

Tragedy Averted: The Promise of Collaboration

TODD A. BRYAN

School of Natural Resources and Environment
University of Michigan
Ann Arbor, Michigan, USA

Environmentalists, for the most part, continue their skepticism of collaborative approaches to environmental and natural resource decision making, particularly on public lands. Such approaches, many have argued, are an abdication of government authority, circumvent environmental laws, lead to lowest common denominator solutions, are not accountable to public and scientific review processes, and are undemocratic. Environmentalists can point to flawed decision-making processes that contain these elements. Such processes, however, are generally not publicly and statutorily accountable collaborative processes. Moreover, thoughtful and accountable collaborative approaches, more than other kinds of decision-making processes, hold promise that other decision-making approaches lack—that of creating a sense of shared ownership of our larger and more complex problems. Achieving shared ownership, and ultimately averting the inevitable tragedies of the commons facing society today, requires a shift in how decision-making processes are structured and managed. This article explores paradoxical barriers to creating a culture of shared ownership and the role of collaboration in overcoming those barriers.

Keywords collaboration, common-pool resources, compliance, conflict, natural resource management, paradox, shared ownership, social dilemmas, tragedy of the commons

Critics of collaborative approaches to natural resource management are correct when they argue that decision-making processes that devolve government authority, hand over responsibility for management of public resources to an unauthorized group, ignore or circumvent existing laws and regulations, and/or preclude the rights of citizens to participate through administrative channels, should be avoided and criticized (Coggins 1996; 2001; McCloskey 1996). Inclusive and accountable collaborative processes, however, are fundamentally different from the cases of federal abdication and the devolution that critics rightly caution us about. Thoughtful and well-designed collaborative processes do not devolve government authority, which Coggins defines as “transferring authority to make public resource decisions from the federal land management agencies to local citizens” (Coggins 1996, 211). To the contrary, such processes engage citizens and other participants in the development of

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Address correspondence to Todd A. Bryan, 2242 15th Street, Boulder, CO 80302, USA.
E-mail: tbryan@umich.edu

alternatives that government agencies have the authority to adopt, modify, or reject based on scientific and formal public review, and compliance with existing laws, regulations, and procedures. In all cases, government agencies retain their decision-making authority and are ultimately responsible for their actions (Wondolleck and Yaffee 2000). As such, collaborative processes are more akin to problem solving than decision making, a distinction that participants understand and accept. While participants may challenge the decisions authorities ultimately make, they do not challenge their authority to make those decisions. Paradoxically, participants share power (are empowered) through the consensus process but do not share authority, which continues to rest with the agency. Managing this paradox is an inherent part of the collaborative process, and provides a clue to understanding this article.

The more important question, and the primary focus of this article, is on *why* collaborative natural resource management should be pursued in the first place. Collaboration, to be sure, is often time-consuming, messy, and unpredictable (Gray 1989; Wondolleck and Yaffee 2000). Collaboration engages people, often adversaries, in ways that are quite unique, and therefore may be uncomfortable for those not fully aware of its underlying structure and purpose. I argue in the article that a deeper understanding of these elements places collaboration in a much more favorable light. That is not to say that collaborative processes, like other problem-solving processes, do not have their drawbacks. They do. But collaboration, I argue, offers an important promise other forms of public decision making seem to lack—that of creating a sense of “shared ownership” of our larger and more complex problems and challenges.

I attempt to construct a conceptual model that brings together previously unrelated concepts, and that begins to provide linkages between behavior and actions that are more likely to result in averting the kinds of “tragedy of the commons” problems we face today, and that we will increasingly face in the future (Hardin 1968; Dolsak and Ostrom 2003). The concepts deal with the paradoxical nature of modern environmental and natural resource problems, the human tendency to split off and disown parts of the paradox in order to manage it, the task of leaders in recognizing, reframing, and restoring paradoxical tensions, and the critical role of collaboration in allowing shared ownership to emerge. Collaboration thus holds the promise of creating new social arrangements and solutions that effectively avert such tragedies. In constructing the conceptual model, I begin with the critical goal of shared ownership and relate it to what I believe we have inadvertently created in its place.

The Goal

Shared ownership is an important concept in public policymaking and cannot be overemphasized. Shared ownership, I argue, is one of the principal underlying goals of almost all policy initiatives. The environmental movement is no exception. While the stated goal of the movement is environmental protection and preservation, most movement members would agree that the preferred path to that goal is through shared ownership and responsibility among all citizens for our environmental and natural resource heritage and the problems we have created. What I mean by shared ownership in this context is the collective recognition that this natural heritage contains value, that a larger problem or crisis exists, and the acceptance of at least part of the responsibility not only for creating the problem but also for correcting it. When shared ownership is achieved, it can be translated into a common purpose and action toward that purpose.

Environmentalists, I believe, have been struggling to achieve shared ownership for most of the last century and have, it appears, made only modest progress toward this goal. What they (we) have achieved instead is a necessary although weak substitute—compliance. What I mean by compliance is the acceptance, often reluctantly, of rules, policies, and procedures that are designed to accomplish a stated goal. I argue that the way we typically approach environmental and natural resource problems is partly responsible for creating a “compliance culture” that is falling short the ultimate goal.

Before discussing shared ownership and its relationship to collaboration in more detail, however, let me draw a clearer distinction between shared ownership and compliance, and describe what I mean by a compliance culture. Compliance is markedly different from shared ownership in that with compliance the actors are accepting only the rule, policy, standard, or procedure for addressing the problem. They may not, and often do not, accept the problem. Tenbrunsel et al. (1997), for example, found that while environmental standards have prevented and minimized environmental destruction, and are beneficial and necessary, the standards themselves become the focus of attention, rather than the problem. In their experimental research, the researchers found that participants minimally met standards when they were known but provided empirically greater levels of protection when, in the absence of known standards, they focused on achieving the underlying objectives. The authors suggest that “standard-based systems can change the incentive systems for individuals and promote self-interested rather than societally-based behavior” (Tenbrunsel et al. 1997, 107).

Compliance is based solely on standards and a structure of authority. As such, it establishes a relationship between regulator and regulated whereby the regulator is granted the power to enforce a set of rules and procedures over the regulated. Even a standard dictionary definition is ominous:

Compliance: 1) the act of conforming, acquiescence, or yielding; 2) a tendency to yield readily to others esp. in a weak and subservient way; 3) conformity; accordance; 4) cooperation or obedience; 5) physics—the strain of an elastic body, expressed as a function of the force producing the strain (Pearson Education 2000–2004).

A compliance culture, it appears, assumes that shared ownership is either not attainable or is attainable only through conformity. The first assumption is based in part on the belief that the regulated are incapable of self-governance. Unfortunately, there is strong evidence suggesting this is true, and has occurred extensively in the past. Hardin’s theory of the “tragedy of the commons” (Hardin 1968) offers a model for such occurrences, as does Elster’s collective action dilemma (Elster 1989) and current research on social and common-pool resource dilemmas (Dolsak and Ostrom 2003; Kollock 1998; Ostrom 1990). In each of these versions, the tragedy occurs as each resource user independently and rationally weighs the benefits of extracting one more unit of value from the resource (for himself) against the costs of doing so (which are spread among all resource users). The result, according to the theories, is inevitable resource depletion since commons dilemmas share the key feature of the “subtractability” of benefits as access to the resource increases (Becker and Ostrom 1995; Dolsak and Ostrom 2003; Kollock 1998). Hardin argues that public resources, like public grazing lands, are more susceptible to tragedy of the commons problems because multiple resource users have little incentive to

voluntarily restrict their use. In fact, if they do they simply leave more for others to exploit. And, since there is often relative anonymity among users, exploiters may go unchecked (Kollock 1998).

The other assumption is that shared ownership can be achieved just as well through compliance-based rules and procedures. While compliance has resulted in significant and undeniable protections to the environment over the past 40 years, it seldom leads to the ultimate goal of shared ownership and this is the rub. While rules, policies, standards, and procedures can induce behavioral change, they seldom lead to a change in underlying attitudes and beliefs about the resource, or to a deeper understanding of the inherent complexities of environmental problems (Holling and Meffe 1996; Tenbrunsel et al. 1997). While compliance may lead to rule adherence, it arguably falls short of meeting the goal of shared ownership. At its worst, it leads to defiance. Consider the statement of a former oil worker writing about development of the Alaska National Wildlife Refuge: “Rightly or wrongly, regulation tends to cause adversarialism—a feeling I know all too well. It leads to circumvention if not outright corruption” (Masiel 2004, 89).

The Promise

Hardin (1968) argued that independent resource users in commons dilemmas were incapable of avoiding the inevitable tragedy and therefore required mediating structures. Interestingly, while most interpreters of Hardin advocate either increased government regulation or increased privatization of resources (Bish 1977), Hardin himself called for social arrangements of responsibility wherein individuals collectively accept what he termed “mutual coercion, mutually agreed upon,” adding that he was not talking about “arbitrary decisions of distant and irresponsible bureaucrats” but mutual coercion “by the majority of the people affected” (1968, 1247). Social arrangements could be laws and regulations, behavioral norms, privatization of resources, or other institutional structures of their making. The critical and often missed component of his idea is that they are created through a process of deliberation and agreement that renders them binding and mutually enforceable. Ostrom (1990) makes the same point in her discussion of alternatives to Leviathan control on the one hand and free-market privatization on the other. Instead, Ostrom (1990, 15) advocates a consensual, binding contract among resource users that commits them to “a cooperative strategy that they themselves will work out.”

What is implied from Hardin’s prescription for “mutual coercion, mutually agreed upon” is entirely consistent with the goal of shared ownership. While Leviathan control fosters a compliance culture, and free-market privatization results in fee title ownership of the resource but not necessarily ownership of the larger problem, deliberation and agreement (the basis of collaboration) appear to hold the promise of fostering a sense of shared ownership for the larger and more complex problem, thus averting the tragedy. Unfortunately, since we have overlooked the critical elements of deliberation and agreement, we have misinterpreted Hardin’s recommendation for action. Instead of working toward the goal of shared ownership, we are perpetuating a compliance culture.

There are, however, situations where common-pool resource dilemmas have not led to tragedy of the commons problems. In such situations, resource users have discovered innovative ways of self-regulation (Acheson 1988; 2003; Ostrom 1990). The “lobster gangs” of Maine, for example, have thus far avoided the tragedy that has befallen the Nova Scotia and New England cod fisheries through a system of

self-regulated harvests, controlled access, and self-imposed limits on the use of new technology (Acheson 1988; 2003). The lobster gangs are closely tied to both the lobster fishery and the individual communities that have grown up around the fishery. Moreover, the lobster gangs exist within the larger context of federal and state fishing regulations and policies that potentially impact their fishing practices. However, the regulations and policies are not viewed as deterrents to those practices. Why? In part because the fishermen follow three tenets of shared ownership: (1) They understand and accept the condition and carrying capacity of the resource, (2) they recognize their role in exploiting it, and (3) they have developed a shared means for sustaining it (Acheson 1988; 2003).

The lobster gangs share four fundamental social traits: (1) Members all know or are acquainted with each other through interaction and/or community social ties; (2) they have developed strong norms, standards, and sanctions that govern behavior; (3) they have developed a foundation of mutual trust; and (4) they share a common identity with the resource and with each other as resource-dependent users (the local lobster fishery on which they all depend and the communities in which they and their families live). In short, fishermen grow up, are educated, attend sporting events, marry, and raise families within the same communities (Acheson 1988; 2003). They are, as Ostrom notes, “tied together in a lattice of interdependence” (1990, 38). The social contract that evolves from such interdependence includes the norms, rules, and sanctions that govern how people act toward each other and toward the lobster fishery. Community members all depend on the sustainability of the fishery for their survival, so norms and rules support and reinforce social behavior that sustains the fishery. Norms are enforced primarily through peer pressure, and anyone violating them is subject to group sanctions. Gang members and their families are wedded, in a sense, to the resource and to each other through a common bond of shared ownership and responsibility. The lobster gangs have evolved what might be called an “ownership culture.”

Researchers have also found through controlled common-pool resource experiments that subjects, when empowered to freely and anonymously harvest from an abundant resource, took as much as they needed as long as the resource was continually replenished (Kramer and Brewer 1984; 1986). When experimenters allowed the resource to slowly deplete, however, subjects began hoarding the remaining supplies, resulting in a more rapidly depleted supply of goods. But when the researchers introduced a unifying element into the experiment, in this case a common identity as resource-dependent users, subjects voluntarily limited their consumption of the resource in order to accommodate other users. As with the lobster gangs, subjects were able to self-regulate their behavior and the tragedy was averted. Unlike the Maine example, however, subjects did not know each other, they did not interact, they had no rational reason to trust or distrust each other, and, finally, they were unencumbered by rules and standards. They could have fully exploited the resource without consequence. That they did not is testament to the significance of one of the more important but commonly overlooked factors of both the experimental groups and the lobster gangs—their common resource-dependent identities. What grew from a common identity was a degree of empathy and concern for other users and a self-imposed willingness—an unspoken social contract—to leave some of the resource in place (Kramer and Brewer 1984; 1986). More recent experimental and field research has confirmed the importance of common identity in enhancing cooperative and societally based behavior in common-pool resource dilemmas (Kollock 1998; Kramer and Goldman 1995; Tyler and Degoe 1995; Van Vugt 2001; Wit and Kerr 2002).

The lobster gangs (Acheson 1988; 2003), the research experiments already described (Kramer and Brewer 1984; 1986), and numerous empirical studies of common-pool resources (Agrawal 2002; Ostrom 1990), offer examples of resource dilemmas involving multiple yet similar users competing for a one-dimensional resource, such as a fishery or groundwater supply. However, most commons dilemmas facing natural resource managers today involve individuals and groups that value the resource quite differently from each other. I refer to these as “multiple-value” commons dilemmas and argue that they present new challenges for natural resource managers. Multiple-use controversies on public lands are essentially multiple value commons dilemmas.

Are there examples of multiple value commons situations in which tragedies have been averted? While they are a relatively recent phenomenon, the movement toward collaborative resource management is, I believe, a significant attempt to manage such dilemmas. And while it is too early to tell whether collaborative groups will be successful at sustainably managing complex resources and ecosystems over the long term, there is growing evidence suggesting that collaborative processes hold this promise (Bernard and Young 1997; Cestaro 1999; Wondolleck and Yaffee 2000).

Before delving more deeply into the role collaboration plays in the process of averting the tragedy, however, let me describe one of the more important psychological dynamics that I believe inadvertently supports our compliance culture and why I argue that collaboration is unique among decision-making processes in altering this dynamic.

Paradoxical Splitting and Disowning

Why do we migrate toward compliance rather than shared ownership? Why, given our desire for others to feel a sense of ownership of our problems, do we find it so difficult to share in the ownership of their problems? The answers, of course, are complex, especially when the issues others are trying to “ripen” create conflicts of interest for us. By accepting someone’s view of the problem, we often believe we have to negate our own view, our own actions, and, in many cases, our own beliefs. For many of us, acknowledging the larger problem is akin to denouncing our own identity and being. A less stressful approach is to disown responsibility for the larger problem while grudgingly complying with the rules and procedures that are forced on us.

Interestingly, psychologists and anthropologists believe that we do this, in part, from a difficulty in managing life’s inherent paradoxes (Smith and Berg 1997). Paradoxes, they argue, are quite prevalent in collective life and by their very nature raise conflict. Paradox is defined in the *American College Dictionary* (1960) as “a statement or proposition, seemingly self-contradictory or absurd, and yet explicable as expressing a truth.” A classic paradox is one that contains statements or propositions that alone are not problematic but taken together create a “strange loop” that cannot be resolved to our satisfaction, such as:

“The following sentence is true.”

“The preceding sentence is false.”

As we explore the strange looping quality of paradox, our minds try to separate the contradictory parts. However, as Smith and Berg note (1997, 14), the more that individuals seek to “pull the contradictions apart, to separate them so that they will not be experienced as contradictory, the more enmeshed they become in the

self-referential binds of paradox.” Indeed, paradox can be debilitating. But as Smith and Berg passionately state (1997), paradox can also be releasing:

We stand in turmoil of contradictions without having the faintest idea how to handle them: Law/Freedom; Rich/Poor; Right/Left; Love/Hate—the list seems endless. Paradox lives and moves in this realm; it is the art of balancing opposites in such a way that they do not cancel each other out but shoot sparks of light across their points of polarity. It looks at our desperate either/ors and tells us they are really both/ands—that life is larger than any of our concepts and can, if we let it, embrace our contradictions. (p. 3)

Paradox, I argue, is prevalent in natural resource management scenarios, especially on public lands where multiple-use mandates bring them to the surface (Cortner and Moote 1999; Lange 2001). Environmental mediators encounter paradoxical tensions regularly and recognize them in the way disputing parties each convey, usually ad nauseum, opposite sides of a legitimate two-sided argument. Two examples of debilitating paradox from Colorado help clarify this point. The first occurs east of I-25, the north–south interstate highway that bisects the state. The paradox heard most often is a wildlife management paradox on private land:

“The wildlife belongs to all the people.”

“The land belongs to me.”

Both statements are true and yet when put together in the context of natural resource management they appear contradictory. The second paradox occurs west of I-25 and is a livestock management paradox on public land:

“The land belongs to all the people.”

“The cattle belong to me.”

Again, in the context of natural resource management both statements are true. Both are rights-based paradoxes that cannot be easily separated. In fact, it can be argued that the conflicts exist precisely because of the contradictory nature of the issues. Because paradoxes are so debilitating, what most of us do when we encounter them is negate one of the halves. We do this through the psychological process of “splitting,” where we compartmentalize one part of the paradox (Smith and Berg 1997). By splitting it off we can disown it, for the time being. In the Colorado examples, the paradoxical nature of the issues causes the parties to split the paradox in half and focus on the part that best represents their values and beliefs in the existing context. Smith and Berg (1997, 61) argue that when we experience “*both* the contradictory, opposing forces and the connections between them, the simultaneous experience traps us in the circularity of paradox.” Since the contradictions are usually more salient than the connections, our response is to “sever the connections,” thereby splitting the contradictory forces. Splitting thus “frees us from the paradoxical experience but transforms paradox into conflict” (p. 61). The parties then endlessly debate the contradictions, without discovering the interconnected problem.

Splitting also enables us to compartmentalize roles and responsibilities that might otherwise create contradictions. Such roles and responsibilities form the basis of our identities (Stets and Burke 2000) and are fiercely maintained. For example, splitting often results in role separation within spousal and familial relationships, where the division of labor is commonly divided along traditional lines between “men’s work” and “women’s work.” Similarly, in the Colorado rights-based

paradoxes just described, roles and identities become solidly associated with each of the halves. Thus, ranchers traditionally carry one of the halves while environmentalists carry the other. Each can now conveniently disown responsibility for the other half. Importantly, however, severing part of the paradox does not mean that the individual does not value the work entailed in maintaining the contradictory part. In fact, a component of much inherent paradox lies in the understanding that both dimensions are valued, although differently. In many situations, as Smith and Berg argue and as families intuitively understand, “the parts take on different roles that together make a whole” (p. 76).

There are obvious examples of paradoxical tensions, and splitting, among the diverse and disparate users of natural resources. When a timber industry executive, for example, remarks that he is responsible only to the company’s shareholders, he is arguably severing the paradox—the contradiction—of balancing economic gain with social and environmental responsibility. When an environmental spokesperson tells us that the organization’s mission does not include a concern for community economic stability, she is arguably severing the paradox of balancing environmental health and social and economic well-being. When a local public official comments that she is concerned primarily with jobs and economic development, she is arguably severing the paradox of balancing economic growth and environmental protection. And when a federal official states that his agency adheres to all federal laws but is strongly aligned with some laws and not others, he is arguably severing the paradox of balancing the contradictions inherent in public policies.

On the Missouri River, for example, the Army Corps of Engineers and the U.S. Fish and Wildlife Service are engaged in managing the paradoxical tensions inherent in balancing economic development and resource protection. The Corps of Engineers, mandated to maintain navigability under the River and Harbors Act, manages the river primarily for barge transportation, motorized recreation, and flood control. The Fish and Wildlife Service, mandated to maintain biodiversity pursuant to the Endangered Species Act, focuses primarily on species recovery and habitat protection. While both agencies are charged with adhering to *all* federal laws and policies, each accepts only part of the paradox, while severing the contradictory part. Moreover, organizational identities and cultures are strongly tied to each mandate. As a result, the Corps of Engineers demonstrates a strong sense of *ownership* of the River and Harbors Act mandate but *complies* (many would say reluctantly) with the Endangered Species Act. Fish and Wildlife demonstrates a strong sense of *ownership* of the Endangered Species Act mandate and lets the Corps of Engineers worry about navigation. Splitting has engendered little sense of shared ownership of the larger problem of managing this complex and dynamic ecosystem.

The not-so-subtle message being conveyed in each of these examples is that the contradictory part of the paradox is now someone else’s problem, not ours. We are, at best, asking someone else to own it for us and, at worst, denying its existence. According to Smith and Berg (1997), we are unable to focus on the larger problem precisely because it contains a paradoxical tension that we wish to avoid. Splitting, therefore, prevents shared ownership of complex social and environmental problems from emerging.

Restoring the Paradox

It may be fairly obvious what this has to do with collaboration. Collaboration, I argue, is superior to other problem-solving processes in its ability to foster shared

ownership. Why? There are several reasons why this is true, but the most salient is that collaboration enables the inherent paradox to be restored and managed. If public problems are inherently paradoxical, and if our tendency is to sever the paradox to avoid its “loopiness,” then in order to effectively manage paradoxes we must first put them back together. Because of our tendency to own parts of the paradox, while disowning other parts, it makes sense to bring people together who individually carry the various parts. Only then, it appears, do we stand a chance of making paradoxes salient to participants and working through the arduous process of addressing the contradictions.

By contrast, noncollaborative processes do not deal with inherent paradoxes. Instead, they inadvertently continue to sever them, first by failing to recognize their interconnected contradictions and second by dealing with them solely as competing interests and values. In fact, noncollaborative processes unknowingly perpetuate the very same splitting that we engage in as individuals. When they favor our own interests and predominant values, such processes appear just. When they do not favor our interests and predominant values, however, the same processes usually feel quite unjust. In fact, we often feel betrayed by them.

Groups that deal effectively with paradoxes, researchers have found, have stopped trying to sever them and simply accept and embrace them (Smith and Berg 1997). Without this acceptance, group members get stuck playing out the contradictory halves. Their conversations sound very much like variations on the ones described earlier:

“The land belongs to all the people.”

“The cattle belong to me.”

“The land belongs to all the people.”

“The cattle belong to me.”

And so on. As an example, several years ago the author, a practicing environmental mediator, facilitated a number of meetings of the Vail Pass Task Force, a community-based group of motorized and nonmotorized recreational users of public land atop Colorado’s popular Vail Pass. The group was dealing with a classic multiple-value commons dilemma. The U.S. Forest Service manager working with the group was frustrated with what he observed as a repetitive debate—a clue that a paradox existed and splitting was occurring. Restoring the paradox lay in confronting and addressing the contradictions between motorized recreational activities (primarily snowmobilers) and the desire for solitude and an isolated wilderness experience (primarily cross-country skiers). Their debate went something like this:

“*We* have a right to use all the trails!”

“*We* have a right to solitude!”

Neither faction was willing to concede any ground or even acknowledge the merits of the other’s arguments. The group was clearly stuck in a strange loop and needed help.

The mediator’s challenge was to provide a “frame” so that task force members could begin to see the paradoxical nature of the problem. As Smith and Berg (1997) suggest, when a group is struggling with paradox, the discovery of the link between contradictory opposites provides a “reframing” of their inherent relationship. This reframing brings with it “new ways of ‘looking’ at the conflicts that have formed and the relationship between the two extremes” (p. 218). As such, reframing the Vail Pass conflict meant coaxing group members to accept the notion that the two sides of the paradox could, in fact, both be legitimate. If it were possible for all of them to, for

the moment, “hold” in their minds the idea that the contradictory statements were both legitimate, as were the users representing them, we might restore the paradox and move toward a sense of shared ownership of the larger problem. The paradox was reframed as an open-ended question:

“How can *we* satisfy multiple-use recreational objectives on Vail Pass while respecting needs for solitude and a wilderness experience?”

After some discussion, task force members were able to agree that this paradoxical statement was, in fact, the larger problem and agreed to work on it together. A noticeable shift in the group occurred as the paradox was restored and shared ownership emerged. The repetitive debate stopped and group members were ready to work on a collective problem. Importantly, and subtly, the problem statement also shifted group members’ identities from the “we” of separate and competing factions to the “we” of common resource-dependent users. Group members were able to make this shift because they were not required to negate their separate identities, which had been denied by the other faction in the act of splitting (Bryan in press).

While the Vail Pass Task Force needed help restoring the inherent paradox, many multiple-value collaborative groups have effectively managed paradoxes without outside help. The Quincy Library Group (QLG), a controversial community-based group in northern California, represents an example of how a community was able to restore and manage some paradoxes and not others. The principal paradox affecting resource-dependent communities and the U.S. Forest Service since the 1970s is in balancing community economic stability and forest ecological health within the context of changing national priorities. The inherent contradictions created by the paradox caused environmentalists, timber industry representatives, community leaders, and the Forest Service to engage in splitting off various parts of the paradox. The splitting was divisively framed as “jobs versus owls,” a destructive theme that was playing out in many parts of the Northwest. Unfortunately, the divisive framing prevented the factions from recognizing the paradoxical nature of the problem and, instead, perpetuated the splitting.

A few Quincy environmentalists did not believe the sides were inextricably opposed, however, and tried to frame the problem more inclusively (Bryan and Wondolleck 2003; Bryan in press). While they did not describe the problem as a paradox, they recognized the need to foster shared ownership of it. The statement that follows is typical of early attempts by local environmentalists to inclusively frame the problem:

“We know that for a complete solution to our common goals we need the wisdom of the people who have worked in the woods for the four generations that we have been logging Plumas County.”

At the time, however, industry, business, and political leaders did not accept the paradoxical nature of the problem and continued to disown its ecological imperatives. Statements such as the one that follows were made by many timber-industry sympathizers to sever contradictory components of the paradox (as well as negate identities):

“The Forest Service now has deemphasized the production of forest products in favor of the preservation policies of a vocal minority. Jobs are being sacrificed for visual constraints and nonmotorized semiprivate recreation areas.”

As the timber economy declined, community leaders and timber-industry executives reluctantly approached local environmentalists with a proposal to resurrect a forest plan environmentalists had previously put forth (Bryan and Wondolleck 2003; Colburn 2002). Archenemies, environmental and timber industry leaders worked across ideological boundaries to successfully restore the forest management paradox facing the Northwest, and committed to work together to “promote the objectives of forest health, ecological integrity, adequate timber supply, and local economic stability.”

Locally, shared ownership of the larger problem began to emerge. However, that is only part of the story. The paradoxical nature of the problem was not recognized or accepted by all of the actors. National environmental organizations and a few local environmentalists continued to view the issues as contradictory and competing. So did the US Forest Service, which had been excluded from planning but was expected to implement the solution. Environmentalists predominantly outside the local community and many Forest Service managers continued to disown the idea that community economic stability, while relevant, was a shared responsibility. As a Forest Service official remarked, “This is a national forest, not a community forest. I’ve got a little problem with you telling me the Forest Service owes this community a living.” Environmentalists, for their part, focused on the forests as a national and not local asset, thus negating local economic realities: “We’re talking about public land. All citizens have a stake in how it is managed.”

QLG, for its part, failed to garner a sense of shared ownership within the Forest Service. Rather than a necessary participant, the Forest Service emerged as a common enemy, thus helping to bind the group:

“We can’t get [officials of] the Plumas National Forest to do anything but talk. They ought to change their name to the US Lip Service. I’m hoping it’s only local ineptness. But if it’s not, owls versus jobs was never the problem.”

While QLG was successful in managing some paradoxical tensions and not others, numerous collaborative resource management groups throughout the United States offer useful examples of attempts to restore and manage paradoxes (Bernard and Young 1997; Cestaro 1999; Wondolleck and Yaffee 2000). The Applegate Partnership in southern Oregon is attempting to manage the paradoxical tensions surrounding economic, social, and ecological sustainability. Members are experimenting in the greater challenge of trying to create an economy that supports rather than destroys the region’s ecology. The Everglades Restoration Project in south Florida is attempting to manage the paradoxical tensions surrounding the restoration of complex hydrologic conditions and a functioning ecosystem that many of the same agencies historically worked to alter. The Malpai Borderlands Group in southern New Mexico is struggling with the paradox of maintaining a viable grazing economy and ranching culture while respecting the integrity of the arid ecosystem and its unique species. Group members are sharing ownership of the social and ecological realities—the paradox of a “working wilderness” (Cash 2001). The group’s mission captures the paradoxical tensions contained in the larger problem they have come to share:

“Our goal is to restore and maintain the natural processes that create and protect a healthy, unfragmented landscape to support a diverse, flourishing, community of human, plant, and animal life in our Borderlands Region.

Together we will accomplish this by working to encourage profitable ranching and other traditional livelihoods, which will sustain the open space nature of our land for generations to come.”

In each of these examples, as well as those already described, what emerged among participants are common identities that are intertwined with the resource itself. One clue to this is that, with the exception of the Quincy Library Group (named after the library where they meet), the groups consciously define themselves in resource-based terms. While this trait may seem obvious and perhaps trivial, a common resource-based identity may actually aid in the group’s ability to identify, restore, and manage the inherent paradox. Social psychology research offers two important explanations: The first suggests that intergroup conflict can be resolved when conflicting factions discover an overarching “superordinate goal” that requires their collaboration (Sherif et al. 1961). The second suggests that a precursor to the identification of a superordinate goal is the adoption, even subconsciously, of an overarching “superordinate identity” that is linked to the goal (Brewer 2000). I argue that the group’s ability to identify and restore its paradox, a type of superordinate goal, is tied to the discovery of a common or superordinate identity, which is intertwined with the resource (Bryan in press). Collaboration is therefore the result of the implicit or explicit recognition that “in spite of *our* differences, *we* are all in this together.”

The Paradox of Leadership

While it is too early to tell whether collaborative groups will achieve long-term sustainable outcomes, the groups described earlier; as well as dozens of others, appear to be restoring and managing inherent paradoxes and fostering shared ownership of their larger and more complex problems (Wondolleck and Yaffee 2000). There is still something missing however. Given our tendency to avoid paradoxical tensions by severing contradictory parts, how do people who represent the severed parts (and who may be embroiled in intractable conflict) get together? I argue that it is precisely the role of leaders to confront interconnected contradictions, restore paradoxes, and manage the tensions they create. Not surprisingly, however, many of our current leaders are actively engaged in splitting and do not see the paradoxical nature of the problems.

A related and compounding dimension of this dilemma is that it is also human nature to turn to institutions and their leaders to solve our problems, especially in times of stress and crisis (Heifetz 1994). Most of us, however, turn to the institutions that support our dominant values. Ranchers turn to sympathetic legislators, county government, and cattlemen’s associations. Environmentalists turn to the courts, sympathetic federal agencies, and environmental organizations. And so on. What we are often looking for, and find, are leaders who willingly tell us what we want to hear—that the problems we face are simple and/or technical in nature, that others are to blame, and that they do not require *us* to change (Heifetz 1994). Thus, conventional leaders often play a dysfunctional role in perpetuating paradoxical splitting. Heifetz’s argument is reinforced in a 1971 speech on politics and morality by Arizona Congressman Morris Udall (Udall 1971). While Udall emphasized the moral failure of leaders, he placed some of the blame on citizens:

It seems to me that what people often look for in leaders are men who will not exercise leadership—men who will give us oversimplified answers, who will justify existing ways, who will castigate our enemies, vindicate self-ishness and make us comfortable with our prejudices. Some people, in the words of Sidney Harris, seek leaders which “reconcile the irreconcilable, moralize the immoral, rationalize the irrational and promise us a society where we can continue to be as narrow and envious and shortsighted as we like without suffering the consequences.”

Can this pattern be broken? Research suggests that the pattern can be broken when leaders emerge who are willing, often at great risk, to step across ideological boundaries and foster deliberative processes that directly confront interconnected contradictions (Bernard and Young 1997; Cestaro 1999; Wondolleck and Yaffee 2000). What is unique among these leaders, it appears, is their ability to instill a sense of shared ownership in others by reframing problems in language that captures the paradoxical tensions that tend to accompany such problems. I argue that shared ownership is conveyed, often subtly, in the language such leaders use to frame paradoxical problems. When prominent rancher Bill McDonald of the Malpai Borderlands Group laments, “We’d gotten awfully good at knowing what we were against, and decided it was time to figure out what we were for,” he is conveying a sense of shared ownership of the larger problem. When former federal Range Conservationist Su Rolle of the Applegate Partnership reveals, “I can never go back to seeing the role of the federal agency in the same way, that just because I’m the Ranger, I’m in charge,” she is conveying a sense of shared ownership. And when environmentalist Michael Jackson of the Quincy Library Group comments, “These are my neighbors. My heart does not bleed for Sierra Pacific Industries, but bleeds for the folks getting \$12 an hour who don’t have alternatives for work,” he is also conveying the language of shared ownership. In each of these examples, problems are reframed in ways that enlarge and complexify issues rather than reduce and simplify, that embrace contradictions rather than deny them, and that open doors to collaboration rather than close them. In this way, leaders are enacting shared ownership.

The Path

Collaboration appears to hold promise for fostering shared ownership of our larger social and environmental problems, thus averting the tragedy. However, skeptics of collaboration abound. Skeptics have attacked such processes on several grounds, including that they are an abdication of government authority, that they are not accountable to public and scientific review processes, that they lack scientific rigor and expertise, and that they are fundamentally undemocratic (Coggins 2001; McCloskey 1996). As mentioned earlier; decision-making processes that contain these characteristics should be avoided, not only because they are illegal but also because they do not foster the goal of shared ownership. However, while collaborative processes can be manipulated toward these ends, they are generally immune from such shenanigans provided they are held accountable not only to those inside collaborative groups but, more importantly, to those outside such groups. Thus, collectively assuring that collaborative processes are accountable is also a dimension of shared ownership.

Moreover, to properly consider and evaluate collaboration, we must also ask the question, “As compared to what?” So the question is not “Can this be

accomplished without flaw?” but rather “Is this better than our alternatives, and can we make it better?” How does collaboration compare with other decision-making processes? What is the baseline against which we should be comparing it with its alternatives? When we compare collaboration with conventional decision-making processes, we do not have to look far to find key differences. First, laws, regulations, and procedures, while providing control, often restrict, limit, and constrain public involvement in agency decision making. In fact, for many they lack accountability, since it is not always obvious how decisions are made or whether they are scientifically defensible. For those who feel disenfranchised by administrative procedures, lack easy access to the courts or appeal processes, or lack the expertise to understand complex issues, conventional processes are unjust. Conventional decision-making processes also often lead to win/lose outcomes and miss opportunities to gather indigenous and experiential knowledge. They do not lend themselves to uncertainty, learning, or adaptation, since outcomes are frozen by legal and administrative procedures. Conventional processes often lead to impasse and gridlock as decisions are appealed and litigated (Wondolleck and Yaffee 2000). Finally, as I have argued here, conventional processes do not foster shared ownership of the larger problem—the inevitable tragedy—but instead feed a less-than-optimal compliance culture focused on rule adherence. Collaboration effectively addresses each of these points. And while it is not a flawless system, it offers a significant and important improvement over conventional processes without sacrificing or replacing them.

My premise throughout this article has been to argue that thoughtful collaboration provides a promising path to restoring inherent paradoxes, which, when effectively managed, leads to shared ownership of our larger social and environmental problems. Shared ownership, and the social contract that accompanies it, appears to provide an important key to averting the inevitable tragedies of the commons we all face. Unfortunately, since we have long interpreted Hardin’s tragedy as a problem in need of either a regulatory or market-based fix, we have responded with what is perceived by many resource users as a system of “arbitrary decisions of distant and irresponsible bureaucrats” (Hardin 1968, 1247). This is not an indictment of that system, nor is it an indictment of the responsible resource managers who work within that system. For reasons of efficiency, and because our political and policymaking processes require it, we now have firmly in place a system of strict compliance-based decision-making processes. Like Civil Rights laws, they represent significant progress. Paradoxically, they also enable collaboration to occur by balancing power among participants, leveling the playing field, and providing alternatives when collaborative approaches fall short, which they will.

However, compliance and a compliance culture should not be our ultimate goal. Laws, regulations, and procedures should serve as sideboards that guide and constrain decision making. They need not be relaxed, replaced, or bypassed. They have a specific purpose, backed by strong public opinion. But if we desire a culture of shared ownership, evidence suggests that we need to look beyond the laws and regulations, and toward accountable collaborative processes. In light of such evidence, the argument that “a far better balance will be achieved if only legislators will legislate, judges will judge, and managers would manage in accordance with the law” is misinformed (Coggins 2001, 171). Even if they could do so seamlessly, research suggests that significant opportunities would be lost.

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