## COMMENT

## Testing for Common versus Private Property: Comment

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Conceptual confusion over common property persists in the literature. An attempt by Clark and Carlson to "test" for common property versus private property is flawed by their misspecification of common property. They test, instead, for private property versus nonproperty (open access). © 1991 Academic Press, Inc.

Clark and Carlson's recent paper [8] perpetuates the unfortunate tradition of failing to recognize the critical distinction between common property (res communes) and nonproperty (res nullius)—also known as open access. My comment is motivated by the belief that there can be no more important aspect of scholarship than that of concepts and language. If scholars use the same words or terms to describe fundamentally different fact situations, ideas, or phenomena, then intellectual progress is impeded rather than advanced. Clark and Carlson are certainly not alone in this matter, though of course their article provides a prominent and recent example of the persistent confusion.

In the literature on natural resources and environmental policy, it would be difficult to find an *idea* (a concept) that is as misunderstood as that of the *commons* and *common property*. The problem started, of course, nearly four decades ago with the use of the term common property to describe the open access fishery in a paper by Scott Gordon [12]. The misunderstanding persisted with Harold Demsetz's [11] writings on "communal property," and it was reinforced with Garrett Hardin's [14] much-cited allegory about the "tragedy of the commons." Small wonder that there is confusion. More discouraging, however, is the realization that recent (and abundant) literature pointing out these conceptual errors continues to be ignored in favor of the older—and conceptually flawed—literature.<sup>1</sup>

The current situation arose because none of the three writers cited above (Gordon, Demsetz, Hardin) offered a coherent discussion of the meaning of rights, of property, or of property rights before expounding, with evident authority, on the "problems" inherent in common property. By failing to understand property, it follows ineluctably that they would fail to understand the distinction between common property and nonproperty. Rectifying the confusion will occur only when we begin to understand that the term property refers not to an object or a natural resource but rather to the benefit stream that arises from that object or that

<sup>1</sup>See, for instance, Berkes [2], Berkes *et al.* [3], Bromley [4, 5], Bromley and Cernea [6], Ciriacy-Wantrup and Bishop [7], Dahlman [9], Dasgupta and Heal [10], McCay and Acheson [15], McKean [16], National Academy of Sciences [17], Netting [18], Randall [19], and Runge [20, 21].

resource. When I purchase a piece of land, its price is a reflection of the present discounted value of its future benefit stream. By purchasing the land, I am really purchasing the benefit stream—that is, my property, the thing I actually own. Land is called property in everyday usage, but the essence of property is the benefit stream that I now own and that the state agrees to protect [1, 13, 22, 23].

Therein lies the source of confusion going back to the paper by Gordon. When economists think of property they may be inclined to think of an object, and when they think of common property they think of joint use of that object. This leads to the uncritical acceptance of the aphorism that "everybody's property is nobody's property." In fact, it is correct to say only that "everybody's access is nobody's property." It is now well recognized in the literature that a *common property resource* is one for which the group of co-owners is well defined and for which the co-owners have established a management regime for determining use rates [5–7, 9, 17]. Common property is a management regime that closely resembles *private property for a group* of co-owners.<sup>2</sup> Gordon and Demsetz certainly overlooked this, and the confusion persists.<sup>3</sup> For instance, Clark and Carlson tell us that:

In general, the theoretical characteristics of common property resources include *open access* with nonexistent, ill-defined, or unenforceable property rights over use of the resources. [p. 45] (emphasis added)

In point of fact, Clark and Carlson are here providing a definition of open access resources (res nullius). True common property is defined by proscribed access for all nonowners and well-defined rights and duties with respect to rates of use for the group of owners; about this there can be no mystery. The European common fields, the common forests (Iriaichi) in Japan, the common pastures in the Himalayas and the Andes, and the summer pastures in the Swiss Alps are examples of common property resources that were (and still are) certainly not open to all for indiscriminate squandering. These are examples of common property resources. Despite the sweeping predictions of Demsetz and others, these common property natural resources have been well managed for thousands of years. They are not mismanaged precisely because they are common property resources. It is open access resources—what Demsetz calls "communal property"—that are prone to mismanagement. Although tight and mutually exclusive categories tend to conceal important subtleties, I suggest four possible natural resource regimes in Table I. These regimes are defined by the structure of rights and duties which characterize individual domains of choice.

<sup>&</sup>lt;sup>2</sup>This may suggest that the term "common property" is redundant, a position that I reject. To talk of private property for the group may suggest that co-owners retain full autonomy to make decisions regarding, for instance, alienation of their share. However, many common property regimes prevent just this aspect of autonomy. Hence, on closer inspection, private property for the group can be quite different from common property. It looks like private property for the group because exclusion of nonowners is present. But the internal decision rules may differ considerably among these two property regimes.

<sup>&</sup>lt;sup>3</sup>The fact that some common property regimes do not work well, meaning that natural resource degradation occurs, does not obviate the conceptual validity of common property. Some common property regimes work very well, while some indeed work badly. But the issue here is the proper comprehension of alternative property regimes, not how a particular regime functions in a specific instance. I note that private property regimes are never cited as the cause of resource degradation. It is part of our received wisdom and ideology that private property is efficient ("good") and therefore when soil erosion or deforestation occurs on private land the cause is *not* the (private) property regime, but rather the "inappropriate" time horizon of the owner, or "inappropriate" prices.

TABLE I Four Types of Resource Regimes

State property	Individuals have a <i>duty</i> to observe use/access rules determined by a control- ling/managing agency; agencies have a <i>right</i> to determine use/access rules
Private property	Individuals have a <i>right</i> to undertake socially acceptable uses and have a duty to refrain from socially unacceptable uses; others (called "nonowners") have a duty to refrain from preventing socially acceptable uses and have a right to expect that only socially acceptable uses will occur
Common property	The management group (the "owners") has a right to exclude nonmembers, and nonmembers have a duty to abide by exclusion; individual members of the management group (the "co-owners") have both rights and duties with respect to use rates and maintenance of the thing owned
Nonproperty	No defined group of users or owners and benefit stream is available to anyone; individuals have both a <i>privilege</i> and <i>no right</i> with respect to use rates and maintenance of the asset; the asset is an "open access resource"

Source. Bromley [4].

Once we understand property as a benefit stream, it is important to consider the concepts of rights and duties. A right is the capacity to call upon the collective to stand behind one's claim to a benefit stream (that is, to one's property). When the collective protects one's rights, it does so by enforcing duties on others. Note that rights have effect only when there is some authority system that agrees to defend a right-holder's interest in a particular outcome. If I have a right in some particular situation, then I can turn to the authority system (the collective or, perhaps, the state) to see that my claim (and my interest) is protected. The effective protection I gain from this authority system is nothing other than a correlated duty for all others interested in my claim. A right is a triadic relationship that encompasses me, the object (the income or benefit stream) of interest, plus all others who have a duty to respect my right. Rights are not relationships between me and an object (or an income stream), but are rather relationships between me and others with respect to that object (or its associated income stream). Rights can exist only when there is a social mechanism that gives duties and binds individuals to those duties [5].

When one has a right to something, the benefit stream (the property) arising from that situation is consciously protected by the state. The state gives and takes away rights by its willingness—or unwillingness—to agree to protect one's claims (and interests) in something.

In their paper, Clark and Carlson address the distinction between open access (nonproperty) and private property only, and their analysis should be regarded in that light. In this connection, Randall has noted that "Considerable confusion arises because the now standard 'common property resource' analysis is not applicable to res communis [sic], property held in common" [19, p. 133]. He goes on to argue that the term common property resources could be abolished "with no loss of information and considerable gain in clarity. The terms nonexclusiveness and nonrivalry represent vast improvements, useful in all contexts and relevant for both goods and resources" [p. 134].

Here Randall suggests that the term common property resources should not be used to describe what are, in fact, open access resources. He is arguing the same point that I make here—the persistent confusion in the literature between res

nullius (open access) and res communes (common property). However, it does not follow that the term common property resource has no useful analytical role in resource economics. The terms recommended by Randall, "nonexcludable" and "nonrival," speak only to the physical and economic aspects of a particular natural resource—exclusion is very expensive (or impossible), or rivalry is absent up until congestion sets in. But describing natural resources by their physical and economic attributes is only part of the task. It is also necessary to retain within the discipline certain concepts defining how individuals and groups have decided to structure institutional arrangements over those natural resources.

A natural resource may, in physical terms, be capable of exclusion at moderate cost, and its use may be rivalrous. Social conventions which choose not to undertake mechanisms for exclusion may evolve. Indeed, an essential aspect of resource economics is understanding the conditions that will lead individuals and groups to undertake efforts to redefine the management regime—institutional arrangements, including property rights—pertinent to a particular natural resource. The effort in the 1970s to create exclusive economic zones was precisely concerned with converting open access coastal fisheries into state property resources. Exclusion was always possible, and at certain levels of fishing effort the resource was clearly rivalrous, yet prior to these institutional changes the resource management regime was one of open access rather than state property. The same process can be observed when natural resources which were formerly open to all become the exclusive managerial domain of a group of users—they then become common property resources.

By suggesting that nonexclusiveness and nonrivalry "represent vast improvements, useful in all contexts and relevant for both goods and resources," Randall elevates the physical and economic attributes of a natural resource to an exclusive analytical position. While these attributes are necessary components of our understanding, they are not sufficient. In the absence of a concept related to the institutional arrangements people create with respect to natural resources, economics is left without a way to describe a resource management regime in which a group of co-owners has exclusive use and managerial authority. Since *property* is the income stream from a valuable asset (whether "produced" or "natural") and since a group of individuals constitute the *owners* of that income stream, clarity is added by recognizing that they own it in *common*; it is common property.

Why these ideas are so difficult to accept remains a mystery. On second thought it is no mystery at all. Economics celebrates the autonomy of the individual to make atomistic decisions without the need to consult another agent; private property is the institutional structure most compatible with economic theory. Common property regimes will usually require that co-owners engage in consultation and seek approval for certain actions. Hence, an important dimension of some common property regimes is at odds with prevailing economic ideology and models.

In closing, the economics literature is full of casual and incorrect references to common property resources as if this were a universal and immutable classification—almost as if the prevailing institutional form were somehow inherent in a natural resource. Never mind that in one place trees and fish and range forage are controlled and managed as private property, in another setting they are controlled and managed as state property, in another setting they are controlled and managed as common property, and in other settings they are not controlled or managed at

all but are instead used by anyone who so desires. I suggest that there is no such thing as a common property *resource*—there are only common property *regimes* over certain natural resources in specific settings, and at particular times. That is, natural resources are controlled and managed as common property, or as state property, or as private property. Or, and this is where confusion persists in the literature, there are natural resources over which *no property rights* have been recognized. We call this latter group open access resources (res nullius).

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