Forms of Property Rights and the Impacts of Changing Ownership

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INTRODUCTION

Formal thinking about the "tragedy of the commons" is derived from studies of fisheries. Indeed, the problem of common property resources is also known as "the fisherman's problem" (McEvoy). For fishes and other renewable living resources, there are relationships between mortality and production—or effort and yield—that look like a logistic Lotka-Volterra curve. In theory, there is a level of mortality that results in maximum sustained yield (MSY). Those using this model have assumed that management involves government rules that keep fishing mortality more or less at the MSY level, and important fisheries today are managed roughly in this way.

To the biologists' concern about MSY, economists added their own concern with maximum economic yield or profitability; they then showed how open access affects both. Marginal returns to capital—i.e., where money made from fishing is no greater than the cost of fishing—is the point at which people will stop. But that is far beyond both MSY and the point of maximum sustained profitability. That also is the basis of a long-standing argument for limiting access to fisheries, an argument that in the past decade has become an enthusiastic chorus for creating exclusive rights to fish or fishing—the "private concern" of this paper.

Almost always, the models used to understand the interactive dynamics of fisheries stop at this point because most of us in America are wedded to two paradigms: conservation and rationalization (Charles, p. 384-385). The first of these paradigms is concerned with taking care of the fish (or birds or forests); the second, with the pursuit of economic returns. Conservation in America has long been marked by tension between the two.

But there is a third paradigm, "the social/community paradigm," involving questions about distributional equity, community welfare, and other social and cultural benefits. The "social/community paradigm" is absent in most discussions of tragedies of the commons and natural resource management. It is, however, expressed in the metaphor "comedies of the commons," which describes people as social beings who are trying to come to some collective agreement about common problems. In the bioeconomic model, people are asocial beings, responding as individuals to incentives from the natural environment and the market; any limits on their behavior (such as TAC's or limited licenses) implicitly come from the outside, from a wiser government. But we know that even fishers care and try to do something about the resources on which they depend and may play important roles in the creation and enforcement

of rules and regulations. This alternative perspective is important in recognizing disproportionality and inequality in both the causes and consequences of environmental problems. And, it points to a focus on collective action and other social responses to environmental problems.

Bad Habits and a New Typology

← Common Property ≠ Description of Resources. Scholarly writing on, thinking about and practice concerning problems of the commons have been in a tangle. One reason is the practice of using the phrase "common property" to refer to resources that share certain features—e.g., fluidity, mobility, extensiveness. The error is the failure to recognize that property derives not from nature, but from culture. It does not refer to things, but to social agreements on how humans relate to things.

A key argument of the revisionist perspective on "commons" issues, therefore, is that one should distinguish between the features of the resource and those of the ways people choose to relate to the resource and to each other. Vincent and Elinor Ostrom long ago argued for use of the term "common pool" (rather than "common property") for that class of resources that are particularly problematic to human institutions because of the difficulties of bounding or dividing them, excluding or controlling the activities of potential users, and handling their "subtractibility" (i.e., the likelihood one person's actions may affect another's enjoyment of the resource). In that case, examples of common-pool resources would include rivers, large bodies of water, fishes and other wildlife, air and airwaves, and even information and genetic material—all of which have certain natural features in common.

Simpler and other definitional schemes abound. Still, the point here is that "common pool" is not the same as "common property." There could be cases of common property for non common-pool resources (e.g., condominium housing), and of private property for common-pool resources (e.g., buying tickets for access to camping in public wilderness areas).

← Common Property ≠ Open Access. A second reason for an intellectual muddle derives from treating "common property" as synonymous with "open access" or "no property rights." Although *open access* is a distinctive "commons" problem, it is not definitive of common property. The "comedy" perspective insists that there is an important difference.

Common property is about property rights. Common property systems can include restrictions on who is a proper "commoner" and on what people may do. It can even be a social agreement to have open access and no restrictions.

To reiterate, *common property* is a cultural artifact, socially constructed and contested. It is not a natural or necessary condition. In this way it is distinct from the condition of *open access*, as used in economic models. It is distinct even though

some common property regimes may have been specified—i.e., socially constructed—as open access.

In the "thin" (cf. Little) version of this perspective, neo-institutional economists and others emphasize the contingency of economic behavior on legal-social contexts (Bromley). Property is not created because one or two individuals behave in certain ways. Rather, property arises from public choice, requiring some degree of community consideration and agreement. Anthropologists, on the other hand, are likely to "thicken" the analysis with more detailed specification of content, context and culture (McCay and Acheson).

Property Rights and Management Regimes: A New Typology

The revisionist view recognizes that the natural environment may be dealt with in many different ways, with many different consequences. *Common pool* resources may be under a variety of management regimes that are not adequately indicated by the term "common property." In a recent set of articles, we used regimes loosely identified as *open access* (no governance), *communal property*, *state property* and *private property* (Berkes et al.; Feeny et al., p. 4, listing many other references to similar distinctions). In traditional analyses, the first three types of management regime are more often lumped as "common property." Yet, splitting the category and examining case studies shows that there is no simple one-to-one relationship between regime and outcome, including whether the outcome is sustainable exploitation. The revisionist perspective plainly and simply leads to doubt that environmental problems are due to the "common property" attribute of some resources (Feeny et al., p. 13).

I propose that we go further to distinguish between property claims (one class of institutions) and management regimes (another class). To keep the analysis, only three general types of property are listed: *private property*, *common property* and *open access*. The management regimes are *laissez-faire*, *market*, *communal*, *state* and *international*.

Open access is the null condition of no property claims. For some purposes it may be appropriate to distinguish this case from a socially constructed agreement that all citizens, inhabitants, or members of "the public" have rights of use.

"Private property" usually is defined in terms of exclusivity and transferability (e.g., Regier and Grima). Private property rights are more exclusive and generally—but not universally—more transferable than common property rights. It is essential, however, to recognize the potential variability of the "bundles of rights" (as the lawyers say) for private, as well as common property.

"Common property" refers to a large class of property rights that can incorporate much of what is thought of in these schemes as state property (as in Feeny et al.). An anthropological point to be made here is that it is dangerous to generalize, given the specificity of particular property systems and their

embeddedness in other dimensions of social, economic and political life. But we can draw general outlines of what often is meant in specific cases. Among the features typically found are a right to use something in common with others or not to be excluded from the use of something (Macpherson), as well as some expression of equality or equitability in the allocation of rights. In some cases people may have use rights, but not exchange rights.

The boundaries of common property are much more variable. They may be virtually nonexistent, as with the Swedish custom of *allmennsretten,* which allows anyone to harvest wild mushrooms or berries on private lands. They may be very tightly circumscribed, as in some village systems where common rights are contingent on citizenship or on land ownership.

The boundaries of "the commons" and "the commoners" vary in permeability. They may be very permeable in terms of access—e.g., where a local community takes care of a resource, but allows others to come in to harvest it while following community rules. This kind of permeable system is fairly typical of indigenous peoples, but also can be found more widely, as in the case of municipal care of a coastal beach to which the larger public has access, upon paying a beach or parking fee (the New Jersey system). On the other hand, systems can be tightly circumscribed, so that only legitimate members of certain communities have any rights.

Property Rights $\neq$ Management Regimes

For purposes of a "thicker" comparative analysis, a first step is to separate property rights from management regimes. Property rights are among the institutional conditions that influence management regimes, but they are not the same. Following is a crude typology that might emerge from making a distinction between property rights and management regimes.

Laissez-faire—the condition of no management regime—replaces open access in the scheme of Feeny et al. Systems in which people have open-access property rights can also be systems in which they must follow rules and are engaged in collective action. Thus, it is important to be clear that laissez-faire is the big problem, not open access per se. The combination of laissez-faire with open access is indeed prone to "tragedies of the commons," if pressure on resources is high.

In the same manner, *market regulation* is distinct from private property. Private property is relevant to management insofar as it allows market mechanisms to work more effectively. Yet, governance is required to uphold private property claims and other conditions of the market. This combination can be a source of both "tragedies of the commoners" and tragedies of misplaced faith in market remedies—particularly if "externalities" and long-term, indirect ecological effects are involved.

Communal governance is distinct from common or communal property. It highlights the existence and the potential of user-governance and local-level systems

of common-pool resource management, whether rights are common, private or mixed.

State governance is distinct from state property, recognizing the central role of the state to most common-pool systems, whatever their ownership. On the one hand, state property can be property owned outright by the state and used exclusively by agents of the state. On the other hand, it can be property that is deemed public—property over which the state exercises governance. The latter is the more important situation, and the concept of state governance reflects that fact.

A significant addition to common-pool resource analyses is *international governance*. It has features of and challenges to common-pool management that differ from state, if not communal governance. One such feature/challenge, for example, is the absolute lack of centralized enforcement.

In sum, property rights are not the same as management systems, although they are logically connected. Open access is not the same as laissez-faire. Even though most laissez-faire systems are open-access, there are many open-access systems in which rules and regulations abound. Private property is not the same as market regulation, even though the "tragedy of the commons" theory holds that the problem with the commons is that market regulation does not work. Market forces certainly apply across the board wherever the activity is linked to markets, but the regulatory incentives of markets work best where there is something like private property. Of course, private property rights are no guarantee that their owners will care about resource conservation. Moreover, a "tragedy of the non-commons" (May) can occur when privatization benefits the few, but further marginalizes the many, who are forced to increase their uses and weaken their management of common-pool resources.

Common property is not the same as *communal regulation*, either. It is possible for communal regulation to exist while access is open. It also is very possible that a community can regulate how private property owners use their properties (e.g., zoning), reflecting concern about externalities and shared community values. But communal regulation probably works best where members of a community have special rights—property rights.

For example, after gaining independence from colonial domination, many new nations have done away with communal or common property rights because these rights have been linked with clans and other groups seen as problematic to the emerging nation-state. This has weakened and destroyed the customary systems of resource management.

State and international management regimes (usually meant by "governance") crosscut all forms of property. "The state" (meaning the centralized government that holds a virtual monopoly on the use of force and is the final arbiter of law) is critical to the existence of both private and common property. It legitimizes and protects—or

can be used to challenge—such property claims. The international level of governance is particularly challenging as the solution of regional and global environmental problems, for the so-called "free rider" problem inherent to all commons dilemmas is "writ large," and there is no real centralized system of enforcement.

Comedies of the Commons

The "tragedy of the commons" approach leads to arguments for: (1) strong, centralized governance or (2) privatization, letting the market do the job. From the revisionist point of view, a broader and more complex range of alternatives comes into view. They include a stronger emphasis on the potentials of people as social actors to manage their affairs—i.e., on more decentralized and cooperative management or what is here meant by "comedy of the commons" (cf. Smith; Rose). Tragedy in the classic Greek sense is the drama of an individual who has a tragic flaw or relationship with the gods and is inevitably propelled to some tragic destiny. In a comedy, on the other hand, people recognize that something is wrong; still, they try—for better or worse and often "comically"—to do something about it.

Communal Management

Margaret McKean recently compared what she has learned about more than two centuries of common property land management on the north slope of Mount Fuji, Japan, with what others have learned from studying landed commons in medieval England, Switzerland, Morocco, Nepal, India and the Andean highlands. She also compared what she has found with some irrigation and fisheries management cases. Her goal was to find out what makes for successful communal management (McKean, p. 258-261; see also Ostrom 1987, 1990):

1. Clear understanding of who is and is not eligible to use the commons.

2. Some way for eligible users or their representatives to meet regularly in order to air grievances, adjudicate problems, and make decisions and rules.

3. Jurisdiction that mostly is independent of larger government powers.

4. Limited transferability of property rights.

5. Ability of the system to handle social and economic differences.

6. Close attention to monitoring and enforcement.

A good example could be found in New Jersey in the late 1970s and early 1980s (McCay 1980). The Fishermen's Dock Cooperative of Point Pleasant had developed a complex system of catch limits for two species that were critical to the fishery during the winter months and were subject to sharp price declines when the market was glutted. The system met all of the criteria emphasized by McKean. Only members of the cooperative were eligible. They met regularly to make decisions and air grievances.

Rights to sell through the cooperative were not transferable. Complex ways of administering the catch rules were created to handle differences in capital and skill—rewarding both, yet maintaining a sense of fairness. Both monitoring and enforcement were relatively easy. The boats had to land their catches and follow the rules to stay in the co-op. In addition—speaking to a question not handled too well by most scholars of common property management—the Point Pleasant fishermen were capable of expanding the boundaries of their "self-regulation" to others within the larger region when it seemed important and necessary.

Some might say the system was too specific and limited to be applicable elsewhere—i.e., to be of interest to fisheries managers in government agencies. But "this very same factor may also be used to suggest that a reasonable alternative or adjunct to centralized, large-scale systems of fisheries management does exist. Some management systems may persist and work best where they remain on a scale small and flexible enough to be adjusted to the particular problems and circumstances of the people inherent in them and yet capable at times (as I have shown in the description) of being extended to a regional level" (McCay, p. 36).

There are many other systems of communal management, including some that are relatively new. A general notion arising from the case studies is that if a group of people have some sort of territorial or jurisdictional claim to a valuable resource, they will be motivated and empowered to manage it better. This is critical where government resources and the political will required for enforcement of regulations are scarce. Some systems are experiments introduced by outsiders. Others developed locally.

Major obstacles exist on the route to the self-governance way of managing the commons. Self-governance may be impractical where resources are migratory or overlap jurisdictions, as in the fisheries of the temperate and northern regions. In addition, self-governance may be unacceptable where it excludes people with claims to common use rights, based on historical use or other notions of right.

For example, it is possible to interpret New Jersey's system of giving municipalities the power to regulate access to coastal beaches as a good example of self-governance. People who go to the beach must pay for beach badges and/or parking, and that money is used by the towns to maintain the beaches. Very little of the coast is a state or federal park. At the same time, however, courts have accepted that the intent and consequence often is exclusionary, favoring local residents. As a result, the courts have delimited the power of the towns because under public trust law, all citizens have common rights of access to the tidewaters and oceans.

Co-Management and User Participation

The revisionist perspective emphasizes communal management and self-governance. But there are clear limits and drawbacks to self-governance, including the migratory or fugitive nature of some resources, overlapping jurisdictions, and competing claims (e.g., the special rights of local people who depend on a resource,

versus the rights of citizens or the public to use of that resource). Put another way, the question often comes down to the ways that common-pool resource users interact with the state in developing, implementing and changing systems of governance.

The term "co-management" has come into use to introduce the topic of how common-pool resource users interact with the state in developing, implementing and changing systems of resource management. Co-management is but one of a variety of forms of government-public interaction for which public participation is central (Jentoft and McCay; McCay and Jentoft 1996). But, it grants more power and responsibility than do advisory or consultative systems.

Co-management where power is actually shared has received considerable attention as an institutional response to the "commons" problem—i.e., the question of how private interests can better intermesh with collective interests. In theory, co-management will improve both the effectiveness and the equitability of fisheries management (Jentoft; Pinkerton). Co-management also may improve compliance with agreed-upon rules.

Effectiveness is partly a question of accurate appraisal of the situation and partly the effects of changing the rules. Resource assessment is critical, but it seems logical that under a co-management system, resource users would be more likely than they are under other systems to share accurate information. And, as fishers become—and are treated as—responsible co-managers, this would be reflected by even more fundamental changes in behavior and attitudes. Co-management is one of the ways that "indigenous" and nonexpert knowledge and interests can be meaningfully brought into management.

There are other arguments for co-management systems, including the likelihood that such systems will be more equitable. This argument is based on the premise that resource users are more familiar with the intricacies of local social and economic situations; therefore, those users can respond to the special needs and interests of different groups or individuals better than governments can, because governments usually try to treat everyone alike. In addition, a co-managed regulatory process may be more responsive to changing conditions. The organizations of those resource users who are involved may be able to change rules more quickly and in general be more flexible and responsive than government.

Private Concerns

Few would disagree with the proposition that open access can generate resource abuse and economic losses. This is really what Hardin was modeling in his sketch of "the tragedy of the commons" and what H. Scott Gordon meant by common property fishing in his seminal article on the dynamics of overfishing.

Nor is there much to argue about concerning the value of delineating and enforcing property rights when conservation is a problem. *Some* specification of property rights is a necessary foundation to the development of regulation.

What *is* of concern is the rapid jump over Gordon's prescription of limiting access. That jump is toward a prescription of creating private property in rights to resources.

In fisheries, privatization involves the creation of exclusive use rights in fish stocks (typically, as percentages of a quota), with more or less freedom to transfer these rights. These are the hallmarks of a marketable commodity. The idea was an extension from work done by economists who, while dealing with environmental pollution problems, introduced the idea of tradeable emissions permits. These ITQ's (individual transferable quotas) are widely praised for solving the problems of "the commons," combining a quota for conservation purposes with a way of restoring the ability of the market to generate efficiencies in the use of a resource.

There is nothing inherently right or wrong about market-based solutions to environmental and resource management problems (Young and McCay). They enable the use of market regulation for common property, but change the property rights in the direction of exclusion. Whether this is good or bad depends on the specifics of a particular situation—including the goals of management, as framed within the goals and expectations of a society. Studies now are underway in a variety of regions, to look at the implications of ITQ's and related measures in fisheries (McCay et al., in press; Pálsson and Helgason, in press).

Whether private ownership creates conditions for a level of stewardship or resource conservation that compensates for the social costs entailed in the concentration of power (as well as in the alienation of many from the means of production involved) is an important question. It is difficult to discern the mechanisms by which privatized fishing rights translate into conservation; ITQ systems are still dependent on government-imposed or co-managed regulations on catches and technology (Mace). Moreover, private property owners are quite willing and able to overexploit and push to extinction "their" resources, if the price is right and the future holds other options— as Colin Clark demonstrated long ago for whaling (Clark). In addition, as shown throughout the world, privatization can create new pressures on the remaining commons where accumulation of privatized property by the few pushes the majority to more marginal lands or to overexploiting their customary, communal lands.

The Embeddedness of Things

All models are simplified abstractions. As such, they provide important clues about how things work, but they also can be misleading.

One of the problems with models of human behavior such as the "tragedy of the commons" is that much that is important about behavior and its consequences has been factored out. This includes: (1) the many dimensions of social relationships and culture; (2) varying ways of appraising both past and future; and (3) the particulars of the historical, ecological and socioeconomic situations of the people and natural

resources involved (McCay and Acheson; McCay and Jentoft, in press).

A co-management or "comedy" perspective can make the same mistake. At some point—ideally, before policy is set—the richer and more complicated context of a natural resource problem will come into the decisionmaking arena.

In closing, I offer a few remarks on the cultural and historical specificity and embeddedness of "the commons," to underscore the point that misuse of the term "common property" as meaning the same thing as "no property rights at all" is arguably a distinctive part of the American experience. In language and culture, Americans generally have lost a sense of "common property" as property. With the rise of radical individualism, capitalist practice and liberal economic theory, property came to be seen *only* as an individual right to exclude others from the use or benefit of something (i.e., private property), even though logically and historically property pertains to a broader class of individual rights—including the individual right *not* to be excluded from something (Macpherson, p. 202). Telling is the fact that the Library of Congress cataloging system does not have a subject heading for "common property" (excepting the very recent use of "commons" and "natural resources, communal" for the revisionist literature I have cited).

This gets to the core of one of the major political problems affecting environmentalist goals in the United States today: The rise of a "private property rights" movement in reaction to attempts to use the common property dimensions of the legal doctrine of "public trust" for environmentalist objectives. Common property has lost its status as anything other than the general power of the state, under the rubric of legal doctrines and the general sentiment of "public trust," reducing the issue to one of compensable "taking," versus private property rights.

It can reemerge, however, as a more positive figure of speech that recognizes such things as having the right *not* to be excluded—from decisionmaking, as well as use—and the critical importance of having those with genuine interests, experience and knowledge involved in natural resource management.

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