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Private, Public, and Common Ownership

Abstract: The idea that private ownership implies that owners are free to do with their things whatever they want is shown to be mistaken. It is argued that private, public and common ownership are all based on the right to alienate a thing, regardless of the number of owners. Social or legal norms can make the ownership of a thing conditional on the participation in government or on group membership. In the former case, the norms establish public ownership, in the latter case common ownership. If things are owned and these norms do not apply, they are privately owned. Local social circumstances determine to some extent what form of ownership generates the highest benefits to owners, social and legal norms provide incentives which encourage or discourage the choice of the efficient form of ownership.

0. Introduction

One of the controversial issues in past as well as present political philosophy is whether some things *ought* to be owned by communities rather than by individuals, and if so what kind of things (see Schlatter 1951, for a historical survey; Nozick 1974 and Roemer 1994 for contemporary antagonistic positions). By contrast, the analysis of the nature of property relations has been rather neglected until recently, when, after the publication of Ronald Coase's work on social cost (Coase 1960), it attracted the attention of both economists and lawyers and subsequently became a central topic in the New Institutional Economics (NIE) (Eggertsson 1990). I will draw on some work done within the NIE in order to elucidate the nature of property relations and offer an explanation of the differences between private, public, and common ownership. I start by introducing briefly the basic concepts in the traditional legal analysis of property relations and point out its limitations (sec. 1). In section 2 I sketch out an alternative framework for the analysis of property relations which I will use, in section 3, in the explanation of the differences between private, public and common ownership. In section 4 I shall suggest that none of these three forms of ownership is always preferable to the others.

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1. The Western Legal Tradition

There has never been any serious disagreement among philosophers, lawyers and social scientists about the three essential elements involved in any property relation: (a) things, (b) persons with a privileged access to things, and (c) persons without this privileged access. Let me briefly characterise these points according to the western legal idea of ownership.

1.1 Ownership, the Nature of Things, and Natural Law

What is 'privileged access'? In Roman Law as well as in the Common Law tradition, privileged access is usually defined by two distinct features, exclusivity and dominion. *Exclusive access* to a thing means that one single person has the power to decide who can use and alienate it. *Dominion* means that there are no restrictions imposed by other people with respect to the use and alienation of the thing. Exclusive access and dominion are thought to be necessary features of *private ownership*.[1]

Can all things be privately owned? According to the Roman Law tradition, not all things admit of such a privileged access. Justinian's compilers write that

> "[S]ome [things] admit of private ownership, while others, it is held, cannot belong to individuals; for some things are by natural law common to all, some are public, some belong to a society or corporation, and some belong to no one. But most things belong to individuals, being acquired by various titles ..." (Moyle 1913, 35)

Examples of things 'naturally' held as *common ownership* include the air, running water, and the sea. Public buildings and the city walls not only belong to a society or corporation, they are, by their 'nature', *publicly owned.* Again, the Common Law tradition seems to recognise a similar classification of things (Blackstone 1979, 14–15).

Finally, let us ask what accounts for the fact that some individuals enjoy this privileged access to things while others do not; and how those who do and those who do not relate to each other. Roman law and Common Law agree that privileged access to things results from rightful acquisition (Moyle 1913 36–45; Blackstone 1979, ch. 14–19). "Rightful" means that there is a limited number of procedures of acquisition, specified by natural law, conceived either as a set of divine orders, or as the commands of Reason, or, as Grotius and

[1] The many subtle differences between the Roman and the Common Law tradition regarding property, such as the relation between possession and property, do not matter for the present argument. For an overview, see Buckland/McNair 1965, ch. 3.

Hume suggest, as the rules handed down by tradition and embodied in custom (see Schlatter 1951, 124–131 on Grotius; Hayek 1963 on Hume). Natural law is thought not only to determine what is rightful and what is not, but also to impose compliance with its dictates, independently of people's consent. Thus, it places the duty on all individuals not to interfere with rightfully acquired privileged access.

1.2 Three Problems With the Legal Framework

Further ad hoc qualifications notwithstanding, the traditional legal picture of property relations is unsatisfactory for several reasons. For the present purpose, I will only consider the three following shortcomings.

(1) Exclusive dominion is incompatible with the fact that private ownership is usually subject to taxes, eminent domain and government regulations, though these at-tenuations hardly turn private ownership into public or common ownership. Moreover, corporate ownership, where no single individual has exclusive dominion over a specified part of the joint holding cannot properly be considered as private ownership, though in this case the partitioning of ownership does not seem to lead neither to public nor to common ownership.

(2) Since public and common ownership cannot be characterised by privileged access cum exclusive dominion, it is not clear whether all forms of property relations have something in common that marks them off from other relations between persons and things.

(3) It is rather mysterious how natural law could impose effective compliance with its dictates independently of people's consent, since people's motivations need not coincide with the dictates of natural law.

2. Norms and Property Rights

My aim is to outline an acceptable account of property relations which is immune to these objections and retains the individualistic perspective exemplified in Roman and Common Law. To do so, I shall deny that dominion must characterise the privileged access owners enjoy. I hope to show that property relations can be specified by exclusive rights to act together with contracts and effective social and legal norms.

2.1 Exclusive Access and Rightful Acquisition

What is it that guarantees an owner's exclusive access to the things he owns? No doubt, if he has the power to decide who can use and alienate a thing, this power may result entirely from his own efforts to keep out intruders. Or

it may result from such efforts *and* all other persons' consent to refrain from interference. In the former case, exclusive access merely characterises *possession*, a natural relation that can also be found among various other species (Kummer 1991). Where people (or animals) compete under such circumstances for scarce things, possession is likely to be ephemeral. As soon as one fails to keep out intruders, one stops possessing the thing. This is not the case where the enforcement of exclusive access depends on other people's consent about prohibited, obligatory and permitted actions with respect to things. Let me call the objects of such consent 'property norms'. The existence of *effective* property norms distinguishes property relations from mere possession. I wish to emphasise 'effective' because simple agreement about what is to be done does not guarantee that people really do what they think they should. Mere consent is insufficient to constrain self-interest, "the bonds of words are too weak to bridle men's ambition, avarice, anger, and other passions" (Hobbes 1996, 91). If people cannot commit themselves credibly to honour their duties, they rationally mistrust one another, and this provides a powerful motive for preventive interference. The existence of effective property norms presupposes that those who recognise these norms have successfully solved the commitment problem.

Commitment problems can be solved in various ways. The task is to persuade others that one *will* do what one *should* do, even in situations where opportunism is most attractive. Successful persuasion requires guarantees that one will honour one's duties and resist opportunism. To provide such guarantees is to show, roughly, that it is irrational and/or emotionally unbearable to act as an opportunist. In the former case one will point out that one's environment is shaped in a way that the costs of opportunism are prohibiting or that one is incapable to act opportunistically (Dixit/Nalebuff 1991), in the latter case by expressing one's emotional attachment to honesty (Frank 1988). Successful persuasion may require either or both of these kinds of guarantees, according to the prevailing circumstances.

I shall suppose that the following story is roughly correct with respect to property. Credible commitment is possible where prudence recommends compliance with effective norms, e.g. norms whose violation is known to be followed by internal or external sanctions, or both. Internal sanctions are negative emotional reactions. On the side of norm violators they usually take the form of guilt, or fear from sanctions, or both. Witnesses of norm violations often feel indignation or anger, and that may motivate them to dispense or to support external sanctions. External sanctions arise from other persons' reactions toward the norm violator and may take various forms ranging from blame to the infliction of harm and ostracism. In the case of customary or social norms, external sanctions are dispensed by laypersons, in the case of legal norms by appointed officials. Since property relations are tied to such

behavioural mechanisms, owners have good reasons to be confident that it is rational for most to honour their duties, provided that these mechanisms work properly.

If property relations depend on the existence of effective norms, we can do away with the theological and rationalist natural law perspective. The dependence of owners' exclusive access to their belongings on the existence of effective norms *ipso facto* solves the compliance problem with rules of rightful acquisition: since there cannot be mutually incompatible *effective* norms inside one community (say, an equal protection of thieves' and owners' holdings), the norms need to specify the kinds of action which validate the claim to exclusive access to a thing.

2.2 Property Rights and Partitioning

If someone's exclusive access to a thing is guaranteed by effective norms, he has property rights over that thing. Property rights are rights to perform actions which involve the use and/or the alienation of a thing. Rights to act are prerogatives for performing some kinds of action according to the prevailing norms. If a right holder's set of permitted actions includes the *right to alienate* the thing, that is the *power to revoke all existing property rights over the thing*, he is the *owner* of that thing. This characterisation of ownership does not imply that owners are absolute rulers over the things they own. Their right to alienate a thing may be attenuated in various ways by contracts or by norms. For example, the power to revoke all existing property rights does not imply that owners can do so at any given moment. The law may assign to widows the usufruct for life of some of the late husband's estate, although another person is the designated heir of these things. The heir is the owner because he is the only person who can revoke all existing property rights over the estate, but he can fully exercise his power only after the dead of the usufructuary.

Ownership is only one among several possible property rights. Different individuals can hold property rights over one single thing or, more precisely, over various *valued attributes* of one single thing. Valued attributes include any parts or qualities of an object whose exclusive control is perceived, by at least one individual, to be instrumental for the pursuit of his goals. With respect to property, things are aggregates of valued attributes. If more than one individual has property rights over a thing I shall say that *the set of property rights (over the thing) is partitioned* (Alchian 1965).

A tenant may for example have the right to use his flat for any purpose he chooses, without having the right to pull down walls and add windows. The right to control the attributes 'number and actual shape of rooms and windows' may remain with the owner. The right to control the attribute 'graphic

aspect of the western facade' may be held by an advertising company. If persons other than the owner hold rights over some attributes of one single thing, they are *right holders by virtue of an explicit or implicit contractual arrangement with the owner.* At the termination of the contractual relationship, the property rights held by non-owners return to the owner. This follows from the above characterisation of the ownership right. Since the owner can revoke all existing property rights, he is *the central contractual agent* with respect to the thing he owns (Demsetz/Alchian 1972). This means that his status as a right-holder is independent of any contractual relationships which are unilaterally terminable by another person, whereas all other right-holders preserve their status only as long as the owner maintains a contractual relationship with them. Notice, however, that contracts only establish property rights if they are compatible with the effective norms protecting property rights. Children or alien citizens may not be allowed as contractors, contracts concluded under the threat of physical harm will probably not be protected by the effective norms, and so on.

2.3 Contractual and Political Attenuation of Property Rights

The partitioning of property rights explains how different individuals may have exclusive access to various attributes of one single thing, but not whether the right holders' use of these attributes is restricted or not, i.e. whether they enjoy dominion in use or not. It is obvious that owners often restrict the other right-holders' set of permitted actions by contractual stipulations. A landlord may, for example, prohibit commercial uses of a flat in the rental contract. Or he may prohibit the use of neon lights for advertisement on the western facade. Such restrictions are *contractual attenuations* of property rights.

Independently of the owners' will, property rights can also be attenuated by legal and social norms. The law may prohibit sub-tenancy or advertisement for tobacco, it may prohibit rents above a certain price, restrict uses and alienation by zoning regulations, and so on. Moreover, it may make at least some property rights conditional on the payment of taxes or on their compatibility with government interests: judges may be entitled to invalidate some property rights in order to liquidate tax debts, or in order to enforce government prerogatives (eminent domain). Social norms may prohibit tenants from making noise at night, or advertisement companies from exhibiting pictures that hurt people's religious or nationalist feelings, or landlords in white neighbourhoods from contracting with black tenants. All these restrictions are examples of *political attenuations* of property rights.

Though attenuations of property rights are ubiquitous and often significantly decrease the value of property rights, they are perfectly compatible with exclusive access. Whatever restrictions limit the range of action of the

landlord, the tenant and the advertisement company, the rights each retains are his rights only. People can share things, but not property rights. Property rights are *individual* rights to act, either in isolation or in concert with others. The reason is that several people cannot all have a *right* to perform a particular action since each would have to prevent the others from doing what they are entitled to do in order to perform the very action. This follows from the fact that property rights are *exclusive* rights. Moreover, property rights are valued precisely because they generally prevent and eventually settle conflicting claims regarding mutually incompatible uses of things. If rights did not enable individuals to anticipate more or less reliably one another's behaviour with respect to the use of things, people could hardly commit themselves credibly to refrain from mutual interference.

I say 'more or less reliably' because the partitioning and attenuation of property rights can only approximately trace the boundaries of rights. Right holders cannot anticipate all possible uses of a thing. Suppose the tenant in the example above notices that the inner side of walls that are part of the western facade are always humid since the advertisement company uses a new technique for the fixation of posters. Is the company violating the tenant's property rights? Or suppose the tenant becomes a free lance collaborator of various publishing houses and works at his computer at home. Is he using the flat commercially?

There are various ways to redefine property rights. The advertisement company might simply *capture* the right to modify the humidity of the wall, and the tenant will acquiesce. Otherwise the two parties might engage in *bargaining* or look for extra-legal *arbitration*. Finally, they might go to *court*. These strategies are also available to the landlord and the tenant if they disagree about the activities that are to be counted as commercial uses of the flat. It is an important feature of well ordered social life that informal redefinitions of property rights are frequent and often uncontroversial. It enables, for example, legislators to assign property rights to collectivities. They can assume that the informal redefinition of rights among members of the collectivity will erase doubts about who is entitled to do what. Thus, child benefits are given to families and subventions to the local football club. The specification of individual property rights over the money is left to the members of these collectivities.

Let me draw some conclusions from the distinctions introduced so far. Property rights are exclusive rights, regardless of whether one or several persons hold rights over a thing, and regardless of whether rights are subject to attenuations or not. Since ownership rights are property rights, they must remain exclusive rights even if they are partitioned and/or attenuated. Thus, private, public and common ownership cannot be distinguished by pointing to the presence or absence of partition and/or attenuation tout court. It follows

that the criterion of exclusive dominion is insufficient to single out private property.

3. Partitioned Ownership

If property rights backed by effective norms are central to property relations, all forms of ownership should be reducible to arrangements of property rights. In the following sections I shall show that they are. I claim that the exclusive right to alienate is common to all forms of ownership.

3.1 Private Ownership: Individual and Corporate

Individual and corporate ownership can be distinguished without reference to either private, public or common ownership. *"Individual ownership"* means that ownership rights are held by one person, whether the remaining property rights are partitioned or not. If ownership rights are partitioned and thus held by more than one person, we speak of *"corporate ownership"*. Each corporate owners' power to revoke other people's property rights is conditional on the procedures of collective choice they have mutually contracted for. Various contractual arrangements can establish different types of corporate ownership, provided that they are compatible with the prevailing norms. Whatever collective choice procedure may be adopted, however, corporate ownership implies that no co-owner (or coalition of co-owners) will be entitled to revoke the ownership rights of any other co-owner without the latter's consent. Each co-owner retains the exclusive right to decide whether to maintain or to give up his ownership rights, except when, according to the adopted collective choice procedure, the co-owners decide to dissolve their joint holding and to end co-ownership. Notice that when a co-owner decides to give up his ownership rights, he may or may not be entitled to take his share with him (or to liquidate it and take the money). Whether he can take out his share or not is equally dependent on the attenuation he has contracted for (Lawson/Rudden 1982, 82–84).

The dissolution of a joint holding by collective choice does not undermine exclusive rights, since all co-owners have chosen to proceed in this way by contracting for corporate ownership. In addition, they must have agreed to decide about the revocation of non-owners' property rights over attributes of the joint holding either by collective choice, or by transferring their right to do so to a manager. In the latter case, the manager will have the power, according to the contract with the owners, to cancel other people's contractually acquired rights over the joint holding, except those hold by the owners. The owners, by contrast, will be entitled to revoke the manager's property

rights unilaterally. Thus, if it is possible to attenuate ownership rights by making them conditional on collective choice procedures, the corporate owners' rights remain exclusive rights. And since individual owners are also able to attenuate their ownership rights by contract, both forms of ownership can properly be considered as private ownership. But what is the criterion to single out private ownership? I take "private ownership" to refer to *ownership that exists independently of the owners' political status.* By political status I mean either the possession of a political office at the top of the government or group membership. Thus, if we analyse property relations in terms of property rights, partitioning and attenuation, rather than in terms of exclusive dominion, corporate ownership is private if it results from contracting between private individual owners. Since the criterion for private ownership is, according to my suggestion, entirely negative, I shall concentrate on what private ownership is not.

3.2 Public Ownership

Let us ask now what distinguishes the property relations which constitute public and common ownership from those which constitute private ownership. Public ownership is either individual or corporate ownership. It is constituted by the two following political attenuations. First, *owners are prohibited from taking their share with them* if they decide to give up their ownership rights, whether individually or collectively. Thus, the public owners' assets cannot (rightfully) be converted into their private ownership. Second, *ownership is tied to political office at the top of the government*: if someone succeeds to be president, chancellor or minister, etc., he acquires the ownership rights attached to the office he holds, if he resigns, he loses them.

To hold a political office at the top of the government is to be in a position of authority vis-à-vis all members of a political community, i.e. to have the right to direct to some extent people's behaviour by orders and to collect taxes, eventually in concert with the other public owners. Thus, we may say that public ownership is the ownership of the rulers. They are owners by virtue of holding their office, whatever further attenuations may limit their discretion in using the things they own.

Public ownership should not be mistaken for the ownership of *public goods*, which include things such as city walls, roads, sewage treatment plants and lighthouses. Two features distinguish public from private goods. The first is *non-exclusion.* This means that, whether or not there is an owner who is able to derive benefits from a thing's existence, there will be other people who are able to derive similar benefits, although they have no property rights over the thing. The reason is that the owner's costs of excluding those unwilling to contract for property rights over the thing exceeds the benefits from successful

exclusion. If the owner's costs of constructing and maintaining the thing are reasonably thought to exceed the benefits he could derive from the existence of the thing, he will not produce the thing or stop investing in maintenance if he owns it already. Though this last assumption is not *implied* by non-excludability, it is often taken to characterise public goods.

The second feature distinguishing public from private goods is the *non rivalrous derivation of benefits*, which means that, inside a given community, no additional beneficiary of the public good decreases the benefits enjoyed by any previous beneficiary, whether they hold property rights over the thing or not. The reason is that the main benefits are not derived from the *control* of the thing, but from its mere *existence*. Private goods, by contrast, are things for which benefits are derived from control and for which the benefits of exclusion typically exceed its costs.

It is often thought that public goods would not exist, if there were no public ownership. The underlying idea is that public owners, by virtue of their political office, can force beneficiaries, by taxation, to pay for the benefits. Although this is true, it does not follow that public goods only exist where financed by compulsory contributions. English lighthouses have been funded by fees for the use of harbours (Coase 1974), some streets are privately owned (Foldvary 1994), the University of Chicago's private police benefits residents of the entire neighbourhood regardless of their affiliation at the University, and so on. This is not the place to investigate the circumstances in which at least some public goods may be profitably held as private ownership. The fact that some public goods *can* be privately owned simply shows that there is no essential link between public ownership and the ownership of public goods. In addition, as Justinian's example of public buildings suggests, public ownership of private goods is current.

3.3 Common Ownership

In much the same way as public ownership ties ownership rights to political office at the top of the government, common ownership ties it to *group membership*: if somebody becomes a member of the group, he *ipso facto* acquires the ownership rights attached to membership, if he quits the group, he loses them. It follows that common ownership is always corporate ownership: if there are common ownership rights over a thing, they are held by more than one person. As in the case of public ownership, *individual alienation of ownership rights does not entitle owners to take their share with them*; but contrary to public ownership, *common ownership may be converted into the co-owners' private ownership according to the collective choice procedures adopted in the group* (Demsetz 1967). In addition to these political attenuations concerning the acquisition and alienation of ownership rights, common

ownership is subject to two further political attenuations regarding the partitioning of property rights. The one is that *only group-members are allowed to hold property rights over the thing*, the other that *each group-member must hold property rights in addition to his ownership rights.* The former attenuation makes sure that only owners (and eventually the members of the owners' household) will be allowed to use the thing. As a consequence, the partitioning of property rights is ineluctably subject to a collective choice procedure. Since all are co-owners, no one can be entirely ignored in partitioning agreements. The latter attenuation ensures that common ownership remains beneficial to all right holders, requiring that each has property rights in addition to his ownership rights. Ownership rights without any further property rights are worthless if the owner cannot derive private benefits from partitioning. Since common ownership excludes such benefits, the latter attenuation guarantees that owners benefit from using the thing.

Although common ownership is usually held over so-called *common pool resources*, the ownership of common pool resources is not constitutive of common ownership. Common pool resources include such things as the air, the sea, ground water, oil reservoirs, forests, grazing areas, irrigation systems and broadcast frequencies. In one way, such things resemble private goods: benefits are derived from the control of the thing, not from its mere existence. Additional users decrease the benefits derived by previous users. In another way, they resemble public goods. A single owner's cost of excluding beneficiaries devoid of property rights are prohibitive, because of the high monitoring expenses due either to the size of the common pool resource, or to the fugitive nature of the parts that can be extracted for use, or to both.

Ownership rights over common pool resources will only exist if some beneficiaries succeed, by collective action, in the double task of (a) excluding alien beneficiaries and of (b) distributing property rights among themselves such that each remaining beneficiary prefers rights-governed access to open access. The form of ownership that will be adopted depends largely on the relative costs of the enforcement of contractual or political attenuations of property rights (Eggertsson 1996).

There is no guarantee, however, that the appropriators of a common pool resource succeed in establishing the most efficient (cost minimising) form of ownership. Collective action may fail with respect to the exclusion of alien beneficiaries or with respect to the distribution of rights. Here is an example for the latter case. According to Gary Libecap, both contractual and political attenuations have been too costly to enforce among beneficiaries of North-American oil reservoirs. As a result, private individual ownership of the oil extracted on privately owned land has been adopted, despite its inefficiency. Oil pools can be exploited from parcels of land belonging to different owners, and each land owner has "incentive to drill competitively and drain to in-

crease its share of oil field rents, even though these individual actions lead to aggregate common pool losses" (Libecap 1989, 93). The aggregate losses are due to the drilling of excessive numbers of wells, the costs of surface storage, and the increasing production costs due to lower subsurface pressure which is an effect of rapid extraction.[2] Though contractual attenuations could have led the land owners with access to one single reservoir to opt for some type of corporate ownership, distributional conflicts over shares undermined successful negotiations at the private level. And since "distributional conflicts present political risks to politicians, giving them incentives to propose regulations that do not seriously upset status quo rankings and that offer only limited relief from common pool losses" (Libecap 1989, 120), the enforcement of the appropriate political attenuations were too costly.

Consider now the former case in which collective action may fail with respect to the exclusion of alien beneficiaries. Low enforcement costs of political attenuations at the level of central governments have frequently undermined the local norms governing traditional common ownership. Collective action failures with regard to the exclusion of aliens from access to the common fishing grounds have led to the disappearance of various traditional fisheries. The fishermen's community of the Sri Lankean fishing village of Mawelle, for example, was unable to refuse the use of additional nets, once the national government had codified the local norms, and thereby shifted the power to enforce the norms from the fishermen's community to the politicians. But "[i]nstead of enforcing entry rules limiting the number of nets, national officials could be convinced with promises of votes (and perhaps even bribes) to intervene and prevent the enforcement of a national rule considered desirable by most local fishers" (Ostrom 1990, 156–157, based on Alexander 1982). Alien entrepreneurs added more and more nets although additional nets could not increase the quantity of the harvest.[3] Their purpose was simply to get a (larger) share out of the common pool. The decreasing returns on each single net finally led to the replacement of common by private ownership, "not because it was 'the only way' but because the external regime was unwilling to allow local rule determination and enforcement. External intervention to

[2] To get an idea of the magnitude of the aggregate losses consider the following numbers: "In 1914, the director of the Bureau of Mines estimated losses from excessive drilling at $50 million, when the value of the U.S. production was $214 million ... In 1926, the Federal Oil Conservation Board ... estimated oil recovery rates of only 20 to 25 percent with competitive extraction, whereas recovery rates of 85 to 90 percent were thought possible with controlled withdrawal." (Libecap 1989, 94)

[3] To get an idea of the resulting rent dissipation, consider the following numbers. Ostrom estimates that the optimal number of nets is between 20 and 30. In 1933, when the national law was enacted, 32 nets were registered in Mawelle, 71 nets were in operation in 1945, 108 nets in 1966. Increasing prices for fish provided the main incentive for the multiplication of nets (Ostrom 1990, 149–157).

prevent rule enforcement against political favourites undermines the viability of common-property arrangements." (Ostrom 1990, 157)

If we assume that public ownership of common pool resources is a familiar case (broadcast frequencies, air corridors, National Parks, etc.), it becomes clear that each of the three forms of ownership can principally be selected as an alternative to open access. My examples suggest, however, that the optimal form might not be selected where enforcement costs matter. Notice finally that private goods, for example between spouses or heirs, and even some public goods, for example chapels in rough country, can be held as common ownership.

Let me summarise the main observation of this section. I assume that all ownership is either private, public or common. To own a thing is to have the right to alienate it. Ownership rights can be partitioned and attenuated. Whereas partition always entails an explicit or implicit contractual arrangement between the owners, attenuations may be either contractual or political. Two particular sets of political attenuations constitute either public or common ownership. If these attenuations are absent and things are owned, they are privately owned. Private ownership is, so to say, the default option among the three forms of ownership. The three forms of ownership are established by the presence or the absence of the two particular sets of political attenuations outlined above. I conjecture that this is a contingent universal fact. If there are any examples of norm-guided access to things that do not satisfy the above-mentioned conditions according to which the ownership of a thing is to be classified as either private, public or common, my characterisation of ownership needs to be rejected or amended.

4. The Costs and Benefits of Ownership

I have argued that the classification of things into private goods, public goods and common pool resources cannot explain the existence of private, public and common ownership. In the following sections I suggest, first, that each of the three forms of ownership can be efficient, and second, that political attenuations of property rights provide incentives for the maintenance or change of forms of ownership, independently of their efficiency.

4.1 Ownership and Efficiency

Right holders can hardly ever close their eyes and lean back, assuming that general compliance with property norms will perpetuate the status quo. They need to dispense some efforts at *monitoring* other people's respect of their rights and some efforts to *deter* and to *sanction* violators. Such enforcement

efforts are unavoidable, first, because the definition of property rights cannot eliminate all indeterminacy, and second, because opportunism is irresistible to most people under certain circumstances. On the other hand, enforcement is not exclusively the right holders' business because property rights are backed by norms. And since enforcement efforts are costly, these costs will be allocated between particular right holders and other people, laypersons or officials. This holds for right holders generally and therefore also for owners. Let us ask how the three forms of ownership affect, *ceteris paribus*, the allocation of enforcement costs between particular owners and other people.

Under private ownership, each particular owner usually bears the bulk of the costs of enforcement. Laypersons and officials usually do not know who is entitled to use a thing and react spontaneously only to obvious violations of rights. If somebody takes your car, you are typically the only person to know whether this person is entitled to use it or not. Other people do not know and therefore do not meddle. Generally, private owners have to ask for help, hire a lawyer or to go to court in order to get assistance. There is another reason, besides asymmetrical information, which helps explaining why other people do not spontaneously assist private owners in enforcing their rights. Other persons are usually not harmed when the private owner's rights are violated. Thus, they do not directly pursue their interests by assisting the victim of interference.

The contrary holds under common ownership. Here, the relevant other persons for each particular owner are his co-owners. All owners typically bear the costs both of supervising the other owners' behaviour and of sanctioning violations of rights. Why is this so? First, each co-owner knows who is entitled to do what, therefore they are able to identify violations of rights reliably. Second, the transgression of property rights norms by one owner harms all co-owners, self-interest motivates mutual supervision. If a few neighbours own a car in common and share repair costs, one owner's reckless driving tends to increase repair costs for each co-owner.

Whereas officials play a minor role in the enforcement of common ownership, public ownership rights appear to be enforced essentially by officials. The set of property rights over publicly owned things is almost always partitioned. Officials are typically right holders over publicly owned things. Police cars are publicly owned. They are bought and sold by the responsible manager of the police department. The police department, however, is ultimately owned by the minister of justice, and he does not particularly care about enforcing his ownership rights over police cars, but whether the police department generates optimal benefits to him, i.e. whether it maximises his income and power given the constraints of the budget and the prevailing political attenuations. Public owners must supervise their officials, of course, but the

latter will take care that only right holders use police cars and all the other things that belong to the public owner.

If these observations are roughly correct, they suggest that, *ceteris paribus*, a particular owner will bear the costs of enforcing his ownership rights mainly himself if he is a private owner; that he will share his costs with other laypeople (the co-owners) if he is a common owner; and that he will shift most of his costs on the shoulders of officials if he is a public owner. Because the forms of ownership entail different allocations of the costs of enforcement, it is plausible to suppose that some things are owned at lowest costs by private owners, other things by common owners, and some by public owners. A decrease of enforcement costs increases, *ceteris paribus*, the benefits from ownership. The benefits owners may derive from their assets are not merely a function of enforcement costs, however. Owners may compensate increasing enforcement costs with even higher benefits from exploiting the opportunities attached to a particular form of ownership. The cost-minimising form of ownership is not always efficient. I call a form of ownership efficient (a) if it offers particular owners equal or better opportunities to maximise wealth than each of the two remaining alternatives, and, (b) provided that it does, at equal or less external costs. Since economic opportunities depend, above all other things, on the availability of valued resources and on the existence of institutions for collective action, the successful identification of efficient forms of ownership presupposes some acquaintance with local social circumstances. On the one hand, we need to know what are the main valued uses of things. On the other hand, we need to know how social life is organised, and especially how conflicts between individuals are resolved. Since the availability of valued resources as well as the existence and nature of institutions vary across time and place, we may conjecture that some things are most efficiently hold as common ownership in one political community, as public ownership in another one and as private ownership in a third one. Many empirical findings support this conjecture. Surveying some of these, Elinor Ostrom and Edella Schlager observe that

> "[a]ll types of property rights regimes - including private property, common property, and state property, whether locally selected or externally imposed—may reduce the costs of open-access regimes, but perform differentially depending on the attributes of the resource, the local community, and the specific rules used." (Ostrom/Schlager 1996, 128)

Economic factors such as efficiency do not determine alone what forms of ownership are chosen with respect to different things. Political factors, especially the attenuation of ownership by social and legal norms, strongly influence such choices. Remember that political attenuations of property rights include,

besides the constraints that establish the different forms of ownership, any extra-contractual prohibitions and prescriptions attached to property rights. Because they ineluctably rise or decrease the particular owners' monitoring and sanctioning costs, political attenuations provide strong incentives for the choice of the form of ownership. We may distinguish two cases.

First, political attenuations of property rights sometimes enable the choice and the retention of the efficient form of ownership. Examples include the century old common ownership in the irrigation systems in southern Spain (Ostrom 1990, 69–82), public ownership in long distance roads, as well as private ownership in apartment houses.

Second, political attenuations sometimes prevent the adoption of efficient forms of ownership, independently of whether they are rooted in social or legal norms. Consider the following examples. (a) Political attenuations embodied in customary norms sometimes prevent the transition from common to private ownership in agricultural land (or at least delay the transition, as long as they remain effective), where growing markets require a change from subsistence to market production. The owners may be unable to solve the distributional problem of dividing the joint holding.[4] (b) Political attenuations fixed by the law prevent the transition from public to private ownership for example of schools in most western countries, despite the predictable efficiency gains (Chubb/Moe 1990). They have prevented the shift from public to private ownership of timber land in the Northwest of the United States despite the evidence of widespread predation (Libecap 1989, ch. 4). Indeed, it may be difficult to find examples of public owners who give up ownership rights where doing so does not promote their personal career prospects.

All these examples suggest that the political attenuation of ownership rights—customary or legal—either prevent or enable right holders to adopt the most efficient form of ownership. Private, public and common ownership are not inherently efficient or inefficient, but with respect to the local social circumstances. Owners are often aware of the feasible alternative forms of ownership and either desire the maintenance of the status quo or a change. Whether they succeed or whether they fail in getting what they want depends largely on their capacity to strengthen or to weaken people's loyalty to political attenuations.

4.2 Dominion and Efficiency

Exclusive dominion—the unbridled power of an owner to do with his things whatever he wants to—implies that political attenuations cannot constrain the

[4] Notice that governments have often proved incapable to resolve the problem for the commoners. Legal attenuation of custom based common ownership often establishes open access instead of the intended private ownership (Jodha 1996).

private ownership rights. I suspect that the idea behind exclusive dominion is that privileged access to a thing should guarantee maximum benefits to the owner. According to my argument, this is precisely the case where the efficient form of ownership is adopted, regardless of whether it is private, public or common ownership. Therefore, we can dispense with the idea of exclusive dominion. To be the owner of a thing is to have the exclusive right to alienate the thing, either individually or in concert with the other owners. Partitioning and attenuations are compatible with any form of ownership and either increase or reduce the owners' benefits. The virtue falsely ascribed to exclusive dominion properly applies to efficiency.

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