinely in suspense about how airplane overflights would be treated at common law.”); *see generally* STUART BANNER, WHO OWNS THE SKY (2008) (providing a thorough history of the overflight issue's development and resolution). It matters little for my purposes whether one understands the resolution of that question as a recognition of how things had always really been or as an announcement of a change. Perhaps future generations will point to the use of eminent domain—or even to reforms like the ones that this paper hopes to foreshadow—as proof that the FS never really granted perpetual estates, but rather only contingent ones.

¹⁴ In a sense, real property has come to more closely resemble intellectual property in its modalities of value production, insofar as both now substantially rely on agglomeration economies and the ability to capture interdependencies. *See, e.g.*, Brett M. Frischmann & Mark A. Lemley, *Spillovers*, 107 COLUM. L. REV. 257, 268-71 (2007) (describing spillovers among geographically clustered high-tech firms and their positive effect on innovation). Real property theory might therefore take a lesson from intellectual property scholars' active engagement with the length and character of the monopolies granted. This inverts the usual focus on what, if anything, intellectual property can learn from real property—and the associated concern that intellectual property is too overshadowed by or beholden to real property metaphors. *See* Julie E. Cohen, *Property as Institutions for Resources: Lessons From and for IP*, 94 TEX. L. REV. 1 (2015).

¹⁵ *Space and the City*, *The Economist*, April 4, 2015.

issue property rights.

There are two basic ways in which our current property system falls short in meeting the challenges of the city. First, we lack good mechanisms for coordinating the spillover-producing behaviors that are most important in urban agglomerations. Second, the veto power granted to owners hampers the ability to reconfigure property at a different scale or with different sets of complementary uses. Although the two issues—coordination and configuration—are entwined,¹⁶ my primary focus in this paper is on finding ways to overcome reconfiguration challenges. Configuration—getting the value-maximizing combination of land uses and land users in place—is a prerequisite to meaningful coordination efforts.¹⁷ And it is here that the architecture of the FS most plainly gets in the way.

To provoke thought, I briefly sketch two possibilities for revising the FS to make it more readily reconfigurable. The first, the callable fee, is a tenure form that is made expressly subject to a call option that can be exercised as to all properties in a designated area when particular conditions obtain.¹⁸ The second, the floating fee, would represent a geographically untethered claim on real property that would facilitate either small-scale readjustment or longer-range relocations.¹⁹ Both would loosen the spatial monopoly that the FS grants to individual landowners in urban areas.

The paper proceeds in three steps. Part I presents property as a dynamic institution that employs a shifting mix of three strategies: boundary exclusion, governance of spillovers, and toleration of externalities. Part II considers how we might remake property forms to better fit the way urban landscapes produce value. Part III addresses a variety of objections,

¹⁶ Significantly, it may be difficult to know whether a reconfiguration will add value if the set of landowners who are currently present are not successfully coordinating with each other to optimize their combined land uses. I consider the possibility that some reconfiguration tools could double as incentive mechanisms that would lead neighboring landowners to develop more effective methods of coordination. *See* text accompanying notes ___ *infra*.

¹⁷ Potential mechanisms for coordinating the behavior of neighboring urban land users might draw on existing approaches for managing large-scale natural resources. *See, e.g.*, Karen Bradshaw Schulz & Dean Lueck, *Contracting for Control of Landscape-Level Resources*, 100 IOWA L. REV. 2507 (2015) (examining management alternatives for landscape-level resources, from habitats to firescapes, which exist at a scale far larger than that used for ordinary productive activities on land). Oil unitization similarly structures coordination among adjacent landowners whose efficient scale of ownership is smaller than the oil reserve that underlies their parcels. *See* Gary D. Libecap, *Contracting for Property Rights*, in PROPERTY RIGHTS: COOPERATION, CONFLICT, AND LAW 142 (Terry L. Anderson & Fred S. McChesney eds., 2003) (describing oil unitization arrangements).

¹⁸ *See infra* Part II.B.2. Of course, the government has an implicit call option on everyone's property already by virtue of the eminent domain power; what is contemplated here is a more explicit option that would price in heightened vulnerability to displacement. The "callable" terminology comes from the language of financial options. In finance, a call option provides the right but not the obligation to purchase a particular stock or other asset at a particular price on or by a particular date. *E.g.*, RICHARD A. BREALEY ET AL., PRINCIPLES OF CORPORATE FINANCE 503–05 (10th ed. 2011). In the legal literature on entitlements, liability rules have been equated with call options. *See* IAN AYRES, OPTIONAL LAW 14–17 (2005) (reviewing development of option analogy in legal scholarship). The property rule-liability rule dichotomy was famously developed in Guido Calabresi & A. Douglas Melamed, *Property Rules, Liability Rules, and Inalienability: One View of the Cathedral*, 85 HARV. L. REV. 1089 (1972).

¹⁹ *See infra* Part II.B.C.

including concerns that the ideas proposed here would run afoul of the *numerus clausus* doctrine or otherwise undermine the meaning of property. In fact, the approaches I discuss could be constructed from existing property forms—defeasible estates and executory interests—and designed to support an enhanced rather than diminished vision of ownership.

To be clear, I do not argue that the FS should be abolished, nor do I dispute that it will continue to be the best tenure form in many situations. But it should not be treated as the only alternative, nor should its costs be ignored.

I. ARCHITECTURE AND ADAPTATION

Property’s architecture has received significant scholarly attention,²⁰ as has the proposition that property can or should adapt over time in response to social and economic shocks.²¹ In this Part, I use these ideas to lay the groundwork for a critique of the FS. I start by locating the FS’s design choices within the framework of architectural decisions that property must make as a general matter. I then turn to questions of adaptation.

A. Property Design: An Overview

Property is designed to deliver access to resources in ways that will induce investment.²² To do this, property pursues a set of strategies for matching up inputs and outcomes. As Henry Smith has emphasized, real property characteristically proceeds by placing a boundary around a resource and allowing those designated as owners to exclude others from the benefit stream that is produced within those boundaries.²³ By delegating control over the demarcated resource, property allows owners to make and collect on investments or bets that play out within that domain.²⁴ Ideally, the boundaries would be well-scaled (in both time and space) to fit the primary activities occurring on a given parcel, so as to at least roughly

²⁰ Henry Smith’s work is perhaps the best known in this vein. *See, e.g.*, Smith, *supra* note 5, at 1699 (“There is a basic architecture of property, and many features of property follow from it.”). Smith conceives of property as a modular, exclusion-based system, albeit one that is supplemented with governance mechanisms. *See id.* Notably, he rejects the bundle of rights understanding of property, as he has also done in joint work with Thomas Merrill. *See* Thomas W. Merrill, *Property as Modularity*, 125 HARV. L. REV. F. 151 (2012) (describing the architectural claims that he and Smith have made jointly and discussing and critiquing Smith’s modularity approach).

²¹ The seminal paper on this topic is Demsetz, *supra* note 9. *See, e.g.*, Thomas W. Merrill, *Introduction: The Demsetz Thesis and the Evolution of Property Rights*, 31 J. LEGAL STUD. S331, S331 (2002) (describing Demsetz’s article as “[t]he point of departure for virtually all efforts to explain changes in property rights”). For a recent evolutionary account, see Lee Alston & Bernardo Mueller, *Towards a More Evolutionary Theory of Property Rights*, 100 IOWA L. REV. 2255 (2015).

²² *See e.g.*, Fennell, *supra* note 4, at 1498-1500; Gray, *supra* note 2, at 304-05.

²³ Henry E. Smith, *Property and Property Rules*, 79 N.Y.U. L. REV. 1719, 1753–56 (2004) (describing property’s “exclusion strategy”).

²⁴ *Id.* at 1729.

internalize the associated costs and benefits.²⁵

As Smith recognizes, this “exclusion strategy” is insufficient on its own to properly align incentives.²⁶ Activities taking place within the boundaries will often produce spillovers, both negative and positive, for proximate others.²⁷ Where boundaries cannot feasibly or cost-effectively be employed,²⁸ some form of governance may be used instead to adjust the payoffs around the edges of the property’s boundaries.²⁹ Zoning, covenants, and nuisance law represent common forms of governance in the land use arena, although more complex schemes might grant parties stakes in particular outcomes or provide structures for collective decisionmaking.

Property law also simply ignores many positive and negative externalities. This is as it should be: Internalizing externalities is costly, and not always worth doing.³⁰ In some cases, internalizing an externality would not alter an actor’s behavior because her internalized returns already cause her to pursue the most efficient course of action—as where a polluting factory would go on polluting at the same level if made to compensate its neighbors.³¹ Even in cases where internalization would lead an actor to make a different decision, a legal intervention may not be cost-justified.³²

The recipe for real property, then, comes down to combining three strategies for managing the effects of activities on land: exclude (through boundaries), govern (by managing spillovers around the edges), and tolerate (by simply ignoring externalized effects).³³ Significantly, the optimal mix of exclusion, governance, and tolerance cannot be determined for all times and contexts. Property’s best design depends on the sorts of land use activities, and hence land use problems, that predominate in a given time and place.

²⁵ See Ellickson, *supra* note 3, at 1332-33 (discussing the problem of optimal scale and its connection to boundary placement).

²⁶ Smith, *supra* note 23, at 1755-56 (distinguishing exclusion from governance).

²⁷ Although it is most common to think of physically proximate others, time-limited estates can produce temporal adjacency that is also prone to spillovers. See, e.g., RICHARD A. POSNER, *ECONOMIC ANALYSIS OF LAW* 71-75 (6th ed. 2003) (discussing temporal and physical division of property).

²⁸ Smith, *supra* note 23, at 1756 (“Using fences to modulate complex questions of use—such as proper grazing technique or optimal noise levels—would be prohibitively costly.”).

²⁹ See *id.*; see also Smith, *supra* note 8.

³⁰ See Demsetz, *supra* note 9, at 350 (“[P]roperty rights develop to internalize externalities when the gains of internalization become larger than the cost of internalization.”); *id.* at 351-52 (positing that before the fur trade became established, the external impacts generated by open-access hunting “were of such small significance that it did not pay for anyone to take them into account”).

³¹ See, e.g., James M. Buchanan & Wm. Craig Stubblebine, *Externality*, 29 *ECONOMICA* (n.s.) 371, 373-81 (1962) (distinguishing Pareto-relevant from Pareto-irrelevant externalities).

³² Private bargains to internalize externalities remain possible even when the law does not act in a concerted manner to manage a given externality. See R.H. Coase, *The Problem of Social Cost*, 3 *J.L. & ECON.* 1 (1960). Even if private bargains are unavailable, the costs of internalizing externalities through law may exceed their benefits. See, e.g., Demsetz, *supra* note 9, at 351-52.

³³ The first two of these have been expressly offset in existing work. See, e.g., Smith, *supra* note 8.

B. *The Architecture of the Fee Simple*

We can now examine how the design features of the FS fit into the framework of strategies outlined above. This discussion will shed light on the ways that the current structure may fail to align with the demands of an increasingly interdependent society in which property configuration represents a crucial source of value.

1. Exclusion

The FS maps onto a set of physical boundaries from which (most) outsiders are presumptively excluded. These borders extend laterally across the earth, and also vertically above and below it—until they bump into other property holdings or trumping societal interests (separately owned mineral estates, say, or airplane overflight zones). Property lines do not just define the overall size and shape of the parcel but also physically anchor the estate that the owner holds to specific map coordinates. In this manner, the FS grants an exclusive right to a spatially defined piece of the physical world to an owner who can (with some exceptions) trump the claims of all others to make use of that space.

The temporal scope of exclusion is also notable: the FS is unencumbered by future interests and perpetual in duration. An owner can undertake projects of any length she chooses and wait indefinitely for her investments and gambles on the land to pay off.³⁴ Her tenure (and those of her heirs and beneficiaries) is limited only by the durability of the legal and political structures that support the estate, and by any caveats that those same legal and political structures establish or reserve (such as eminent domain). Uninvited outsiders are not merely excluded from a time slice, but rather from the entire arrow of time.

Together, these boundaries grant owners perpetual monopolies on specific spatial locations. The FS thus does an excellent job of encouraging optimal investments in outcomes that are spatially constrained (within the parcel) but temporally extended. For example, the unlimited time horizon encourages owners to make the right choices between chopping down trees now or letting them grow into larger trees³⁵—at least if we assume that neither the trees nor the chopping operations impact anyone outside of the

³⁴ *See id.* at 1729; *see also* FRANK H. KNIGHT, RISK, UNCERTAINTY, AND PROFIT 370-73 [1921] (1957 edition) (discussing connections between risk and ownership, although expressing some skepticism about the need for property interests to survive death).

³⁵ This is a standard example in economics. *See, e.g.*, LEE S. FRIEDMAN, THE MICROECONOMICS OF PUBLIC POLICY ANALYSIS 709-12 (2002) (presenting “tree models”); POSNER, *supra* note 27, at 73 (explaining that a life tenant would “want to cut timber before it has attained its mature growth—even though the present value of the timber would be greater if the cutting of some or all of it were postponed—if the added value of the from waiting would enure to the remaindermen”).

owned parcel. In other words, the FS handily internalizes the sorts of purely temporal spillovers that historically led to dust-ups between life tenants and remaindermen, landlords and tenants.³⁶

By contrast, the capacity of the FS to contain *spatial* impacts depends on the size of the holding relative to the events taking place upon it. Thus, the prevalence of what Robert Ellickson calls “small,” “medium,” or “large” events will inform the question of how property should be held.³⁷ The parcel does not have to be large enough to contain *all* the impacts of the owner’s activities in order for the FS to work well—some impacts can be reached through governance mechanisms or bargains, while others can simply be ignored. But a pervasive mismatch between the property’s scope and the scope of the owner’s impacts calls boundary placement into question. Making boundaries too expansive can be as problematic as making them too narrow, however. Not only must owners find a way to manage the resources that lie inside the boundaries,³⁸ expansive boundaries may effectively trap resources in one owner’s hands that would be more valuable in a number of other hands.³⁹ In other words, there may be diseconomies of scale as well as economies of scale.⁴⁰

There can be diseconomies of scale in time as well as in space. Because the temporal scale for human endeavors is never infinitely long, it is likely that a given property holding will later come to be more valuably held by a different party, one who is best positioned to oversee the endeavors on the property that will have become the most valuable ones. As long as land is freely alienable, this seems to present no problem; the owner simply lops off the portion of time she cannot use herself by selling the property.⁴¹ A difficulty arises, however, if the new use will require a larger spatial scale, because the turnover in adjacent properties will most likely not be synchronized. Thus, the FS’s lengthy temporal horizon can block the realization of new spatial economies of scale.

This interaction follows from a key feature of boundary exclusion: the veto rights that it grants owners. Subject to some qualifications,⁴² the FS

³⁶ It may not do so perfectly, however. Just as a landowner’s actions may fail to account for costs imposed on other people (externalities), her actions may fail to account for costs imposed on later versions of herself (internalities). See, e.g., R.J. Herrnstein et al., *Utility Maximization and Melioration: Internalities in Individual Choice*, 6 J. BEHAV. DECISION-MAKING 149, 150 (1993) (defining “internality” as “a within-person externality”).

³⁷ Ellickson, *supra* note 3, at 1323-35.

³⁸ See R.H. Coase, *The Nature of the Firm*, 4 *ECONOMICA* (n.s.) 386, 390-98 (1937).

³⁹ For example, large holdings may contain excess capacity that will go to waste if it is too costly to transact over. See Yochai Benkler, *Sharing Nicely: On Shareable Goods and the Emergence of Sharing as a Modality of Economic Production*, 114 *YALE L.J.* 273, 301-04 (2004) (describing excess capacity). Large property holdings could also unduly concentrate ownership in too few hands. For some disadvantages of ownership concentration, see Merrill, *supra* note 7, at 2094.

⁴⁰ See, e.g., Demsetz, *supra* note 9, at 358.

⁴¹ See, e.g., Lee Anne Fennell, *Property in Housing* 12 *ACADEMIA SINICA L.J.* 31, 39-40 (2013).

⁴² There are some circumstances in which an owner’s possession can be truncated involuntarily. Not only can an owner lose her property in predictable ways by failing to pay her mortgage or property taxes, but she might

allows owners to stand on their rights and stay rooted in place. The owner's veto presents no difficulty when there are many good substitutes for the property in question. But it becomes problematic when a set of properties serve as strict complements in producing a larger economic benefit.

2. Governance

The FS does not rely on boundary exclusion alone; a variety of governance mechanisms exist to address cross-boundary spillovers. Negative externalities that pass a certain threshold are reachable through nuisance law,⁴³ while less serious impacts are reachable through finer-grained land use regulations like zoning and covenants. Together, these land use controls work fairly well to deal with spillovers that take the form of impacts—debris, noises, smells, aesthetic effects—that literally or figuratively come across the border from a party's on-site operations.

Positive cross-boundary spillovers have not received parallel treatment. Only in very limited circumstances can parties be made to pay their neighbors for undertaking acts that incidentally benefit them.⁴⁴ Yet positive externalities are less neglected than one might conclude from reading academic treatments of the issue. Coercion is rarely applied to the *recipients* of positive externalities, to be sure, but coercion is routinely applied to *producers* of positive externalities. Land owners are often required by land use regulations or covenants to engage in certain affirmative acts for the benefit of those around them.⁴⁵ Put differently, whenever the failure to provide a particular benefit to one's neighbors becomes a large enough problem for the community, it will be recharacterized as a harm and controlled accordingly.⁴⁶

Most notably, land use restrictions often ensure that landowners provide *reciprocal* positive externalities to their neighbors by engaging in like uses. For instance, an area zoned for single-family homes on large lots forces each landowner to contribute to the neighborhood atmosphere enjoyed by

also be dispossessed by factors like eminent domain, natural disasters, or private lawlessness. See, e.g., John A. Lovett, *Property and Radically Changed Circumstances*, 74 TENN. L. REV. 463 (2007) (examining property rights in the wake of Hurricane Katrina); Nadav Shoked, *The Duty to Maintain*, 64 DUKE L.J. 437, 481-89 (2014) (detailing avenues through which property may be forfeited through failure to undertake certain actions).

⁴³ This might be either an absolute threshold, or one that is defined relative to the utility of the activity. See, e.g., DUKEMINIER ET AL., *supra* note 2, at 782-83.

⁴⁴ See, e.g., Ariel Porat, *Private Production of Public Goods: Liability for Unrequested Benefits*, 108 MICH. L. REV. 189, 195-98 (2009).

⁴⁵ See, e.g., Shoked, *supra* note 42; Larissa Katz, *Governing Through Owners*, 160 U. PA. L. REV. 2029, 2051 (2012); Robert C. Ellickson, *The Affirmative Duties of Property Owners: An Essay for Tom Merrill*, 3 BRIGHAM-KANNER PROP. RTS. CONF. J. 43, 50-58 (2014).

⁴⁶ For example, in Pigou's time, refraining from emitting smoke from one's smokestack was understood as the conferral of a benefit; it is now natural to think of such smoky emissions as negative externalities. See James E. Krier, *The Tragedy of the Commons, Part Two*, 15 HARV. J.L. & PUB. POL'Y 325, 325 n.3 (1992) (discussing Pigou's view of pollution control as generating a positive externality).

her neighbors, even as it secures their reciprocal contributions to the atmosphere she herself enjoys. Whether framed as controlling the negative externalities associated with less compatible uses or as eliciting the positive externalities that come from the specified use,⁴⁷ such restrictions have the effect of inducing behaviors designed to benefit the neighbors.⁴⁸

Nonetheless, there are some positive externalities that are difficult for existing governance tools to reach. Although there is no limit to how bad impacts for neighbors can get and still be reachable through land use tools, there is some practical limit to how much landowners can be required to do for each other.⁴⁹ Especially difficult to compel are unique inputs into shared environments that cannot be reciprocally required of all owners within a spatially proximate area. Neighbors could in theory find ways to coordinate over these inputs once they are neighbors, but land use law has few effective tools for assembling together the heterogeneous land uses and land users that might be most capable of producing valuable synergies.

3. Tolerance

The FS does not internalize all externalities, whether through boundaries or through governance. There are some externalities that it simply tolerates. As a general matter, this is entirely appropriate and indeed unavoidable. No property form can completely internalize all effects, because to do so would be prohibitively costly. Moreover, externalities often turn out to be irrelevant to efficiency.⁵⁰ The interesting question is whether the FS systematically ignores categories of impacts that have come to have real economic significance. If so, then we must ask whether there is any way to cost-effectively address those types of externalities.

Here it becomes relevant that the FS ignores two sets of external impacts that have become increasingly important in urban areas—one by design, and the other more contingently. First, because the very essence of the FS is a perpetual spatial monopoly, the externalities that follow from that design choice are an unavoidable part of the package. Although holdout problems are not typically characterized in this way, they come down to externalities: In an effort to garner more surplus for herself, the holdout

⁴⁷ Any externality can be described in either positive or negative terms. *See id*; *see also* Lisa Grow Sun & Brigham Daniels, *Mirrored Externalities*, 90 NOTRE DAME L. REV. 135 (2014) (providing an extended exploration of this point).

⁴⁸ As I will explore presently, such a single-use scheme may not produce the most valuable synergies among uses. My point here is simply that existing land use tools can require owners to engage in uses that are thought to benefit proximate others, and that these tools are thus not categorically inept at addressing positive externalities.

⁴⁹ Lon Fuller makes a similar point in distinguishing the duties that everyone owes from the aspirations that individuals might strive to achieve. *See* LON L. FULLER, *THE MORALITY OF LAW* 27-28 (rev. ed. 1964).

⁵⁰ *See supra* note 31 and accompanying text.

raises assembly costs (often to prohibitive levels) in ways that harm not only herself but also the would-be assembler and others who would benefit from the assembly.⁵¹ Holdout behavior can stymie not only efforts to physically assemble land, but also to assemble complementary land users and uses in proximity with each other.⁵²

Second, the governance mechanisms with which the FS is commonly paired cannot reach certain categories of positive spillovers: those that stem from the unique, nonreciprocal contributions of proximate land users, and that generate cumulative and often nonlinear effects. While coordination mechanisms could be devised to reach these impacts,⁵³ implementing them in already-developed areas requires assembling consent among the relevant proximate actors (or employing coercion to override the lack of consent).⁵⁴ Moreover, optimizing the use of such mechanisms requires first solving the configuration problem referenced above. For these reasons, the holdout problems baked into the FS's architecture get in the way of governance innovations as well.

C. Adaptation and Evolution

Property can be understood as a dynamic institution, a living system that evolves—or at least *should* evolve—over time in response to changes in circumstances that alter how resources generate value. This raises the question of whether the FS has adapted, or can adapt, to the changes that urbanization has brought about in how property generates value.

1. Internalizing and Uninternalizing

Following Demsetz, we should internalize externalities when (and only when) the gains from internalization outweigh the costs of delineating and enforcing the relevant property rights.⁵⁵ Thus, when a resource dramatically increases in economic importance (Demsetz uses the example of fur-bearing animals) it becomes worthwhile to internalize externalities (such as those from overhunting) surrounding that resource.⁵⁶ Property rights that had

⁵¹ See, e.g., Lee Anne Fennell, *Common Interest Tragedies*, 98 NW. U. L. REV. 907, 928-29 (2004) (describing externalities generated by holdout behavior).

⁵² It is helpful here to recognize that placing land under one owner's control is only one possible way to achieve coordination among proximate uses. What must be assembled is a structure for coordinating resource access and use. See, e.g., Fennell, *supra* note 4, at 1529-30; Lloyd Cohen, *Holdouts and Free Riders*, 20 J. LEGAL STUD. 351, 351-53 (1991).

⁵³ See *supra* note 17.

⁵⁴ See, e.g., Robert H. Nelson, *Privatizing the Neighborhood: A Proposal to Replace Zoning with Private Collective Property Rights to Existing Neighborhoods*, 7 GEO. MASON L. REV. 827, 834 (1999) (addressing this issue in the context of creating neighborhood associations within established areas).

⁵⁵ *Id.* at 350-51.

⁵⁶ *Id.* at 350-53.

previously not been worth the trouble of defining and enforcing become valuable enough to pay their own way, and too costly to continue doing without.

Although Demsetz himself focused on the rise of private property rights,⁵⁷ his logic operates in the reverse direction as well: We should *stop* internalizing externalities when the cost of internalizing them rises too high relative to the benefits associated with that internalization.⁵⁸ To be sure, some of the costs of internalization—such as those of defining property rights—are sunk once private property has been established along particular lines.⁵⁹ But the costs of enforcing those rights are ongoing, and may eventually become no longer worth incurring. Of particular relevance to the discussion here is the cost of extending property rule protection and its associated veto power to landowners for an indefinite period of time, as the FS does.⁶⁰

Even when internalization is cost-justified, a choice remains about how to carry it out. We must decide which aspects of resource management will be “automatically” incentivized through boundary placement⁶¹ and which features can be effectively managed through governance mechanisms like taxes, subsidies, regulation, covenants, zoning, and nuisance law. Changes in the costs of carrying out exclusion or governance strategies—whether due to changes in the scale of activities that are typically undertaken on property, new technologies for governing or excluding,⁶² or otherwise—can alter the ideal mix of strategies.⁶³

2. Changing Sources of Value

Legal scholars have recently begun to focus sustained attention on the challenges and opportunities presented by increasing urbanization.⁶⁴ There

⁵⁷ See generally *id.*

⁵⁸ The idea that the Demsetzian process can “work[] in reverse” when the costs associated with property rights grow too large has been noted in the intellectual property context. Jonathan Barnett, *Property as Process: How Innovation Markets Select Innovation Regimes*, 119 YALE L.J. 384, 431-32 (2009); see also Eli M. Salzberger, *Economic Analysis of the Public Domain*, in THE FUTURE OF THE PUBLIC DOMAIN 27, 34-36 (L. Guibault and P.B. Hugenholtz, eds., 2006) (extending Demsetz’s theory to “de-propertization”).

⁵⁹ Richard N. Langlois, *The Secret Life of Mundane Transaction Costs*, 27 ORG. STUD. 1389, 1392-93 & fig. 1 (2006) (describing fixed and variable costs associated with property rights, and noting fixed costs may be sunk).

⁶⁰ See Calabresi & Melamed, *supra* note 18, at 1092 (defining property rules and distinguishing them from liability rules)

⁶¹ See Robert C. Ellickson, *The Costs of Complex Land Titles: Two Examples from China*, 1 BRIGHAM-KANNER PROP. RTS CONF. J. 281, 284 (2012) (“When a private farmer is entitled to keep a crop he grows, for example, he is automatically rewarded for choosing the best crop to plant, planting at the right time, weeding, applying fertilizer, fallowing a field when appropriate, and so on.”).

⁶² A canonical example is barbed wire, which dramatically reduced the costs of fencing one’s land. See, e.g., Terry L. Anderson & P.J. Hill, *The Evolution of Property Rights: A Study of the American West*, 18 J.L. & ECON. 163, 172 (1975).

⁶³ See, e.g., Smith, *supra* note 8, at S462-78.

⁶⁴ See, e.g., David Schleicher, *The City as a Law and Economic Subject*, 2010 U. ILL. L. REV. 1507 (2010); Gideon Parchomovsky & Peter Siegelman, *Cities, Property, and Positive Externalities*, 54 WM. & MARY L. REV.

are a variety of mechanisms through which proximity generates value—agglomeration economies—at various scales within cities and metropolitan areas.⁶⁵ A city’s or a metro area’s depth and variety of labor markets, social scenes, and shopping opportunities influence the value to firms and individuals of locating in the area,⁶⁶ while combinations of particular land uses at the neighborhood or block level can produce localized synergies.⁶⁷ There are large literatures examining these and related effects that I will not attempt to summarize here.⁶⁸ I will instead make two claims about the way life in urban areas alters the work that property is asked to do.

First, interdependence among landowners has made combinations or *patterns* of property holdings a much more important source of property value.⁶⁹ For example, synergies among complementary uses together contribute to a given district or neighborhood’s overall energy or vibe—collectively determining, for instance, whether a city’s downtown has a lively art or music scene, whether an area counts as a tech corridor, and whether a neighborhood is historic, eclectic, or dull. The significance of clusters of enterprises has received recent attention,⁷⁰ along with the possibility that small overlapping circles of interaction could provide the key to understanding agglomeration’s benefits.⁷¹ Finding ways to bring complementary land users into close proximity thus represents a primary challenge, one that I have elsewhere termed a “participant assembly problem.”⁷² To meet this challenge, we need property rights and property forms that are good at making—and remaking—valuable patterns of use.

The second and related claim is that urbanization has made it much more important to reach categories of externalities that have historically been ignored. Consider the owner’s veto power. As long as socially valuable projects that use land as an input rarely depend on obtaining a

211 (2012); Daniel B. Rodriguez & David Schleicher, *The Location Market*, 19 GEO. MASON L. REV. 637 (2012); Lee Anne Fennell, *Agglomerama*, 2014 BYU L. REV. 1373 (2015).

⁶⁵ Rodriguez & Schleicher, *supra* note 64, at 638; Pierre-Phillippe Combes & Laurent Gobillon, *The Empirics of Agglomeration Economies*, in 5 HANDBOOK OF REGIONAL AND URBAN ECONOMICS 247, 294–95 (Gilles Duranton et al. eds., 2015).

⁶⁶ See, e.g., Gilles Duranton & Diego Puga, *Micro-Foundations of Urban Agglomeration Economies*, in 4 HANDBOOK OF REGIONAL AND URBAN ECONOMICS 2063, 2086-98 (2004); Schleicher, *supra* note 64, at 1521-23.

⁶⁷ See, e.g., Rodriguez & Schleicher, *supra* note 64, at 647 (discussing small-scale “microagglomerations” from larger-scale agglomeration effects).

⁶⁸ For some starting points, see, for example, ALFRED MARSHALL, PRINCIPLES OF ECONOMICS IV.X.7–13 §3 (8th ed. 1920), available at <http://www.econlib.org/library/Marshall/marP.html>; EDWARD L. GLAESER, CITIES, AGGLOMERATION, AND SPATIAL EQUILIBRIUM (2008); Duranton & Puga, *supra* note 66.

⁶⁹ See, e.g., LEWIS D. HOPKINS, URBAN DEVELOPMENT: THE LOGIC OF MAKING PLANS 27-28 (2001) (defining and discussing interdependence).

⁷⁰ See, e.g., Aaron Chatterji et al., *Clusters of Entrepreneurship and Innovation*, 14 INNOVATION POLICY AND THE ECONOMY 129 (2014); Gilles Duranton & William Kerr, *The Logic of Agglomeration*, NBER Working Paper No. 21452 (August 2015) available at <http://www.nber.org/papers/w21452>.

⁷¹ William R. Kerr & Scott Dukes Kominers, *Agglomerative Forces and Cluster Shapes*, NBER Working Paper No. 16639 (December 2010) available at <http://www.nber.org/papers/w16639>; Duranton & Kerr, *supra* note 70.

⁷² See Fennell, *supra* note 64, at 1375, 1389-96.

complete set of complementary parcels from potentially recalcitrant owners—that is, as long as many good substitutes exist—the owner’s nominal spatial monopoly is of little moment. But when an owner’s property represents a unique ingredient to a valuable assembly, she can exercise the veto power in socially harmful ways. Urbanization makes complementarities among holdings an increasingly important source of value, which sharpens holdout problems and raises their costs.

The positive externalities associated with patterns of land use have also become far more economically significant while remaining difficult to reach through traditional governance mechanisms like zoning and covenants. Individual households and firms are part of larger land use patterns, but do not internalize the costs and benefits associated with their place within the pattern.⁷³ Of course, many externalities are irrelevant to efficiency; actors may do the efficient thing for their own reasons.⁷⁴ Is this the case for the sorts of spatial investments that yield agglomeration economies?

The answer may depend in part on whether the acts that generate these externalities are discrete or “lumpy” in nature rather than comprising a continuous spectrum of choices.⁷⁵ If private returns are enough to trigger an entire lumpy action, the fact that positive spillovers benefit others will be irrelevant.⁷⁶ By contrast, we might expect a party who is choosing *how much* to contribute to a social good to contribute too little if she cannot capture all the gains. In other words, decisions made on the intensive margin (how much to do something) may be more sensitive to externalities than those made on the extensive margin (whether to do something).

An interesting and to my knowledge unexplored question is whether positive externalities have historically been easier for property systems to ignore than negative externalities because they took lumpier forms that made them less likely to be relevant to efficiency. Activities that generate negative externalities like pollution or noise typically involve continuous variables, often leading actors to do too much of them. Choices that generate positive externalities may have traditionally been more discrete or lumpy in nature—like the binary decision whether to attend a festival, open up a store, or plant a rose garden.⁷⁷ But that may be changing. Modern

⁷³ Cf. JON ELSTER, EXPLAINING SOCIAL BEHAVIOR: MORE NUTS AND BOLTS FOR THE SOCIAL SCIENCES at 388-89 (revised ed. 2007) (presenting “Living Flag” example from Garrison Keillor in which townspeople were unable to both be part of a flag pattern as viewed aerially and view that pattern themselves).

⁷⁴ See Buchanan & Stubblebine, *supra* note 31, at 373-81; David D. Haddock, *Irrelevant Externality Angst*, 19 J. INTERDISC. ECON. 3 (2007).

⁷⁵ See Lee Anne Fennell, *Slicing Spontaneity*, 100 IOWA L. REV. 2365, 2378-82 (2015); Mark P. Gergen, *The Use of Open Terms in Contract*, 92 COLUM. L. REV. 997, 1013-19 (1992).

⁷⁶ See Fennell, *supra* note 75, at 2378-81. The same idea was explored in a somewhat different context in Gergen, *supra* note 75, at 1013-19. To use Gergen’s example, a real estate agent may undertake an optimal step like listing the home on a multilisting service, despite receiving only a fraction of the return from the home’s sales proceeds, if there is no way for her to do less and still receive any return. *See id.*

⁷⁷ To be sure, the choices in these examples are not truly binary insofar as one can be a better or worse festival participant, have a more or less elaborate garden, or open a larger or smaller shop. But the choice

urban agglomeration benefits likely turn less on discrete on-off choices like garden planting and more on continuous choices about levels of economic investment in the area that might, for example, attract increased foot traffic.

Thus, one interpretation of the growing significance of urban agglomeration benefits is that positive externalities, which used to be either largely irrelevant to efficiency or easy to capture through reciprocally enforced requirements, now take forms that render them at once more elusive and more relevant to efficiency. At the same time, the negative externalities associated with the owner's veto have become far more socially costly, impeding valuable patterns of complementary uses.

3. The Prospects for Adaptation

The discussion above suggests that urbanization has rendered the FS paradigm more costly and less beneficial as our default property form. Following Demsetz, we might expect changes in property law to ensue. That we have not seen a shift away from the FS might be interpreted as a failure of adaptation. But it might also be interpreted as evidence that our property laws have in fact successfully adapted (and will continue successfully adapting) to keep the FS in fighting trim as conditions change. There is some support for this faith in the FS's adaptability.⁷⁸ But there is also some reason for doubt.

Notably, Demsetz did not specify a mechanism for establishing new property rights.⁷⁹ Indeed, his account was not meant to be an evolutionary one at all.⁸⁰ In a recent paper, Lee Alston and Bernardo Mueller explain how an approach employing evolutionary theory might map a "fitness landscape," and place property forms upon it based upon the attributes they possess.⁸¹ The terrain of that landscape might be very "rugged" and multi-peaked because the attributes of property are heavily interdependent, so that choosing to jettison or add one feature causes the value of other features to

resembles a binary one if we assume there is some minimum level of provision that is necessary in order for the actor to enjoy any returns, and that this minimum level corresponds to a level of satiation for those nearby (or in any event, a level sufficiently good that they would not be willing to pay the actor enough to increase her efforts). See Haddock, *supra* note 74, at 10-11; Buchanan & Stubblebine, *supra* note 31, at 374.

⁷⁸ See, e.g., Charles M. Haar, *The Social Control of Urban Space*, in CITIES AND SPACE: THE FUTURE USE OF URBAN LAND 175, 175 (Lowdon, Wingo, Jr., ed., 1963) (positing, as a general claim "for discussion," that "the continued sway of outmoded legal institutions will not be the cause of any irrationality in the long-run trends of urban space patterns."). Haar's essay emphasizes the dynamic structure of law and argues that "this country's legal climate is such that any strong and persistent pressure or need will make or force accommodation." *Id.* at 176. Although he qualifies this claim, he expresses optimism about law's capacity to adapt and cites a number of innovations in land use controls to illustrate his point.

⁷⁹ See, e.g., Merrill, *supra* note 21, at S333 (observing that Demsetz's article "said virtually nothing about the precise mechanism by which a society determines that the benefits of property exceed the costs").

⁸⁰ See James E. Krier, *Evolutionary Theory and the Origin of Property Rights*, 95 CORNELL L. REV. 139, 142-43 (2009) (citing Harold Demsetz, *Frischmann's View of "Toward a Theory of Property Rights,"* 4 REV. L. & ECON. 127, 128 (2008)); see also Alston & Mueller, *supra* note 21.

⁸¹ Alston & Mueller, *supra* note 21.

change dramatically in value.⁸² In this world, it is possible to wind up at a local maximum and be unable to easily reach a higher, but distant, peak.⁸³ Small changes can make matters much worse, even if large changes would represent improvements.⁸⁴

Exogenous shocks can alter the relative fitness of different property arrangements.⁸⁵ The authors' examples of such shocks include the demand for beaver pelts in Demsetz's model and the changes wrought by the internet.⁸⁶ Urbanization represents another large shock, but one that has come about gradually. There has been no concentrated scramble for a wholly new and "fitter" bundle but rather a series of adjustments, primarily in the governance domain, designed around the polestar of the FS. Thus, zoning and covenants have evolved, but remain unequal to the challenges that urbanization has brought about, including the need for reconfiguration as the efficient scale changes.

Eminent domain offers a more potent tool for addressing urban reconfiguration challenges—one that has become both increasingly necessary and increasingly controversial. This safety valve has remained doctrinally open as a matter of federal constitutional law.⁸⁷ But the political response to such takings has hampered resort to this approach,⁸⁸ even as the economic pressure to employ it continues to intensify.

II. PROPERTY FOR THE CITY

Carol Rose once provocatively asked how our thinking about property might change if a resource like water, rather than "immovable, enduring land" served as "our chief symbol for property."⁸⁹ We might similarly wonder how tenure forms might have developed had urban agglomeration, not agricultural use, been the signal source of land value. Property directed at optimizing synergies within cities' prime collaboration space would

⁸² Such complementarity among property rights argues for making it available in particular packages, given positive transaction costs. *See generally* Thomas W. Merrill & Henry E. Smith, *Making Coasean Property More Coasean*, 54 J.L. & ECON. S77 (2011).

⁸³ Alston & Mueller, *supra* note 21.

⁸⁴ *Cf.* ROBERT C. ELLICKSON & VICKI L. BEEN, *LAND USE CONTROLS* 40 (3d ed. 2005) (describing a similar phenomenon in the land use context, where transforming an area would add value but small steps in that direction would subtract value).

⁸⁵ *See* Alston & Mueller, *supra* note 21, at 2268 (explaining that these shocks can cause the fitness landscape to shift or "dance," and "what was a good design may no longer be able to deal with the new conflicts that arise and a new fitter bundle may or may not evolve.").

⁸⁶ *See id.*

⁸⁷ *See, e.g.,* *Kelo v. City of New London*, 545 U.S. 469 (2005) (finding economic redevelopment to be a "public use" for purposes of eminent domain).

⁸⁸ *See e.g.,* ILYA SOMIN, *THE GRASPING HAND* (2015) (describing the political backlash against the *Kelo* decision, including some of the ways in which it fell short). Even where legislative or judicial responses did not place hard legal constraints on the use of eminent domain for economic development, the anticipated political fallout remains a practical constraint on this approach.

⁸⁹ Carol M. Rose, *Property as the Keystone Right?* 71 NOTRE DAME L. REV. 329, 351 (1996).

likely look very different from property directed at optimizing the yield of crops or herds. Endless time horizons might be swapped for greater flexibility in configuration. And entitlements might focus more on coordinating co-location, and less on physical rootedness. The sections below examine these possibilities.

A. *Ending Endlessness*

The FS endures forever. This temporal feature has received a great deal of credit for appropriately aligning incentives—and conversely, the absence of this feature has been blamed for holding back economic progress.⁹⁰ The optimality of perpetual rights to real property is rarely questioned, at least as a robust default.⁹¹ For example, Ellickson describes “an infinite time-horizon” as “the economic ideal,”⁹² and views an endless estate as “a low-transaction cost device for inducing a mortal landowner to conserve natural resources for future generations.”⁹³ Demsetz similarly explains that “an owner of a private right to use land acts as a broker whose wealth depends on how well he takes into account the competing claims of the present and the future”⁹⁴—an assessment that appears to be premised on an estate of infinite duration.

1. Escape from Foreverland

The case for reconsidering how temporal externalities are internalized turns on their relationship to other externalities that are of skyrocketing economic significance. Once we understand an estate’s length as one of several possible mechanisms for internalizing temporal externalities, and once we further recognize (following Demsetz) that some externalities may be too costly to internalize, it becomes unclear why perpetual estates are necessarily the correct length. We no longer assume that an estate of infinite physical height is optimal, for example, even though such an estate does an outstanding job of capturing the effects, both positive and negative, of vertical efforts undertaken on the land.⁹⁵ We are, I suggest, in a similar situation when it comes to the agglomeration benefits of cities, which are difficult to realize in a system that uses as its basic building block an estate

⁹⁰ See generally Ellickson, *supra* note 61.

⁹¹ See *id.* at 284 (noting the possible advantages of voluntarily chosen temporal splits that would shift risk).

⁹² *Id.* at 293.

⁹³ Ellickson, *supra* note 3, at 1368.

⁹⁴ Demsetz, *supra* note 9, at 355.

⁹⁵ See Ellickson, *supra* note 3, at 1363 (discussing shifts in “vertical boundaries” after “aircraft opened access to the skies, and mechanized drilling and mining equipment, to the subsurface,” both of which “pose an efficient-boundary problem in the vertical dimension”) (footnote omitted); Gray, *supra* note 2, at 253 (“[F]ee simple ownership cannot possibly confer on the modern landowner a limitless domain over the vertical column of airspace grounded within the territorial boundaries of his or her realty.”).

of perpetual duration.

This is not to lightly dismiss the advantages of building into a property form an automatic method for internalizing purely temporal spillovers from one period to the next. If we could costlessly keep this feature as standard equipment for property holdings, doing so would be sensible. The problem is that it does carry costs, and those costs are rising, even as the associated benefits are diminishing. Robert Ellickson made an analogous (if opposite) point in discussing the Chinese custom of *dian*, which granted a seller of land and his heirs the right to repurchase the property much later at the original sales price.⁹⁶ As Ellickson explains, “[i]n a pre-commercial society, as opposed to a commercial one, non-waivable redemption rights have fewer costs and greater benefits.”⁹⁷ We might similarly say that FS’s infinite duration carried fewer costs and produced greater benefits in the low-density agrarian society for which it was designed than it does in today’s thoroughly urbanized society.

What was needed then was an estate that was temporally lengthy but spatially well-scaled to individual holdings on which “small events” like growing crops regularly occurred,⁹⁸ and that facilitated easy negotiations among close neighbors about “medium events,” like whether to dam a river.⁹⁹ What transpires in metropolitan areas today is a deeply interdependent and ongoing mega-event. Relaxing the assumption that estates must be perpetual as a matter of course offers new ways to address these large-scale effects. Time-limited estates are not a new phenomenon,¹⁰⁰ nor is the idea of keying the length of a property interest to surrounding conditions or to the owner’s own use patterns.¹⁰¹ There is room to think creatively about how to adapt these models for the urban context.

This is not to throw all concerns about temporal spillovers by the boards. Presently we deal with spatial spillovers through extensive sets of land use controls, not by mandating land holdings that are extremely large physically. Similarly, there are ways to address temporal spillovers other than through infinitely lengthy estates. Historically, the law of waste and later the trust fulfilled this role,¹⁰² and the trust model might be adapted to meet the challenge of managing multiple spatial and temporal scales in urban areas.¹⁰³ Bonding mechanisms might also be employed to address

⁹⁶ Ellickson, *supra* note 61, at 281.

⁹⁷ *Id.* at 294.

⁹⁸ Ellickson, *supra* note 3, at 1325 (illustrating a “small event” with the example of growing a tomato plant).

⁹⁹ *See id.* at 1330-31; Demsetz, *supra* note 9, at 356-58.

¹⁰⁰ For a recent comparative survey of such property interests, see generally TIME-LIMITED INTERESTS IN LAND (Cornelius van der Merwe & Alain-Laurent Verbeke, eds, 2012).

¹⁰¹ For example, entitlements to water may be lost if the water is not put to beneficial use. *See, e.g., Daphna Lewinsohn-Zamir, More Is Not Always Better than Less: An Exploration in Property Law*, 92 MINN. L. REV. 634, 655-56 (discussing “use it or lose it” character of certain water rights).

¹⁰² *See e.g., POSNER, supra* note 27, at 73; DUKEMINIER ET AL., *supra* note 2, at 239-43.

¹⁰³ Such an approach would recognize that failing to configure property and its users in a way that will

more frequent turnover cycles.¹⁰⁴ Finally, it worth observing that the problem of temporal spillovers is not perfectly solved even by the FS; the FS can and does generate moral hazard when owners can avoid taking responsibility for negative-value properties.¹⁰⁵

2. The Callable Fee

There are many ways that innovative time-limited estates might be developed, and my hope is that this paper will spur interest in exploring them. To fix ideas, however, consider the possibility of a callable fee—a possessory estate that is subject to a call option after a given interval if certain conditions are met.¹⁰⁶

At the outset, it must be emphasized that the FS *already is* a callable fee. The eminent domain power enables the government to truncate the FS at will upon payment of compensation, provided that the taking is for a public use. Because economic redevelopment counts as a public use—at least under the U.S. Constitution¹⁰⁷—the kinds of reconfigurations necessary to optimize urban agglomerations can be legally achieved through eminent domain. Political limits on the use of eminent domain may be much tighter than legal restrictions, however, often rendering this course of action unduly costly or unavailable. An expressly callable tenure form could address this gap, while reducing reliance on a form of government coercion that many view as unusually damaging and unfair.

Although it would often be desirable to introduce callable fees into already developed areas, as I discuss below,¹⁰⁸ it is easiest to describe how they might be introduced in presently undeveloped areas, such as those on the outskirts of an expanding city. A local government would begin by

maximize value also produces an opportunity cost, a flow of lost value that can also be understood as a type of waste.

¹⁰⁴ See, e.g., T. Nicolaus Tideman, *Integrating Land-Value Taxation with the Internalization of Spatial Externalities*, 66 LAND ECON. 341, 346 (1990) (discussing potential use of bonds to address costs of abandonment).

¹⁰⁵ The fact that owners are unable to unilaterally divest themselves of legal ownership does not prevent them from imposing costs on others if they can transfer the property to someone who is insolvent. See, e.g., Lior Jacob Strahilevitz, *The Right to Abandon*, 158 U. PA. L. REV. 355, 401 (2010). For a recent example, see Matthew Walberg & Ted Gregory, *Tax Buyer Deeds Abandoned Properties to Homeless Man*, CHI. TRIB., Oct. 26, 2015, <http://www.chicagotribune.com/news/ct-homeless-property-owner-met-20151025-story.html> (reporting on the transfer of several properties to a homeless man by a property investment firm that faced lawsuits filed by the City of Chicago seeking to require it to rehabilitate the properties or pay for demolishing them).

¹⁰⁶ See *supra* note 18 (defining call options). Other scholars have previously explored the idea of subjecting property in various contexts to implicit or explicit call options that would be held and exercised by private parties. See, e.g., Benito Arruñada and Amnon Lehavi, *Prime Property Institutions for a Subprime Era: Toward Innovative Models of Ownership*, 8 BERKELEY BUS. L.J. 1, 29-34 (2011); Abraham Bell, *Private Takings*, 76 U CHI. L. REV. 517 (2009); Saul Levmore, *Self-Assessed Valuation Systems for Tort and Other Law*, 68 VA. L. REV. 771, 778-83 (1982).

¹⁰⁷ See, e.g., *Kelo v. City of New London*, 545 U.S. 469 (2005).

¹⁰⁸ See Part II.C.2, *infra* (addressing transition issues).

designating one or more “callblocks” in these areas.¹⁰⁹ These callblocks would not necessarily correspond to city blocks, but rather would be aggregations of property of sufficient scale and contiguity to accommodate major future redevelopment efforts.¹¹⁰ The goal would be to identify relatively self-contained modules that could be repurposed in the future without slicing into important indivisibilities (such as tight-knit neighborhoods) in surrounding areas.¹¹¹

In the simplest scenario, the entire callblock would already be in unified public or private ownership.¹¹² In this case, the initial owner of the properties could sell lots within the block to individual private owners for residences or businesses, while retaining a call option on those properties. The call option would make each new possessory owner subject to having her property repurchased later, along with the other properties in the callblock, at a price to be established through a fixed methodology (the strike price), after a specified interval had passed (such as ten or twenty years), if certain substantive conditions were met. These trigger conditions might include underperformance of the callblock as a whole on pre-established metrics (property value declines, residential density shortfalls, lack of sufficient affordable housing, and so on). The initial public or private owner of the callblock properties could hold onto these options, or resell them as a block to a private developer or a public entity.

The party holding the block of call options when the relevant conditions were met (typically, a private developer) could choose to exercise those options upon paying the specified strike price to the holders of the possessory estates.¹¹³ If the developer chose to exercise the options, she would be required to do so with respect to the entire callblock on an all-or-nothing basis.¹¹⁴ This would help to ensure that the repurchase would be

¹⁰⁹ Whether this designation would be a compensable event is taken up below. The owner would effectively be required to split up an FS into two pieces, a call option and an estate subject to that call option.

¹¹⁰ The boundaries of the callblocks could be informed both by crowdsourced information about perceived community boundaries and through market research into the sizes and configurations predicted to be most valuable going forward.

¹¹¹ The sort of modularity I have in mind here is related to but differs from Henry Smith’s. *See, e.g.*, Henry E. Smith, *On the Economy of Concepts in Property*, 160 U. PA. L. REV. 2097, 2115-16 (2012). Smith focuses on modularity as an attribute of property itself, with each piece of property operating as an opaque module with certain standardized attributes that facilitate interaction. My analysis focuses on how sets of complementary uses form larger-scale units that might be addressed as such. *See also* Lee Anne Fennell, *Lumpy Property*, 160 U. PA. L. REV. 1955, 1978-84 (2012) (recasting key debates among property scholars as disagreements about the scale at which to assess and pursue complementarity).

¹¹² If the callblock was initially divided among multiple owners, a methodology for consolidating the options for the entire callblock in a single party’s hands would need to be established, such as a system of buyouts.

¹¹³ Of course she would not be obligated to do so. The essence of an option is that it provides the right, but not the obligation, to do something -- here, engage in a repurchase on specified terms. *See* BREALEY ET AL., *supra* note 18, at 503-05.

¹¹⁴ In this sense, the callblock setup would produce a kind of forced ownership – the option holder must take the entire block if she chooses to engage in a repurchase at all. *See* Lee Anne Fennell, *Forcings*, 114 COLUM L. REV. 1297, 1356 (2014) (discussing bundles offered on an all-or-nothing basis as examples of forcings); *see also* Gary D. Libecap & Dean Lueck, *Land Demarcation Systems*, in RESEARCH HANDBOOK ON THE ECONOMICS OF PROPERTY LAW 257, 286 (Kenneth Ayotte & Henry E. Smith eds., 2011) (discussing the analogous point that a

prompted by changes in the efficient scale of development rather than by a desire to cherry-pick particular properties that have become more attractive. Once the call is exercised and the strike price is paid to the owners, the property would be turned over to the developer in compliance with an established schedule, allowing a reasonable period for transition.

The land at this point would be reconsolidated. The developer could then resell individual parcels, typically after undertaking large-scale redevelopment, but these sales would again be in the form of callable fees.¹¹⁵ The callblock of options associated with the parcels would be kept intact as a unit, either to be retained by this developer, or resold as a block to another private or governmental party. This would make it possible to again reassemble the callblock in the future, for further redevelopment. The government could redraw the boundaries of the callblocks at a later date based on long-term predictions about changes in efficient scale or configuration. But until it did so, the associated options would be maintained as a unit, enabling the entire module to be serially redeveloped.

3. Design Considerations

Strike prices, timing, and other trigger conditions would all require considerable design attention, which I can only briefly touch on here. The strike price would determine the amount of compensation that the owner of the possessory estate would receive if the call option were exercised. As in the eminent domain context, compensation levels must balance the moral hazard of wasteful overdevelopment in the shadow of compensated takings against the costs of underinvestment that might be associated with anticipated undercompensation.¹¹⁶ Owners who voluntarily purchased callable fees could price in the expected costs of any particular compensation scheme, but compensation protocols could be consciously designed with incentives in mind.¹¹⁷

For example, a certain degree of undercompensation, coupled with appropriate trigger conditions, could powerfully catalyze cooperative behavior among neighboring land owners to keep those conditions from

rectangular parcel system has the effect of “making the buyer take the good land with the bad”).

¹¹⁵ Resale of individual parcels within a particular period could be a required part of the overall scheme in some areas, if one of the goals of this approach is to keep land in many hands rather than consolidated in those of a single owner.

¹¹⁶ See, e.g., Lawrence Blume, Daniel L. Rubinfeld, & Perry Shapiro, *The Taking of Land: When Should Compensation be Paid?* 99 Q.J. ECON. 71 (1984); William A. Fischel & Perry Shapiro, *Takings, Insurance, and Michelman: Comments on Economic Interpretations of “Just Compensation” Law*, 17 J. LEGAL STUD. 269, 270-75 (1988); Robert Cooter, *Unity in Tort, Contract, and Property: The Model of Precaution*, 73 CAL. L. REV. 1, 19-22 (1985).

¹¹⁷ An interesting line of work has considered how express options might improve incentives for landowners and the government in the eminent domain context. See, e.g., Fischel & Shapiro, *supra* note 116, at 274-75 & n. 12 (discussing the possibility that government could acquire options to compensate only for land and not buildings, and citing work on this alternative); Cooter, *supra* note 116, at 22-23.

coming about and thereby stave off calls. As important, designated callblocks might draw together those who are best positioned to engage in cooperative action with their neighbors to achieve the specified performance measures. This outcome be a double-edged sword, however, as some collective neighbor behavior can be harmful and exclusionary. The trigger conditions (and surrounding regulatory regime) must be formulated with care to channel collective action in socially desirable directions.¹¹⁸

An analogy might be drawn to beneficial use requirements in water law, and other “use or lose” rules applied to property interests.¹¹⁹ These too extend a kind of call option on underutilized property. The difference here is that keeping or losing a callable fee depends not just on the individual owner’s use, but on that of all the owners within the callblock. The arrangement would operate on a principle that is similar in some ways to group liability, which can incentivize certain mechanisms of intragroup control—for better or worse.¹²⁰ At its best, a tool for easing reconfiguration might double as a diagnostic for determining when reconfiguration is really necessary and as a prompt for private experimentation in small-scale urban cooperation. Private innovations, devised in the shadow of a potential call, could in some cases obviate the need for redevelopment altogether.

Establishing callable fees in certain sectors of the city would also induce self-selection among potential owners based on preferences for length of tenure.¹²¹ Option periods for different blocks of properties could be staggered to create a ladder effect, so that at any given time some blocks of property within a city would be coming online for renewal while most areas would be relatively immunized from redevelopment.¹²² The risk of the property being called would be priced into the value of the property, as would the potential for nearby development that would enhance the value of the property.¹²³ Owners who wanted a higher level of security could buy in an area where FS’s remain available, or choose callable fees in a district unlikely to be redeveloped soon (where the price would be accordingly

¹¹⁸ See text accompanying notes 169-170, *infra* (discussing how trigger conditions for callable fees might be combined with mechanisms for reducing investment risk to shift the incentive structure facing homeowners).

¹¹⁹ See, e.g., Lewinsohn-Zamir, *supra* note 101, at 655-56 (examining use or lose requirements); Singer, *supra* note 7, at 317-18 (noting antecedents forms of conditional property, from homesteading requirements to adverse possession); see also Shoked, *supra* note 42, at 481-89.

¹²⁰ See, e.g., Daryl Levinson, *Collective Sanctions*, 56 STAN. L. REV. 345, 378-91 (2003) (explaining how group sanctions can leverage and build solidarity while carrying the potential for unwanted side effects such as excessive levels of control). Another parallel is worth noting: the potential that the existence of a group sanction (here, the risk of dispossession) will create pressures toward sorting in group composition. See *id.* at 391-94.

¹²¹ Cf. Lee Anne Fennell, *Property and Precaution*, 4 J. TORT L. 1 (2011) (proposing mechanisms that would allow property owners to voluntarily downgrade some of their entitlements to liability rule protection).

¹²² Of course, the government cannot bind itself to not exercise eminent domain. But a widespread system of callable fees might be expected to concentrate development along the political path of least resistance—the exercise of call options—rather than through new development elsewhere.

¹²³ Cf. Sebastien Gay & Nadia Nasser-Ghods, *Guarding the Subjective Premium: Condemnation Risk Discounts in the Housing Market*, 89 TUL. L. REV. 79, 84-93 (2014) (suggesting that property values are sensitive both to condemnation risk and to the potential gains of nearby condemnations leading to redevelopment).

higher).

Buyers must already make such calculations to some degree: An expanding city can thwart plans and even render property useless, and eminent domain poses more of a threat to languishing areas than to thriving ones.¹²⁴ The callable fee would add transparency to the mix.

B. Rethinking Rootedness

The FS's endlessness impedes reconfiguration because of the monopoly power it confers. A different tack to take in defusing that power would involve untethering the estate from its geographic footprint. Interestingly, a major conceptual component of this approach is already in place: Under Anglo-American law, an "estate in land" is viewed as something separate and distinct from the land itself.¹²⁵ Anchoring that estate to a particular geographic position might seem like an important and obvious move, but it turns out to be deeply contingent.

1. Assessing Anchoring

Consider what anchoring accomplishes. It allows trade to proceed over not just the abstract dimensions of a piece of property but also its unique qualities (soil, minerals, water features) and topography. Anchoring establishes continuity of possession over the physical attributes of the land, which internalizes the effects of acts on the land. Trees are rooted (literally) and present the owner with the choice between chopping now and chopping later. Crops are anchored in space, so owners must reap where they sow. Cattle are not immobile, but their grazing imposes costs that an owner of both pasture and cow is in the best position to trade off against the benefits. Physical mooring seems essential in all of these contexts. It is also simply a convenient way to demarcate what is owned; there has historically been little need to make things more complex.

As these examples suggest, physical rootedness is most valuable when the land itself is the repository of an owner's investment efforts and the place where returns from those efforts must be collected. And rootedness is least costly when there is little anticipated need for reconfiguration. Urban landscapes flip this equation. In cities, it is the relative rather than absolute position of a land use that delivers the bulk of its value. At the same time, the ability to reconfigure holdings and rescale uses represents a primary

¹²⁴ See, e.g., *Hadacheck v. Sebastian*, 239 U.S. 394 (1915).

¹²⁵ See e.g., *DUKEMINIER ET AL.*, *supra* note 2, at 217 ("Instead of thinking of the land itself, the lawyer thinks of an *estate in land*, which is imagined as almost having a real existence apart from the land." (fn omitted)); Raffaele Caterina, *Setting the Scene*, in *TIME-LIMITED INTERESTS IN LAND*, *supra* note 100, at 3, 4 (explaining that "English law . . . divorced ownership from land itself and attached it to an imaginary thing called an estate").

source of value.

It might seem that immobile structures (commercial, residential, industrial) also require continuity of geographic location. After all, they are costly to construct and often tailored for a particular user (or become so over time). But the need for geographic continuity becomes more contingent to the extent that buildings of a certain type are either fungible with each other or capable of replication in (or transport to) new positions. Although structures are costly to destroy and rebuild (or move), the cost may at times compare favorably to that of alternative ways of reclaiming prime urban land for a highly valued purpose. Currently, there is no method short of eminent domain to accomplish cost-effective rearrangements. Loosening the connection between estates and geographic coordinates could offer an alternative.

2. The Floating Fee

To spur thought about the form such an untethered estate might take, consider the possibility of a “floating fee.” Under this model, the estate in land that an owner holds is not immutably moored to a fixed set of geographic coordinates, but instead represents a portable claim over equivalent property in other locations. Although the idea sounds unusual, it is not without antecedents, both in the literature and in practice.

An important example is found in land readjustment, which has been used in limited ways in the United States and more extensively in a number of other countries.¹²⁶ Many variations exist, but the core idea can be illustrated with an example. Suppose a low-density residential area on the edge of an expanding urban center would be more valuably reconfigured into a higher density mix of housing, retail, and parkland. After the relevant procedures are engaged for triggering the readjustment mechanism, the area would be redeveloped, with residents receiving equally valuable property within the redevelopment area.¹²⁷ Although the post-redevelopment holdings would be smaller and would occupy different spatial footprints than before, the redevelopment would have rendered the residents’ new property at least as valuable as the old.¹²⁸

While land readjustment can be pursued legislatively without resort to a floating fee, designating property in this way would allow people to opt into districts that are designed to be subject to such redevelopment. As with the

¹²⁶ See generally ANALYZING LAND READJUSTMENT: ECONOMICS, LAW, AND COLLECTIVE ACTION (Yu-Hung Hong & Barrie Needham, eds., 2007).

¹²⁷ See Yu-Hung Hong, *Assembling Land for Urban Development* in ANALYZING LAND READJUSTMENT, *supra* note 126 at 3, 23. They would also have an option to sell the land. *See id.* Under some models, the displaced parties instead receive shares of the new development or a right to buy “an equivalent housing unit.” *See id.* at 24.

¹²⁸ *Id.* at 23.

callable fee, this could induce useful self-selection. A number of details would have to be hashed out: the initiation procedures, the way in which equivalent land is defined, and cash-out procedures for those who do not want the in-kind compensation.¹²⁹ But the fact that this approach offers displaced residents a continuing place in the community is an appealing feature, and one that aligns with an understanding that co-location, rather than location per se, is the primary source of urban value.¹³⁰

3. Of Property and Portability

While land readjustment offers the most concrete and fully conceived model for a floating fee, there are many other ways that untethered property might operate. A range of existing portable claims—housing vouchers,¹³¹ vacation timeshares,¹³² continuing care retirement communities,¹³³ and so on¹³⁴—offer models that might be adapted or mined for transferable lessons (or cautions). While these examples currently operate within special-purpose spheres, it is possible to imagine bringing portable claims more squarely into the heartland of market-rate housing.

Entrepreneurs and commentators have already made some progress along these lines. An enterprise called Kasita has recently attracted attention for its plan to develop portable microhomes that will be designed to slide interchangeably like drawers into and out of complexes in a number of cities.¹³⁵ But one need not create units that are capable of being physically shipped across the country to carry out a similar plan.¹³⁶ Richard Florida has imagined sets of similar rental homes that households could seamlessly shift among.¹³⁷ Although leaseholds might initially seem better suited to this

¹²⁹ These features are already addressed in existing models for land readjustment.

¹³⁰ For recent work focusing on the significance of co-location, see, for example, Lee Anne Fennell, *Co-location, Co-location: Land Use and Housing Priorities Reimagined*, 39 VT. L. REV. 925 (2015); Schleicher, *supra* note 64, at 1509–10, 1515–29; Rodriguez & Schleicher, *supra* note 64.

¹³¹ Although often implemented in ways that severely constrain choice, Housing Choice Vouchers (commonly known as Section 8 vouchers) offer portable claims on eligible housing.

¹³² See, e.g., Disney Vacation Club, <https://disneyvacationclub.disney.go.com/membership/> (providing information on a type of vacation timeshare that can be used at any of a number of different properties).

¹³³ See, e.g., Ellen Graham, *To Move or Not to Move*, Wall St. J., June 20, 2009, <http://www.wsj.com/articles/SB10001424052970204333804574159582221794994> (describing continuing-care retirement communities in which seniors can move to different types of housing units as their needs change).

¹³⁴ One intriguing short-term portable claim is one’s position in a queue. See Kevin Gray, *Property in a Queue*, in PROPERTY AND COMMUNITY 165, 175 (Gregory S. Alexander & Eduardo M. Peñalver, eds., 2010) (“The queuer holds, in effect, a kind of mobile property in land, a portable space that is uniquely and recognizably his or hers and is defensible against all comers.”) (footnote omitted). The queue illustrates well how a portable claim over property might be defined functionally based on its ability to provide proximity to transactions, rather than based on its correspondence to a fixed map point.

¹³⁵ See Matt Johnston, *These Ingenious Tiny Homes Move with You from City to City*, TECH INSIDER, Oct. 7, 2015, <http://www.techinsider.io/tiny-smart-homes-move-2015-10/>; see also Kasita, <http://www.kasita.com/>.

¹³⁶ Indeed, the fact that so-called “mobile homes” are rarely moved from their initial location might suggest that there is little demand for physically relocating structures from place to place.

¹³⁷ RICHARD FLORIDA, *THE GREAT RESET* 176-77 (2010) (describing his vision of “plug-and-play housing”). Florida sees this approach as an extension on existing models, such as the flexible extended stay rental model

approach than freeholds, a mobile version of homeownership coupled with portable mortgages is not beyond imagining.¹³⁸

Suppose, for example, that a set of homes distributed throughout a metro area were designated as “floating estates.” Although buyers would choose a specific home as usual, they would purchase not the home itself but rather a portable claim equal to their investment—one that would grow as they built up equity or as improvements to the home were made that enhanced its value.¹³⁹ At designated intervals or on their own initiative, owners of these estates could bid to “shift their claim” by moving to another home within the system, dependent on availability. A portable mortgage could be shifted to the new property at the time of the move and differences in the value of the old and new home could be paid or received. The entire system could be managed by a governing body akin to a homeowners association, with the relevant community consisting not of a group of contiguous property holders but rather scattered holders of claims within a floating estate system.

Holders of these floating estates might also be made vulnerable to a shift to a different home in the event of a change in land use in the immediate area. For some, the ability to initiate seamless moves would mitigate or counterbalance the risk of a possible involuntary displacement, especially if meaningful choice about the destination home were made possible by the many voluntary moves of others. Those undergoing involuntary shifts could be provided guarantees with respect to proximity and other features (along with a put option to simply exit the system and receive fair market value). Groups of residents could be guaranteed moves that would relocate them as a cohesive unit, preserving intra-group proximity and assuring continued co-consumption of local public goods like education and safety.¹⁴⁰ Compensation for displacement could also be provided, scaled to the degree to which the family’s destination home differed from the family’s preferred home along designated dimensions.

A geographically scaled-up version of this model could facilitate voluntary moves among metro areas. This too would help to serve urban land use needs writ large by facilitating efficient shifts of human capital.

employed by AVE Korman Communities.

¹³⁷ See *id.* at 174; see also AVE, What Is Ave, <http://www.aveliving.com/what-is-ave.aspx> (describing the extended stay options available in multiple cities).

¹³⁸ Some limited examples of portable mortgages have been found in the US, but the idea has not taken hold; they are somewhat more common in other countries. See, e.g., Jeffrey Lubell, *Housing More People More Effectively Through a Dynamic Housing Policy*, Abt Associates, December 2014, at 28-29 & n. 64 available at <http://www.abtassociates.com/AbtAssociates/files/ce/ce7c306c-3cce-4dda-96c8-6098abe8a5ac.pdf> (describing the workings of portable mortgages and noting the current dearth of these alternatives in the U.S.).

¹³⁹ Such a model would work well with a reduced-risk form of homeownership in which the risk associated with housing market fluctuations would be outsourced, although this would not be an essential feature if all the homes in the system were in closely correlated local housing markets. See *infra* notes 169-171 and accompanying text.

¹⁴⁰ I thank Lior Strahilevitz for comments on this point.

While much of this paper has focused on the need to periodically clear the slate within urban areas to enable redevelopment—and hence on moving existing uses out of the way—it is just as important to devise mechanisms that can support the mobility of people and firms *to* the places where they can add the most value.

While such an approach is not for everyone, it would provide more stability than many leaseholds, as well as flexibility that might be attractive to households with uncertain job prospects or changing family needs. And it might be especially attractive to a new generation that is less enamored of homeownership and already comfortable navigating fluid systems like Airbnb. Finally, although it is not my focus here, it is worth observing that natural changes such as sea level rise may also create pressure in the direction of shifting or mobile property interests.¹⁴¹ The common theme is the need for adaptation to changing conditions, whether the product of natural or social phenomena.

C. Making the Switch

The ideas sketched thus far are just that, sketches—departure points for further exploration, not fully conceived new institutional arrangements. Retrofitting property for modern conditions is a large project, one that I can only hope to set in motion here. My primary goal in this paper is to suggest the need for a foundational shift in the way real property is conceptualized. Section 1 below discusses the nature of that shift. Sections 2 and 3 turn to more practical aspects of a paradigm shift in real property's form—transition issues, and the interaction between limited fees and other existing and proposed approaches to land use control.

1. From Enduring Things to Access Streams

Property theory is dominated by a thing-based paradigm that emphasizes the exclusion strategy.¹⁴² The appeal of this paradigm is undeniable: Drawing boundaries around resources and keeping interlopers out is an ingenious way to pair inputs and outcomes across a range of

¹⁴¹ For example, “rolling easements” (which comprise a number of distinct legal arrangements) are types of untethered property interests. See, e.g., Michael Allan Wolf, *Strategies for Making Sea-Level Rise Adaptation Tools “Takings-Proof,”* 28 J. LAND USE & ENVIRON. L. 157, 192-93 (2013). For discussion of the ambulatory line between public and private ownership along the shoreline, see generally Katrina M. Wyman and Nicholas R. Williams, *Migrating Boundaries*, 65 FLA. L. REV. 1957 (2013).

¹⁴² The thing-based approach has been most strongly associated with the work of Henry Smith. See, e.g., Smith, *supra* note 5. Although Smith claims his is an outlier view among property theorists, his conceptualization not only aligns with popular perceptions of property but also represents the dominant theoretical starting point with which all property theorists must contend. See Ezra Rosser, *Destabilizing Property*, CONN. L. REV. (forthcoming 2016), draft at <http://ssrn.com/abstract=2581710> (“Smith describes himself as the underdog, even though he and others who share his perspective on property are winning.”).

settings. These are, unsurprisingly, the settings from which exclusion theorists overwhelmingly draw their motivating examples. Points about how property is or must be structured rely heavily on a set of stock characters: farms, crops, herds, decontextualized single-family homes, and privately owned cars.¹⁴³ These familiar illustrations obscure the fact that there are important contexts in which the exclusion approach does *not* work well—from water rights¹⁴⁴ to the urban areas in which most human beings now live.¹⁴⁵

There have been challenges to the dominant property paradigm, but they have primarily come in the form of pushback against strong exclusion rights.¹⁴⁶ Both sides in the exclusion debate seem to agree that the core of value lies inside the boundaries, and the only question is who will be allowed to get at it. The message here is different. There is nothing (much) of value inside property boundaries unless the right things are happening outside those property boundaries. Assigning people rights in physical space for a period of time remains a way of delivering access to a consumption stream, but that stream is fed and diverted by acts undertaken by many parties both on and off the parcel.¹⁴⁷ And one of the primary ways in which the consumption stream is enriched is through property reconfiguration that enables development at different scales.

Maintaining dominion over a physical thing in perpetuity is no longer a particularly good way of ensuring access to the relevant stream of resources over time. Just as advances in cloud-based computing have made continuity in individually owned devices less crucial than it once was, so too may we come to understand buildings and plots of land less as ultimate repositories of value than as mechanisms for accessing value that resides elsewhere.¹⁴⁸ Seeing real property as primarily constituting “portal rights” into the

¹⁴³ See, e.g., Smith, *supra* note 5, at 1702-06 (using examples of cars and “Blackacre”); *id.* at 1720-21 (discussing “fencing in” rule to address wandering cattle); Thomas W. Merrill, *The Property Strategy*, 160 U. PA. L. REV. 2061, 2071-72 (2012) (giving “archetypical example” of an American family farm); Thomas W. Merrill, *Property as Modularity*, 125 HARV. L. REV. F. 151, 155-57 (2012) (discussing how a farmer who owns “the proverbial Blackacre” can expand holdings modularly by adding more land, a tractor, a barn, livestock and so on, and noting in passing that “a similar story can be told about the factory owner, the owner of an apartment complex, and so on and so forth.”); *id.* at 161-62 (discussing crop examples); Thomas W. Merrill & Henry E. Smith, *What Happened to Property in Law and Economics?*, 111 YALE L.J. 357, 388-91 (2001) (discussing cattle fencing, based on Robert Ellickson’s study in Shasta County); *id.* at 361-62 (citing and discussing Blackstone on the importance of protecting the right to reap where one has sown); see also Eric R. Claeys, *Exclusion and Private Law Theory: A Comment on Property as the Law of Things*, 125 HARV. L. REV. F. 133, 140 (2012) (“*The Law of Things* uses land and cars as paradigm cases of property.”) (discussing Smith, *supra* note 5).

¹⁴⁴ Claeys, *supra* note 143, at 140-41 (criticizing Smith’s approach for marginalizing riparian rights).

¹⁴⁵ See *supra* note 10.

¹⁴⁶ See, e.g., Gregory S. Alexander, *The Social-Obligation Norm in American Property Law*, 94 CORNELL L. REV. 745, 746-48 (2009).

¹⁴⁷ Contrast this very different understanding of the returns to ownership, which is prefaced by agricultural examples: “Property is like a profit-sharing plan in which 100% of the profits go to the individual profit center, or an incentive compensation scheme in which 100% of the compensation is in stock options.” Merrill, *Property as Modularity*, *supra* note 143, at 162.

¹⁴⁸ See, e.g., Fennell, *supra* note 130, at 941-42.

surrounding urban value creation machine, rather than as owned patch of earth, illuminates the real end and aim of ownership—delivering access to resources. Some continuity of physical possession is important to that enterprise, but how much? Something well short of eternity, I posit, can do nicely.

The mental shift I am urging here is echoed in some ways by innovations in the so-called sharing economy. Access to resources, not the ownership of things, is increasingly becoming the coin of the realm. Finding functional ways to deliver that access is the overarching enterprise. The business model of an Airbnb or a Zipcar cannot, of course, be extended in a simplistic way to all of property ownership—continuity of possession continues to generate benefits that cannot be replicated through finely-sliced use rights. But neither should we neglect the lesson that traditional ownership of enduring objects is only one way, and often not the best way, to gain access to valuable resources.

2. Transition Issues

A primary rationale behind floating and callable fees is to ease future transitions when the scale of efficient use changes and there is an accompanying need to reconfigure holdings and uses. But what about the initial transition that is required to get such a system of limited fees started in the first place? We can, of course, simply posit a clean slate—a set of properties that have been cleared through traditional eminent domain or that happen to be under the control of a developer or other single owner already.¹⁴⁹ In these contexts, it would be possible to simply sell individual parcels subject to options. But it would make little sense to limit floating and callable fees to these contexts. The places where reconfiguration is likely to be most valuable going forward may very well be already developed and fragmented among many owners. Moreover, concerns about eminent domain form part of the rationale for using limited fees to ease reconfiguration.

Suppose, then, that a local government wished to introduce a callable or floating fee district in an existing, already-developed area. To accomplish this result, the entitlements held by each existing owner would be effectively downgraded from an FS to a type of defeasible fee, one subject to an option that can be exercised upon specified conditions and within specified time windows, for specified levels of compensation.¹⁵⁰ One

¹⁴⁹ See text accompanying *supra* note 108 (positing such a clean slate, for expository simplicity).

¹⁵⁰ The callable fee would contemplate cash compensation while the floating fee might be characterized as providing in-kind compensation. The move to a floating fee could be understood as replacing a fixed estate with a portable one at the time the limited estate is established; in-kind compensation for the fixed estate comes in the form of the portable estate and the associated reciprocal benefits of making the surrounding estates portable as

possibility would be to condemn the rights associated with the option to call or move the estate, with compensation provided. Alternatively, a supermajority vote might be legislatively prescribed in order to form the district, as with compulsory unitization in the oil and gas context.¹⁵¹ The latter approach might be attractive where the designated community as a whole stands to gain from the associated future flexibility.¹⁵²

As a doctrinal matter, it is not evident that the kind of adjustment in tenure form contemplated here represents a compensable taking in itself, assuming compensation would be provided at the point when displacement actually occurs. Suppose the option to which the land is made subject complies with the standards for the exercise of eminent domain in the jurisdiction—that is, the strike price constitutes just compensation and the conditions for calling or relocating the estate qualify the shift as one for public use. If the trigger conditions for calls and moves are set up to enable reconfiguration only when another configuration is likely to produce higher value, the latter condition would seem to be met,¹⁵³ and the former condition would be satisfied as long as at least fair market value is provided to owners.¹⁵⁴ In such a case, it would not seem that the mere shift to a callable or floating fee would require separate compensation. The explicit option would merely track the substance of the implicit option that the power of eminent domain already embodies.

This is not to suggest that no change has been introduced, or that no one has been disadvantaged relative to the status quo ante. To the extent that limited property forms of the nature contemplated here lower the political price of displacement, people may run a higher risk of displacement.¹⁵⁵ Some transition relief might therefore be provided to those placed more immediately at risk of displacement, funded by those in areas that remain in

well.

¹⁵¹ See Libecap, *supra* note 17, at 161-62; see also Nelson, *supra* note 54, at 834 (proposing supermajority rule for creating new neighborhood associations in existing communities).

¹⁵² These supermajority alternatives would resemble in some respects the land assembly districts proposed by Michael Heller and Rick Hills. Michael Heller & Rick Hills, *Land Assembly Districts*, 121 HARV. L. REV. 1465 (2008), although differences may exist depending on what decisions the vote procedure is used to resolve (e.g., whether it applies to the initial decision to form a floating fee district, or to particular decisions to undertake rearrangements once such a district exists).

¹⁵³ There is some question whether a legislative body could set in advance criteria for public use and then allow a private party to proceed when those criteria are met. Making the criteria objective and verifiable would help, but courts would likely demand an individualized determination in each case that the shift would serve a public purpose—and might not look kindly on rubber-stamp approvals. See *Southwestern Illinois Development Authority v. National City Environmental L.L.C.*, 768 N.E.2d 1, 10 (2002) (finding that a development authority's attempted condemnation on behalf of a private party "was not clothed in an independent, legitimate governmental decision to further a planned public use").

¹⁵⁴ Floating fees would characteristically provide compensation in kind, but including a fair market buyout option would likely address compensation concerns. See Douglas T. Kendall & James E. Ryan, "Paying" for the Change: Using Eminent Domain to Secure Exactions and Sidestep Nollan and Dolan, 81 VA. L. REV. 1801, 1843-44 (1995) (discussing the constitutional status of an arrangement allowing monetary just compensation to be waived in favor of in-kind compensation).

¹⁵⁵ This point is considered in depth below. See *infra* Part III.C.

FS or are made subject to options that can be exercised further in the future. In considering the appropriate level of compensation, however, it is important to recognize that there is a form of in-kind compensation that is reciprocally distributed to the population at the same time that this disadvantage is introduced: the greater flexibility that comes from having others nearby similarly subject to a limited fee that permits easier reconfiguration.¹⁵⁶

An analogy might be drawn to other historical transitions that property law has made among tenure forms, such as the elimination of the fee tail. The fee tail came to be regarded as an obstacle to social goals, and was ultimately done away with, even though this inevitably truncated some interests and enlarged others.¹⁵⁷ Converting the FS to a floating or callable fee would similarly strip away the veto rights that impede the achievement of social goals. This would curtail the rights of owners in some respects while simultaneously granting them greater access to the prospect of valuable reconfiguration.

3. Connecting to Other Approaches

What would the adoption of callable or floating fees mean for existing land use controls and proposed reforms? One possibility is that land use controls could be loosened to permit more risk-taking and experimentation, now that there is an orderly process for revising missteps and weeding out failures.¹⁵⁸ To the extent that some land use controls can be understood as prophylactic measures designed to preserve future options, the need would be obviated by explicit options capable of addressing later concerns. For example, it is sometimes suggested that minimum lot sizes are meant to protect against excessive spatial fragmentation, based on the idea that reassembly would be far more difficult to accomplish at a later time.¹⁵⁹ Keeping property in one large tract when it is more efficiently divided into multiple pieces preserves an option to use the property at the large-tract scale in the future, but it also carries an opportunity cost—one that is unnecessary if the option can be preserved in other ways.

More interesting is the potential effect that these tenure forms might

¹⁵⁶ Cf. Gay & Nasser-Ghods, *supra* note 123, at 84-93.

¹⁵⁷ See, e.g., DUKEMINIER ET AL., *supra* note 2, at 225; Stanley N. Katz, *Thomas Jefferson and the Right to Private Property*, 19 J. L. ECON. 467, 471 (discussing Jefferson's bill to abolish the entail in Virginia and quoting his rationale, which included the idea that natural rights would not be deprived, but rather enlarged).

¹⁵⁸ A more pessimistic account would focus on the new opportunities that revised tenure forms might provide for government to extract value from private parties. But our present system of land use already carries these risks, and it is unclear why tenure forms that provide more opportunities for redevelopment would make matters worse.

¹⁵⁹ See, e.g., Michael A. Heller, *The Boundaries of Private Property*, 108 YALE L.J. 1163, 1173 (1999) (“[T]he dynamics of the one-way ratchet of fragmentation suggest another logic for minimum lot sizes: to counteract market forces that might lead individuals to break up land too much.”).

have on small-scale private land use controls, such as systems of covenants. As already suggested, the callable fee could induce collective action aimed at staving off calls, and might consequently produce innovative mechanisms for fostering and harnessing cooperative efforts. This approach is not without risk. Private solutions can be as coercive as public ones,¹⁶⁰ and long-range projects with large but deferred payoffs may be undervalued in a system that makes continuity contingent on performance.¹⁶¹ But requiring the unit to effectively “justify its existence” over a long enough period of time could have a galvanizing effect in producing bottom-up solutions to the collective problems of urban life: namely, how to get parties to act in ways that will generate valuable positive spillovers and make the most of complementarities.

One way to understand the challenge is to see urban energy or vibrancy as a kind of “landscape level” resource that must be collectively managed at a scale greater than the everyday activities that take place on the property.¹⁶² A number of alternatives exist, from separate ownership of the landscape level resource itself to institutional arrangements that allow owners to work together to optimize the shared resource. A unitization approach has been used extensively in oil and gas contexts, where reserves exist at a scale larger than the efficient use of the surface parcel. There, owners create a decisionmaking body that will make optimal decisions about the resource and equitably split up costs and revenues.¹⁶³ This model is similar to the trust, which emerged to solve an analogous problem of misaligned temporal scales.¹⁶⁴ In the urban context, such an approach could build on existing structures like business improvement districts (BIDs)¹⁶⁵ and proposed variations like block-level improvement districts (BLIDs).¹⁶⁶

Floating fees, at least those following the land readjustment model,

¹⁶⁰ See, e.g., Stephen Clowney, *Rule of Flesh and Bone: The Dark Side of Informal Property Rights*, 2015 U. ILL. L. REV. 59.

¹⁶¹ There are obvious parallels to academic tenure (and other forms of job security) here. Reevaluation (at the extreme, periodically “reinterviewing” for one’s job) may keep incentives sharp, but these advantages must be weighed against potential demoralization and the benefits of allowing people to engage in long-range projects without obvious near-term payoffs. See also Singer, *supra* note 7, at 317-18 (noting the value judgments inherent in choosing whether to make continued possession of property contingent rather than presumptive).

¹⁶² See Schulz & Lueck, *supra* note 17.

¹⁶³ However, there are difficulties in initially establishing unitization, often requiring some form of coercion. Libecap, involuntary unitization.

¹⁶⁴ See RICHARD A. POSNER, *ECONOMIC ANALYSIS OF LAW* 73 (6th ed. 2003) (analogizing the trust to unitization). The trust developed as a way to ease interactions among holders of present and future interests. A trustee holds legal title in the full fee simple interest while beneficiaries of the trust hold equitable versions of standard property interests, such as life estates and remainders. See, e.g., *DUKEMINIER ET AL.*, *supra* note 2, at 295-97. In an urban area, a trust-like structure might be employed to nest physically smaller equitable holdings within larger legal ownership.

¹⁶⁵ See, e.g., Richard Briffault, *A Government for Our Time?: Business Improvement Districts and Urban Governance*, 99 COLUM. L. REV. 365 (1999). Although BIDs allow proximate owners to impose taxes on themselves and to spend the revenues pursuing shared goals, they do not have a formalized system in place for splitting up the benefits that are thereby realized.

¹⁶⁶ Robert C. Ellickson, *New Institutions for Old Neighborhoods*, 48 DUKE L.J. 75 (1998) (proposing BLIDs).

provide a different set of incentives for cooperation. The fact that anyone might later end up in another spatial position within the community gives everyone at least a limited stake in the fate of all portions of the community. This is a synthetic entwining of ownership interests that replicates in some measure the scattered strips of the semicommons, which similarly blurred ownership lines and helped to align incentives.¹⁶⁷ Other opportunities for both cooperation and conflict would arise for floating fee owners when land is reallocated. Finding an appropriate algorithm for collecting and prioritizing preferences is no easy matter, as disputes over mundane types of portable claims—office space in a new building, for example—attests.¹⁶⁸ At the same time, however, the floating fee offers the capacity for collaboration directed at maximizing the joint returns from a given reconfiguration.

Finally, callable or floating fees might interact in interesting ways with other land use innovations that have been discussed in recent years. To take one example that I have focused on previous work, a shared equity or reduced risk form of homeownership might mesh well with a callable or floating fee if the latter structures offered more predictable time windows for settling up with investors over gains and losses.¹⁶⁹ One of the difficulties associated with offloading housing market risk onto investors is that the expected returns depend on how long the owner holds onto the property—and this is unpredictable.¹⁷⁰ If property became vulnerable to calls or reconfigurations at predictable intervals, those intervals could provide natural points for payouts to investors (if area home values have gone up) or payments to homeowners (if area home values have gone down).

The potential for a new homeownership form to buffer investment losses and truncate investment gains would also interact with incentives surrounding the exercise of calls or reconfigurations, with the specific effects depending on the compensation protocols in place. A combination of investment protection against market fluctuations and incentives to meet governmentally established metrics in order to retain possession could work an interesting change in the way that people think about ownership. These changes might, for example, invert NIMBYism. In place of risk-averse

¹⁶⁷ See Henry E. Smith, *Semicommon Property Rights and Scattering in the Open Fields*, 29 J. LEGAL STUD. 131–69 (2000). A similar approach, which might be used more broadly, would synthetically interlock the holdings of individual owners through the use of derivative instruments keyed to neighboring owners' property values, stock prices, or other economic variables. Again, the goal would be to make each owner share to a greater extent in the fortunes of her neighbors.

¹⁶⁸ RICHARD H. THALER, MISBEHAVING 270–76 (2015) (describing the office-allocation difficulties associated with the Booth School of Business's move to a new building).

¹⁶⁹ For background on existing models, see Lee Anne Fennell, *Homeownership 2.0*, 102 NW. U. L. REV. 1047, 1063–70 (2008) and sources cited therein.

¹⁷⁰ See, e.g., Andrew Caplin et al., *Shared-Equity Mortgages, Housing Affordability, and Homeownership*, 18 HOUSING POL'Y DEBATE 209, 219 (2007) (“The long and unpredictable nature of the payoff period appears to have been the chief reason that the Bank of Scotland withdrew its shared-equity mortgages from the market”).

homeowners who reflexively fight all change to protect resale values, a new style of owners might be willing to take positive expected-value bets with respect to development in order to earn the right to remain.¹⁷¹

III. OBJECTIONS

Any suggested change in existing property forms might be expected to produce strong resistance. Property is an inherently conservative institution that is designed to entrench claims and protect expectations, not upend them. Yet property cannot work without some degree of dynamism.¹⁷² Property thus illustrates well Lon Fuller's point that a foundational social design challenge is "that of maintaining a balance between supportive structure and adaptive fluidity."¹⁷³ The premise of this paper is that our existing property forms are long on supportive structure but too short on adaptive fluidity, and that recalibration is warranted.

This Part anticipates several objections. I start by addressing the standard question of how any idea can be a good one if it has not already been implemented. I then turn to a set of theoretical concerns associated with altering property forms in the ways suggested here, including the worry that the resulting arrangement is too weak to count as property or runs afoul of the *numerus clausus* principle. Finally, I consider a primary normative objection to making property less rooted or permanent—that it will result in harmful forms of displacement and associated identity loss for people and communities.

A. *Why Don't We See It?*

A standard response to any proposed innovation in property (or any other area of the law) runs like this: If this were such a good idea, wouldn't private parties already be clamoring to adopt it on their own? Doesn't the fact that we don't observe it in the real world establish its lack of value?

As an initial matter, it is worth reiterating that we *do* see models that involve time limited or floating estates already, both in the U.S. and in other countries—from vacation timeshares to retirement homes to land readjustment to all manner of usufructs. Eminent domain provides us with a

¹⁷¹ Such a result would fit with behavioral findings suggesting that people are loss averse rather than uniformly risk averse, and more willing take risks to avoid a result that would be framed as a loss than to obtain a result that would be framed as a gain. See Daniel Kahneman & Amos Tversky, *Choices, Values, and Frames*, 39 AM. PSYCHOL. 341, 342-43 (1984).

¹⁷² See LON L. FULLER, *THE MORALITY OF LAW* 28 (rev. ed. 1964) (describing the tension between stability and dynamism in contract and property, in which too little stability presents the risk that "exchange would lose its anchorage," while too much rigidity means that "society's effort to direct its resources toward their most effective use is frustrated by a system of vested personal and institutional interests").

¹⁷³ *Id.* at 29.

callable fee as well, if a much maligned one. The question, then, is not whether there is demand for these kinds of alternatives—clearly there is—but rather why private innovation has not produced more comprehensive versions of them that could generate solutions to urban land use challenges. There are at least three reasons we might see this shortfall, other than intrinsic lack of merit.

First, private parties may have difficulty introducing a new way of holding property without the imprimatur of government. It is not just a matter of getting potential buyers to accept the new form, but also lenders and loan guarantors who are wedded to standardized forms.

Second, the options retained by a private party would be close to valueless unless the local government was willing to approve—and commit itself in advance to approving—the larger scale projects that would be made possible by the option's exercise. Likewise, the private party would be gambling on the government not undertaking some protective measure that would prevent exercise of the options against the current wishes of the possessory owners.¹⁷⁴

Third, some of the places where callable and floating fees would be most valuable are places in which ownership is presently dispersed among many owners. Government involvement would likely be necessary to consolidate ownership in such places before a private party would be in a position to experiment with the approaches discussed here. But a developer would be unlikely to win that form of government intervention based on a possible *future* development project that the developer now only wishes to amass options on exercising.

To be sure, these points only cast doubt on the claim that the nonexistence of these property forms indicates their lack of value. They do not establish the opposite proposition: that positive value could be derived from these innovations. And one might argue that these arguments prove too much. If it is really the case that uncertainty about future government actions helps to explain private reluctance to initiate these forms, wouldn't the same uncertainty operate to quash private participation even under a governmentally-sponsored system of callable or floating fees? Because the government cannot legally bind itself not to act in certain ways in the future, what would keep it from bowing to political pressure and unwinding the limited fees (to the detriment of the option holders) once the possessory owners had ensconced themselves in their properties?¹⁷⁵

¹⁷⁴ Such a move to eliminate bargained-for value might or might not amount to a compensable taking. Compare *Pennsylvania Coal v. Mahon*, 260 U.S. 393 (1922) with *Keystone Bituminous Coal Assoc. v. DeBenedictis*, 480 U.S. 470 (1987) (reaching different results when statutes regulating coal mining effectively eliminated the value associated with the “support estate” recognized by Pennsylvania law).

¹⁷⁵ Cf. Donald Clarke, *China's Stealth Urban Land Revolution*, 62 AM. J. COMP. L. 323, 352-58 (2014) (assessing the potential for political action to turn time-limited, renewable urban land use rights in China into perpetual ones).

There are a couple of responses. For one thing, granting actual property interests to third parties is a form of precommitment that is harder to undo, at least to the extent that it creates interests that, if eliminated, would be compensable takings. A better answer is that a government that plans ahead to create these limited fees is likely to face lower political barriers in allowing the already conveyed interests to play out as planned than it would in initiating eminent domain anew. This does not mean that local governments might not unwind these interests under some circumstances, only that the ability to facilitate economic redevelopment through inaction could be a valuable asset for governmental entities faced with increasing economic pressures. Moreover, local governments would be in a position to incentivize initial developer participation in these approaches, generating momentum and credibility for the approach in a way that would be difficult to replicate privately.

In short, the problems that I identify with existing property forms are not amenable to ordinary market solutions. For one thing, land use markets are not ordinary markets; instead, they are highly regulated arenas in which the rights to engage in uses are not objects of commerce but rather the subjects of complex political negotiations. Equally significant, the turnover in individual neighboring properties is not synchronized in a way that would enable large-scale changes in use. Land assembly can be accomplished through eminent domain, but eminent domain is not a market solution.

Of course, private parties can attempt to amass large assemblages of land on their own, using buying agents and the like to get around holdout problems.¹⁷⁶ But even when this strategy is successful, it concentrates ownership in a way that can generate normative concerns. And there can be inefficiencies associated with consolidating ownership for all purposes at a scale much larger than that which is best suited to the ordinary value-generating activities taking place on the property. Doing so solves one set of problems (managing the coordination among separate owners) at the cost of introducing another set of problems (managing the internal interactions among different agents, such as employees or tenants).¹⁷⁷

What is unique about the approach here, and what requires the coordinating involvement of government, is the possibility of repeatedly assembling *and reassembling* the most valuable complementary land uses—all without the need to continually maintain the entire operation under a single owner's control.

¹⁷⁶ See Daniel B. Kelly, *The "Public Use" Requirement in Eminent Domain: A Rationale Based on Secret Purchases and Private Influence*, 92 CORNELL L. REV. 1, 18–24 (2006).

¹⁷⁷ See *supra* note 39 and accompanying text.

B. Property Gone Wrong?

The next set of objections sounds in property theory and asks whether the approaches suggested here would move us away from what property is foundationally meant to be and do. First I address the question of whether the limited estates discussed here would fatally weaken property. Second, I consider whether the *numerus clausus* principle ought to be regarded as an impediment to these sorts of innovations.

1. Too Weak?

The analysis above explained why a tenure form that moved away from the FS's particular architecture would not cease to be property. But would such a form of property be too weak to be attractive to anyone? To answer the question, we must compare it not to an idealized version of property but to the FS as it operates on the ground and as it might be adapted to urban conditions going forward.

In terms of protecting the option to stay in place, the stalwart FS is only as strong as the current political resistance to the application of eminent domain.¹⁷⁸ We do not have a property form that guarantees the right to stay in place forever.¹⁷⁹ Yet even a strong right to stay in the same physical location indefinitely does little to protect what gives property most of its value—its position relative to other uses. What will happen (or fail to happen) nearby remains a gamble, no matter how strong the right to remain.¹⁸⁰ Property rights may well be more valuable in a system that is good at putting complementary uses together, even at some displacement risk.

Remaking the tenure form may also give the average citizen property rights that are stronger than they would be likely to enjoy under alternative models. For example, expanding the scope of holdings under one owner's control can harness synergies among uses without upending the FS.¹⁸¹ But

¹⁷⁸ This statement assumes that politics, not constitutional doctrine, provide the binding constraint against the use of eminent domain to reconfigure property in urban areas. See text accompanying *supra* note 107.

¹⁷⁹ It might seem that owners who keep their properties in high-value uses would be largely immune to eminent domain. This might be generally true as a political matter, but it remains contingent for that same reason. Even if we assume that condemning authorities can unfailingly recognize and protect efficient uses on the merits, the fact that a given owner's use is high-value for the current parcel size does not mean that another use at a different scale might not generate more value. Similarly, even if the owner's current use is optimal, it might be embedded within an area that contains many suboptimal uses; eminent domain might target the area as a whole. See *Berman v. Parker*, 348 U.S. 26 (1954) (nonblighted store can be condemned along with blighted neighboring properties in order to redevelop the entire area).

¹⁸⁰ See STRETTON, *supra* note 11, at 39 (explaining that within large, complex cities, the location choice of a firm or household "consists chiefly in guessing at other people's future locational and investment decisions" and is thus "*chiefly* a gamble on other people's externalities") (emphasis in original).

¹⁸¹ For example, Gideon Parchomovsky and Peter Siegelman have proposed an approach modeled on the one that shopping malls use to manage asymmetric spillovers among anchor stores and smaller stores, which is premised on bringing a block of uses under single ownership. See Parchomovsky & Siegelman, *supra* note 64;

such approaches rely on consolidating ownership in a smaller number of hands. Most economic actors—that is, all those operating within the large envelope of the single entity’s control—would hold diminished property interests, such as leaseholds. And, not incidentally, achieving this consolidated property form is likely to require some form of coercion—presumably eminent domain. Both leaseholds and eminent domain temporally truncate property interests just as surely as would a fee interest that expressly builds in that possibility.

Indeed, introducing limited tenure forms may be in some cases a less invasive and more owner-protective move than applying more coercion to an (ostensibly) fuller set of ownership rights. By clearly laying out expectations, limited tenure forms align more closely with urban realities. They thereby avoid the sort of jarring disconnect that eminent domain produces between the rhetoric of unlimited property ownership and the reality of coercive reconfiguration.

We might also understand limited fees as changing the nature of coercion associated with private property.¹⁸² What makes property coercive is not only the state-backed enforcement of exclusion from an individual owner’s premises but property’s capacity to thwart larger-scale projects by granting holdouts a veto power. A floating or callable fee can indeed have the effect of coercively pushing individual owners out of the way of larger projects, but it also frees owners as a group from the coercion of individual owners. For similar reasons, we would not say that a unanimity requirement is an inherently less coercive way to make decisions than a simple majority or supermajority requirement. It is more protective of the status quo, to be sure, but it grants tremendous power to each individual voter to lock the status quo in place.¹⁸³

2. Too Fancy?

No discussion of altered tenure forms can avoid confronting the supposed barrier of the *numerus clausus* doctrine—the idea that property should come in just a few standardized forms. Thomas Merrill and Henry Smith famously argued that a limited property menu keeps information costs low for all those who wish to transact over, or even just avoid

see also Fennell, *supra* note 64 (discussing and critiquing Parchomovksy & Siegelman’s approach).

¹⁸² As Eric Freyfogle has observed, a system of private property represents a form of mutual coercion. Eric T. Freyfogle, *A Good that Transcends: Culture Change and Our Common Home*, 2014 BYU L. REV. 1415, 1424 (2015) (“[T]he private-property approach [to the tragedy of the commons] is merely a form of mutual coercion mutually agreed upon, and not necessarily much different from overtly regulatory approaches.”).

¹⁸³ For a classic discussion of the costs and benefits of different voting rules, see JAMES BUCHANAN & GORDON TULLOCK, *THE CALCULUS OF CONSENT* 68-72 (1962) (examining the tradeoffs between decision costs and the costs of a decision adverse to one’s interests as the threshold for decisionmaking changes).

encroaching on, property.¹⁸⁴ By contrast, allowing idiosyncratic or “fancy” property interests will sow confusion, causing information costs to skyrocket.¹⁸⁵ Should a callable or floating fee be rejected for this reason?

There are two reasons for a negative answer, even if we assume the merits of the information-cost arguments in favor of a limited menu of property forms. First, Merrill and Smith’s approach seeks “optimal” standardization, not maximum standardization.¹⁸⁶ The asserted benefits flowing from a fixed and limited tenure menu do not require that the menu be limited (for all practical purposes) to only *one* form, much less that this form equate to the FS.

Second, the callable and floating fee can be constructed without adding materially to the existing property menu. The kinds of changes proposed in this paper could be readily accomplished using varieties of defeasible estates and executory interests—familiar entries in the current list of property forms. For reasons similar to those that led to legislation concerning common interest communities and conservation easements, however, it would be advisable to legislatively define these new property forms and give them standardized characteristics and terminology.

It is here that we see the more important point that might be taken from the *numerus clausus* principle: the significance of providing a recognizable, standardized form when introducing a novel type of property. Not only does a standard template allow people to understand what they are getting into, it also provides an anchor point for law and policy to coalesce around.¹⁸⁷ Conversely, a lack of consistency in terminology and operational detail can produce confusion and impair uptake.¹⁸⁸ None of this counsels against property innovations, but it does suggest that care should go into the way in which new forms are introduced.

Instructive in this regard is Pavel Pelikan’s analysis of organizational structures for producing incentive systems. He identifies two types of errors that such a structure might generate: “surviving errors” (incentive systems that persist despite their flaws) and “absent successes” (experiments that never occur or are rapidly stamped out despite their value).¹⁸⁹ Applied to systems for generating property forms, a closed list should make it easier to

¹⁸⁴ Thomas W. Merrill & Henry E. Smith, *Optimal Standardization in the Law of Property: The Numerus Clausus Principle*, 110 YALE L.J. 1 (2000).

¹⁸⁵ *See id.* at 26-34.

¹⁸⁶ *See id.* at 38-42.

¹⁸⁷ *See* Nestor M. Davidson, *Standardization and Pluralism in Property Law*, 61 VAND. L. REV. 1597, 1607 (2008) (arguing that the limited property forms serve as regulatory platforms).

¹⁸⁸ *See, e.g.,* Ray W. Archer, *Land Pooling by Local Government for Planned Urban Development*, in LAND READJUSTMENT 29, 39 (William A. Doebele, ed., 1982) (suggesting that such problems may explain in part why Perth’s experiments in land pooling failed to thrive).

¹⁸⁹ Pavel Pelikan, *The Formation of Incentive Mechanisms in Different Economic Systems*, in INCENTIVES AND ECONOMIC SYSTEMS 27, 43-44 (Stefan Hedlund, ed., 1987). These error categories track the dichotomy between “type 1” and “type 2” errors—false positive and false negatives—if the system is designed to identify socially valuable arrangements.

identify and eradicate problematic forms (“surviving errors”). But it would also quash experimentation capable of generating useful new forms.¹⁹⁰

To the extent that the *numerus clausus* principle is reflexively invoked to shut down innovation in tenure forms,¹⁹¹ it represents an insidious doctrine—one whose costs may go undetected because they mostly take the form of “absent successes.” But at the same time, new forms must be introduced in a way that enables them to survive long enough to take hold, or they too will join the ranks of the absent successes.

C. Displacement and Identity Loss

A primary concern with recognizing explicitly callable or floating fees is that these tenure forms would lead to more involuntary displacement. I have written elsewhere about the significance of the possessory option—the ability to remain in place if one so chooses.¹⁹² There is no way to extend an option to other parties to end or change a household’s or firm’s tenure without at the same time curtailing the possessory option that the owner herself holds. The issue is not just one of individual owners being displaced, though that is a large concern. Facilitating or accelerating change within a community also presents risks to that community’s collective sense of identity, which is shared among its residents.

There are at least two distinct ways that the new tenure forms sketched here might interact with questions of displacement and identity. First, we might wonder if these potential effects would make floating or callable fees political nonstarters—either doomed from the beginning or subject to being unwound once they are underway.¹⁹³ Second is the possibility that these property forms would heighten the vulnerability of the least politically powerful groups to forced displacement. The concern here would not be that these new property forms would prove politically impossible, but rather that they would prove all too politically possible—with unwanted results.

I will start by dispensing with two arguments that might seem to moot

¹⁹⁰ Pelikan’s analysis focuses on the role of “tacit knowledge” in minimizing both kinds of errors. *See id.* at 33-50. Experimentation at the local government level offers an alternative to more centralized methods of control that might be better able to make use of such dispersed knowledge. Moreover, in the present context, I have suggested that some new property forms could themselves spur *private* experimentation into cooperative structures—whether for managing change under a floating fee arrangement or banding together to forestall a call under a callable fee arrangement.

¹⁹¹ To be clear, this need not be the import of the *numerus clausus* doctrine, and it is not what scholars like Merrill and Smith are actually saying. One way of understanding the doctrine is procedural in nature, designed to channel changes in tenure forms into legislatures rather than through courts. Another interpretation, suggested in the text, is to focus on the significance of standardizing the forms that are introduced, not keeping them out.

¹⁹² *See, e.g.,* Lee Anne Fennell, *Options for Owners and Outlaws*, 1 BRIGHAM-KANNER PROP. RTS. J. 239, 244-47 (2012).

¹⁹³ This point was addressed in a general way above. *See* text accompanying note 175 *supra*. The severity of the underlying displacement concerns, considered in this section, may bear on the likelihood of these political impediments.

concerns about displacement. First is the claim that displacement concerns disappear when parties voluntarily opt into a given tenure form, as where a currently undeveloped area is newly developed subject to the limited fee. As with other “opt in” arrangements like common interest communities, we may wonder whether parties fully recognize what they are getting into, and ask how voluntary a choice really is if all of the available housing stock within the most desirable areas comes with this proviso. This concern is sharpened if the pricing of homes in different areas builds in displacement risks, as it presumably would, since lower income people may face a constrained choice set. While the opportunity to opt into different tenure forms does make a normative difference, as I will explain, it does not provide a complete answer to concerns about displacement.

Nor is the observation that everyone is already holding a callable fee by virtue of their vulnerability to eminent domain a complete answer. While it is relevant that vulnerability to displacement does already exist, we cannot ignore the possibility that the introduction of more limited estates would alter the character or distribution of that vulnerability in potentially unwanted ways. Offering expressly callable or floating fees could also sidestep the political resistance associated with the exercise of eminent domain, which might lead to displacement occurring with greater frequency.¹⁹⁴ It would be inaccurate to suggest that this would introduce no disadvantages relative to eminent domain for anyone.

We must, therefore, take displacement concerns seriously, both as a potential threat to the viability of tenure innovations and as potential normative objection to their success. Here it becomes relevant that leaseholds that provide little to no long-term tenure protection are common in most U.S. jurisdictions. Most residential leaseholds are for one year or less, and the landlord typically has the right to raise the rent or withdraw the unit at the end of the lease term, with either action carrying the potential to displace the tenant. Compared with these typical leaseholds, a callable or floating fee would appear to add tenure protection rather than erode it. To the extent that these new tenure forms made ownership more affordable, they could shift households from the relatively less secure tenure form of leasing to a relatively more secure tenure form.

Significantly, however, some jurisdictions do tightly control the displacement of leaseholders through rent control and similar measures. In such places, it is not only the FS that can block reconfiguration, but also the veto power that is assigned to tenants who are given a statutory right to

¹⁹⁴ A similar criticism can be leveled against land assembly districts, an alternative to eminent domain proposed in Heller & Hills, *supra* note 152. By design, these districts are meant to increase the amount of land assembly by lowering political barriers. *See generally id.* Consequently, it is impossible to claim that the intra-district coercion upon which the system relies will never operate to the disadvantage of landowners relative to the baseline of eminent domain.

remain indefinitely.¹⁹⁵ Introducing a callable or floating fee into jurisdictions where such rights exist would curtail not only the rights of affected landlords but also those of their tenants.¹⁹⁶ Such a result might seem either politically untenable (given the political equilibrium that has already produced such strong tenant protections) or normatively suspect (because it would seem to unambiguously downgrade rather than upgrade the prevailing level of tenure protection in the jurisdiction).

But the downgrading of tenure protection may not be as unambiguous as it seems. If the status quo protections for existing tenants also tend to restrict the supply of affordable housing in these jurisdictions, people may be either pushed out of the jurisdiction or into less secure arrangements (homelessness, staying with family and friends, and so on). The capacity to reconfigure and repurpose property, possibly at higher densities, could add to the overall housing stock for both tenants and buyers. Instead of maximally protecting a subset of those who desire housing in the area and offering nothing to the balance, a larger slate of housing choice might be available to greater numbers of households.

Regardless of the empirical reality or the relative normative weighting given to the interests of current and potential tenants,¹⁹⁷ the political forces generating tenant protections might nonetheless block any property innovation that would have the effect of reducing protections for tenants. An interesting question, then, is how and whether flexible tenure arrangements could accommodate strong demands for tenure security. One possibility would be to designate certain portions of an urban area for long-term residency while other areas were designated for callable or floating fees. The result might be valuable sorting into more and less permanent forms of property—just as investors can elect callable or call-protected financial instruments. Even if more dispossessions occurred under this approach, they might be channeled toward those who are least bothered by them.¹⁹⁸

Troublingly, however, such approaches might also seem to channel dispossession toward those who are least able to pay the premium for permanence. But this need not be the case. Call-protected tenancies might

¹⁹⁵ This right is of course subject to eminent domain, but the political limits on that course of action may remove much of the associated threat.

¹⁹⁶ Absent an exception or override, curtailment in the landlord's estate entails a curtailment in the tenant's estate as well; the landlord cannot lease out an interest greater than that which she herself holds. *See, e.g.*, Henry E. Smith, *The Elements of Possession*, in *THE LAW AND ECONOMICS OF POSSESSION* 65, 91 (Yun-chien Chang, ed., 2015) (describing the rule of *nemo dat quod non habet* which holds that "one cannot give that which one does not have").

¹⁹⁷ *See* Margaret Jane Radin, *Residential Rent Control*, 15 *PHIL. & PUB. AFF.* 350, 355-71 (1986) (discussing arguments for favoring tenants already present in the community through rent control).

¹⁹⁸ Governments may already attempt to steer eminent domain away from those who will suffer the most, at least if they are politically well-organized. *See* Nicole Stelle Garnett, *The Neglected Political Economy of Eminent Domain*, 105 *MICH. L. REV.* 101, 110-21 (2006). But the callable fee would do so more consistently and openly.

offer one way of distributing permanence to those who gain the most from it, whether or not they can pay for it. Callable or floating fees might also be spatially distributed in ways that would address equity concerns. It cannot be ignored in this discussion that under the status quo, low income people are generally more vulnerable to eminent domain, more likely to occupy leaseholds rather than freeholds, and at greater risk for foreclosure. Simply making that vulnerability to displacement more transparent, as the callable and floating fees would do, would make it more politically salient and more amenable to being addressed directly through law and policy.¹⁹⁹

A related concern is that these new tenure forms would undervalue and disrupt the deep connections that people form with land.²⁰⁰ There are several responses. First, if people are heterogeneous in their connections to land, they may be able to self-sort into more or less rooted and endless estates. Second, some versions of the floating fee could actually increase the security with which people would remain members of the same community, even if not occupying precisely the same physical footprint.²⁰¹ Third, it is an open normative question whether society ought to encourage people to make large emotional investments in remaining in precisely the same physical location over time.²⁰² People's willingness to move for new job opportunities, for example, can be economically valuable. Absolute immobility may no longer even serve as a particularly good proxy for the important goals of maintaining ties to family and social support networks.

Some degree of disruption may, indeed, be generative in breaking up existing patterns and enabling more inclusive and vibrant communities. Stability looks less attractive as a normative value when one realizes its role in perpetuating existing residential patterns, including segregation. Drawing floating fee zones that straddle boundary lines between racially identifiable neighborhoods, for example, might shake up ordinary metrics of housing search and produce greater prospects for integration.²⁰³ Callable fees could likewise offer controlled opportunities to introduce perturbations in existing housing and land use arrangements, which could powerfully disrupt self-

¹⁹⁹ This might, for example, be an area in which the disparate impact cause of action under the Fair Housing Act could offer traction. See *Texas Department of Housing and Community Affairs v. Inclusive Communities Project, Inc.*, 135 S. Ct. 2507 (2015) (recognizing a disparate impact cause of action in the Fair Housing Act).

²⁰⁰ For an illuminating discussion of the connections between property and memory, see generally Eduardo M. Peñalver, *Property's Memories*, 80 *FORDHAM L. REV.* 1071 (2011).

²⁰¹ This raises the issue of the scale at which rootedness should be assessed. See YI-FU TUAN, *SPACE AND PLACE* 149-60 (1977) (emphasizing the role of scale in determining the meaning of one's "homeland"); *id.* at 182 ("For nomads the cyclical exigencies of life yield a sense of place at two scales: the camps, and the far larger territory within which they move.").

²⁰² The extent to which law and policy can shape people's expectations surrounding property has been the subject of some recent empirical work. See, e.g., Jonathan Remy Nash & Stephanie M. Stern, *Property Frames*, 87 *WASH. U. L. REV.* 449, 479-84 (2010).

²⁰³ See Lee Anne Fennell, *Searching for Fair Housing* (unpublished draft dated October 2015). Cf. Aaron J. Saiger, *Local Government Without Tiebout*, 41 *URB. L.* 93 (2009) (proposing periodic redrawing of local government boundaries to thwart efforts to sort into exclusive, wealth-stratified communities). I am grateful to Angela Onwuachi-Willig and Paul Gowder for discussions on this point.

reinforcing patterns.²⁰⁴

Fostering an enduring sense of identity with particular places does require that the built environment exhibit some degree of stability over time.²⁰⁵ The costs of disposable property are evident.²⁰⁶ But keeping too much of the past in place also impose costs—including stifling creativity. In discussing historic preservation, Yi-Fu Tuan offers the arresting metaphor of an individual who must decide what to keep and what to throw away to survive in what threatens to become an increasingly cluttered home.²⁰⁷ Along similar lines, Edward Glaeser has suggested placing a budget on the number of properties that can be historically preserved, which would keep a stable fraction of the city open to redesign and redevelopment.²⁰⁸

Regardless of the tenure forms that communities choose to employ, they cannot avoid confronting issues of urban permanence and change. Heterogeneity in tenure alternatives offers one way to manage that tension. Like museums that employ a mix of permanent and temporary exhibits, cities might designate areas for more frequent remaking or relative permanence.²⁰⁹ Doing so would offer a more flexible alternative than a hard cap on the number of historic buildings, and one that would recognize complementarities among adjacent properties.²¹⁰

CONCLUSION

For centuries, the FS powerfully aligned incentives by extending perpetual dominion over a specified physical domain. It proved versatile enough to maintain its dominant position even as social and economic conditions changed in profound ways. But a perpetual temporal reach tied to specific geographic coordinates has shifted over time from a core source

²⁰⁴ See, e.g., Fennell, *supra* note 203 (examining the potential for random variation to disrupt segregative patterns); Richard R.W. Brooks, *The Banality of Racial Inequality* (reviewing DARIA ROITHMAYR, *REPRODUCING RACISM* (2014)), 124 *YALE L.J.* 2626, 2655-61 (2015) (explaining how introducing random variation into urn-filling protocols could break the entrenched pattern that is illustrated by the Polya urn model). Cf. Ken Kollman, John H. Miller, & Scott E. Page, *Political Institutions and Sorting in a Tiebout Model*, 87 *AM ECON REV.* 977, 989 (1997) (describing how the introduction of random policy mutations in a multi-jurisdictional model can facilitate a shift from a less valuable local optimum to a more valuable overall configuration).

²⁰⁵ TUAN, *supra* note 201, at 159 (discussing the significance of landmarks as “visible signs [that] serve to enhance a people’s sense of identity; they encourage awareness of and loyalty to place.”).

²⁰⁶ See, e.g., Elisabeth Braw, *Japan’s Disposable Home Culture Is an Environmental and Financial Headache*, *THE GUARDIAN*, May 2, 2014 (describing problems arising out of a culture of building homes to be destroyed in less than 30 years). I thank David Schleicher for alerting me to this example.

²⁰⁷ TUAN, *supra* note 201, at 196-97.

²⁰⁸ See EDWARD GLAESER, *TRIUMPH OF THE CITY* 162 (suggesting that “in a city like New York, the landmarks commission should have a fixed number of buildings, perhaps five thousand, that it may protect.”).

²⁰⁹ Cf. Roderick M. Hills, Jr. & David Schleicher, *Balancing the Zoning Budget*, 62 *CASE W. RES. L. REV.* 81 (2011) (proposing that limits on growth implemented within a city be offset by increased rights to build elsewhere in the city).

²¹⁰ See Carol M. Rose, *Preservation and Community: New Directions in the Law of Historic Preservation*, 33 *STAN. L. REV.* 473, 507-08 (1981) (discussing the “tout ensemble” doctrine articulated in *Maier v. City of New Orleans*, 516 F.2d 1051 (5th Cir. 1975)).

of value to a real liability in urban areas. It is time to rethink what we want from estates in land and to ask whether the FS can still deliver it.

What is needed now are property forms that can cope with the spatial interdependence that characterizes life in and around cities. This paper has attempted to convince readers of this fact. I have suggested some directions in which property might develop if we could escape the gravitational pull of the FS, but the discussion here has been intentionally short on operational detail. I do not purport to have hit upon the best way, or ways, to revise tenure forms for the city. What I hope to have done instead is put on the agenda—or at least on the table for debate—the idea of revising some of the most foundational attributes of the FS.

Property is a human invention,²¹¹ and one that we must reinvent as conditions change. It is no longer enough for the law to protect an owner's domain and forestall overt land use conflicts, when the opportunity cost of failing to put together complementary uses in valuable patterns looms ever larger. We must loosen the grip of the rooted, everlasting estate on our imaginations if we want to build cities that are flexible enough to flourish.

²¹¹ See, e.g., *State v. Shack*, 277 A.2d 369, 372 (N.J. 1971) (“Property rights serve human values.”).