

Examining the Influence of Positionality in Evaluating Collaborative Progress in Natural Resource Management: Reflections of an Academic and a Practitioner

Antony S. Cheng^a  and Tammy Randall-Parker^b

^aDepartment of Forest and Rangeland Stewardship, Colorado State University, Fort Collins, CO, USA;

^bUSDA Forest Service, Montrose, CO, USA

ABSTRACT

In this paper, we present a reflexive examination of how and why we, an academic and a practitioner, arrive at different evaluations of collaborative progress in natural resource management. We situate this examination in our long-standing involvement in designing, adaptively managing, and participating in the Uncompahgre Plateau collaborative forest restoration project in western Colorado, USA. Drawing on the concept of “positionality” in qualitative social science research, we disclose our respective motivations, assumptions, roles, and power relative to the collaborative process. The differences in evaluating collaborative progress stem from our respective professional positionality. For the academic, the guiding interest was to test theory and promote success for his applied research institute; for the practitioner, the motivation was to build trust to allow her field staff the flexibility to implement management actions and demonstrate effectiveness as an agency line officer. These epistemological differences draw attention to the importance of transdisciplinary approaches to producing knowledge from shared practice, starting with efforts to explicitly disclose and honor differing interests, assumptions, and frames of reference stemming from each party’s personal and professional biographies and institutional norms. This reflexivity is essential to advancing knowledge about collaboration in natural resource management.

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Introduction

In fall 2007, a group composed of U.S. Forest Service (USFS) personnel, environmentalists, natural resource users (e.g., forest industry, motorized and nonmotorized recreation, livestock grazing permittees), local community residents, and academics came together to collaboratively develop a restoration strategy to reduce wildfire risk to, and restore the resilience of, national forest lands managed by the USFS on the Uncompahgre Plateau in western Colorado. Over the next 9 years, the collaborative’s structure, composition, and functioning evolved, as planning transitioned into implementing and monitoring on-the-ground projects, participation turned over, and the project expanded due to the passage of new national-level policies aimed at increasing the pace and scale of forest restoration on lands managed by the USFS. We, the authors of this article, in addition to being active participants in the collaborative group since its earliest days, worked behind the scenes as members of a

CONTACT Antony S. Cheng  tony.cheng@colostate.edu  Department of Forest and Rangeland Stewardship, Colorado State University, 1472 Campus Delivery, Fort Collins, CO 80523-1472, USA.

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joint academic-practitioner team to design and adjust activities as the collaboration evolved. Through this behind-the-scenes process, we had to work through our differences in how we evaluated collaborative progress, in order to devise and adjust collaborative activities.

These differences are not unexpected, as academics and practitioners operate in different institutional environments and develop different types of knowledge and ways of knowing to evaluate project activities and outcomes (Macduff and Netting 2000; Roper 2002; Aram and Salipante 2003; Bartunek and Rynes 2014). However, these differences are rarely explored in an explicit manner, even though academics and practitioners frequently work together to design, implement, and evaluate collaborative processes in natural resource management (e.g., Daniels and Walker 1996a, 1996b; Blatner et al. 2001; Cheng et al. 2008; Munoz-Erickson et al. 2010). In this article, we seek to inform researchers and practitioners working jointly on collaboration design and evaluation about why these differences occur and how they affect evaluations of collaboration success in natural resource management. Having an open dialogue between researchers and practitioners about the sources of these differences and ways to work through them can help minimize conflict and enhance collective understanding about the benefits and limitations of collaboration in natural resource management. We ground this examination in our experiences in the Uncompahgre Plateau forest restoration project in western Colorado. Specifically, we examine the ways in which our respective positionality relative to the collaborative process shaped how we, an academic and a practitioner, arrived at our evaluations as members of the behind-the-scenes process management team. Positionality refers to one's motivations, interests, and assumptions in a social situation, as well as the roles, identity, and power one exhibits relative to others in that situation (Finlay 2002; Mauthner and Doucet 2003). Positionality is invoked as a core aspect of qualitative social science research, with commentators calling on researchers to be reflexive with how their positionality affects research practice and the production of knowledge from research (Aram and Salipante 2003; Mauthner and Doucet 2003; Cunliffe 2004; Bourke 2014). Reflexivity is achieved through self-disclosure and explicit, critical examination of one's motivations, interests, assumptions, roles, identity, and power relative to the social situation under investigation. In this view, the researcher is not an impartial, objective observer, but is a subject within the social situation (Steier 1991; England 1994).

In this vein, what follows is not a conventional reporting of research results analyzing the factors affecting collaboration. Rather, we present in this article a reflexive examination of how our respective positionality influenced how each of us evaluated collaborative progress. In short, the "methods" are our respective personal reflections and disclosure of these attributes, with the "data" being the attributes of positionality. Beyond the specific context of the Uncompahgre Plateau collaborative forest restoration process, this reflexive examination is relevant to the ongoing challenges of evaluating collaborative natural resource management articulated by Conley and Moote (2003)—specifically, who is best placed to evaluate collaborative outcomes and the associated problems of objectivity vs. subjectivity in such evaluations. In doing so, we surface issues about the tension between objectivity and subjectivity in evaluative assessments of collaboration, and highlight the complexities associated with joint academic-practitioner projects to design and implement decision-making processes for natural resource management. This reflexive account mirrors reflexivity practices in other fields, such as organizational management (Gherardi 2000; Cunliffe 2004), public health (Finlay 2002), and sociology (Mauthner and Doucet 2003). After describing the context of collaborative forest restoration on the Uncompahgre

Plateau, we present our reflexive examination in two segments: First, we disclose our respective motivations, interests, and assumptions concerning the collaborative process; second, we describe our respective roles, identity, and power relative to the collaborative participants. In each segment, we highlight examples of how our positionality operated as a lens through which we developed knowledge about collaborative progress.

Setting the Context: Collaborative Forest Restoration on the Uncompahgre Plateau

The Uncompahgre Plateau (UP) is a tilted fault block in western Colorado encompassing approximately 700,700 hectares (ha) (Figure 1). Approximately 56% of the land area is managed by the USFS. The remaining land ownership is divided into 25% federal land managed by the U.S. Bureau of Land Management, 18% private land, and 1% state trust lands managed by the Colorado Division of Parks & Wildlife.

Beginning in the early 1990s, scientists and managers grew concerned about the consequence of historic land uses (e.g., logging, grazing) and fire suppression on the UP's ecosystem vulnerability to undesirable changes. While there existed a broad consensus among natural resource managers, scientists, user groups, conservationists, and community residents regarding the need for restoration across the UP, especially in low-elevation forest types, missing were the details of where restoration actions should occur, what restoration actually looks like, and what restoration should accomplish. During a prior assessment process examining ecosystem vulnerabilities of the Uncompahgre Plateau (Cheng 2006), environmentalists in particular were wary of USFS proposals to cut

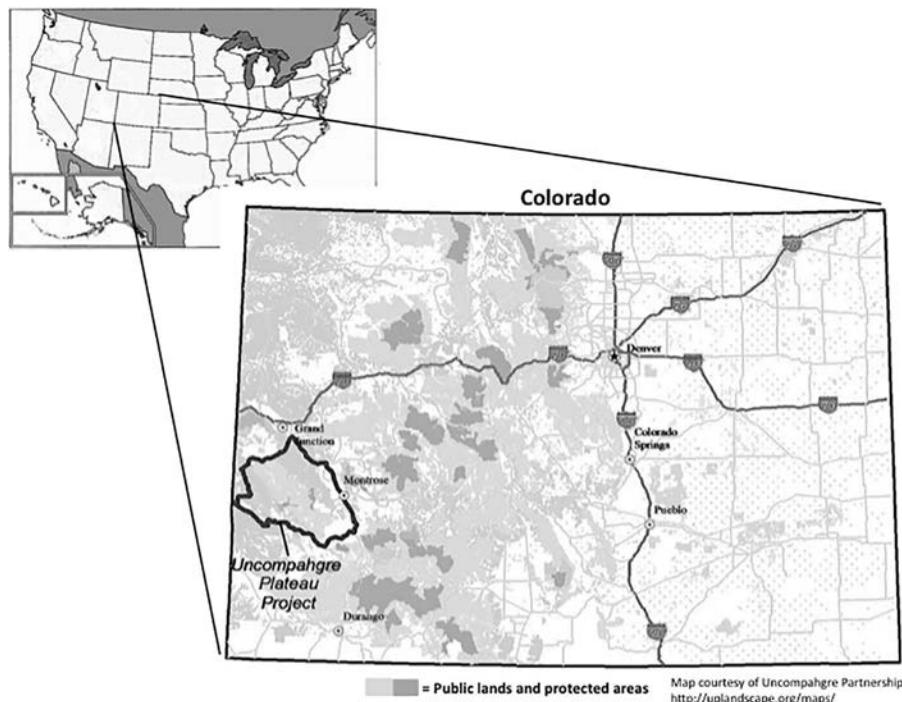


Figure 1. Location of the Uncompahgre Plateau in Western Colorado, USA.

trees—an activity they had fought hard to curtail both on the Uncompahgre and across all national forest lands. Resource users and community leaders were concerned with the decline of forest health and threats from wildfires and also advocated for aggressive timber harvesting to support local mills and forest industry employment. The USFS knew forest vegetation management actions were needed to reduce the vulnerability of forest loss to wildfires, but lacked sufficient stakeholder trust and local science-based details to proceed on its own. A small pilot restoration project was conducted in 2004–2005 to reduce the density of forest vegetation through mechanical removal of trees, but subsequent restoration plans failed to come to fruition.

In fall 2007, then-newly-arrived Ouray District Ranger Tammy Randall-Parker sought to initiate a restoration project covering 28,340 ha. Randall-Parker invited the various parties involved in the initial pilot project to create a collaborative process to resolve key sticking points. The process was convened and facilitated by the Uncompahgre Partnership, a not-for-profit, nongovernmental organization dedicated to addressing ecosystem restoration and management of the plateau. Randall-Parker also reached out to the Colorado Forest Restoration Institute (CFRI) at Colorado State University to provide collaboration and science support. The group spent nearly 6 months crafting goals for the forest restoration project, finalizing the document in July 2008. The process involved monthly meetings at the library of one of the local communities. The group agreed to scale back from the initial 28,340-ha proposal and focus on a smaller 6,900-ha area that came to be known as the Uncompahgre Mesas Forest Restoration Project. While these meetings were valuable for defining common goals, they did little to resolve the details of what restoration should look like and where actions should be applied. Practices developed by the Ecological Restoration Institute at Northern Arizona University (a sister institute to CFRI) had positive results in addressing these details by collecting local evidence of historic forest conditions that would be expected with natural fire regimes. Such evidence has been found to be useful for developing restoration goals and strategies (Fule, Covington, and Moore 1997; Larson and Churchill 2012).

Instead of marshaling a team of researchers and graduate students to collect and analyze data, and write scholarly journal articles on the results, CFRI then-director Dan Binkley and co-director Bill Romme,¹ with assistance from Doc Smith from the Ecological Restoration Institute, sought to engage the collaborators in a “citizen science” enterprise to gather and assess the data themselves to construct locally-relevant details. CFRI published a report on the results (CFRI 2008), describing the departure of current forest conditions from likely historic forest conditions and generating recommendations for restoration prescriptions—essentially, descriptive, quantitative guidelines for forest restoration actions. The report was vetted with the collaborative group, which, in turn, voiced support for the findings.

Using the report as a frame of reference, in February 2009, USFS personnel on the Ouray Ranger District created a Proposed Action document that described mechanical and hand harvesting of trees and prescribed burning (fires intentionally ignited by managers to achieve ecological and fire management objectives) intended to restore the forests of the Uncompahgre Mesas project area. After notifying the public of the proposal, the USFS personnel conducted public involvement scoping and environmental analysis processes pursuant to the National Environmental Policy Act requirements. The Decision Notice for the Uncompahgre Mesas Forest Restoration Project was signed in August 2009 by Randall-Parker. The Decision Notice approved commercial harvesting of up to 1,900 ha, noncommercial tree and brush removal of up to 1,200 ha, and prescribed burning of up to

5,700 ha. There were no appeals or lawsuits. While the USFS was proceeding with its formal environmental assessment, the collaborative set about developing a multiparty monitoring strategy with the facilitation of the Uncompahgre Partnership and technical assistance from CFRI and USFS specialists. In the summers of 2009 and 2010, field trips were conducted with stakeholders and local high school students to collect data on pretreatment forest conditions in order to compare posttreatment conditions with historical forest conditions.

In fall 2010, the Uncompahgre Plateau collaborative forest restoration project successfully applied for inclusion in the National Collaborative Forest Landscape Restoration Program (CFLRP), a competitive funding program administered by the U.S. Forest Service to support collaboratively developed forest restoration projects nationwide (Schultz, Jedd, and Beam 2012). The Uncompahgre project has received between \$430,000 and \$730,000 annually from fiscal year 2010 through 2016. To generate additional projects under the CFLRP, the USFS finalized the Escalante Forest Restoration and Stewardship Project encompassing 55,000 ha in May 2013. While the Escalante project planning process did not utilize the same intensive collaboration as for the Uncompahgre Mesas project, it incorporated the collaborative's goals and leveraged the knowledge generated by the historic forest reconstruction activity and involved many of the stakeholders in the Escalante project public involvement process.

Since 2011, the collaborative has met every February for an annual stakeholders' meeting to review and approve of the coming year's proposed forest management and monitoring activities. During this meeting, participants review and comment on the USFS's upcoming year's proposed projects based on the previous year's monitoring results, and make decisions about the upcoming year's monitoring projects and funding for monitoring. In the summer, the collaborative convenes for field trips to view, discuss, and debate the merits of management and monitoring results. As of spring 2016, nearly 5,500 ha had been subject to mechanical removal of trees and nearly 3,000 ha had prescribed fire applied between the Uncompahgre Mesas and Escalante projects.

Positionality and Its Influence in Evaluating Collaborative Progress

Whoever defines and evaluates collaborative progress inherently brings with them a positionality relative to the situation. With this as a starting point, we elaborate on our respective motivations, interests, and assumptions, as well as our respective roles, identity, and power relative to the collaborative process. Following each disclosure, we examine how our positionality affected our judgments about what constitutes collaborative progress using specific examples.

Tony Cheng is director of the Colorado Forest Restoration Institute (CFRI) at Colorado State University. CFRI was established in 2005 as an applied research and outreach program to develop, compile, and apply locally relevant science-based knowledge to advance forest restoration and wildfire hazard reduction goals in the western United States. In addition to directing the CFRI, Cheng has an academic appointment at a state university and has developed an applied research program on collaboration in resource management, including developing methods for monitoring and evaluating collaboration as it progresses over time. As part of this program, Cheng has worked with the USFS to design, facilitate, and evaluate collaborative efforts on the Grand Mesa, Uncompahgre, and Gunnison (GMUG) National Forest for over 15 years.



Tammy Randall-Parker is a district ranger with of the Ouray District of the GMUG National Forest. The Uncompahgre Mesas and Escalante projects fall within the boundaries of the Ouray District. As line officer with decision authority, Randall-Parker administers USFS personnel, financial, and technological resources to develop and achieve natural resource management goals on the Ouray District. Specifically, Randall-Parker makes decisions about the location and scope of proposed projects, assigns USFS staff to further develop proposal details and complete environmental impact analysis, makes final decisions about proposed actions, and allocates resources to implement projects. She is also responsible for external relations with various stakeholder groups, elected officials, and the general public, and is accountable to line officers above her in the USFS's hierarchy.

Motivations, Interests, and Assumptions

For Cheng, it was important to demonstrate positive impact and value to the USFS as a primary funder of CFRI; a landscape-scale restoration success story would improve the prospect of continued—and potentially expanded—financial support. At the inception of the project, CFRI had been in existence for about 3 years and had produced science synthesis documents concerning the historical ecology of Colorado's forest ecosystems. However, unlike the Ecological Restoration Institute (ERI) at Northern Arizona University, CFRI had not engaged in on-the-ground restoration project development and implementation, leading some USFS leadership and members of Colorado's congressional delegation to question the value of CFRI to advancing tangible outcomes. The need to demonstrate a success story—and to replicate this success elsewhere—was a strong motivation.

As an academic, the project also provided Cheng an opportunity to advance his research interests in collaborative forest governance and management. An opportunity to influence the design and implementation of collaboration is rare for academics in this topic; most research on collaborative natural resource management is conducted without direct intervention by researchers. A case study examining innovative approaches to collaborative forest restoration would help Cheng advance scholarship in natural resource collaboration, and enhance his publication record and standing as an expert in the field. Additionally, the project offered an opportunity to test theoretical concepts of collaborative governance and learning in a real-world setting.

For Randall-Parker, the project was an opportunity to replicate collaborative forest restoration approaches she was involved in when she worked for the USFS in northern Arizona and to build a foundation for a long-term program of forest restoration on the Ouray District and the GMUG National Forest. During Randall-Parker's time in northern Arizona, the USFS, local stakeholders, and the ERI at Northern Arizona University successfully established the Greater Flagstaff Forest Partnership, a multistakeholder collaborative effort to restructure forest conditions to reduce large, severe fires and restore natural fire regimes around the area of Flagstaff, AZ (Coughlan 2003). While there was a long history of collaboration between local community stakeholders and the USFS on the GMUG National Forest, there was yet to be an enduring program of work on forest restoration. A successful collaborative forest restoration project would benefit Randall-Parker professionally and the GMUG national forest organizationally.

Based on our different motivations and interests, we brought to our involvement different assumptions of what the collaboration would produce. The differences in our respective assumptions led us to varying conclusions about collaborative progress throughout our

participation. One example of this difference was our respective assumptions on the role of trust in collaboration. For Randall-Parker in particular, this was critical for her and her staff, as trust issues impede timely and efficient decision making and project implementation, and, more broadly, affects long-term relationships between the USFS and its constituencies. The communication, interactions, and relationships that develop between stakeholders and USFS personnel comprised a critical end in itself. This was not an immediate conclusion for Cheng, who was more interested in the collaborative process as an instrumental means to achieving agreement about, and implementing, forest restoration actions. For Cheng, trust is a mediating factor affecting agreement and implementation; it may be a necessary but not a sufficient condition to achieving on-the-ground forest restoration actions. If trust were developed between non-USFS participants and USFS personnel but no on-the-ground forest restoration projects were implemented, the collaboration would not be considered successful.

A second example related to the assumption that, through collaborative learning about and co-producing the ecological and economic bases underlying forest restoration, non-USFS participants would take a more active role in forest management decision making over the long term. For Cheng, this was an important assumption rooted in collaborative environmental governance theory, wherein participants who engage in co-producing knowledge, that is, who actively participate in framing questions, defining methods, collecting data, and interpreting results, become more empowered to influence management decisions (Armitage et al. 2009; Berkes 2009). Realizing this outcome would serve Cheng's interest in advancing academic theory and research in collaborative governance. From Randall-Parker's prior experience working in the southwestern United States, she referenced citizen science practices to collect historic forest information for the Greater Flagstaff Forest Partnership and multiparty monitoring in the New Mexico Collaborative Forest Restoration Program as essential for developing relationships and trust among stakeholders. She assumed similar approaches for the Uncompahgre forest restoration project would help build trust and ensure long-term stakeholder engagement and buy-in for the Uncompahgre Plateau forest restoration project and potentially other similar projects on the GMUG national forest.

In practice, the collaborative learning activities designed for the project resulted in two different outcomes. First, the citizen science activities to reconstruct historic forest conditions did lead to a broad consensus among participants about forest restoration goals and prescriptions; the Uncompahgre Mesas Forest Restoration Project decision was signed without controversy or objections. From both of our positions, our interests and assumptions about collaborative progress were met. However, stakeholder participation in ongoing multiparty assessment and monitoring of forest treatments decayed after only 2 years; collaborative participants eventually decided to let CFRI and USFS specialists conduct the monitoring over the subsequent years. On the one hand, Randall-Parker concluded that the participants had gained sufficient trust that what the USFS's forest restoration treatments were meeting the goals of the collaborative group; in this way, her interests and assumptions were met that the collaborative learning through multiparty monitoring built sufficient levels of trust. On the other hand, reality fell short of Cheng's assumptions that stakeholders would become vested in long-term multiparty monitoring in order to influence subsequent forest management decisions. That the monitoring program reverted to being an expert-driven activity marked a shortcoming in collaborative progress for Cheng. In light of our different motivations, interests, and assumptions, these examples illustrates our differences in how we defined collaborative progress.



Roles, Identity, and Power

Cheng's primary role in the Uncompahgre collaborative forest restoration effort is to participate in the process team to plan activities that advance collaborative learning, support the involvement of other scientists to provide science-based knowledge, and direct the forest vegetation and socioeconomic monitoring components of the multiparty monitoring plan. In his identity as an academic, Cheng has felt compelled to assume a somewhat distant role in the collaborative process in order to retain an air of objectivity and credibility. However, as director of CFRI, Cheng has a different role and identity tied to his motivations and interests that create a tension against this distance and objectivity. By participating in the collaborative process and working behind the scenes to shape the process, Cheng exerted influence on collaborative progress. Supporting the involvement of eminent university scientists that influenced the collaborative process has afforded Cheng a degree of power relative to other stakeholders. Cheng also has at his disposal CFRI staff with scientific and technical expertise to carry out the monitoring program, thereby giving him leverage in collaborative decisions concerning what to monitor and how much to fund the monitoring.

The tension in this dual role affects how Cheng evaluated collaborative progress. On the one hand, Cheng's role as an academic scientist places an expectation to not favor one outcome over another; critical analysis and reporting of both progress and shortcomings of the collaborative project comprise an important role and expectation. On the other hand, Cheng's role, identity, and power are colored by his motivations and interests in ensuring the Uncompahgre collaborative forest restoration project is successful. Being overly critical threatened the legitimacy of the project and CFRI's standing with the USFS and local stakeholders. To combat the tendency to be uncritical, Cheng has financially supported the involvement of scientists who have different perspectives about the need and scope of forest restoration, including a well-known skeptic of forest restoration. Injecting alternative viewpoints into the collaborative process has broadened Cheng's ability to critically examine his own motivations, interests, and assumptions about how collaborative progress in forest restoration is evaluated.

Central to Randall-Parker's role, identity, and power relative to the collaborative process is being a USFS line officer. This a privileged position, as it is invested with discretionary authority and power over decisions pertaining to the collaborative process and to on-the-ground management actions. Randall-Parker's position is threefold. First, she serves as a focal point for external public relations for the USFS. She creates the space and sets the stage for public engagement in USFS management planning and decision making by deciding the types and scope of decisions for which the public provides input, the timing and frequency of public engagement, how much information to provide to the public, and the extent to which she and her staff should incorporate public input into management decisions. Second, Randall-Parker is also a focal point for internal staff engagement in collaboration. In her identity as a leader, she exerts persuasive influence over staff to participate in and buy into the process, managing her staff's expectations and reservations about taking the time needed to foster collaboration. Third, as a line officer, Randall-Parker is part of an accountability chain within USFS, which places value on making timely decisions, meeting targets, collaborating with other line officers, and following direction from superiors. In this role, Randall-Parker must balance time demands associated with collaboration versus the demands on efficiency and meeting targets.

Similar to Cheng, the tensions placed on Randall-Parker's multiple roles are manifested in why and how she evaluated collaborative progress. Central to Randall-Parker's evaluation is the value she places on relationships. The potential for conflict and delays associated with large-scale forest restoration on the Uncompahgre Plateau necessitated that Randall-Parker use her role and power to foster positive, trusting relationships. Throughout the collaborative process, in order to get to on-the-ground action, Randall-Parker used her role, identity, and power as a line officer to foster and sustain relationships with collaborative participants, her staff, and her line officer peers and superiors. As on-the-ground actions are implemented, stakeholders, staff, fellow line officers, and superiors have been able to see the returns on her investments in the time needed to build relationships and trust. This feedback loop occurring over many years is Randall-Parker's knowledge basis for evaluating collaborative progress. This has implications for how collaborative progress is evaluated by both academics and practitioners, as on-the-ground results may take many years to realize.

Discussion

By participating in and working behind the scenes to shape the Uncompahgre Plateau collaborative forest restoration process, we were frequently forced to identify and debate our respective evaluations of collaborative progress. In this article, we present a highly personal, reflexive examination to expose the ways in which an academic's and a practitioner's motivations, interests, assumptions, roles, identity, and power influenced our respective evaluations. Such examinations are rare, but nevertheless have the potential to advance theory and practice of collaboration in natural resource management. Specifically, by surfacing and exploring the importance of positionality, we aim to illustrate the challenges associated with evaluating collaboration in natural resource management as noted in Conley and Moote (2003), and to the challenges confronting joint academic-practitioner collaboration in designing and adaptively managing collaborative processes in natural resource management.

On this first point, this examination demonstrates how our respective positionality biased the outcomes each of us looked for, acting as an evaluative screen through which the collaborative process was perceived and interpreted. As an academic, Cheng engaged in the process with an eye toward contributing to broader social scientific knowledge about collaborative environmental governance, and toward demonstrating the value of CFRI to university leadership, federal land management agency leadership, and elected officials. As decision authority in the USFS, Randall-Parker sought out evidence that community stakeholders were granting her and her staff a greater degree of trust to carry out an ambitious forest restoration project within a reasonable time frame. Taken together, our different positionalities created a tension between evaluating the collaborative process relative to general theories versus specific, immediate needs and demands.

While this point may seem obvious, it highlights epistemological issues associated with evaluations of collaboration in natural resource management that are rarely explored. We came to realize and appreciate our differences only after many behind-the-scenes discussions as we sought to adaptively manage the collaborative process. Explorations in other fields provide insight on how to bridge these epistemological issues, especially those involving academics and practitioners, through transdisciplinary knowledge production (Aram and Salipante 2003). This mode of interaction seeks to reconcile the academic's

aspiration to build general knowledge and theory and the practitioner's focus on resolving problems in specific situations through a shared commitment to joint interpretive activities. Essential to these activities is to explicitly disclose and honor differing interests, assumptions, and "interpretive schemes"—frames of reference stemming from each party's personal and professional biographies and institutional norms (Kuhn 2002; Aram and Salipante 2003; Hughes et al. 2011; Bartunek and Rynes 2014), similar to what we have done in this article. This critical examination of epistemological differences stemming from positionality mirrors reflexive practices in broader fields of management (Gherardi 2000; Cunliffe 2004). In assessing and evaluating collaborative progress, it is valuable for both academic and practitioner commentators to critically examine and disclose one's positionality relative to the collaborative group and process in order for others to fully appreciate the root sources of how and why knowledge is derived from various perspectives. Understanding these root sources can help address inevitable tensions arising from different perspectives of collaboration in natural resource management advanced by academics and practitioners.

Note

1. Cheng assumed CFRI directorship in summer 2008 and was in transition during this effort.

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ORCID

Antony S. Cheng  <http://orcid.org/0000-0002-0977-0381>

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