

Neoliberalism in the oceans: “rationalization,” property rights, and the commons question

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Abstract

Neoliberalism, with its emphasis on privatization and marketization, is becoming a dominant mode of ocean governance. In this paper I show that neoliberalism in ocean fisheries has a specific form and history based on the ways that, for the last 50 years, regulation debates have centered on the question of the commons. Focus on the role of the commons in problems such as overfishing and overcapacity has contributed to convergence of different viewpoints around neoliberal, market-oriented approaches that try to harness the profit motive to conservation and economic efficiency. I trace the idea of property rights in fisheries from the point in the 1950s when economists first identified the commons as the underlying cause of fisheries problems, through extended political jurisdiction, to recent emphasis on the benefits of common property. Despite their differences, proponents of these different viewpoints all take property as their central problematic and contribute to the idea that creating market incentives, by specifying property rights, is the foundation upon which proper use of ocean resources rests. I illustrate these ideas with a description of the shift toward privatization in the fisheries of the US portion of the North Pacific, which have a direct annual value of almost \$1 billion. Neoliberal approaches to fisheries regulation are not simply spillover from larger trends toward market-based governance, but instead are influenced by the ways that past policy orientations toward fisheries have centered on enclosing the oceans within carefully delimited regimes of property rights, be those regimes of collective, state, or private control.

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1. Introduction: putting property at the center

To the extent that neoliberalism, with its calls for letting “the market” address myriad social and economic woes, has become the dominant model for political economic practice today, it should be expected that environmental governance, too, would be shaped by the neoliberal imperative to deregulate, liberalize trade and investment, marketize, and privatize (see Agnew and Corbridge, 1995; Overbeek, 1993; Peck, 2001), and evidence of neoliberal approaches to the environment is easily found (e.g. Anderson and Leal, 2001). On the one hand, primary sector industries such as agriculture, forestry, and fisheries are increasingly shaped by efforts to liberalize international trade through reducing tariffs and non-tariff “trade barriers” such as domestic subsidies. On the other hand, envi-

ronmental governance itself is increasingly oriented toward market-based, rather than state-led, approaches: a prime example are emissions trading schemes as solutions to pollution, such as those proposed for reducing greenhouse gases that contribute to global warming. The rationale for this neoliberal turn in environmental governance is that market mechanisms will harness the profit motive to more innovative and efficient environmental solutions than those devised, implemented, and enforced by states. In what ways, then, is neoliberalism and the environment any different from neoliberalism more generally? Are market-based approaches to the natural environment simply spillover from the larger trends of deregulation, reductions in social services, free trade, and structural adjustment? Or does the history of environmental regulation, both in general and in specific arenas, affect the development of neoliberal environmental governance?

In this paper, I address these questions by analyzing the development of neoliberalism in the oceans, and in

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particular in ocean fisheries. Examining the ways that past policy orientations toward fisheries have influenced the development of neoliberal approaches to ocean governance, I contend that neoliberalism in the oceans centers specifically around concerns about property and the use of privatization to create markets for governing access to and use of ocean resources. Within the Euro-American tradition that has shaped international law of the sea, the oceans (including the water column, seabed, and living and mineral resources) were long treated as common property—the “common heritage of mankind” (Pardo, 1967)—open to all comers with the means to create and exploit oceanic opportunities. Although historically there has also been continual tension between this openness of access and desire for territorialization (especially of coastal waters), treating the oceans as a commons is consistent with the idea that oceans are spaces of movement and transportation, which have facilitated mercantilism, exploration, colonial expansion, and cold war military maneuvering (Steinberg, 2001).¹ Oceans have also long been sites for resource extraction, yet it has not been until recent decades that new economic desires and environmental contradictions have contributed to a pronounced move away from open access and freedom of the seas. New technologies for resource extraction combined with regional overexploitation have contributed to conflicts over resources, to which representatives from academia, politics, and business have responded by calling for enclosing the oceans within carefully delimited regimes of property rights, be those regimes of state, individual, or collective control.

At the center of this new political economy of oceans, as it has evolved over the past 50 years, has been concern about “the commons,” and the extent to which common and open access property regimes contribute to economic and environmental crises, which include overfishing and overcapitalization. As such, the question of the commons has been at the center of numerous, seemingly contradictory approaches to ocean governance and fisheries regulation. Thus, the first argument of the paper is that neoliberal approaches in fisheries cannot be treated simply as derivative of a larger neoliberal movement that became entrenched starting in the 1980s. Instead, examining trajectories of neoliberalism in fisheries over the past half century reveals that the emphasis on property and the commons has contributed to a more specific dynamic of neoliberalism operating in ocean fisheries and, therefore, to distinctive forms of neoliberalism.

To be clear, it is not the emphasis on property in itself that ties this history into neoliberalism, but rather the particular perspective that links property specifically to market rationality. The underlying assumption of all the approaches to property discussed in this paper is that market rationality (i.e. profit maximization) is natural. Given this, property rights harness this rationality to the greater good, while a lack of property rights inevitably leads to economic and environmental problems. It is this set of assumptions that underlies the neoliberal emphasis on privatization and marketization. But this assumption of market rationality is not necessarily a dimension of property in general; property can involve multiple types of arrangements, with different goals and outcomes (Rose, 1994). For example, to the extent that control over access to resources and places can be about protecting traditional livelihoods, assigning property rights can actually challenge purely market-based approaches to resource use. One example relevant to the case study in this paper is the “Community Development Quota” program for communities of Native Alaskans in the Bering Sea region of the North Pacific (Holland and Ginter, 2001; Tryon, 1993). This program guarantees these communities a set percentage of the annual fish catch, with the goal of providing economic and social benefits. These community development quotas are not divorced from markets—and native communities do lease these quotas on the open market—yet property in this context is about providing economic protection for a marginalized group of people. This contrasts to neoliberal approaches, in which property is the basis for rational decision making and market efficiency, not economic protection.

My claim here, however, is that fisheries scholars and managers have focused on using property rights specifically to harness supposedly natural market-oriented behavior; in this sense, the development of property rights in fisheries is tied into the neoliberal focus on markets as the central form of governance. Thus, privatization and marketization are not the same thing, yet in neoliberal approaches they are tied together through the presumption that private property rights are necessary for markets to work, and that markets are necessary for optimal economic and environmental behavior (see Section 2.1). At the same time, the difficulty of defining property rights in fisheries has contributed to unique forms of neoliberal privatization and marketization.

A second argument is that the focus on property regimes as a key factor in the political economy of fisheries has contributed to convergence of quite different approaches around neoliberal, market-oriented perspectives. These approaches include not only neoclassical fisheries economics, but also approaches that focus on extended state jurisdiction over the oceans and on community management of fish resources. As I will

¹ The history of the coasts, beach, and seashore is quite different from that of the oceans themselves (see Corbin, 1994; Lencek and Bosker, 1999).

show, despite their differences, many proponents of these viewpoints take property as their central problematic and contribute to the idea that proper specification of property rights is the foundation upon which proper use of ocean resources rests. Again, focus on property is not in itself neoliberal, but when scholars and managers make a case for property rights in fisheries as an alternative to open access regimes, they are not simply arguing for the importance of environmental governance in general. Instead, they make the neoliberal argument that property rights can harness people's supposedly innate profit motives for the good of all. Thus, neoliberalism in the oceans has its own history, rooted, in part, in the question of the commons and debates about the role of property in environmental degradation and economic efficiency of resource industries.

A third argument, running implicitly throughout the paper, is the importance of the state in neoliberal regulation. Whereas proponents offer neoliberalism as an alternative to state governance, the discussion in this paper shows that states and markets do not act independently. This is especially the case with privatization, which relies on states to create and maintain property rights. Whether it is in the form of enclosing the oceans as state property, deciding how to further devolve property rights to individuals and collectives, or enforcing those property rights, states have been central to the neoliberal shift in ocean governance: markets are not natural and spontaneous (Polanyi, [1944] 1957). That states have a key role does not in itself negate the neoliberal aspects of fisheries policy; rather it highlights that the exclusive focus on markets within neoliberalism is itself misleading.

The main section of the paper comprises a general discussion of the development of the idea of property rights in fisheries, primarily though not exclusively in the US. This intellectual history starts at the point, in the 1950s, when neoclassical economic analysis entered into fisheries, and then traces the threads of property rights and the commons through the move toward extended political jurisdiction of the oceans in the 1970s–80s and the emphasis on common property management from the 1980s to today. By the turn of the millennium, these different approaches to the governance of fisheries all converged around the neoliberal notion of creating market incentives by specifying as property the right to fish. Because all these views share the idea that open access regimes create economic *dis*-incentives to efficient and environmentally conservative actions, they all advocate enclosing the oceans through some form of privatization. I then illustrate the importance of these debates about property rights and the commons question by explaining the suite of changes in the fisheries of the US portion of the North Pacific in recent years. During this time, the policy framework has shifted from

one that combined biological management with fisheries development, to one that is centered on privatization. Fishery regulators, both regional and national, have worked to limit entry to the fisheries and to allocate property rights among established fishing and processing interests. In doing so, they have pioneered distinctive modes of privatization that incorporate collective as well as individual forms of private property. The fisheries of the North Pacific are one example of how emphasis on the commons is at the heart of neoliberal privatization of the oceans.

2. The question of the commons ²

2.1. Fisheries economists and the common property dilemma

In 1954, Gordon wrote an influential paper about the fishermen's problem, outlining the ways that economic inefficiencies and overexploitation are inevitable in fisheries as long as fish are treated as a common, rather than private, resource (Gordon, 1954). Defining common property resources as those that "are free goods for the individual and scarce goods for society" (1954, p. 135), his main argument was that the lack of private property drives a non-equilibrium pattern in fisheries, such that total effort levels will always rise to the point that they dissipate any potential profits, thus leading to inefficient use of capital and fish. Gordon argued "the fish in the sea are valueless to the fisherman, because there is no assurance that they will be there for him tomorrow if they are left behind today;" in other words, "everybody's property is nobody's property" (1954, p. 135). Because "in the sea fisheries the natural resource is not private property" (1954, pp. 130–131), the rational fisher will catch as many fish today as possible. According to this neoclassical economic model, this leads inevitably to overcapitalization, as, first, each fisher applies more capital (in the form of new boats, new technology, or more hours at sea) to extract fish before everyone else, and, second, as new fishers enter the fishery to capture rents. These two forms of expansion then lead inevitably to rent dissipation, as overcapitalization absorbs any potential profits, and to overexploitation, as the race for fish requires that each fisher catch as many fish today as possible. This then drives increasing capitalization and effort as fishers compete for ever diminishing fish and profits, and so on. In this view, it is impossible to have an efficient and environmentally friendly industry for a common

² The title of this section is the same as an influential book on common property from the 1980s (McCay and Acheson, 1987).

property resource. The solution, therefore, is to create property rights.

Gordon's paper is significant not only for predating Garrett Hardin's more well-known "tragedy of the commons" by almost 15 years (Hardin, 1968),³ but also because it is one of the first efforts to apply systematic economic analysis to fisheries. In his paper Gordon suggested that economic analysis of fisheries was severely lacking, and most that existed was carried out not by economists, but by fisheries biologists who "recognized that the ultimate question is not the ecology of life in the sea as such, but man's use of these resources for his own (economic) purposes" (1954, p. 124). Gordon argued that fisheries management is as much or more about the economic actions and decisions of people as it is about fish themselves, and thus fishers (and especially their economic decision making) should be seen as endogenous to fisheries systems. The solution to problems in fisheries, then, is not to focus on fish and their biological condition, but is to focus on economic efficiency and ways to reform the property regime to harness individual decision-making to both market and ecological realities. Gordon's paper, along with Anthony Scott's response and extension in which he argues more specifically that the solution to the commons problem is "sole ownership" of fisheries (Scott, 1955), is cited as a historic moment in the development of fisheries economics.⁴

As outlined by Scheiber and Carr (1998),⁵ during the 1950s and 1960s economists (particularly in the US) continued to develop their ideas about the problem with

³ Hardin makes a logical argument quite similar to that of Gordon, but extends it to resources of all kinds. For any resource held in common, the economic gain to the individual for using that resource is +1, while the costs are $-1/n$, where n is the number of users. Thus, because the costs will always be much smaller than the gains, it is economically rational to use the resource, even if doing so brings demise to all: hence the "tragedy" of the commons. Hardin was actually writing specifically about population, and the ways that "freedom to breed" among the poor brings global environmental catastrophe, but his formulation of the "commons problem" has been applied to myriad social and environmental resources.

⁴ There were economic analyses of the fisheries that predate Gordon and Scott, and that foreshadow their arguments about the commons. For example, in *The Fish Gate*, Michael Graham argued that there is "the general tendency of free [i.e. open access] fishing to become unprofitable" (1943, p. 14). However, it was not until Gordon's article that fisheries economists mounted a sustained effort at theorizing common property fisheries and at engaging in fisheries policy debates. For discussion of the history of economic thinking in these areas, see Pearse, 1992, 1994; Scheiber and Carr, 1998; Scott, 1989; Wilen, 1988.

⁵ Scheiber and Carr (1998) provide an interpretation of the ways that the new field of fisheries economics influenced fisheries biology and fisheries international law during this period. They trace the influence of the economists and their approaches to "limited entry" through landmark events such as influential conferences, and they connect the genealogy of privatization with that of extended jurisdiction, as will be discussed in the next subsection.

common property, including the fallacy of creating economic *inefficiencies*, such as limitations on gear, as solutions to fisheries problems. Their alternative was to develop (in theory, not yet in practice) mechanisms for "limiting entry" to individual fisheries as a way of moving toward property rights. As economists developed their ideas, they began to gain access to international fora on fisheries management, such as the United Nations Food and Agriculture Organization. For example, in 1956 FAO convened a roundtable on "the economics of fishing," at which the dominant view was that the commons dilemma and the need for delimiting property rights are at the center of fisheries economics, and in 1961 FAO held another conference on the economic effects of fishery regulations. And although economists' views remained highly controversial among fisheries biologists, who saw biological approaches as a way of gaining objectivity in what were almost always contentious management battles, economists were also beginning to influence some of these biologists, who started to see fisheries problems as more than a scientific issue.

As this brief outline shows, at the center of the emerging and increasingly influential field of fisheries economics was the commons, which was cast as a market failure: in the absence of clearly specified property rights, rational individual behavior leads to economic and environmental problems. In this view, economic efficiency is *the* key to social and environmental welfare: individual rational decision making in free markets results in the greater good for all. As one proponent put it, "rights based fishing offers an *economic* alternative to the political process" (Neher et al., 1989, p. 9, emphasis in original). Although these neoclassical fisheries economists of the 1950s–1960s did not completely dismiss state involvement in fisheries, they do prefigure by several decades the *laissez faire*, free market themes of contemporary neoliberalism (which builds on neoclassical theory to create a larger political project). In this way, current neoliberal themes of market mechanisms and the importance of privatization are central to the birth of social science approaches to fisheries and concerns about control over and access to the oceans.

2.2. Enclosing the global ocean commons

During this period in which economists were gaining influence among fisheries regulators, the political and economic geography of the oceans was transformed. Building on a longer history of transition in which states increasingly brought nearshore areas under territorial control while the open oceans remained open access, during the 1950s–1980s the ocean regime shifted from one of primarily open access, to one in which individual coastal states had sovereign rights to control and exploit economic resources in large areas of ocean adjacent to

their land (Steinberg, 2001). Individual states, first unilaterally and then under international law, extended their political economic jurisdiction generally from three nautical miles from shore to 200 nautical miles. By the time these 200-mile zones became customary international law in the early 1980s, approximately 30% of the world's oceans (Nadelson, 1992) and 95% of the world's fish catch (Juda, 1991) was enclosed as state property. While conflicts over issues such as mineral rights and maritime (including military) transportation contributed to the contentiousness of this transition, concern about fish resources, including issues of conservation and allocation at the global scale, was one force tending toward enclosure. By the 1950s, distant water fishing fleets increasingly targeted fish stocks of the southern hemisphere. Wanting to protect what they saw as their own resources, several Latin American countries led efforts toward enclosure when, as a group, they declared 200-mile zones, and thus sparked three decades of UN conferences on the status of the coastal oceans and the law of the sea. In this context of global allocation of fish resources, several scholars have argued that enclosure of the oceans as state territory represents the efforts of third world countries, many of which were newly independent, to secure economic self-determination (Juda, 1991; Nadelson, 1992).

In one sense, this form of limited access seems to directly contradict neoliberal approaches to markets and states, in that political enclosure represents an expansion, rather than a limitation, of state control and governance. Yet, the move toward extended jurisdiction in many ways is consistent with the economic argument about property rights and economic efficiency, and fisheries economists generally supported the move toward extended political jurisdiction as a form of property rights (Caddy and Cochrane, 2001; Christy and Scott, 1965; Scheiber and Carr, 1998). First, extended jurisdiction encloses the global commons as state territory, creating a new form of property right. Second, it provides the foundation from which states can further enclose the oceans through limited licenses or other privatization schemes. In the US, the decision to unilaterally declare a 200-mile zone in the 1976 Fishery Conservation and Management Act (now the Magnuson-Stevens FCMA), was itself influenced by the economic logic of the problem of the commons. By the early 1970s, officials with the US National Marine Fisheries Service began to promote controlled access as a way to address problems of overfishing and overcapitalization, which they attributed to the "inability of present US management machinery to limit entry" (unpublished NMFS document, cited in Scheiber and Carr, 1998; see also Weber, 2002, Chapter 5). Extended jurisdiction provided an alternative legal framework in which the US would be able to limit entry. In this view, extended jurisdiction,

by enclosing oceans as national territory, was the first step toward further devolving property rights to individuals. Once individual states had control over adjacent fishing grounds and jurisdiction over their management, they could begin the process of designing new property rights mechanisms.

The reality, however, was that much of the fisheries management effort after extended jurisdiction, in the US and elsewhere, went toward expanding domestic fisheries effort; state programs often helped finance vessel construction and develop new domestic and international markets (e.g. Mansfield, 2001a,b). Seeing this expansion, rather than contraction, in fishing effort and investment, many economists began to argue that the economic incentives of state management were in fact irrational. For example, in his "economic appraisal" of extended jurisdiction, Stephen Crutchfield argues that "the failure of the current system to directly address the common property nature of the fishery [has] led to the unfortunate result that each new opportunity made available to US fishermen by exclusion or limitation of foreign harvesting has been followed by either an entry of new vessels or a shift in fishing effort from other, fully utilized domestic fisheries. . . Excess capacity in so many of the domestic fisheries represents a significant waste of resources" (1986, p. 275). In this view, blame for problems is placed not on specific regulations and programs, but on the property regime itself: state property is treated as a form of open access. Further, even when states did use their new management authority to implement license limitation programs, fishers (often with state support) were able to continue to capitalize by redesigning vessels and other technology: effort can increase even if the number of vessels stays the same. Anthony Scott, summarizing economists' view of this process, stated that "license limitation without other reinforcing measures induced such a sickening excess of investment in individual fishing capital. . . that analysts were challenged to look for something else"—namely private property mechanisms (1989, p. 24).

This period, in the 1980s, marks the point at which fisheries economists adopted a fully neoliberal approach that disregards state involvement in fisheries. This move was not primarily due to the more general political shift toward neoliberalism at this time, but was influenced by the realities of fisheries development in the era of extended jurisdiction as viewed through the lens of several decades of economic theory on the commons and property rights. At the same time that extended jurisdiction made possible state management oriented toward limited entry and other forms of property rights for fishing, economists used extended jurisdiction as an object lesson in how open access to a common property resource leads to inefficiency and degradation, and they continued to advocate for privatization of fisheries.

2.3. Institutions and rules: the commons as a form of property

By the 1980s, scholars in anthropology, institutional economics, and geography, among others, were challenging the idea that “the commons” is the ultimate cause of environmental and economic problems associated with resource use. Witnessing the rising popularity of the commons model, not only in fisheries but much more widely after the publication of Hardin’s “tragedy of the commons” formulation of the model, scholars began to piece together empirical evidence that countered the argument that resources in the commons are inevitably degraded. Researchers found numerous case studies from around the world, of fisheries and otherwise, in which local people successfully managed common property resources using combinations of explicit and implicit rules and cultural norms to protect resources, control access to those resources, and distribute the benefits of resource use (Berkes, 1989; Bromley, 1992; Burger et al., 2001; Durrenberger and King, 2000; Dyer and McGoodwin, 1994; Hanna and Munasinghe, 1995b; McCay and Acheson, 1987). From this empirical starting point, scholars have offered the commons not as the underlying cause of resource problems, but instead as a potential solution. Community and cooperative management are alternatives in which people’s ability to design institutions for resource use and allocation is harnessed to the specific goals of contemporary resource management.⁶

Just as enclosing the oceans as state property at once contradicts and is consistent with the neoliberal focus on privatization, my point here is that whereas this work on the “benefits of the commons” seems to contradict “the tragedy of the commons” model, it can also be quite consistent with the model, especially when applied to fisheries (see also Mansfield, 2001a). Before I discuss these points of overlap, it is important to note that there is a diverse literature on common property and community management, and not all of it is consistent with aspects of the tragedy of the commons model. In the more critical strand of the literature, scholars across numerous fields draw on the empirical evidence of successful commons to shift their focus away from property dynamics per se. If it is not property (i.e. the commons) that is the problem, what is? These scholars focus especially on the power relations that inhere in resource use situations, analyzing, for example, ways that colonialism, articulation with capitalism, growth of global markets, efforts at economic development, or relations between state authorities and resource users can, *inter*

alia, disrupt existing management systems, place new pressures on resource users, or create conflicts that drive unsustainable, wasteful, or inequitable resource use (Durrenberger and King, 2000; Fairlie, 1995; Gadgil and Guha, 1993; Goldman, 1998; Marchak et al., 1987; McEvoy, 1986; Ribot, 2000; Watts, 2000). From these perspectives, common property arrangements can challenge both market and state regulation of access to resources.

However, another influential strand of the common property literature stitches together empirical insights on the benefits of the commons and theoretical focus on property rights. This strand centers on developing a more precise variant of the “tragedy of the commons” model, retaining the focus on specification of property rights as the solution to resource problems. Whereas there is certainly overlap between this strand of literature and that described in the previous paragraph (e.g. both might look at issues such as the role of states in disrupting successful commons), there are differences in emphasis and types of conclusions drawn from such research. Scholars in this latter area work to make explicit some of the assumptions of orthodox commons models, and then evaluate those assumptions using empirical evidence as well as abstract logic. They then modify those assumptions deemed faulty, with the aim of making the model more robust and more useful for devising solutions to resource problems (Berkes, 1989; Berkes et al., 1989; Burger et al., 2001; Ciriacy-Wantrup and Bishop, 1975; Feeny et al., 1990; Feeny et al., 1996; Hanna et al., 1996; McCay and Acheson, 1987; Ostrom et al., 1999). The first assumption that scholars challenge is that common property and open access are the same. In contrast, researchers define common property as that which is owned and controlled collectively, and distinguish it from that which is not owned and controlled by anyone (open access).⁷ Not only can groups often control who within their group has access to resources (as well as where, when, and how), but often they can also exclude outsiders. The second assumption they challenge is that institutions (including rules and social pressures) play no role in constraining individual’s actions. In contrast, researchers specify that what makes the commons successful are precisely the social institutions and cooperative agreements that are posited as insignificant, or impossible, in the tragedy of the commons model; instead, economic rationality, in which

⁶ Community management occurs when the resource users manage themselves; cooperative management (or co-management) occurs when resource users and state officials share management responsibilities.

⁷ Scholars also distinguish between “common property resources” (also known as “common-pool resources”) and “common property:” common property resources are those resources for which “exclusion... of potential users is problematic” and “each user is capable of subtracting from the welfare of others” (Berkes et al., 1989, p. 91). In addition to fish, examples of common property resources are air, water, and wildlife. Common property, on the other hand, is ownership by a group rather than an individual entity.

profit maximization is the driving force behind individual decision making, can be modified by social practices. In this view, then, common property belongs in the category of possible types of property rights, along with private and state property, rather than in the category of open-access non-rights. From this starting point, a large body of literature has developed in which researchers identify under what conditions common property or cooperative management can be made to work, that is, the conditions (e.g. size of community, type of resource, or relationship between users) that facilitate the development of rules and institutions that overcome the problems associated with common property resources (Bromley, 1992; Dolsak and Ostrom, 2003; Dyer and McGoodwin, 1994; Hanna and Munasinghe, 1995a; Ostrom, 1990; Ostrom et al., 1999; Pinkerton, 1989; Singleton, 1998).

This latter strand of the commons literature does *not* reject the underlying economic approach that defines the commons as the problem. Instead, these scholars specify the commons model by more carefully articulating types of property and their relations to social institutions. At the same time that they carefully articulate the complex social dynamics of common property, these scholars transfer the idea of the tragedy of the commons to that of the “tragedy of open access,” such that the problems often associated with commons are attributed instead to open access (Mansfield, 2001a). As one benefits of the commons proponent put it, “there is general consensus that open-access is not compatible with sustainability. Hardin’s herders, whose access to the resource was free and rulemaking appeared not to exist, were functioning in an open-access regime, not communal property... The evidence is in support of a general ‘tragedy of the commons’ when resources are held as open-access” (Berkes, 1996, pp. 89, 94; see also Grima and Berkes, 1989, p. 38; McCay, 1996, p. 120; Ostrom, 1992, p. 293).

In other words, open access situations replace the commons, in that they are not analyzed in terms of the institutions or power relations that might shape how resources are used and allocated, but instead are analyzed simply as cases in which individuals make purely economic decisions based on relative costs and benefits. The very same scholars who argue for the importance of culture, institutions, and power in the commons simultaneously treat open access as lacking these factors, and thus argue that economic rationality governs behavior in open access situations. But this in itself can be a faulty analysis of fisheries problems: just because there are problems in open access situations, this does not indicate that it is the property regime that is the problem. For example, west coast groundfish fisheries of the US had a long history of open access, but problems of overcapitalization and overfishing only arose in the 1980s, when the US government created institutions for fisheries development that encouraged rapid expansion

of capacity and overall catch (Mansfield, 2001a). Thus, the open access nature of fisheries of this region does not indicate a lack of institutions, nor is it the cause of problems. Ignoring this type of complexity within open access regimes, common property theorists argue that open access inherently creates negative incentives, and that therefore property rights are essential. As other proponents of the commons argued, “open-access resources—those characterized by no property rights—will be overused, will generate conflict, and may be destroyed” (Ostrom and Schlager, 1996, p. 128).

2.4. Convergence

What all these seemingly different perspectives on the commons share is that they link forms of property, economic rationality, and environmental outcomes. Once common property theorists replaced the “tragedy of the commons” with the “tragedy of open access,” the differences between what seemed like quite opposed positions are no longer so great. Without property regimes that constrain individual behavior, people will overcapitalize and overuse resources because it is economically rational to do so: this is the underlying argument of Gordon’s model of the fisherman’s problem, Hardin’s model of the commons more generally, and the revisionist model of the tragedy of open access. The solution, all argue, is to specify property rights in such a way as to limit access, provide market incentives for conservation, and encourage exit from overcapitalized industries.⁸ As discussed in the introduction, closing access by designating property can be tied to different logics, with different goals. The aim of exclusion might simply be protection for one group of resource users from the actions of another group, without the goal of harnessing market forces to create more “efficient” situations and without the assumption of economic rationality—which itself has been challenged as a social relation rather than a fact of human nature (Barnes and Sheppard, 1992; Barnes, 1996). But when property rights are tied explicitly to solving “the tragedy of open access,” they are about market-based resource regulation.

These similarities among what seem like very different perspectives are exemplified in the ways that fisheries analysts from different fields have recently explained the

⁸ The convergence is also clear in the commons literature that focuses on institutions for managing common-property resources, rather than for management of communally owned property. Within this literature, there is no contradiction between common-property resources and market-based institutional frameworks—it is just that it is technically difficult to devise market mechanisms for this type of resource (e.g. Dolsak and Ostrom, 2003, especially the introductory and concluding chapters). Tradable quota programs, such as those for fisheries and emissions, are seen as a step in this direction.

economic-environmental dynamics of fisheries. Economists, writing about “rights based fishing,” argue that,

“the institution of property rights has stature in society because it generates incentives for people to behave economically. It forces them to bear the consequences of their own decisions. Put another way, property rights enable people to enjoy the rewards of being economical. As people sow, so shall they reap. . . . If a resource generates revenues in excess of full costs, it is a ‘money machine’ and people will be willing to pay for the right to have access to it. If the right of access is marketable, then a positive market price for it supports a presumptive case that the resource has social value as well as value to private persons. Property rights which do not generate net (of costs) revenues have no value to people and will wither away. Maintained rights do have value and are evidence that the resource is making a social contribution” (Neher et al., 1989, pp. 1, 3).

Drawing on this economic approach, a UN Food and Agriculture Organization fisheries report similarly states,

“since the 1950s, economists concerned with the management of capture fisheries have been aware that the rules for access to resources create incentives and participatory responses, and that these rules and incentives can have a fundamental effect on the long-term status of fisheries. In most fisheries, ineffective strategies for regulating access can lead to situations where the level of fishing effort wastes society’s resources and overexploits species. There is a growing realization that part of the remedy to this management problem lies in designing appropriate access rights to wild stocks, and fishery administrators are now increasingly considering how to provide explicit rights of various sorts to fisheries participants. . . . The basic concept of property and the rights associated with property is a simple one. So-called ‘property rights’ are bundles of entitlements that confer both privileges and responsibilities” (FAO, 2000).

Finally, and quite strikingly, one scholar who is well-known for her work on the benefits of the commons has recently made an argument that is remarkably similar.

“The reason that overfishing continues is not because people are greedy, weak, or overly romantic but because it is a rational thing to do. When a fishery is open to anyone, there is no assurance that a fish not caught today will be around tomorrow. In fact, it will probably be caught by someone else.

So why not catch it yourself? Why invest in the long-term sustainability of the fishery if what happens tomorrow or next week or next year is highly uncertain? It’s not rational. The only rational thing to do is to race for the fish, to fish early and often, and to build a boat that will out-fish competitors. That is the incentive of open access. The uncertainty among fishermen about whether fish will be there tomorrow interacts with the economics of fishing and the natural variability of fish populations in a way that is destructive of the resource. Attempts by the government to manage fishing behavior are inadequate to control these dynamics. Leaving fisheries open to anyone is often done with the best of intentions. It is an attempt to be fair to all and to share the opportunity of fishing. But despite this noble goal, the outcome of open access fishing is neither fair nor profitable. As this book clearly demonstrates, an open access fishery will attract too many boats, too many people, and too much fishing power. The result is an overfished fishery” (Hanna, 1999, p. ix).

All these quotes, while supposedly coming from different academic and policy positions, emphasize property, rights-based management, individual behavior, and economic rationality as the cause of and solutions to fisheries problems.

Just as general descriptions of causes of and solutions to fisheries problems are increasingly similar, so are the more specific policy prescriptions advocated by fisheries scholars and analysts. For example, the three documents quoted in the preceding paragraphs all go on to discuss individual transferable quotas (ITQs) as either *the* solution or a significant solution to property rights dilemmas in fisheries. In their generic form, quota programs divide fish catch among different users; this can be at the international level (e.g. national quota), or within individual countries and fisheries. Such quota programs on their own are an example of limited entry, discussed earlier, which economists suggest lead to further capitalization rather than to increasing “rationalization” of the fisheries. What makes ITQs different—and what make them a dimension of particularly neoliberal approaches to fisheries governance—is that they marketize allocation of fish catch. Individual fishers receive an initial quota allocation that represents a percentage of the total catch. Each year thereafter, fishers can then either catch that amount, or lease or sell their quota allocation to other fishers.

ITQs appear to be a peculiar variant of neoliberalism, first in that their implementation requires strong state involvement, and second in that this state involvement includes initially restricting access to fish to a small group of individuals and firms. While this may appear to

Table 1
Catch, value, and privatization status of US North Pacific (Alaska) fisheries, 2000^a

Species group	Catch (1000 metric tons)	Value (million USD)	Privatization status (in 2002)
Alaska ^b	2030	957	
Crab-all	24	130	Plan awaiting approval
Groundfish ^c	452	179	Plan for Gulf of Alaska under development
Halibut-Pacific	33	135	Since 1995
Pollock-Alaska	1185	161	Since 1998
Sablefish	16	80	Since 1995
Salmon-all	276	247	Small-scale experiments

^a Source: NMFS (2002).

^b The total is greater than the sum of the individual species groups because it includes species not in this table.

^c This total does not include pollock, halibut, or sablefish.

go against the neoliberal emphasis on free markets, the rationale is that they are not actually restricting free markets because in an open access situation there is no market. The goal of ITQs is precisely to create a market—for access—where one did not exist before, and the method is to assign property rights that can be held by individuals and groups and that can be sold or leased in the marketplace. Thus, ITQs are a form of both privatization and marketization. What were once public resources are enclosed as private property for the benefit of a few. And this new form of marketable property is presumed to lead to increased efficiency—as the least efficient operations sell their quota to the most efficient ones, thus reducing total capacity—and better stewardship of the resource. ITQs have received the most attention as a form of privatized property right in fishing, but they are not the only privatization instrument currently in use. The next section in the paper turns to a short discussion of neoliberal governance changes in the North Pacific Ocean to illustrate some varieties of privatization and marketization, all of which reflect the convergence of thinking on property rights and the commons that I have discussed thus far.

3. Rationalizing the North Pacific

The North Pacific fishery, which includes the Gulf of Alaska, Aleutian Islands, and eastern Bering Sea regions, is by far the largest in the US, accounting in 2000 for over two million metric tons, or half the national fish catch, and worth almost \$1 billion (NMFS, 2002) (see Table 1).⁹ For well over a decade, fisheries managers, citing economic inefficiencies and “irrational” incentives of open access, have been developing plans for “rationalizing” all individual fisheries of this region, including

those for halibut, king and snow crab, and possibly salmon.¹⁰ Rationalization entails creating markets to govern resource use by enclosing fisheries within increasingly more delimited regimes of property rights, thus giving what was once a public good to a select group of fishers. Rationalization, with its dual focus on privatization and marketization, has been highly controversial, especially among many fishers, who fear they will lose their livelihoods, independence, or both. Yet the term “rationalization,” which derives from the perceived economic rationality of private property, serves to make moves toward privatization sound obvious and intelligent, as the alternative is to remain *irrational*.

The example of the North Pacific serves two main purposes. The first is to demonstrate the ways that arguments about the problems with open access and the promise of private property have been taken on-board by fishery regulators. Regional regulators¹¹ do consistently cite both conservation and economic opportunities for fisheries dependent communities (i.e. small and isolated communities of Alaska) as the primary goals of fisheries management. Yet, the fact that they have, for over a decade, consistently turned to specifying property rights as the primary means to achieve these goals is itself testimony to the pervasiveness of these ideas about the problem of open access and the solution

¹⁰ General information about these fisheries, and governance of them, is available on the North Pacific Fishery Management Council website: <http://www.fakr.noaa.gov/npfmc/>.

¹¹ It is important to note the “regulators” here can take many forms. The North Pacific Fishery Management Council is a regional regulatory arm of the federal National Marine Fisheries Service (there are eight such regional councils in the US), and has jurisdiction of fisheries between three and 200 nautical miles from shore. The members of the Council include representatives of the fishing and processing industry, as well as representatives from state and federal agencies and academia. In some cases, however, federal legislation is the driving force behind specific policies, as was the case with privatization in the Alaska pollock industry. And nearshore fisheries, including salmon, are largely managed by agencies of the local state, such as the Alaska Department of Fish and Game. Because of this heterogeneity, regulation cannot simply be seen as a top-down process, but represents the complex scalar dynamics of contemporary governance, including moves toward decentralization.

⁹ The second largest regional fishery is that of the Gulf of Mexico, which accounts for about a fifth of the total catch. While fishers in the Alaska region catch far more fish than those in the Gulf of Mexico, the fisheries are almost equal in value, with the value of both at over \$900 million in 2000.

that privatization and marketization supposedly provide. However, the fact that these moves toward privatization did not occur until the 1990s should not be taken as a sign that these moves simply reflect spillover from neoliberal approaches more generally. Rather, as noted earlier in the paper, the renewed emphasis on privatization was spurred by economists who decried the growth in fisheries that occurred in the era of extended jurisdiction. Therefore, these recent moves toward “rationalization” should be situated within this longer history of emphasis on property and the problem of the commons. This unique history is one sense in which neoliberalism in fisheries is distinctive.

The second purpose is to demonstrate variations on the neoliberal theme when such policies are put into practice; these variations are also indications of convergence of different perspectives around neoliberal approaches. The reality of these fisheries, combined with the history of fisheries management, leads to specific forms of neoliberal practice, including collective as well as individual forms of privatization. Although it is more usual to treat collective property as being opposed to neoliberal privatization, the ways that such property is implemented in these fisheries shows that collective privatization can be a variation of market-based regulation, rather than a fundamental challenge to it. “Rationalization” is a neoliberal approach to fisheries in that it relies on market incentives to govern fishers’ behavior, yet at the same time, rationalization, and neoliberalism more generally, can take distinctive forms.

For a decade after the US extended jurisdiction in 1976, fishery management of the North Pacific centered on developing, rather than limiting, US domestic fishing and processing capacity. By the late 1980s, however, regulators decided that there was too much capacity, and they began to move toward privatization in the form of limited entry. At this time, regulators developed a vessel moratorium (implemented in 1995), which prohibited any new entrants to the fishery but did not eliminate any existing vessels, and later a license limitation program (implemented in 2000), which superceded the moratorium and limits the number, size, and operation of vessels. Individuals had to qualify for a license based on their participation in the fisheries during specific years, thus eliminating anyone who did not participate during the qualifying years, who entered the fisheries more recently, or who hoped to enter in the future. Drawing on arguments about property discussed in the last section, regulators describe these moves toward assigning property rights using limited entry as “an interim step toward a more comprehensive solution to the conservation, management, and economic problems in an open access fishery” (NPFMC, 2002, p. 4).

One of these “more comprehensive” forms of privatization that is currently used in the North Pacific is individual transferable quotas. Since 1995 there has been

just one such program, for halibut and sablefish (Pautzke and Oliver, 1997). Halibut, especially, has long been an important fishery in the Alaska region, with a catch in 2000 of 33 thousand metric tons, worth \$135 million (NMFS, 2002).¹² The ITQ program allocated a percentage of the annual total allowable catch to individual fishers, based on each individual’s catch over a series of qualifying years, such that those who caught more (for whatever reason) benefited more. In this ITQ program, quotas are also assigned to different categories, rather than being lumped into one pool. For example, there are different quota pools by management areas, vessel type (catcher-processors vs. catchers), and vessel length (under 35 feet, 35–60 feet, or over 60 feet). ITQs such as this one work to reduce excess capacity by encouraging the least efficient vessels to voluntarily exit the fishery, for which they receive compensation by leasing or selling their quota. However, citing concerns about consolidation and vertical integration that might result, regulators did place limits on transfer of halibut-sablefish shares: quota cannot be shifted among categories, and there are limits on the amount of quota that any entity can control. This privatization and marketization plan for halibut and sablefish was one of the first ITQ programs implemented in the US, and remains one of the only ones due to a federal moratorium on ITQs, enacted in 1996. This moratorium was a political response to the controversial nature of privatization, and was designed to provide time for further study before proceeding further.

Not only has further study resulted in recommendations to rescind the moratorium (citing the now familiar arguments about problems with open access and gains to be achieved through using property rights to harness market rationality) (National Research Council, 1999), but the moratorium did not in itself halt all efforts toward privatization, as there are methods other than ITQs for privatizing fisheries. In 1998, federal regulators enclosed the fishery for Alaska pollock in a form of collective privatization. This fishery is the largest in the US with a 2000 catch of about 1.2 million metric tons, worth \$160 million (NMFS, 2001, p. 2). Privatization of pollock involved closing the fishery to all new entrants (qualifying vessels were named individually) and then dividing the annual total catch not among individuals, but among cooperatives (for background, see NPFMC, 2001). One of these cooperatives was composed of all the factory trawlers; the rest were composed of individual processing facilities and the fishing vessels that deliver their catch to them.¹³ The members of each

¹² Catch of sablefish in 2000 came to 16 thousand metric tons, worth \$80 million (NMFS, 2002).

¹³ One additional coop is composed of “motherships” and all fishing vessels that deliver to them. “Motherships” are processing vessels that are mobile, but do not catch their own fish.

cooperative then decide among themselves how to further divide their allocation among individual vessels. Although not an ITQ, this type of enclosure works to reduce capacity in similar ways. Within a coop, the group can decide to shift all of the quota to the most efficient vessels, who would compensate those who do not fish. A new provision also allows individuals, once they have their allocation for the year, to lease even to vessels outside their coop. The goal, again, is to encourage the least economically efficient entities (e.g. the smaller ones, or ones which fish part time on a given species) to leave the fishery. Even though the coop system uses collective ownership and decision making, the underlying logic of the coop system is that property rights are a market mechanism that can harness economic rationality to the goal of economic efficiency and conservation. Rather than devolving ownership and decision-making control to individuals or individual firms, this control is devolved to groups of firms. Thus, coops are consistent with neoliberal approaches to regulation, particularly in that they involve market-based mechanisms that switch governance from public to private control.

Following from these existing plans, regulators are currently developing privatization programs for the rest of the fisheries of the North Pacific as well. In the crab fisheries, a rationalization plan (which at the time of this writing has not yet been approved) incorporates aspects of both the halibut ITQs and pollock coops (NPFMC, 2002). Catch in the crab fisheries, which include king and snow crabs, in 2000 amounted to 24 thousand metric tons, worth \$130 million (NMFS, 2002). As in the halibut-sablefish ITQ program, initial allocation of the fishing quota would be made to individuals, with quota grouped into different regional categories. Also similar to the halibut-sablefish ITQs, there would be limits placed on consolidation and vertical integration. The similarity with the pollock fishery is that fishers could also form coops, in which they could easily shift their quota based on various formal and informal agreements among coop members. The crab plan, if approved, also adds a new dimension to privatization. This plan includes not only transferable quotas for fishers, but also for processors. Just as the total allowable catch is divided among fishers based on their historical catch, it would also be divided among processors, such that those firms that are currently in the crab processing business would receive shares based on their processing history. This part of the plan has received the harshest criticism and most opposition. Processors argue that this quota is necessary to protect their sunk costs in risky businesses in isolated areas. Fishers, on the other hand, fear that processing quotas will force them to sell all their fish to one or two customers, such that processors could dictate everything from timing of fishing to prices for the catch. In other words, many fear

that private processor quota is a means of eliminating independent fishers, and replacing them with the equivalent of sharecroppers or piece-workers.

“Rationalization” plans are also currently under development for the groundfish fisheries (cod, flatfish, rockfish) of the Gulf of Alaska, with regional regulators developing alternatives for analysis that include the types of property rights discussed here, including transferable fishing quotas, transferable processing quotas, and coops (NPFMC et al., 2002). Currently there is also a small-scale experiment in privatization of the salmon fishery of Alaska, which remains quite economically decentralized. This fishery, which in 2000 caught 276 thousand metric tons of salmon worth almost \$250 million (NMFS, 2002), is currently composed of thousands of relatively small scale enterprises, which contrasts significantly with the pollock fishery, for example, in which only about 100 vessels prosecute the entire fishery. The current experiment comprises a single regional cooperative, in the Alaska peninsula community of Chignik, that fishers had the option to join (Loy, 2002; Warren, 2002). Members of the coop then assigned about a quarter of the vessels to fish, while all members shared in the profits. Similar to the pollock coops and those proposed for crab and groundfish, the rationale is that cooperatives will provide a market incentive for individuals to leave the fishery. Although this experiment has been highly controversial, and it remains unclear if this coop will continue, the recent history of all fisheries of this region indicate that it is likely that the large-scale experiment in privatizing the billion-dollar-a-year fishing industry of the North Pacific will continue.¹⁴

4. Conclusions

These examples of the property revolution in one regional fishery in the United States show that property rights can take many forms, but that all of them revolve around this concern with economic rationality and enclosing the commons. These examples also show that enclosures of the commons can take the form of either individual or collective privatization. Different forms of privatization have different rules associated with them, and have somewhat different implications for both efficiency and equity. Yet all of the forms entail reducing the options of those who once relied on public fisheries, while giving to those who qualify a form of wealth that can then be used for further gain.

¹⁴ The fishery is actually worth far more than \$1 billion a year, as this includes only the ex-vessel value, or the value to fishers themselves, and not the value of processing, trade, and other fish-related industries.

That neoliberalism can encompass varieties of privatization, including property rights assigned either individually or collectively, is also made clear by academic proponents of these plans, who do not make distinctions on individual/collective lines. First, proponents of the benefits of the commons have recently argued *for* these privatization plans for the North Pacific, as long as they include some kind of collective decision making—even if that collective is a group of firms. For example, Bonnie McCay, one of the early scholars of the benefits of the commons, has argued that the cooperative system currently in operation in the pollock fishery (and recommended for the crab and groundfish fisheries) is not only a property right that solves the economic problems of open-access, but is also a form of community management, because the individual factory trawler firms can collectively make decisions about how and when to catch fish (McCay, 2001, pp. 181–182; see also Hanna, 1995; Holland and Ginter, 2001). In this view, using privatization to create market incentives can be consistent with community management, as long as groups, rather than just individuals, are assigned rights.

Second, although not writing specifically about the North Pacific, several economists also suggest that it is unimportant whether property rights are collective or individual; rather, what is important is that privatization continue. Thus, Francis Christy, who has long argued for privatization in fisheries, makes a case not for ITQs but for “territorial” or “stock” use rights in fisheries, in which a single entity has ownership of the resource. The holders of these fully privatized rights “could be individuals, communities, cooperatives, or corporations. They would have the incentives to take over most of the four basic functions of management from governments,” including determining goals, collecting information, allocating capital and labor, and designing and enforcing regulations (Christy, 1996, p. 295). Another analyst has argued that if groups of individuals with fishing quota “cooperate they can collectively act like a sole owner,” such that collective and private property are much the same, and the debate between private vs. common property rights advocates is misplaced (Pearse, 1994, p. 87; see also Pearse, 1992). From all these perspectives, individuals acting collectively are much like any other single collective entity (e.g. a firm), and the use of property rights to enclose the oceans can proceed.

As these arguments show, orthodox fisheries economists do seem to be absorbing the lessons from common property research that individuals are not the only decision making unit and that groups of people can decide on rules by which they can collectively manage a resource. But economists have been able to absorb this lesson without substantially altering their underlying argument about the relationship between property and economic rationality, the problems with state-led regulation, or the importance of markets for environmental

governance. Common property theorists have also been able to influence debates in fisheries by shifting the focus from the commons to problems more specifically with open access, and many economists and managers seem to accept that idea that some forms of common property management may be workable. Yet, to the extent that common property theorists focus on open access as inherently a problem, they are also aligning themselves with orthodox economists’ arguments about property, economic rationality, and state vs. market governance. As long as these theorists treat open access as a realm in which economic rationality prevails, rather than itself as a social relation in which different sorts of institutions and power relations are at work, they are limiting their critique of orthodox economic approaches; they more carefully specify existing models of social behavior and resource management, but do not offer completely different models that do not rely on the assumption of economic rationality and market behavior. The result is that even though these different groups of scholars seem to have quite different perspectives, they can all agree on plans for neoliberal privatization of fisheries to solve the economic and environmental problems that are assumed to result from open access.

It is in this sense that putting property at the center of fisheries problems is a neoliberal, market-based approach to ocean governance. All the approaches discussed in this paper—whether private-, state-, or group-oriented—start from a particular economic logic that takes economic rationality (meaning individual profit maximization) as a given. From this starting point, the problems in fisheries stem from the ways that open access regimes inherently create irrational incentives: incentives to overuse, to use inefficiently, to race for the resource, and so on. In this view, open access represents a market distortion: what should be rational economic behavior becomes distorted under open access so that outcomes are inefficient and environmentally destructive. The solution, then, must eliminate the market distortion. Government regulation, these theorists argue, cannot in itself do this; instead governments can assign property rights that allow the market itself to be the solution. From this neoliberal perspective, market incentives decrease capacity and increase efficiency as individuals or groups lease and sell privatized rights to fish; market incentives encourage conservation because each individual or group knows they can profit from the fish as much tomorrow as today, and thus they will fish more slowly and more carefully. Market incentives may also lead to overfishing when “mining” fish stocks makes economic sense, and they will also cause “a high degree of real pain” among those who are not the beneficiaries of privatization, but this, proponents argue, is inevitable and inexorable, and all in the name of the greater good (Christy, 1996, pp. 288, 297; see also Hanna, 1999). Property rights are at the center of a

massive change in the political economy of the oceans around neoliberal, market-based socio-environmental policies that enclose for a few what was once the property of all. Neoliberalism in the oceans takes a particular form and has its own history and timeline based on the ways that, for the last 50 years, fisheries analysts have structured regulation debates around the question of the commons and rationalization of the oceans.

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