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D. Public and Private Property

Having discussed the ownership of organizations, we return to a discussion of the ownership of assets like land, buildings, and machinery by organizations. We will use our theory of property to explain the difference between private and public ownership of a resource. Private and public externalities differ according to the number of affected people. Similarly, private and public ownership can be distinguished by the number of owners. A resource owned by a single individual is private. A corporation owned by a small group of stockholders (“closely held corporation” or “close corporation”) is a “private company.” Corporations owned by many shareholders are “public companies.” Similarly, the state is called the “public sector.” When the state owns a resource, such as a public park, we sometimes say that the resource belongs to all of the citizens or that it belongs to no one other than the state.

What difference does the number of owners make? In discussing the Coase Theorem, we described bargaining among the owners of separate properties, such as the rancher and the farmer. Bargaining also occurs when several people own the same property. For example, the partners in a business bargain over the allocation of tasks. The difference between private and public ownership can be described as a difference in the structure of bargaining.

Private ownership divides people into small groups. So long as externalities are private, private owners can advance their interests by cooperating with a small number of people. Bargaining among small groups of people tends to result in cooperation and to achieve efficiency. Consequently, the case for private ownership is easy to make when production and utility functions are separable, or when externalities affect few people. In these circumstances, public ownership is a costly mistake.

An illustration comes from a study of oyster beds along the Atlantic and Gulf coasts of the United States.²⁵ At an early stage in their lives, oysters attach themselves permanently to some subaqueous material, such as rock. This attachment makes it possible to imagine defining private property rights in oysters for commercial fishing operators. However, the states along the Atlantic and Gulf coasts that have commercial oyster industries have not settled on a single system of property rights for oysters. Some states have determined that the subaqueous areas where oysters tend to congregate are to be *common* property for oyster harvesters; any of them may take oysters from those areas, and none may exclude another. Other states have held that these areas are to be available for private leasing from the state and that the lessee will have the usual rights to exclude and transfer (with some limitations). This difference allowed Professors Agnello and Donnelly to compare the relative efficiency of the private and communal property-rights systems. The measure of efficiency they used was labor productivity (output per person-hour in oyster fishing). Their finding was that labor was much more productively employed in the privately leased oyster beds than in the communal oyster beds. Put dramatically, the authors of this study concluded that if all oyster beds had been privately leased in 1969, the average oyster harvester’s

²⁵ See R.J. Agnello & L.P. Donnelly, *Property Rights and Efficiency in the Oyster Industry*, 18 J. LAW & ECON. 521 (1975). See also G. Power, *More About Oysters Than You Wanted to Know*, 30 M.D. L. REV. 199 (1970).

income would have been 50 percent higher than it was. That implies a sizable welfare loss due to public ownership.

The public oyster beds are an example of the depletion of an open-access resource by overuse, which is called “the tragedy of the commons.”²⁶ Open access to a congested natural resource has a remorseless logic with a terrible ending, like a Greek tragedy. There were two clear correctives to the problem: Turn ownership of the resource over to an individual (who would then have the appropriate incentive to invest in its preservation or use and to exclude others from using it) or devise an enforceable and effective method of restricting access to the common resource.²⁷



Commons and Anticommons

Instead of a tragedy of the commons, the breakup of the Soviet Union in the early 1990s exposed the symmetrically opposite problem of property rights.²⁸ Rather than too few property interests—the problem of the commons—there were too many property interests. How did this come to be? Private property interests were largely unknown during the 70 years of communist rule, and people came to have ownership claims to resources in idiosyncratic ways. So, for example, a large apartment with many rooms, which had been privately owned before the 1917 Revolution, had come to be home to several different families. Each family might occupy one of the rooms of the apartment and share the use of the kitchen and bathroom. When communism ended, these families thought that they had continuing ownership claims to their individual rooms and the common spaces. Suppose that if integrated into an apartment for a single owner, the apartment—or *komunalka*, as it was called—would be worth \$500,000. Assume that there are currently four tenant families, each occupying one room and sharing use of the common spaces. If sold separately, the interests of the tenants would fetch, we assume, \$25,000—or \$100,000 in total. Converting the *komunalka* into a single apartment would create \$400,000 in value. But it was frequently the case that the costs of assembling the individual tenant interests into the more valuable whole were so great as to preclude the more valuable use of the resource.

The tragedy of the anticommons occurs when multiple owners are each endowed with the right to exclude others from a scarce resource, and no one has an effective privilege of use. Property interests can be so finely divided as to impose significant assembly costs on later users who would like to consolidate the property interests into a more valuable whole. Heller and others have argued that precisely this anticommons problem arises in biomedical research.²⁹ We shall see an additional example in the box on the public domain later in this chapter. The commons and the anticommons suggest symmetric problems of “under-propertyization” and “over-propertyization.” Just as the porridge of the three bears could be too hot or too cold or just right, so, too, the law can define property interests too finely or not at all or in just the right measure.

²⁶ G. Hardin, *The Tragedy of the Commons*, 162 SCIENCE 1243 (1968).

²⁷ See ELINOR OSTROM, *GOVERNING THE COMMONS: THE EVOLUTION OF INSTITUTIONS FOR ACTION* (1990).

²⁸ See Michael Heller, *The Tragedy of the Anticommons: Property in the Transition from Marx to Market*, 111 HARV. L. REV. 621 (1998).

²⁹ Michael A. Heller & Rebecca Eisenberg, *Can Patents Deter Innovation?: The Anticommons in Biomedical Research*, 280 SCIENCE 698 (1998).

We have discussed the easy case in which private ownership can separate utility and production functions and in which externalities are private. A more difficult case for choosing between public and private ownership arises when production and utility functions of many owners are interdependent and externalities are public. To address this problem through private ownership, the affected parties must bargain with each other, and the transaction costs are prohibitive. Public ownership is a possible solution. Instead of unstructured bargaining and a requirement that everyone agree, the switch from private to public ownership substitutes structured bargaining and a collective-choice principle, such as majority rule.

To illustrate, consider pasture land in the mountains of Iceland.³⁰ Dividing the mountain pasture among individual owners would require fencing it, which is prohibitively expensive. Instead, the highland pasture is held in common, with each village owning different pastures that are separated by natural features, such as lakes and mountain peaks. If each person in the village could place as many sheep as he or she wanted in the common pasture, the meadows might be destroyed and eroded by overuse. In fact, the common pastures in the mountains of Iceland have not been overused and destroyed because the villages have effective systems of governance. They have adopted rules to protect and preserve the common pasture. The sheep are grazed in common pasture in the mountains during the summer and then returned to individual farms in the valleys during the winter. The total number of sheep allowed in the mountain pasture during the summer is adjusted to its carrying capacity. Each member of the village receives a share of the total in proportion to the amount of farmland where he or she raises hay to feed the sheep in the winter.³¹

Some discussions of the superiority of private ownership over public ownership equate public ownership with open access to resources. This equation is too simple. In fact, the general public does not have free access to most public property. To illustrate, the national parks in the United States are publicly owned, but a fee is charged to enter; many activities require reservations in advance (a form of rationing by time), and no one can graze animals or cut wood. The tragedy of the commons, in its fully disastrous form, requires a political paralysis that prevents government from stopping the destruction of a resource. This paralysis seems to have reached an advanced stage for some resources, such as fisheries. For other resources, there are symptoms of paralysis, but not the full disaster. For example, the federal government owns vast lands in the American West and sells permits for grazing, forestry, and mining on these lands. The federal domain is inefficiently managed. As a result, the environment has deteriorated.³²

Communism's collapse in Eastern Europe identified a kind of property problem that had gone unnoticed. Many shops in Moscow remained closed for several years while busy street kiosks appeared on the street in front of them. Potentially profitable shops remained closed because too many people had the legal or effective power to prevent

³⁰ See the discussion of common mountain pastures in Iceland in THIRAINN EGGERTSSON, *ECONOMIC BEHAVIOR AND INSTITUTIONS* (1990).

³¹ Professor Elinor Ostrom won the 2009 Nobel Prize in Economics for her studies of governance systems of public and common resources.

³² For an introduction to federal ownership of American land, see MARION CLAWSON, *THE FEDERAL LANDS REVISITED* (1983).

anyone from using them. Multiple vetoes resulted from the overhang of socialist laws enacted under the communist regime. The situation where everyone could prevent anyone from using a Moscow shop is the mirror image of the sea where no one could prevent anyone from fishing. The problem of the sea was already called the “tragedy of the commons,” so the problem of the Moscow shops was named the “tragedy of the anti-commons.” Once an anticommons emerges, collecting rights into usable private property bundles can be brutal and slow.

Private ownership assigns each resource to a person who owns it, and the owner can control access by excluding users. Private owners must bear the cost of boundary maintenance. Private ownership works well when production and utility functions are separable or externalities affect few people who can bargain with each other. *Public ownership* comes in three forms. First, *open access* allows everyone to use a resource, and no one can exclude anyone from using it. Nothing is spent on boundary maintenance. Open access works well when the resource is uncongested, but congestion causes tragic overuse. Second, *political control* allows lawmakers or regulators to impose rules concerning access. Limited access is the most common rule for the state’s property, including public lands. Third, the opposite of open access is *unanimous consent*, which allows no one access unless everyone agrees. The need for unanimous consent among multiple owners causes tragic underuse. In special circumstances where the aim is to preserve a resource in its unused condition, underuse is serendipitous rather than tragic.

It would be surprising if a small, homogeneous village in Iceland were paralyzed politically to the point of being unable to manage public resources. However, a large, heterogeneous country such as the United States faces far more difficult problems in managing public resources. One solution is to reduce public ownership by selling federally owned land. The market value of the products yielded by lands in the American West would surely be higher if the land currently under public control were transferred to private control.

This argument, however, is unlikely to persuade those who *want* to see the wilderness underutilized. Most ecologists believe that public land should *not* be managed with the aim of maximizing the market value that it yields. Everyone tends to think that some things are more valuable than wealth (at least at the margin), such as liberty or truth; for some people, wilderness is such a value. People who love liberty would never decide whether persons have the right to speak by asking whether people would pay more to hear them or to shut them up. Similarly, those who love the wilderness would never decide whether to build condominiums on the nesting site of the California condors by asking whether developers would pay more for the land than would the ecologists. Ecologists usually oppose the sale of public lands to private interests because their aim is to limit development rather than to increase yield. Given the scope of disagreement between ecologists and developers, it seems certain that vast resources will be used up in political disputes over the governance of public lands in the western United States.

QUESTION 5.14: Cooperative enterprises are collectively owned, and their affairs are directed through shared governance. Use the preceding theory to discuss the management of some cooperative enterprises with which you are familiar, such as a cooperative dairy, a cooperative apartment building, an Israeli kibbutz, a Hutterite farm, a commune, and so on.