1. Introduction
In light of the importance of property to the economic system and the tremendous attention to transaction costs since Coase (1960), it seems somewhat odd that the particular rules of English property law, which impose costs on land transactions, have received relatively little attention from economists. Perhaps this is because the English common-law system of property rules is both high enough in flexibility and generally low enough in administrative costs that it causes no large and obvious drag on commerce. Nevertheless, the rules governing subdivision or decomposition of property rights have received some attention from law and economics scholars (e.g., Shavell 2004, pp. 27–32). The purpose of this chapter is to review some of the literature relating to ways in which rights in land and other assets can be divided and suggest explanations for existing decompositions of property.

Economics and property law meet in at least two fundamentally different ways. In the standard analysis, researchers have attempted to determine the allocative and welfare effects of various legal rules and regimes. Both economists and lawyers have, in a positive vein, tried to explain and predict behavior of individuals and, in a normative vein, criticized the law and proposed reforms based on those predicted behaviors (e.g., Epstein 1982; Hirsch 1983). Second, economic analysis has occasionally (Posner 2007; Krier 1974) been used to explain the behavior of judges and, in so doing, to clarify vague legal rules and make the law more predictable. The latter is not an application of Public Choice theory, although the two have similar goals. It is instead an attempt to predict or explain the results of cases by developing specific hypotheses from the general proposition that the law leans toward efficient rules. This might be so because judges prefer efficient outcomes, or it might be the result of a Darwinian process of evolution toward efficient rules (Rubin 2007; Stake 2005).

Before an owner can divide her rights in land, she must both have some rights and have the right to transfer rights. One basic topic, therefore, in the decomposition of property is whether, and to what degree, private parties have the right to alienate their rights. In one sense, this is a definitional matter: is the right to transfer inherent in the bundle of sticks we call ‘property’? The right of alienation is the first topic discussed below.
Once owners have the right to divide and transfer their interests, rights in land can be divided in at least four ways. First, and most obvious, land rights are divided spatially. In addition to the ordinary horizontal division of land by region, the common law allows vertical division into condominiums, useful for modern residential living, as well as surface estates and subsurface estates useful to mining firms. Although there are economic studies of the optimal size of landholdings for uses such as farming, the law and economics literature on spatial division of rights in land is not extensive. Perhaps this is because there is not much law to study. One major exception to this generalization is the substantial literature on takings law, within which one topic is whether geographic areas can be segmented by landowners hoping to establish an unconstitutional taking of a small part where the remaining portion has not been affected.

Second, land rights can be divided temporally. Indeed, under early English common law, a feudal tenant’s land rights lasted no longer than he did. An obvious inefficiency of that system was that any lasting improvement made by the tenant to the land would redound to the benefit of the overlord. Perhaps in part to internalize these positive temporal externalities, the law soon allowed a tenant to acquire rights that would survive his death. This was accomplished by use of the ancient words ‘and his heirs,’ a phrase still found today. The literature on subdividing rights by time, including the substantial literature on landlord-tenant law, is discussed after alienation and tenurial systems.

Third, rights in land can be divided according to use. One person can enjoy nearly complete dominion over a piece of land while another person holds a right to put the land to some limited use, such as burying utility lines, harvesting timber, or driving across it to get to a landlocked parcel. The multiple and confusing common-law doctrines of covenants, equitable servitudes, easements and profits govern this area of law, along with more modern zoning rules imposed by legislative bodies. The common-law doctrines controlling private division of land by uses are discussed, jointly and severally, after temporal divisions.

Fourth, in the common law system, rights in land or any other asset can be divided by creating a trust. A trust divides ownership into rights to control, held by the trustee, and rights to enjoy, held by the beneficiaries. The trust is enjoying a resurgence of interest, in both financial and academic markets.

It is not hard to see the advantages of decomposing rights along some of these dimensions. An owner might have little use of some of his rights, and might find someone to whom they are worth more. The disadvantages of decomposition are sometimes harder to anticipate. Any subdivision raises possibilities of disputes along the line of division and, if that line
is inadequately specified or monitored by the parties or their successors, externalities may flow from one subpart to another (Shavell 2004, p. 29). Another cost of dividing rights relates to the difficulty of reassembling them in the future when consolidated rights are more efficient.

A. ‘Takings’ doctrine
Decomposition of property rights has become an issue of constitutional importance in the United States. The Fifth Amendment prohibits the government from taking property without paying just compensation. One difficult issue is when to consider ‘property’ to have been ‘taken’. If the government deprives an owner of all her rights in all her land, it has plainly taken property. It is also clear that the government cannot avoid a finding that it took property by decomposing the rights spatially or temporally and taking only a portion. If the government occupies half of the owner’s land for ten years, that is just as surely a taking as a deprivation of all land forever. But the outcome of a takings claim becomes less predictable if the government decomposes the owner’s rights along the dimension of use, prohibiting some uses and allowing others. Since the US Supreme Court’s formula for resolving takings claims turns in part on the proportional degree of financial deprivation, aggrieved owners claiming compensation would like to decompose their rights, separating restricted uses from unrestricted uses in order to increase the percentage taken. Although owners have had little luck doing so, the US Supreme Court has said recently, in 

Palazzolo v. Rhode Island (2001), that the issue remains open.

In addition to percentage diminution, the US Supreme Court considers whether the regulation deprives the owner of distinct, investment-backed expectations. Thus the Court has decomposed uses according to how much the owner has invested in them. This uneconomic portion of takings doctrine has been defended by reference to the findings of experimental economics and psychology (Stake 1995). Depriving persons of longstanding uses carries especially high psychological costs, higher than would be recognized if the value of the loss were calculated by reference to the amount the owners would be willing to pay to acquire the rights taken. However, recent experiments by Zeiler and Plott (2005) have cast doubt on earlier conclusions.

B. Over-fractionalization
In addition to the specific doctrines discussed below, decomposition of property raises over-fractionalization issues that have recently received a good deal of attention. Productivity suffers when property is divided among too many owners (Dagan and Heller 2001). For example, land on Manhattan Island was cut up geographically into parcels that were
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presumably efficient for development in the nineteenth century. Larger parcels would be optimal today, but consolidating them is impeded by holdouts. One special case of over-divided rights is the anticommons, in which a number of people hold a right to exclude (Michelman 1982; Ellickson 1993; Heller 1998).

Fragmentation of intellectual property may prevent efficient use of knowledge (Heller and Eisenberg 1998) just as fragmentation of real estate may prevent efficient development of land. In both cases, holdouts may prevent assembly of the different rights into a package of the size most efficient for development in today’s market. Depoorter and Parisi (2003) noted that if transaction costs are asymmetrical and dividing fragmented interests is easier than reconsolidating them, there will be a trend towards an ever increasing level of fractionalization in property. The *numerus clausus* principle has been heralded as a rule that helps limit decomposition to the efficient level (Heller 1999; Merrill and Smith 2000). There is an optimal standardization of rights that is determined by the trade off between utility of having more forms and the confusion they would engender (Merrill and Smith 2000). Hansmann and Kraakman (2002) argued that the law does not limit the forms of property so much as it regulates the types and degree of notice required to establish different sorts of property. These limitations aid verification of the ownership of rights offered for conveyance.

As technology has advanced, new land uses have created externalities more remote than those of land uses in the past. For example, chlorofluorocarbons, CFCs, degrade the ozone in the atmosphere, allowing greater penetration of ultraviolet radiation and increasing the risk of skin cancer in people far from the location at which the CFCs were released. Scientific advances have also increased our ability to detect remote effects of activities that were long thought to have only regional externalities. For example, the emission of carbon dioxide contributes to global climate change in ways that were not understood in the past and are not fully appreciated even at the present time. New technologies may create both commons and anticommons tragedies that are not easily solved using traditional rules of property law (Rose 1998 and 2002). New forms of property or decompositions of rights might, or might not, be useful in preventing the tragedies. Although the topic of governing a commons is closely related, its vast literature (e.g., Ostrom 1990) is outside the scope of this chapter.

2. **Limited alienation of property – land tenure systems**

The topic of land tenure systems sits between the general theory of property and the private subdivision of property rights. The question is what
happens when private owners are not allowed to have full rights in land. A right sometimes missing from the property bundle is the right to alienate other rights.

By the Statute Quia Emptores in 1290, English landholders gained the right to transfer their interests to others without obtaining consent of the overlord, who in important ways played the role of the modern state. Prior to that time in England, and more recently in other places, landholders lacked complete freedom of alienation. From the date of statehood, all of the United States have allowed landowners to transfer their rights to others. So well ingrained is this right that it seems odd that it could be otherwise.

Despite a long heritage of free alienation, the United States government has not extended that right to many American Indians holding Reservation lands. As a result of various statutes and changes in policy, Indian Reservation lands are held in three types of tenure. Some Reservation lands are held in legal fee simple by individuals, both Native American and not, and are completely alienable. Some lands are held by Native American tribes, but legal title lies in the United States, so the tribes cannot alienate the lands. Similarly, some lands are held by individual Native Americans, with legal title resting in the United States, again with the result that the lands are inalienable.

Economic theory would predict that where rights cannot be transferred, productivity will suffer. Johnson (1972), applying the analysis of Coase (1960), Alchian (1963) and Demsetz (1964 and 1966) to land tenure, argued that restrictions on the sale of land reduce investment in land by making it difficult to borrow for improvements and by limiting an owner’s ways of capturing his investment. He concluded that there must be freedom and legal enforcement of sale and rental contracts for a system of land tenure to facilitate wealth increases.

Rose-Ackerman (1985) argued that economic theory places too much confidence in private markets, and that restraints on alienation can efficiently exist as market corrections to externalities. Traditional economic remedies for externalities may be insufficient in the presence of high transaction costs. She concluded that in specific, enumerated instances restraints on alienation can advance efficiency.

The three types of land tenure existing on Indian Reservations presented Anderson and Lueck (1992) with an opportunity to study empirically the effects of tenure on land productivity. Where Native Americans cannot offer the land as security for a loan, costs of borrowing will be higher and capital investment will be lower. Where they cannot sell their interests, it becomes harder for an owner to gather parcels into a farm of optimum size. Difficulties in transfer during life increase the frequency of death-time
transfers and thus the frequency of devolution by intestate succession which often divides ownership. Multiple ownership leads to decreased investment of labor by owners because the benefits of the effort will fall in part on other owners. Multiple ownership, which entails sharing of inputs and output, may also cause owners to avoid the most valuable use if the inputs to or outputs from such use are comparatively harder for multiple parties to monitor.

Anderson and Lueck found that per acre value of agricultural output is 85–90 percent lower on tribal-trust land than on fee-simple land and 30–40 percent lower on individual-trust land than on fee-simple land. Their study did not, however, eliminate the possibility that the lands held in individual or tribal trust were simply less productive lands than the average lands held in fee. They stated that the patterns of ownership appear random on the map, but untillable mountain peaks might also appear random on a map. They also argued that the determinants of value are probably different today than when the parcels were allotted, but that seems dubious for land in agricultural use today. The authors published data from the US Department of Agriculture relating to relative land quality. On average, trust land has a lower percentage of land in the top four land-capability categories, but the authors say that the difference is not sufficiently strong to reject the hypothesis that the land is equivalent. (Given the small number of observations on quality, N = 13, it would have taken a large difference in quality to reject the null hypothesis.) That the difference in rated capability is not strong enough to be significant does not mean that the difference might not indeed influence the actual land productivity. In addition, considering the obvious potential relationship between land quality and productivity, it is unfortunate that there were quality classification data for only 13 reservations.

Congress attempted to reduce the problems associated with divided ownership of American Indian lands by reducing the number of owners. The statute provided that, at the death of the owner, small fractional interests in individual trust lands would pass to the tribe instead of the intestate successors or devisees. This attempt to improve the productivity of Indian lands was struck down by the US Supreme Court (Hodel v. Irving, 1987), which held that depriving fractional interest holders of their ability to pass those interests at their death takes property without just compensation. Thus Congress’s long history of failure in dealing with Indian lands continues.

Comparing the history of Congressional control of Indian ownership to English history shows the economic importance of a good fit between law and culture. In common-law England, when a landowner died his lands passed according to the rules of primogeniture, under which the eldest
male child took full title. Primogeniture avoided fractional interests that could lead to ineffective use. By the time modern rules of intestate succession were adopted, hundreds of years of experience had created an English cultural expectation of individual ownership. The English tradition of individual ownership counteracted the tendency of the modern intestacy law to subdivide ownership; private transfers kept most lands from being shared by too many hands. The Native Americans, upon whom the US Government forced individual ownership and fractious laws of intestate succession, had a different cultural heritage, one of tribal ownership or no ownership at all. Native American culture, being less oriented toward individual control, did not counter the sterilizing tendency of the modern rules of heirship.

This relationship between culture and law is important for understanding third-world development. Demsetz (1967) contended that as resource values rise, individual property rights emerge to encourage more investment and better husbandry. However, Fitzpatrick (2006) argued that many developing regions still have open access and uncertain rights regimes because enforcement is unreliable. Other scholars have questioned whether Western individualized marketable property rights are optimal for development. Dixon (2007) argued for legitimation of tribal custom as a solution to the failure of governmental land mobilization. Banner (1999) argued that Maori use rights would not necessarily be inefficient, as use rights do not face the same collective action problems as open access. Although a commons can lead to overuse, the tragedy is not ineluctable as social norms and other informal regulations can constrain behavior (Fennell 2004). Serious problems arise when a government displaces social norms with a legal property regime that cannot be relied upon, effectively removing what rights there were (Fitzpatrick 2006).

The problem of alienability arises in a different way in connection with long-term leases. Historically, common-law courts have allowed landlords to impose restrictions on the alienability of leaseholds. By inserting the necessary terms in a lease, landlords could retain to themselves the legal power to prevent alienation without their consent. Courts upheld these clauses without concern for whether the landlord withheld consent unreasonably or arbitrarily. Recently, it has appeared to observers that some American courts will no longer let landlords prevent alienation by tenants. However, it is also possible to read some of the decisions as merely requiring landlords to express clearly their retention of an absolute veto, a requirement which would reduce tenants’ information costs.

Johnson (1988) argues that restrictions on alienability serve legitimate purposes and, hence, the modern trend toward limiting the scope of restrictions will lead to inefficiency in the law. Landlords need to be able
to keep tenants from leasing to new tenants whose occupancy might injure the value of the landlord’s reversion. Because they cannot easily specify in advance all of the ways in which potential new tenants might injure their retained interest, landlords often need wide discretion to reject the transfer of the leasehold. Without that power, landlords will forsake the long-term lease in favor of otherwise less-efficient alternatives such as short-term leases. In addition, Johnson argues that requiring landlords to be more clear in their retention of unfettered discretion to veto transfers may be quite costly. He does not spell out in practical terms, however, why it would be ineffective or especially costly for landlords wanting to retain an unconstrained veto to do so by reserving ‘sole, absolute, and unfettered discretion’ in their leases.

3. Temporal division via the estate system
The English common-law system allows a number of different ‘estates’ in land, each estate varying in potential duration. A ‘fee simple’ lasts potentially forever. A ‘life estate’ lasts for the life of a person, usually the holder of the estate. A ‘term of years’ is measured by a period of time. All of these estates can be made ‘defeasible’, by attaching a condition specifying the circumstances in which the estate terminates prematurely. For example, a transfer ‘to the City as long as the land is used for a public park’ creates a fee simple determinable, an estate that could last forever but will terminate earlier if the land is not used for a public park. With the exception of the fee simple absolute, in which the owner holds perpetual rights, each of the estates above divides rights according to time or contingency or both, with the holder of the named estate holding the present possessory rights and at least one other person holding a ‘future interest’ which will become possessory when the present estate terminates.

It is plain that dividing rights temporally or contingently may increase the utility of land. A student may need a place to live for only a year and have no desire (or capital) to invest in ownership that lasts forever. A teacher taking sabbatical leave may have no interest in possession for that year, but a strong interest in the right to possession forever thereafter. A one-year lease with an early termination for non-payment of rent divides the risks and benefits associated with ownership of the land to accommodate both interests and maximize the value of the land.

Stake (1990) argued that some forms of divided ownership, those hinging on contingencies that might occur in the distant future, diminish rather than increase the utility of land to living persons. The empirical evidence for this proposition is that those temporal divisions of rights are made primarily in gifts (often testamentary gifts). Because such divisions are rarely, if ever, found in transactions in which two or more parties
exchange rights to produce gains from trade, there is good reason to doubt that creating such interests increases value. Of course the act of dividing the ownership makes the donor happy, and that utility added to the values of the present and future interests will probably be greater than the value of a fee simple absolute. But after the donor dies, which is sometimes the instant the two interests are created, the donor’s utility drops out of the sum and the remaining values are together less than the value of a fee simple. One economic function of the Rule against Perpetuities, which eliminates remote future interests, is to help reunite multiple interests into a more valuable fee simple.

Many courts and commentators have pointed out that the Rule against Perpetuities is often difficult to apply and the complexity of the Rule has led to various proposals for ‘reform.’ Hirsch and Wang (1992) argued that the Rule should be applied differently depending on the ways in which the dead hand attempts to control the land. The most popular reform is the wait-and-see approach, which saves interests that vest in a timely manner. Another popular ‘reform’ has been to eliminate whole categories of interests from the ambit of the Rule. At this point in time, it appears that the Rule against Perpetuities will itself be void within lives in being plus 21 years.

The possibility of negative externalities is created whenever land rights are divided according to time. A life tenant might fail to make repairs to existing buildings because the repair costs will fall solely on the tenant but the costs of not repairing will fall in part on the ‘remainderman’ holding the future interest. To the dismay of his landlord, a tenant with a one-year tenancy might cut down valuable trees to use for firewood despite the trees being worth more, in the long run, alive. The common law partially internalized negative temporal externalities by the doctrine of ‘waste,’ which makes the present estate holder liable to the holder of the future interest for actions that damage the land in a permanent way. Interestingly, the doctrine of waste also acknowledges the subjective value of land in its rule that merely changing the character of land can be waste even though the change increases market value. Posner (2007, p. 74) pointed out that present and future estate holders could in theory prevent inefficient maintenance by agreement, obviating the need for the doctrine of waste, but negotiations may bog down in bilateral monopoly problems. Furthermore, the future interest holders are often minors or unborns who lack the capacity to contract.

The converse of the waste problem is created by positive externalities. The present estate holder and future interest holder may both fail to make efficient improvements to the land because each bears the burden of the improvement while some of the benefits accrue to the other. With a nod
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to Coase, Posner (2007, p. 73) asked and answered why multiple owners cannot solve the problem of inadequate investment by contract. The possessor estate holder often lacks the endowment to make major capital improvements and the future interest holders may be hard to identify or lack the capacity to strike an enforceable bargain. The law plays an important role in regulating land use when ownership is divided.

4. Leaseholds

Landlord-tenant law is one topic in which there is a substantial literature that speaks to scholars from both the economics and the law perspectives. Limitations on the alienability of tenant interests and on landlords’ rights to evict have been blamed for inadequate investment in improvements to land. Solow (1971) discussed the problem in connection with poverty in nineteenth century Ireland. Basu (1989) noted that landlords wanting to make an offer to share the costs of improvements face an adverse selection problem: only the tenants who expect to stay long enough for their investment to be repaid will accept the offer, leaving the landlord with inadequate return on his contribution.

Leases can have many functions, such as spreading risk (Cheung 1969) or creating appropriate incentives for development and husbandry (Allen and Lueck 1992a; Williams 1979a; see also Allen and Lueck 1996). In the context of leasing personalty, Flath (1980) discussed how leases can economize on transaction costs such as identifying, assuring, and maintaining quality. Those topics and many others in commercial leases are more a matter of contract law and are analyzed primarily with contractual analysis and thus are outside the scope of this chapter. One early use of leasehold estates may have been to avoid the ecclesiastical prohibition of usury. When the law prevented lending of money at market interest rates, a lender could avoid usury by transferring money in return for the borrower’s (landlord’s) transfer of an estate in land. The lease would be designed so that the periodic rents from the land during the term of the lease would be sufficient to pay off the principal and additional interest (see Simpson 1986, p. 72).

New developments in leases raise additional issues. Under the common law, landlords had few obligations with regard to the leased premises. To try to reduce the human misery due to squalid living conditions, some modern law reforms have attempted to force landlords to deliver habitable premises at an affordable price. The standard economic analysis of reforms designed to benefit residential tenants is presented entertainingly (that is, at the expense of lawyers) by Albon (1982). Assuming that supply decreases with price and shifts as landlords’ costs increase and that such marginal costs exceed marginal benefits to tenants, the results of reform
are not favorable to tenants. If rents are not controlled, rents will increase by more than the value of the increased housing services to tenants and the reforms end up forcing tenants to buy housing services they do not wish to buy. If rents are controlled, demand will exceed supply and a shortage will develop, housing search costs will increase for tenants, and landlords will discriminate more. Schwallie (1990) argued that, because investors are risk averse, increased uncertainties caused by law reform will reduce the attractiveness of the return from rental housing. In a neighborhood with declining values, the application of housing quality minima may hasten the withdrawal of units from the market and increase discrimination against riskier tenants. Some critics have pointed to reduced supply as a consequence of reforms, but a change in consumer preferences towards home ownership may have reduced new construction of rental housing (Rabin 1984, pp. 561–562).

Hirsch, Hirsch and Margolis (1975) stated that repair-and-deduct remedies may be an inefficient means of housing code enforcement for a number of reasons. Landlords, being specialists in housing, often have more experience than residential tenants in making repairs or finding an appropriate tradesman. Tenants have little reason to monitor the quality of the work, as long as it serves their temporary needs. Landlords have access to all portions of the building and can coordinate related repairs and improvements.

On the other hand, tenants, who often learn of problems before landlords, are more likely to make repairs before they become costly if they know they can deduct the cost. In addition, tenants might make more efficient repairs because they will make no more repair than they think is needed.

Nevertheless, landlords are repeat players. They are likely less transient than residential tenants and thus will know local repair tradespeople. More important, once landlords recognize that ignoring tenant requests for repairs leads to their paying for inefficient repairs, they will become more responsive to tenant requests. The inefficiency of repairs actually made by tenants can be analogized to the cost of incarcerating criminals which is justified if it deters wrongdoing. The repair-and-deduct remedy might be a low-cost way of getting landlords to pay attention to legitimate tenant complaints.

Markovits (1976) argued that the standard economic analysis is wrong in a number of ways. Some tenants, such as children, will value the mandated services more highly than their cost and those tenants will gain from law reform. Reform requirements can also be allocatively efficient if they require housing improvements that create benefits, such as reduced fire, disease and crime, that are external to the person who pays the rent.
Almost all reforms of landlord-tenant law were designed to improve the life of tenants by shifting rights from landlords to tenants. But empirical work indicates that the reforms have hurt many tenants (Hirsch, Hirsch and Margolis 1975; Hirsch 1980, 1981, 1983, 1984, and 1987; Rydell 1981; and Schafer 1979). If that is so, why have the habitability reforms been so popular? The passage of reforms increasing housing quality unaccompanied by rent controls might be explained as a rational attempt by tenants whose income has increased to increase their housing quality without incurring the costs of moving.

Vlatas (1994) argued for extension of habitability warranties to commercial leases on the basis of efficiency arguments like those used to support habitability in residential leases. However, Ashauer-Miller (1997) advised caution in adopting habitability in commercial settings, noting that efficiency arguments are weaker than they are in the residential setting.

5. Division of land by usage
This entry now shifts from division of land ownership by time to division by use, where one person holds the right to control one use while another holds the right to control remaining uses in the same land at the same time. These sorts of interests are not ‘estates in land’ but go by a number of other names such as easements, profits, covenants, and equitable servitudes. Examples include a utility company’s easement to bury service lines under private lawns or a neighbor’s equitable restriction preventing an owner from using his home for a business. A promise by an owner to keep his driveway cleared might be found by a court to be a covenant, a servitude, or an easement. Land-use doctrines govern the separation of such non-possessory rights from the rights of possession ordinarily thought of as ownership. The next sections address the enforceability, outside the landlord-tenant context, of easements, profits, licenses, covenants, and equitable servitudes.

The basic economic rationale for allowing an owner to divide the set of all rights to use a piece of land into smaller packages of use rights would appear to be the same as the rationale for allowing the owner of a farm to break it geographically into tracts for a subdivision, or allowing the owner of a house to slice it temporally into the rights of landlord and tenant. In all these cases, the sum of the parts can be worth more than the whole.

Assume that it is worth $200 to Sara, who owns Blackacre, to be able to walk across her neighbor Ben’s pasture on Whiteacre to get to town. Assume also that Ben feels a loss equal to $100 from Sara’s walking across the pasture. Ben and Sara could improve their positions by a contractual exchange, in this case Sara’s $150 for Ben’s allowing her to walk across Whiteacre. The land-use situation differs from the ordinary
contractual situation, however, in that Sara’s real concern is not just with Ben’s consent, but also the consent of all future owners of Whiteacre (see Dunham 1965). Sara’s goal cannot be achieved by contract because Ben cannot bind his successors to perform his contractual promise.

Over the centuries, the tremendous gains to be had from exchanging rights to control the use of land have driven owners to seek legal mechanisms to accomplish those exchanges. And courts have obliged. The problem is solved by separating out the right to determine whether the owner of Blackacre can walk across Whiteacre to get to town from the other rights in Whiteacre. As Korngold (1990) put it, with servitudes people do not have to acquire more rights than they want.

The interesting economic issues relate not to why rights in Whiteacre can be subdivided according to usage, but rather why the law fetters the subdivision of rights, as it does, and whether there is any current utility to having multiple doctrines with differing rules by which rights are subdivided. Many of the restrictions have yet to be supported with an economic rationale. One concern, supporting constraints, is that subdivision of rights will lead to situations in which later purchasers think they are buying complete packages of rights when, in fact, they are not. During the initial development of the common law, England had no recording system to give purchasers notice of outstanding non-possessory interests in land. Without such a system, mistakes and fraud become likely, reducing the liquidity of land markets and undermining the basis for assuming that a voluntary exchange of rights is a Pareto improvement. Curtailing the number of non-possessory interests with restrictive doctrine, i.e., limiting the number of possible forms of rights, reduces the occasions for incomplete or false information.

In addition, peculiar restrictions and obligations impressed on land by a capricious or imprudent owner may continue to burden land in perpetuity. Indeed, if severe enough, such private restrictions could deprive the land of its productive power forever. In part for those reasons, judges and scholars have been quite reluctant to allow burdens placed on land to run to successors and have imposed the many limitations found in land-use doctrine.

As a means of controlling uses of land, servitudes of one form or another should be compared to and contrasted with zoning. Servitudes are created by private parties, whereas zoning is imposed by public entities, local governments. Following Siegan (1972) and Ellickson (1973), servitudes are often discussed as an alternative to zoning (see Speyrer 1989). As is obvious from thousands of modern developments, however, public and private controls are not mutually exclusive and often perform different functions.
Fischel (1990) noted that zoning is often easier to revise, at least compared to covenants requiring unanimous consent. Hughes and Turnbull (1996) contended that things that are inherently difficult to adjust, like lot configuration and basic type of use, are better candidates for regulation by zoning. By contrast, they said, activities that are easily adjusted by subsequent landowners, like yard plantings and automobile parking, require more rigid intertemporal regulation and would be better regulated by covenant. This led Korngold (2001) to conclude that it is most efficient to have a combination of both zoning and servitudes.

6. Easements, profits and licenses
When an easement is for the benefit of the owner of a particular parcel of land, the benefit is said to be ‘appurtenant’ to that ‘dominant’ parcel and may be exercised only for the benefit of that parcel. Suppose Ben, Sara, and Janet own lots 1, 2, and 3, respectively, and Ben grants to Sara an easement so that she and future owners of lot 2 can get from her dominant parcel to the road passing by Ben’s servient parcel. Sara then buys Janet’s lot and decides to build a new house on that lot instead of lot 2. Sara cannot use her easement for the benefit of lot 3 even though there is no more harm to Ben than he anticipated when he granted the easement (Bruce and Ely 2001, sec. 2.8). This rule obviously puts Ben and Sara in a bilateral monopoly situation, with the possible result that a Pareto-improving exchange of rights will not take place because of strategic bargaining. One justification for the rule is that in most situations, unlike the example above, the extension of an easement to benefit parcels other than the dominant tenement will indeed generate greater costs to the servient land, and it is administratively easier to lump all extensions together than to cull the harmless extensions from the bulk. The rule also creates an incentive for the holder of the easement to negotiate with the servient owner before extending or modifying her use of the easement in any way. It also creates an incentive for the party obtaining an easement to negotiate an agreement that it can be extended to his other parcels in the future. Nevertheless, it would seem a close case as to whether the rule is justified on efficiency grounds.

Easements can be created by express or implied grant or reservation and, unlike real covenants and equitable servitudes, can be created by prescription (longstanding use). Like real covenants and equitable servitudes, easements can be divided into negative (or restrictive) easements and positive (or affirmative) easements. Early English decisions recognized four types of negative easement: easements of light, air, building support, and flow of water in artificial streams. In most American states, a landowner has no right to sunlight coming across his neighbor’s land. Because of
increased interest in solar energy, some reformers have argued that either nuisance or prior appropriation rules should be applied to protect persons who install solar energy devices from being shaded by subsequent development (for a critical discussion, see Williams 1979b). However, private allocation of rights might suffice since current law defines solar rights clearly and allows for their alienation at low cost by restrictive covenant. Freerider and holdout problems are minimal because it is rare for more than a few owners to be involved in the location of a particular solar collector, although bi-lateral monopoly could prevent the parties from reaching the efficient result.

For a number of reasons, courts cabined the development of negative easements with the rule that only four types could be created; no new forms were allowed. One economic rationale is that negative easements are harder for prospective purchasers of the servient parcel to discover than affirmative easements, such as shortcut footpaths. Limiting the number of unobservable easements reduces the frequency of inefficient transfers of the burdened parcel to unsuspecting purchasers.

A person who uses land of another in a particular way for a long time may gain an easement by prescription, which allows that person (and possibly her successors) to continue making that use of the land. In light of the ease of ex-ante contracting, it is unclear whether this ability to gain rights by wrongful act can be justified. It is some evidence of the questionable merits of the doctrine that in 1966 the Law Reform Committee debated total abolition of prescription in England. However, the closely related doctrine of adverse possession might be defended on the ground that depriving a longstanding user carries a higher cost than refusing to honor the meritorious claim of a non-user (Stake 2001). Perhaps prescription might be justified on a similar rationale.

The rules of prescription provide a good example of path-dependent evolution in the law. The possibility in England that negative easements could be created by prescription explains the English judicial reluctance to allow new types of negative easements. If new types of negative easements could be created by longstanding non-use, any new use of land could be met with a neighbor’s objection that she had a prescriptive negative easement preventing such use. The law could not allow new sorts of negative easements to be created by prescription without creating great uncertainty about whether a parcel of land could be put to a new use without encroaching on prescriptive rights held by neighbors. In the United States, where most courts have held that negative easements cannot be created by prescription, allowing new sorts of negative easements is not similarly problematic and need not be proscribed.

Easements may terminate by their own terms, by express release, by
adverse use, or by abandonment, though the latter is hard to prove. Easements terminate by the ancient doctrine of ‘merger’ if the servient tenement and the easement come into the same hands. In such cases the easement is not created anew when the once-dominant or once-servient parcel is transferred. This rule creates problems for future holders of the dominant parcel that wrongly assume the old easement still exists. However, the merger rule can be justified on the simple ground that it reduces the costs of selling the unencumbered fee in the future; the seller of the once-servient parcel need not specify that he is transferring both the previously encumbered fee and the right to be free of the encumbrance. On the reasonable assumption that sellers wish to transfer all their rights more often than they wish to transfer a previously divided subset of their rights, the rule reduces transaction costs.

A profit (or ‘profit à prendre’) is a right to sever and remove some substance, like minerals, gravel, or timber, from land possessed by another. The common-law rules governing ownership of fugacious minerals were borrowed from the rules applied to the capture of wild animals. Because those rules created common-pool problems and led to massive waste, they have been superseded by statutory regimes.

7. Real covenants
Whereas easements and profits usually involve rights of the dominant owner to do something without interference from the servient owner, real covenants and equitable servitudes usually involve rights of the dominant owner to make the servient owner do something, such as maintain a wall, or to prevent the servient owner from doing something, such as making noise on Sundays. Servitudes and easements are not mutually exclusive, however. Equitable servitudes overlap with negative easements.

A real covenant is a promise. It is different from a contractual promise in that a real covenant is stuck to some interest in land and passes automatically to each owner of that interest rather than staying with the original party to the promise. The law of real covenants sets forth a number of ‘elements’ that must be met for a promise to ‘run’ with land: as covenants, they must be in writing; they must be intended to run; they must ‘touch and concern’ the land (rather than being irrelevant to the ownership of interests in land); there must be ‘horizontal’ and ‘vertical’ ‘privity of estate’ (abstruse requirements explained below); and, under modern recording acts, grantees of the affected interests in land must have notice of the covenants.

These requirements apply separately to the burden and the benefit of the covenant. Whether the burden (duty to perform) runs to future holders of the servient parcel and whether the benefit (right to performance) runs to
holders of the dominant parcel are, for the most part, independent issues. The covenanting parties must intend, for example, that the burden of the promise run to the successors of the burdened party for the burden to run and must intend that the benefit run in order that the benefit run. An examination of the doctrinal elements follows next.

A. Intent

We can be reasonably confident that the parties to a real covenant will reap gains from their exchange only if the law enforces what the parties intended. If the law expands the rights exchanged, the chances that the outcome will be a Pareto improvement decrease dramatically. Furthermore, if promising parties think the law might increase the scope of their promise beyond what they intend, they might pass up a beneficial exchange. Therefore, it is essential that courts find that the parties intended for the promise to run before holding that it does so. However, Winokur (1989) contended that courts are all too willing to find intent, essentially dispensing with the requirement as an independent element. In order to assure more meaningful consent, he urged that courts require some explicit language expressing the parties’ intention that the covenant run.

Although the running of the benefit and burden are usually independent, English (see London County Council v. Allen, 1914) and a few American authorities have linked the two. These authorities hold that the burden of a real covenant will not run with land if the benefit is ‘in gross,’ which means that the benefit is held by a person rather than being attached to a parcel of land. The cost of this rule is that it prevents many beneficial divisions of rights in land. Suppose, for example, a talented gardener has worked hard to make his house a showcase for his horticultural abilities. Suppose also that his family has outgrown this house, and he would like to sell if he could be assured that his successors would maintain his garden. He cares what happens to his garden no matter where he moves; he wants to hold ‘in gross’ the benefit of a promise that the subsequent owners will maintain the garden. If law does not allow the burden to run with the benefit is in gross, the gardener can assure that the garden will be maintained only by remaining the owner.

The advantage of this intent-frustrating rule is that it makes a real covenant easier to terminate by private negotiation because it will usually be possible to find the holder of the benefit since the benefit is tied to land and the owner of any given parcel of land can usually be identified. If the benefit is not tied to land, a successor willing to pay more than the gardener’s price to convert the garden to another use might have a harder time finding the gardener. Thus, transaction costs could prevent the successor...
from buying his way free of the promise. The requirement that the benefit run with land helps keep down the costs of terminating promises. This justification seems to have failed to convince most American commentators, perhaps because the problem of locating benefit holders could be solved by requiring holders of benefits in gross to place their mailing address on record if they wish to keep the promise from lapsing.

B. Touch and concern

Courts require that the benefit of a real covenant touch and concern (sometimes ‘touch or concern’) the dominant parcel for the benefit to run to the successive owners and that the burden touch and concern the servient parcel for the burden to run successors to that parcel. Reichman (1978) pointed out that the touch and concern element is the only real barrier to the attachment of a promise to land. While it does not prohibit any particular agreement, it does shift the burden of negotiation once a parcel has been transferred. If the promise does touch and concern, the new neighbors have to negotiate if they want to terminate the covenant. If the promise does not touch and concern, the new neighbors have to negotiate if they want to reinstate the promise.

A promise to keep a party wall in good repair touches and concerns, as does a promise not to use for commercial purposes, but promises to pay money, promises enforcing ideologies, and promises for personal services usually do not. Some promises have proved hard for courts to categorize, and the touch and concern element has long been criticized as being indeterminate. Rarely, however, do the critics identify an actual case that has been decided badly because of the touch and concern element. Rather, Epstein (1982) said, the harm from indeterminacy is that it generates litigation, increases the costs of exchanges, or dissuades parties from using covenants.

The amount of litigation generated by the touch and concern requirement remains uncertain. The reported appellate cases in the United States in the twentieth century in which that element has played an important part number only in the hundreds. A Lexis search on 7 June 2007 for ‘touch and concern and (covenant or servitude)’ in the ‘mega’ file containing all US federal and state cases yielded 488 cases. Although the reported appellate cases are just the tip of the iceberg, this tip is so small that the whole might not be of huge concern. It is unknown to what degree the touch and concern element deflects parties from desirable transactions or raises the drafting costs of completed transactions.

The element may be less indeterminate than the critics suggest. According to one examination of American cases (Stake 1988), the element can be understood as a mechanism for efficiently allocating the
burden and the benefit of the promise. If the benefit of the promise is likely to be enjoyed more by the successor than the original promisee, the court will find that the benefit touches and concerns. In other words, the benefits will be allocated to the person who would enjoy them most. On the burden side, courts act as if they assume the promise will be performed and the only question is whom to hold responsible for its performance. If placing the burden of performance on the successor to the promisor would avoid inefficiencies that would result from leaving the burden with the original promisor, the court will find that the covenant touches and concerns. In some cases it is a simple matter of allocating the burden to the party that can perform the obligation more easily. For example, the new owner of a barn is better able to perform a promise to keep the barn painted because he can monitor its condition and has easy physical access when it needs painting. In other cases the court improves the allocation of resources by avoiding situations having more subtle inefficiencies, such as when the court passes burdens to pay homeowners association dues on to those who will be spending those dues. If the court were to find that the covenant did not touch and concern, the homeowners in charge of the association would in theory have the power to make improvements and charge them to former homeowners, a group not represented in the decisions to purchase. The association might easily spend too much if it is spending other people’s money.

There are other economic tests for determining whether a covenant touches and concerns land. Under one, a covenant touches and concerns if it was set up to regulate externalities generated by the use of one parcel (see Nelson, Stoebuck and Whitman 1996, p. 610). Another intuitive approach is to ask whether ownership of some particular land makes the burden easier to perform or the benefit more enjoyable.

Successful positive explanation of touch and concern does not as a normative matter justify the element’s interference with the parties’ intent that the covenant run. Krier (1974) developed a defense based on problems with successive bargaining. While it is possible for successive owners to re-bargain and contract for the original covenant, it is not hard to see that this is not probable. The purpose served by touch and concern is to continue those covenants which would have been agreed to by successive owners had they negotiated. Reichman (1978) defended the touch and concern element on the ground that tying to land the sorts of promises that do not touch and concern to land could reduce efficiency, democracy, or personal freedom.

Stake (1988) developed a justification of the touch and concern element that builds on the models suggested by Krier and Reichman by adding an observation about the low costs of renegotiating promises that do not touch
and concern. First, the courts allow covenants to bind future owners when efficiency considerations support shifting the burden or benefit from the original party to his successor. Second, the touch and concern requirement distinguishes those situations in which it is difficult for the parties to re-create the promise from those in which it is not difficult. The cases in which the touch and concern element prevents the promise from running to successors are cases in which the successor parties can renegotiate the promise if it remains desirable to the successors. However, in situations where it would be hard to renegotiate the promise, the element allows the promise to continue without renegotiation. Thus the element serves as an efficiency check without undoing promises that would be hard to re-create.

Assume that a group of neighbors agreed that they and their successors would play poker together once a week. Assume that one of them sells to a new owner who refuses to play poker. If the group tries to enforce the covenant, the court will not enforce it because the burden fails to touch and concern his land. Assuming that this covenant as applied to the new owner is inefficient, generating less wealth than it costs to perform, the judicial refusal to enforce it against the new owner enhances efficiency. This freedom from enforcement might not be accomplished easily by the successor since each of the other parties is in a position to hold out. The touch and concern element beneficially prevents inefficient promises from running against parties that might find it hard to buy their way free of the obligations.

On the other hand, judicial refusal to enforce the covenant does not prevent new neighbors from negotiating a new covenant to play poker when it would be efficient. Transaction costs will rarely prevent the negotiation of that new covenant because no owner is necessary to the agreement; the group can simply get someone else to play. Therefore, private extension of the old covenant to new neighbors is unproblematic. The very fact that the covenant does not touch and concern land helps to assure that the unraveling of the promise will not be difficult to reverse.

The touch and concern element might be criticized for depriving some promisees of the benefit of their bargain. However, if the covenant fails to touch and concern it presumably remains enforceable against the original promisor. The mistaken promisee loses a remedy against the successor, but retains a remedy against the original promisor, a remedy that would have been lost if the burden had run. Thus, the distributional costs of the touch and concern element are mitigated.

The American Law Institute (ALI) (2000) urged courts to replace the touch and concern element with a judicial inquiry into whether the promise in question violates public policy. French (2003) applied the
ALI’s recommended rule to three cases and concluded that the public-policy inquiry is superior to the touch and concern doctrine. However, this approach will likely make the law less determinate and could interfere more with private intent, since the traditional touch and concern approach has prevented few covenants from running. In addition, this public-policy inquiry fails to distinguish between situations in which it is difficult to reinstate the promise and those in which it is not. Finally, the traditional touch and concern element in no way impedes enforcement of the promise between the original parties, as the ALI’s validity test would do. The proposed reform fails to recognize that it could be useful to have a rule that allows a promise to be enforced between the original parties but not between their successors.

C. Notice
For the burden of a covenant to run, the promisor’s successor must have had ‘notice’ before purchasing the land. The notice element requires that the successor to the promisor have some opportunity to find out about the obligations attached to the land. Requiring notice is often justified by lawyers on the ground that it would be unfair to hold successors to promises they did not know about, but there is also an efficiency rationale. Holding successors liable despite their lack of notice would create an opportunity for promisors to free themselves of promises by selling the burdened lands to unsuspecting buyers, who might place a lower value on the burdened lands. Thus, notice goes to the heart of voluntary consent. Without meaningful opportunity for parties to know of the burdens they assume, we cannot be sure that the exchange of an interest in land makes a Pareto improvement. Dilution of the notice requirement, as has occurred in some jurisdictions (see Winokur 1989), undermines the economic foundation of servitude doctrine.

D. Horizontal privity
According to many authorities, the original parties must have a special connection between them, called ‘horizontal privity’, for their covenant to run to either of their successors. Parties are in horizontal privity if they have simultaneous interests or successive interests, that is, at the time of the covenant one party conveys to the other an interest in the dominant or servient parcel. The horizontal privity requirement prevents neighbors from creating an enforceable, mutual, real covenant to keep their lawns mowed without their exchanging some interest in their lands at the same time. Thus, this element imposes substantial costs on parties attempting to create a real covenant. The legal world is still waiting for a convincing policy analysis explaining why courts should, by requiring
horizontal privity, continue to impose costs on neighbors wishing to exchange running promises.

E. Vertical privity
A promisor and his successor are in ‘vertical privity’ if the promisor transfers his entire estate in land to the successor. Only in such cases is the successor bound by a real covenant. A possible rationale for the traditional requirement of vertical privity will be suggested in the section on equitable servitudes, below.

F. Termination
Real covenants terminate if all dominant and servient tenements come under the same ownership and also may terminate automatically by their own terms. Alternatively, judges will sometimes refuse to enforce a covenant on the ground that the holders of the dominant tenement have abandoned the covenant or acquiesced in its violation. In England there is a statutory procedure for discharging obsolete or destructive covenants. Additionally, real covenants can be terminated privately if the holders of the benefit waive their rights or release the burdened parties from their obligations. When real covenants involve a number of owners, holdouts will often prevent such private termination. For that reason, many modern covenants include a provision that the covenants can be terminated by the vote of a majority or supermajority of the parties.

Real covenants are also terminated if the government condemns the servient parcel and uses it in violation of the covenant. The issue arises as to whether the holder of the dominant parcel should obtain a portion of the condemnation award and, if so, how much that award should be. Cases limiting the total compensation awarded to the value of an unrestricted fee simple would seem to ignore the possibility that the value of the sum of the divided interests is higher than the value of the unencumbered, undivided fee. Such cases also undercut the allocative-efficiency rationale for requiring compensation, which is to make sure that the rights taken by the government are worth at least as much to the government as to the private land owners.

8. Equitable servitudes
Courts of equity, which have now merged with courts of law, have enforced promises stuck to land at least since *Tulk v. Moxhay* (1848). When a court sitting in equity enforces a promise attached to land, the promise is called an ‘equitable servitude,’ ‘equitable restriction,’ ‘servitude,’ or even ‘restrictive covenant.’ The court applies the requirements of intent, touch and
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concern, and notice in much the same manner as when it sits at law and analyzes the promise as a real covenant.

A. Changed conditions

Even when the holder of the benefit of an equitable servitude has established the elements above, the ‘changed-conditions’ (or ‘changed-circumstances’ or ‘changed-neighborhood’) doctrine, may prevent enforcement. This doctrine says that injunctive relief will be denied if conditions in the area affected by the covenant have so changed that the covenant can no longer achieve its purpose. Stake (1991) noted that the doctrine creates inefficient incentives. By destabilizing servitude law, it invites litigation and deters parties from beneficial exchanges of rights or shunts them to more reliable but clumsier legal mechanisms such as defeasible estates. If the clumsier forms of restriction are unsatisfactory, a seller may refuse to sell at all, in which case society loses the gains from trade that would have been possible had the seller been confident that the necessary restriction were enforceable.

On the other hand, there are other efficiency benefits from applying the changed-conditions doctrine. Reichman (1978) stated that there is a large difference between an interest expected to promote land utilization and a right having no value other than its negative capacity to prevent efficient land utilization. He said the changed-conditions doctrine applies only to promises of the latter sort. Krier’s (1974) analysis suggests that judges might apply the changed-conditions doctrine so as to terminate specific performance when the current owners would not reconstruct the servitude if they were starting anew.

Judges can efficiently reallocate land-use rights in situations where strategic behavior would prevent the parties from privately terminating the servitude. The productivity of restricted land is improved by the changed-conditions doctrine so long as the doctrine is applied only if the challenged restriction generates no conceivable benefit to neighbors and is being asserted only to capture some of the gains from changing the use of the servient parcel.

It is not clear whether judges will extend this doctrine to real covenants. Stake (1991) argued that there is a reason not to do so. Adhering to the distinction between law and equity and allowing the holders of dominant tenements to assert rights only to damages reduces the distributional unfairness that would attend complete termination of the promise.

B. Privity

The primary difference between the requirements for real covenants and those for equitable servitudes is that courts sitting in equity require neither
horizontal nor vertical privity, making it easier for a promisee’s successor to assert the benefits of a promise in equity than at law. Any real covenant may also be enforced in equity as an equitable servitude, but some equitable servitudes cannot be enforced at law as real covenants. At first blush, this seems anomalous because the usual rule is that a court will grant equitable relief (an injunction) only if the legal remedy (damages) is inadequate.

The practical consequence of enforcement of a servitude in equity is that the court will issue an injunction against the covenantor’s successor, requiring him to do, or not to do, an act, while it might not order him to pay damages. This distinction between legal and equitable enforcement of promises was attacked by Winokur (1989) as being indefensible. But there is an economic defense, which might be made clear by an example. Suppose Ben promises neighbor Sara that Whiteacre will not be used for a business, and then leases the land to Jake, who starts a business. If Sara brings an action against Jake to enforce Ben’s promise, the court will order Jake not to operate the business on Whiteacre, but will not make him pay damages. If Sara sues Ben, the court will not enjoin Ben to do anything because the burden, in equity, has passed to Jake, but it will make him pay damages because the burden at law has not run to Jake and remains with Ben. Making Ben liable for any monetary damages caused by the business use of Whiteacre seems appropriate, especially if Ben failed to tell Jake about the covenant. Indeed, Ben’s continuing liability on the covenant gives him an incentive to inform Jake. But Sara can enforce the equitable servitude directly against Jake, who is in possession, rather than having to find Ben and get him to control Jake’s use of Whiteacre. Thus, it is possible that this division of responsibilities approximates what parties would choose for themselves if they thought about it. Moreover, when the vertical privity requirement does not yield results that fit the parties’ needs, the parties can often privately mitigate the effect of the requirement. For example, if Ben wants Jake to be liable at law for damages for breach of the promise, Ben can put that term in his lease to Jake.

If the burdened owner passes his entire interest to a successor, the successor is bound by the promise in both law (in the US) and equity. Assuming that the original covenanting parties were not landlord and tenant (and assuming in England that the transferor is not the original covenantor), the transferor is released from any burden of the promise. It would unduly burden commerce in land if owners were to remain forever liable for breach of covenants attached to lands they once owned. But where the servient owner has not stepped out of the picture entirely by completely transferring his interest, it may be desirable to create an incentive for him to inform his tenant or other successor about the covenant.
Making him liable for damages at law upon a breach maintains that incentive for the transferor.

C. Homeowners associations

One of the many important uses of covenants and equitable servitudes is in the creation of homeowners associations or common interest communities. Thousands of such associations have been set up to regulate uses and provide for the maintenance of realty. They often operate on near-democratic principles, such as each house or condominium having one vote.

Because these organizations are geographically based and have powers to tax, spend, and regulate, homeowners associations are in many ways like private governments, as was noted by Epstein (1988). Fischel (1987) compared homeowners associations to local governments and found some advantages for private regulation of land use. The advantages of associations include unanimous consent and a contractual basis for development. The power to contract regarding uses to which lands may be put in the future is sometimes not available to municipalities because of judicial decisions invalidating attempts by municipalities to bind themselves by such agreements.

Winokur (1990) and Korngold (1990) disagreed as to whether the consent to be governed by community associations is voluntary or coerced. However, even if consent to association governance is initially and meaningfully unanimous by virtue of the fact that everyone governed has bought land within the area governed by the association, opportunities may subsequently arise for the majority to take unfair or inefficient advantage of the minority. To prevent this, courts sometimes impose a reasonableness requirement on the actions of the majority. Applying this requirement, courts have struck down rules that reduce the market value of minority interests or stop a minority member from doing something he has long been doing or cannot stop doing. In determining whether a majority has treated a minority unfairly, courts benefit from a natural advantage homeowners associations have over nearly all governments – they govern areas of land that are comparatively homogeneous in their use. For that reason, when the association attempts by majority rule to place unfair burdens on the minority it is often readily apparent to a court. Because characteristics and uses of land within the jurisdiction of a local government vary so widely, it is much more difficult for courts to identify situations in which the majority has increased its wealth at the expense of the minority.

Despite the potential gains from associating, common interest communities are not universally appreciated by their residents and a substantial
number of persons would prefer to live outside their control. Winokur (1989 and 1990) argued that servitude regimes generate inefficiency, conflict, and excessive restraints on individual liberty and expression, and for those reasons the government should impose limits on the duration of the servitudes that form the legal basis for community associations. The legislative scheme Winokur proposed would reform the procedures for terminating or adjusting servitudes and would make servitudes unenforceable beyond 20 years unless, by the terms of the servitude, fewer than 11 parcels have the right to enforce the servitude. This would assure that any owner wishing to negotiate freedom from a 20-year-old servitude would not have to deal with too many other owners. On the other hand, such a law would, as Korngold points out, terminate beneficial servitudes and would do nothing to cure problems during the first 20 years of the covenant. In light of Winokur’s concern for the difficulties of negotiations among multiple parties, it is somewhat odd that under his proposal servitudes could be modified after 20 years only by unanimous consent. Winokur does not provide a mechanism for protecting other neighbors outside the group from negative externalities of uses allowed by the 10 neighbors, externalities which are much more likely if the restricted party is allowed to buy his freedom with payments to the ten. Moreover, while his proposals might improve the private instruments used to establish associations, the case for legislative limitation is less compelling. Winokur’s mix of temporal limitations and subsequent unanimous consent by a subgroup is not so obviously right for all developments that it should be imposed by law. As usual, this area of law calls for default rules rather than limiting rules.

9. Division of benefits from management via the trust

For centuries, English landowners used a special device called the ‘use’ to circumvent formal legal rules governing land. For example, Chris could transfer land ‘to Laura for the use of Alison for life, and then whomever Alison appoints by will.’ In this case, Chris has created in Alison a right to transfer Blackacre by will, which was not allowed at law before 1540. The courts of law would recognize Laura as the owner, but the courts of equity would compel Laura to manage the land for the benefit of Alison and then her appointee.

This ancient division of rights from responsibilities continues in common law countries today in the form of the ‘trust.’ The trustee holds legal title and the beneficiary holds equitable title. Strict fiduciary duties are imposed upon the trustee to protect the interests of the beneficiary, the c’estui que trust. The ubiquitous use of the trust today is a testament to the utility of decomposing rights into separate packages for management and enjoyment. Beyond the trust, the modern corporation might be seen as a
variation on this ancient theme of placing control in the hands of professionals for the benefit of ‘equity’ stakeholders. Trusts offer an alternative to partnerships and corporations as a form for setting up a business.

Trusts are used in a variety of situations. Separating management duties from income benefits is important when a donor wishes to leave an asset to a group of beneficiaries. By leaving control in the hands of a single trustee, the donor can avoid the problems that would arise if all the beneficiaries were to attempt to manage it as a group. Separating management from enjoyment is also important when the donor wishes to make a gift to a person who has little ability to manage assets, such as an infant or a person lacking mental capacity. Even when the beneficiary is fully capable, the donor may wish to place control of an asset in the hands of a professional in order to benefit from his business and financial expertise or to ease the management burdens on the beneficiary.

In addition to employing trusts to assure prudent asset management, settlors settle trusts to protect the assets from the claims of creditors of the beneficiary. A trustee of a ‘spendthrift’ trust may continue to make payments to a beneficiary despite the fact that the beneficiary owes money to a creditor; ordinary creditors cannot reach the assets in the trust for payment of their claims. To protect against the claims of special creditors (spouses, children, suppliers of necessities) who can pierce through a spendthrift limitation, a settlor can create a ‘discretionary’ trust, the trustee of which may choose not to make a distribution from the trust rather than making a distribution that will wind up in the hands of a creditor. If the trustee chooses not to make a distribution to the debtor-beneficiary, that beneficiary gets nothing from the trust, but the trust assets are protected from his creditors. The result is something like a hostage standoff, with the creditor not able to gain control of the assets but able to prevent the trustee from making a distribution to the beneficiary.

Yet another important role for trusts appears when donors wish to make bequests to charities. By setting up a charitable trust, the settlor can specify the purpose to which the trust assets will be put for many years into the future. Indeed, if the trust is for a charitable purpose, the trust is exempt from the Rule against Perpetuities and may last forever.

Discretionary and charitable trusts are not without their worries, however. Posner (2007, p. 547) pointed out that charitable trustees may lack adequate incentives for efficient management of trust assets. He advocated a rule requiring charitable trusts to distribute all gifts within a period of years. He did not discuss the possibility that the trusts would then spend too much on advertising.

Another key concern falls within the broad category of agency costs (Sitkoff 2004). Whether the trustee is a friend or relative of the settlor or
is a professional manager, there is some chance that the trustee will ignore the settlor’s instructions and fail to make distributions in accordance with her wishes. If the terms of the trust make it difficult for outsiders to remove the trustee, the trustee may use his discretion to substitute goals of his own for goals of the settlor. If, on the other hand, the terms of the trust make it easy for outsiders to remove the trustee, the replacement trustee may be even less faithful to the goals of the settlor. To reduce the chances of mismanagement and misallocation of trust assets, to protect the interests of beneficiaries, and to guard against deviations from the settlor’s intentions, settlors have recently and increasingly employed ‘trust protectors’ (Sterk 2006). Trust protectors have the power to oversee the actions of the trustee and to remove the trustee if necessary. The establishment of trust protectors may be viewed as a further decomposition of property rights in that legal control is subdivided into two parts, control of the asset and control of the person controlling the asset. Whether this additional decomposition increases social welfare is not yet clear (Stake 2006). Perhaps the next subdivision of control will occur when a settlor creates a trust that employs someone to oversee the trust protector.

10. Personalty
As seen above, the common law has developed an elaborate system for dividing rights in land, with numerous fine distinctions that make at least some economic sense. English and American law have not developed an equally extensive system for dividing rights in personal property. However, rights in personalty are not beyond decomposition. Personal property can be placed in a trust, which allows all of the divisions possible for realty, and can be divided temporally by lease, which for personalty is essentially a matter of contract law. Corporation and partnership laws can also be seen as sets of rules for decomposing personal property.

The law of wild animals was characterized by Lueck (1995) as divided ownership. The division of property in wild animals is, however, different from the decomposition of land property discussed above. The fundamental issue above was how private owners might decompose their rights. By contrast, a key issue in the law of living, uncaptured, wild animals is whether there is any owner at all. For many purposes, uncaptured wild animals are unowned. The federal government is not liable as an owner for damage done by wild animals (see Sickman v. United States, 1950). Moreover, the US refrained from asserting ownership of wild animals on federal land even in a Supreme Court case where doing so might have saved a federal statute from being declared unconstitutional, although the statute was upheld on other grounds (Kleppe v. New Mexico, 1976).

Lueck employed a transaction cost framework to examine the variation
in the rules governing wild animals over time and geography. He confirmed that efficiency explains the development of the rules. His analysis does not justify complacency, however. Transaction costs, including strategic behavior, may prevent the creation of a system of property in wild animals. And, in the absence of a system of rights, it makes little sense for a person to refrain from capturing a wild animal worth more than the private costs of capture, which do not fully include depletion. For animals such as falcons and whales that roam or migrate in a range larger than the optimal (or actual) area of land ownership, the absence of a property system could result in extinction. The difference in remaining numbers of domesticated animals and endangered species suggests that the harvesting of some wild animals has been inefficiently high. Perhaps a rational whale would rather be owned.

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