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# Edited by Terry L. Anderson and Fred S. McChesney: Property Rights

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# THE ECONOMIC APPROACH TO PROPERTY RIGHTS

The institution of property — ownership and control of assets — is as old as humankind. In every society, even the former Soviet Union, individuals have had rights to own at least some property. Property rights have evolved, not just in complex industrial societies where individuals own everything from personal automobiles to shares of giant corporations, but also in American Indian societies, where individuals owned personal property like bows and arrows, tipis, and horses. To be sure, not all members of society share equally in ownership and control of assets and, in some instances, some persons may be denied ownership rights altogether. But property rights for some people, at least over some assets, have prevailed at all times and in all places.

This volume examines the reasons for the ubiquity of property rights, by which we mean the formal or informal rules that govern access to and use of tangible assets such as land and buildings, and intangible assets such as patents and contract rights. By this definition, clearly the deed to land or the title to a car constitutes a property right. Less formal, but no less important, are property rights to personal property such as clothing or jewelry, although these rights are not recorded with any agency.

Property is often called a "bundle of sticks" because it actually is made up of multiple rights. In its most complete form, ownership of property gives its owner the right to derive value from the asset, to exclude others from using it, and to transfer the asset to others. As discussed by Yoram Barzel in chapter 2, however, property rights may be less complete, allowing an owner to derive only some value from an asset, exclude only some people from using it, or transfer only certain uses for a specified time period.

Government institutions can play an important role in defining and enforcing property rights through the courts and the state's police power. Because government today is nearly ubiquitous, it is conventionally viewed as an inextricable part of any system defining and enforcing property rights.

But government involvement, though often useful, is not necessary for creating or enforcing rights. As discussed in chapter 3 by Thráinn

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Eggertsson, informal and even formal property rights exist without governmental involvement. When a person occupies a seat in a movie theater, it is considered his for the duration of the movie without a police officer monitoring each aisle. If a dispute over claims to the seat arises, the theater operator would typically settle it himself, using familiar and generally accepted rules such as "first-come first-served," the subject of Dean Lueck's chapter 8, rather than calling on the government.

This perspective may surprise some readers, because a paramount government role in creating and enforcing property rights is usually taken as given. Neither the fact nor the desirability of that role is necessarily to be disputed. This volume strives, however, not to take government as given, but to show why and how the governmental role emerges. To employ social-science terms, government thus is treated here as endogenous, not exogenous. That is, its existence and functions in a property rights regime are not merely posited, but treated as subjects for investigation and explanation in a general model of property rights delineation.

As will be shown, the role of government emerges as a function of the difficulties of private definition and enforcement of property rights. Therefore, in the early chapters of this book, government appears on stage only fleetingly, as the spotlights focus more on private actors. Beginning in parts III and IV, however, and increasingly thereafter, government actors (politicians, bureaucrats, judges) play increasingly important roles. In the end, an analysis proceeding from private to governmental action furthers an understanding of what government should and can do. It is often the institution best suited to define and enforce property rights, but not always.

# THE ECONOMIC PERSPECTIVE

This volume analyzes the emergence and importance of property rights from an economic perspective. Economics emphasizes that life is a series of choices among alternatives, choices required because we face limits. There is only so much time, so much money, so much land, so much oil, and so forth.

To some, this general definition of an economic perspective may be surprising. If economics is about choices people make, then economics must be claiming it can study nearly everything about life. And so, indeed, it does. Of course, economists routinely analyze prices, products, and markets. But economists also analyze things such as love and marriage, drug addiction, altruism, terrorism, capital punishment, and practically any other phenomenon about which human beings make choices, which is virtually everything in life.

In other words, it is not the substance, but the methodology of economics that defines economic science and distinguishes it from other social sciences.<sup>3</sup> Economic methodology, including that applied to property rights, builds on four basic postulates, presented here. At the heart of all four is an insistence on the individual as the unit of analysis (socalled methodological individualism). The economist "commences with individuals as evaluating, choosing, and acting units. Regardless of the possible complexity of the processes or institutional structures from which outcomes emerge, the economist focuses on individual choices" (Buchanan 1987a).4

If the individual is the basic unit of analysis, economics insists that constructs such as classes (à la Marx), government, the firm, society, and similar abstractions are only useful analytically to the extent they specify how individual preferences and actions are agglomerated. A class, a government, or a society does not make choices. Not being animate entities, none can act except through the decisions of individuals capable of choosing. True, economists talk about the firm (Barzel, chapter 2) or the government (McChesney, chapter 9), but only as a shorthand summary for how the myriad individuals within these institutions act. This is not to say that individuals always act individually; certainly collective action takes place. But collective action can only be a manifestation of individual preferences and actions shaped by constraints and conditioned by rules for aggregating individual preferences and actions.

Using the individual as the unit of analysis, this volume (like most of economics) aspires to be positive, referring to what individual actors do, not what they should do under some notion of morality or civic virtue. Positive analysis seeks to describe what does happen in the world and predict what will happen, not to prescribe normative rules for making the world a different (perhaps better) place. To analogize, the distinction between positive and normative is seen in newspapers, where one finds both sports news (positive) and editorials (normative). This is not to say that economics ignores issues important to morality and virtue; its analysis of actions such as addiction and altruism was noted earlier.5 But economic analysis ordinarily treats such things as it does other subjects, as phenomena to be explained. That is the spirit animating the analysis of property rights in this volume.

## THE FOUR BASIC POSTULATES

Building on the individual as the basic unit of positive analysis, four postulates guide the economic analysis of property rights.

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*Postulate 1*: Individuals choose under conditions of scarcity; no one has as much of the world's riches as he would like.

As already noted, economics begins with the fact that choices are made subject to constraints. Because resources are limited, we must choose which of our unlimited desires to satisfy, meaning we must make tradeoffs. In a world of scarcity, one use of an asset precludes another and, thereby, generates an opportunity cost (as discussed, for example, by Bruce Yandle in chapter 10). The cost of breathing clean air, building houses, or irrigating crops is measured in terms of the alternative uses that are foregone. Land occupied by a house cannot provide grizzly bear habitat. Water used for irrigation cannot provide a free-flowing stream in which fish can spawn.

Postulate 2: Individuals act rationally to pursue their self-interest by continually adjusting to the incremental (marginal) benefits and incremental (marginal) costs of their actions.

Methodological individualism presumes that individuals are rational. By rational we mean that people have well-defined preferences and act systematically to maximize the amount of those things (tangible or intangible) that satisfy those preferences, subject to the cost of achieving satisfaction. An individual's maximization of his satisfaction does not necessarily imply selfishness. Even a person satisfied with what he had for himself would want more for his family, his friends, the members of his church or club, or others. Human desires (including desires to see others better off) are limitless.

But resources are not limitless. Rational maximization therefore requires individuals to weigh the benefits and costs that their choices entail, asking what additional gains there are from additional amounts of a good or service and what must be sacrificed (foregone) to obtain the gains. This does not mean that individuals always measure perfectly and never make mistakes. In fact, making mistakes bears out the assumption of rationality: information is costly to obtain (scarce), so rational actors will never have perfect information when they make their choices.

In the analysis of property rights that follows, the rationality postulate is particularly important in thinking about why and how property rights evolve. Because resources are scarce (have alternative beneficial uses), rational actors employ resources to define and enforce property rights as long as the benefits of using resources in that way exceeds their costs. If the marginal benefits of defining and enforcing rights are greater than the marginal costs, do it. More dynamically, if the cost of acting falls (rises), do more (less) of it.

The process of rational wealth maximization described by postulate 2 applies to all individuals, not only those in modern capitalistic economies. It is well accepted that the owner of a firm must compare the additional revenue from extra production with the additional resource cost if he is to maximize profits. It is sometimes claimed that such rational calculation does not apply to people in developing economies or nonwestern cultures. Trosper (1978, 503) notes, for example, that explanations of economic differences between American Indians and whites have frequently rested on supposed differences in values. His evidence shows, however, that Indian ranchers are no less efficient and no less interested in profiting than their non-Indian counterparts. Trosper concludes, "The theory of the 'optimizing' [i.e., rational maximizing] peasant is now ascendant in economic development theory, because more facts are consistent with it. . . . People of diverse cultures make allocation decisions similarly." Where there are differences in Indians' output and efficiency, those differences are best explained by the different structures of property rights (Anderson and Lueck 1992). The empirical evidence that Louis De Alessi summarizes in chapter 4 of this volume illustrates this point more generally.

Postulate 3: Scarcity and rational behavior result in competition for resources, and societal rules govern how this competition proceeds.

Rational maximization of one's satisfaction in the face of resource scarcity means that individuals will compete to own resources conducive to their personal welfare. People will invest time and effort vying with others to determine who gets how much of the resource, and under what conditions. In the case of movie theater seats on opening night, one must arrive early to take first possession (as Lueck's chapter 8 discusses). With an open access fishery, fishers will race to catch fish before someone else takes them (Gordon 1954).

The competition for open access resources is costly because the same time and effort spent competing for resources could be expended in other ways. Less obviously, competition for resources may degenerate into violence, as David Haddock explains in chapter 7. Whatever the type of cost, rational individuals invest in defining rights up to the point where the incremental benefits of competing for resources equal the cost of doing so.

The fact that competition is costly means that individuals may benefit collectively from defining rules to govern competition for resources, choosing those rules that lower the overall costs of resource competition. Individuals might collectively agree, for example, that violence or threats of violence will not be recognized as a way to define property rights. As a way to reduce the costs of violence, rules can be agreed upon privately. For example, there is no statute that requires airline passengers to respect the right of the first passenger who puts his suitcase in the overhead bin to use that space during the flight. Such a rule presumably is preferable to a might-makes-rights system whereby the biggest and strongest passenger takes what he wants, regardless of the desires of others.

Where the number of people competing for a resource is small and the group is homogeneous, there is a greater incentive to minimize wasteful competition for property rights by contracting, rather than warring, over property rights (as discussed in chapter 6 by Gary Libecap). Privately contrived and enforced rules may not work best in all situations, however. Increasing group size and heterogeneity at some point may produce the Hobbesian jungle, where life is "nasty, brutish and short." Externally imposed rules, embodied in explicit laws or ordinances, then may become preferable to private solutions in minimizing conflict over resources.

Explaining the evolution of rules governing competition for rights has been a major task for economists and lawyers studying property. Rather than taking property rights as exogenous, economic and legal scholars recognize that rules which evolve are produced by rational individuals willing to devote effort to defining and enforcing property rights, as long as the marginal benefits to them of doing so exceed the marginal costs. Institutional entrepreneurs recognize that establishing property rights or redefining the rules that determine who benefits from scarce resources can be just as valuable as producing a better mousetrap. Terry Anderson and P. J. Hill discuss this issue in chapter 5.

Postulate 4: Given individual rationality and self-interest, a system of well-specified and transferable property rights encourages positive-sum games with mutual gains from trade.

Competition for the use of scarce resources can result in conflict or cooperation, depending on the system of property rights. If property rights are not well defined and enforced, the incentive to take by threat or violence increases, with the predictable results that resource owners will invest less in developing their property or even keeping it up (Tullock 1967). Likewise, if property rights are not transferable, those who might place a higher value on a scarce resource will have little option to negotiate over it, relative to the incentives to take it by theft or resort to government (Epstein 1985a). On the other hand, if property rights are

well defined, enforced, and transferable, owners can trade their rights with others, making all parties better off.

The potential for gains from trade is revealed by many comparative studies that show economies with greater economic freedom-secure and tradable property rights defended by the rule of law - outperform other economies. For example, in economies with higher levels of economic freedom, per capita gross domestic product grew approximately 2.5 percent, as compared to a 1.5 percent decline in economies with less economic freedom between 1980 and 1994 (Gwartney, Lawson, and Block 1996). Keefer and Knack (1997) report similarly that the absence of a secure rule of law diminishes rates of economic growth. Norton (1998) not only finds that growth rates are higher in countries with more secure property rights, but that environmental quality is better. As Norton (1998, 51) puts it, "the specification of strong aggregate property rights appears to have an important place in improving human well-being."

### THE ROAD AHEAD

The four postulates stated above guide the discussions of the law and economics of property rights that follow. In part I, Edwin West surveys early political economists' work on property rights. West concludes that while some economists (Adam Smith and David Hume, for example) understood the nexus between property rights, freedom, and growth, early economic thinkers were more concerned with establishing the normative bases for private property. Doubtless in part because of the embryonic state of economics itself, positive (descriptive) analysis of property rights was little studied.

That neglect disappeared in the mid-twentieth century when the role of property rights within business firms, particularly large corporations, was increasingly scrutinized. In chapter 2, Yoram Barzel presents a critical précis of how this literature has developed in the past twenty-five years. It is no exaggeration to say that the property rights revolution in economic thinking has completely revised the way in which the modern corporation is analyzed. Disappearing among lawyers are earlier notions of the corporation as a "creature of the state." So is the previously central idea among economists that the firm is defined by its production function and cost curves. Both lawyers and economists now view corporations as creatures of an interconnected web of contracts that establish property rights among the contracting parties (managers, investors, lenders, workers, and so forth).

Part II of this volume establishes the modern property rights approach,

departing from the "tragedy of the commons." In chapter 3, Thráinn Eggertsson distinguishes open access and common property from private property, measuring distinctions among the three according to a group's ability to govern itself and to exclude outsiders. Among groups with different characteristics, different forms of property are desirable; no one form of property rights is optimal in all settings. However, with the growth of population and related changes, private property (permitting the exclusion of nonowners) tends to become more desirable. As Eggertsson concludes, "when exclusion and governance are absent, economic agents lack the incentive to economize in the use of resources, maintain their quality, and invest in their improvement." Whether private property truly is superior to other ownership forms is an empirical proposition. In chapter 4, Louis De Alessi continues Eggertsson's theme by summarizing the many empirical studies in particular settings where private and nonprivate property rights coexist, and so can be compared. Overwhelmingly, the studies document the positive impact that property rights have on resource stewardship, human cooperation, and wealth, when the economic conditions for the emergence of private rights are fulfilled.

If private property is generally a superior institution (but not always, Eggertsson cautions), the rules by which property is defined and enforced are important to understand. Part III considers the evolution of property rights. In chapter 5, Terry Anderson and P. J. Hill introduce the institutional entrepreneur as an evolutionary force in defining rights. Property rights evolve as rational individuals devote effort (time and money) to defining and enforcing their claims to scarce resources. Whether individuals by themselves can escape the tragedy of the commons depends largely on their ability to contract among themselves for exclusion and governance. In chapter 6, Gary Libecap develops the factors that determine whether private contracting for property rights is feasible. Libecap demonstrates that in many historical and contemporary settings, cooperation among private individuals to define and enforce rights has indeed occurred. Enforcing contracting for property rights is not costless, as David Haddock explains in chapter 7. He develops the crucial point that force underlies all enforcement. This does not mean that force is always exercised, because its exercise is a zerosum, if not negative-sum, game. Haddock explains why a party with an absolute advantage in the use of force will not control all resources simply because devoting effort to enforce rights has opportunity costs in other productive activities.

Part IV develops the potential for collective action or government to establish and enforce property rights in situations where individual action might fail. Dean Lueck discusses how first possession rules determine who will be excluded from open access resources and how those rules can limit the dissipation of resources in the race to get property rights. In this regard, first possession rules represent a quasicontractual solution to defining rights.

Fred McChesney in chapter 9 introduces government as the collectively sanctioned agency with a monopoly on the legitimate use of force. Government may be the cheapest definer and enforcer of property rights in some situations, but it is naive to assume that government, with its monopoly on force, will perform optimally. Although governments can help define and enforce property rights, the same governmental force is available to redistribute wealth from one group in society to another. Hence, McChesney raises the fundamental dilemma of political economy: how can collective coercive power be harnessed to enforce property rights and the rule of law, without abuse of that same power to disrupt rights?

In part V, the focus shifts to conflicting uses of private property (socalled externalities) and the possibility of government intervention in resolving those conflicts. In chapter 10, Bruce Yandle reviews the work of English economist A. C. Pigou, the influential advocate of government command-and-control policies to resolve conflicting property uses. Yandle contrasts Pigou's solution with that of Ronald Coase. Pigou's reliance on government regulatory fixes for externalities ignored the role of private property rights. Coase, on the other hand, showed how private property and bargaining over contending uses could resolve conflicts, as long as transaction costs were not prohibitive. In chapter 11, Harold Demsetz challenges the twin notions that transaction costs are different from other production costs and that transaction costs create market failure. Typical of his path-breaking analyses of property rights (1964, 1966, 1967), Demsetz argues here that externalities could be eliminated if the firms generating them simply merged, but that such integration entails other costs. Hence, if firms fail to integrate to eliminate externalities, this suggests that the costs of eliminating the externalities outweigh the benefits and, so, are of no economic relevance.

In addition to externalities, private property, once defined, may be incompatible with the production of public goods. Public goods - tangible things like roads, dams, and national defense, or intangibles such as scenic views and orderly development of urban space – are often said to require government taking of land or land use zoning. Part VI considers those claims. In chapter 12, Richard Epstein discusses the reasons eminent domain procedures may be necessary to allow the government to produce public goods and overcome holdout problems. Epstein also discusses the pernicious results that can come from this power. Similarly, in the volume's concluding chapter 13, William Fischel uses zoning as an example of how the coercive power of government can be harnessed to overcome free riding, but how this process can also go astray. Especially at the local level, zoning becomes a way to rearrange and clarify property rights. When done at the local level where exit from zoning rules is less costly, zoning may remove some spillover effects. However, even when the costs and benefits of changing property rights through zoning inure to local people, there is a possibility that zoning will result in the type of rent seeking described by McChesney in chapter 9.

### Conclusion

Much of the literature on property rights—and this volume is no exception—relies on economic history for its lessons. Especially on the frontier, whether it be the United States of the nineteenth century or Brazil today, different resource endowments, new technologies, and a lack of property rights provide fertile opportunities for institutional innovation. Often, government is largely absent or even nonexistent, meaning that solutions to defining and defending property must arise from private, contractual ordering. Historical episodes therefore furnish ideal natural laboratories to observe the phenomena analyzed in this volume.

The focus on history should not be taken to mean that the model developed in this volume is any less applicable to modern property rights settings. From the open access of the oceans to the far reaches of space, new frontiers where property rights have not been established offer new applications for the law and economics of property rights. Issues that arose concerning property rights on the high seas the late nineteenth century (Ellickson 1991) are relevant in the twentieth century (Clarkson 1974), and for the same reasons. The same open-access problem arises in the privacy of our homes when the telemarketing firm invades our private time. (See the introduction to part III for an elaboration of this problem.) With the accelerating growth of populations, issues of the relative importance of private versus governmental solutions to property rights problems take on increased urgency. We hope this volume stimulates scholars to expand the approach presented here, ultimately finding new applications and solutions to problems that, at their core, are ones of property rights.

# **ENDNOTES**

1. There are, of course, other approaches. See, for example, Dietze (1971). Most of these other approaches, however, are normative rather than positive, a distinction discussed in this Introduction.

- 2. This emphasis is consistent with perhaps the most celebrated definition of economics, that of Lionel Robbins: "Economics is the science which studies human behavior as a relationship between ends and scarce means which have alternative uses" (1935, 16). For other discussions of economics' domain, see Kirzner (1976) and Buchanan (1979).
  - 3. See, for example, Enthoven (1963, 422): [T]he tools of analysis that we . . . use are the simplest, most fundamental concepts of economic theory, combined with the simplest quantitative methods. . . . The economic theory we are using is the theory most of us learned as sophomores. The reason Ph.D.'s are required is that many economists do not believe what they have learned until they have gone through graduate school and acquired a vested interest in the analysis.
- 4. This 1987 article is the lecture Buchanan delivered in accepting the 1986 Nobel Prize in Economic Science.
- 5. Works combining economic and religious thinking appear frequently. See, for example, Dean and Waterman (1999).