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INTRODUCTION

Why Do We Need to Open the Windows?

KATE SHERREN, DOUGLAS JACKSON-SMITH,
GLADMAN THONDHLANA, AND POLLY NGUYEN

What Is the State of Knowledge on Society and Natural Resources?

Over the last thirty years we have increasingly seen that the fate of the earth depends on understanding humans, their varied circumstances, and their complex striving. Over the same time period, the International Association of Society and Natural Resources (IASNR) has grown to become an important global (though predominantly English-language) interdisciplinary association for social science professionals who explore the relationships between people and working landscapes. While still dominated by North American members, the organization currently has members from more than forty-five nations—and newly created regional hubs for East/Southeast Asia and Europe are helping expand international perspectives. The kinds of questions IASNR members ask and the issues they focus on have also evolved with the times and in step with the organization's increasingly broad and diverse community of scholars, policy makers and practitioners. As IASNR's membership evolves, the organization has made efforts to better embrace cultural differences, power disparities,

and criticism of its historic North American biases. It has been like a breath of fresh air.

In late 2020, we were asked to lead this third decennial volume to bring together examples of recent work on natural resource social science (NRSS). IASNR has done this twice before, in 2004 and 2014, and each time it has produced a very different volume. What was produced at each moment in time tells an interesting story about our trajectory as an organization and field of study. The first decennial volume was released at the 10th International Symposium for Society and Resource Management (ISSRM, now called the IASNR Conference) in 2004, in the US Rocky Mountains (Manfredo et al. 2004). The editors of that volume titled their introductory chapter “Coming in from the Dark,” referencing the emergence of a systematic NRSS community of practice that focused on the central role of people in natural resource and land management. The trajectory they described (and the contributing author list) was anchored in the institutions, issues, and public lands of the United States (US). The thirty-one chapters were comprehensive but also somewhat siloed, a reflection of the disparate work of that era. Diversity was demonstrated by the impressively wide range of sectors and applications that fit into this still-emerging field. The authorship list included many of the best-known and established scholars in NRSS that often get tapped for such synthetic work.

The second decennial volume was released at the 20th ISSRM in 2014 in Hannover, Germany (Manfredo et al. 2014). That volume was inspired by the surge of intellectual energy around integrated social-ecological systems (SES) that had captured the imagination of social and natural sciences over the previous decade. Focused on presenting the state of the art of and potential for new theoretical and methodological approaches—such as interdisciplinarity, systems thinking, ecosystem services, and multi-scalar analysis—the book presented a roadmap to integrate SES approaches from across the social sciences to better represent human dimensions in models of coupled human-natural systems. Their preface was titled “AND not OR,” speaking to growing interest in multifunctionality and balance in landscapes and the need to simultaneously use *and* protect natural resources in a crowded world. This eleven-chapter 2014 volume was less retrospective and featured contributions from invited “leading authors,” including some non-US scholars. In this volume, diversity was represented through the different disciplinary

lenses applied to SES scholarship. The volume sought to draw together the disparate threads of this evolving field while allowing it to be more useful and commensurate with progress in the natural sciences.

In late 2020 when we got started with this volume, we each were grappling with the challenges of the COVID-19 pandemic, deeply affected by the Black Lives Matter and Decolonization movements and concerned about the lessons of this transformative moment in history for scholarship on NRSS. Antiracism and decolonization, as lenses, bring to the fore colonial processes that resulted in the oppression of people's minds, world-views, and knowledges as much as they disenfranchised them of their land and resources. In using these lenses, we become more conscious of and committed to addressing issues related to: (i) the impacts of colonial history, racism, classism, gender and inequality, and to avoid "othering" in how we think and do research; (ii) biases in thinking and in whose voices dominate and count; (iii) challenging the status quo and hegemonic and unjust discourses; and (iv) recognizing the value of greater inclusivity and cultural, embodied, and spiritual ways of seeing the world. We were thus guided by central questions of equity, power, privilege, social structure, and resilience; for instance, who has power and who doesn't in shaping research and the trajectory of natural resource transitions, and how do these imbalances propagate? Within NRSS scholarship and practice, we were struck by the energy and leadership on these topics from a younger generation of scholars and practitioners, and by the critical importance of perspectives from outside the dominant Western colonial, white, male academic community. The work that has emerged over the last decade marks a shift in the field toward a greater understanding of the diversity of lived experiences in relation to natural resources and increased attention to how to manage them justly.

In response, our call for contributions to this volume deliberately emphasized a desire to open the windows of NRSS to emerging scholars, perspectives, practices, and opportunities. In crafting the field of potential contributions, we solicited submissions from the community at large, rather than reaching out to authors in our own personal and professional networks. We provided a list of themes of particular interest (global voices, power and privilege, and relevance and impact), but adapted the organization of the final volume based on the mix of submissions. Readers looking for chapters

on particular topics will find that we didn't seek to generate a comprehensive tour of NRSS research activity. However, we felt that a volume focused on broadening the voices and perspectives on these pressing issues would be of most value at this time. In addition, our ethos has been one of equity of opportunity and diversity of representation, not just in the substance of the collection but in its editors and contributors. The invitation for proposals explicitly called for author teams that represented diversity in geographies, sectors, identities, and career stages. Most chapters are written by multiple authors with complementary perspectives: a solid majority are non-male, over a third are from non-US institutions, a fifth are from non-academic sectors, and many are early career, including more than a quarter who were graduate students at the time of writing. Authors are also of non-dominant genders and sexualities and Indigenous and non-white identities. Chapters also vary in length and purpose. Commentaries are the shortest, grounded in previous work but focused on making a well-framed argument for new directions for research and application in NRSS. Reviews are longer and are designed to synthesize and identify gaps in the current literature and to make a case for a future research agenda and practice. We hope that the final product is provocative and helpful and that it opens the windows even further to new ideas and voices within IASNR.

Opening Windows

Compared to previous volumes, this collection spends less time looking backward (to the "state of the field") and places more of a premium on creating a roadmap for the future. Most authors included a critical review of previous work but were encouraged to focus on the work that remains to be done. The four themes in which the following fifteen chapters are grouped were induced from the submissions themselves but are also conceptually overlapping and illustrative of the "fresh air" invigorating the field. Upon reflection, we recognized that these themes also reflect shifts in language, concepts, and methods we had observed in the scholarship published in our flagship journal *Society and Natural Resources* (SNR) over the last decade. Below we reflect on some of these trends, as indicated in the frequency with which different concepts appear in titles, abstracts, and keywords in SNR, and highlight their connections to the various contributions in this volume.

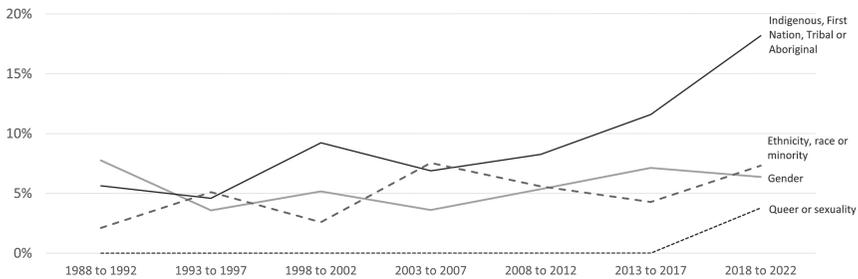


FIGURE 1.1. Selected diversity-related term use in *SNR* papers over time based on the proportion of papers in which the term is present in title, abstracts, and keywords.

Diversity and Justice

In the first decennial volume, the editors included among priorities of the young field, “diverse and local voices in natural resource decision making,” described later as moving “past mere public input to active participation” and “communities and collaboration” (Manfredo et al. 2004, 7). Attention to issues of diversity and justice are not new to the social sciences (indeed, they reflect key axes of theoretical reflection in classical sociology), but their application in the natural resource arena as reflected by scholarship in *SNR* has evolved over time (figure 1.1). Gender has been an ongoing interest to *SNR* authors but has yet to climb back up to where it started in *SNR*’s first five years, when it featured in over 8 percent of papers. *Ethnicity* has stayed relatively level as a keyword, but *queer/sexuality* only really received significant attention in the last five-year period, largely thanks to a special issue on sexuality in agriculture. Most dramatic is an increase in the use of terms such as *Indigenous* and *First Nation*, which appeared in almost 20 percent of publications between 2018 and 2020, reflecting a growing appetite for decolonial action within NRSS.

Our first set of chapters reflect the above patterns, both in substance and authorship, and demonstrates the energy and leadership that early career researchers bring to our field. It starts with a commentary by Mejía-Duwan and Hoffelmeyer (chapter 1) advocating for a “queer agroecology” because of the ways that productivist agriculture replicates inequity in access not only to food but to farming, and how embedded ideas of heterosexism also

dominate and degrade the ecosystem on which we all depend. Carter and Roesch-McNally (chapter 2) highlight the need for more intersectional analyses of gender and power within agricultural conservation research and programs. Using examples from US-based women in agriculture programs, they show positive outcomes including self-empowerment and conservation decision-making but also highlight the potential of replicating gender inequalities if gender is conceptualized as a simple demographic variable rather than one facet of a more complex system of exclusion. Schelhas et al. (chapter 3) present an overview of the recent empirical and theoretical work on the intersection of racial and ethnic identities and natural resource management that updates an earlier synthesis from twenty years earlier. The chapter points to the similarities *and differences* in how American Indian/Indigenous, Black, Asian American, and Latinx communities have intersected with natural resource systems and institutions in the United States. Finally, Andrews et al. (chapter 4) provide a perspective on the challenges of and need for building capacity for human dignity to support and empower NRSS researchers during their training and as they seek careers, so they can simultaneously pursue their goals and well-being. Among those challenges are overcoming unreasonably high workloads for emerging faculty (academic staff), limited budgets, unfamiliarity with NRSS, and organizational cultures. They highlight the concept of human dignity as central to meaningfulness, freedom, and health, and as a yardstick for equity and inclusion. They conclude by providing a framework for developing capacity for building human dignity. All four of these chapters not only speak to the importance of opening the windows to new voices and ideas but also provide specific tools and guidance for doing so.

Governance and Power

One of the most dramatic changes in the last decade of NRSS is the growing focus on the concept and approaches to governance. Since 2018 the term *governance* has been present in almost half of SNR titles, abstracts, and keywords (47%), up from 19 percent the five years before and almost nonexistent before 2000 (figure 1.2). Over the same period, use of the term *decision-making* has been relatively flat (roughly 10% of papers), while *power* has increased from about 4 percent of SNR papers before 2000 to 14 percent. These are

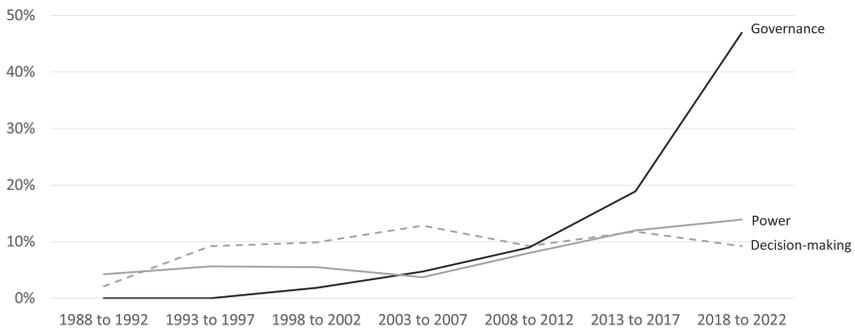


FIGURE 1.2. Selected governance and power term use in SNR papers over time based on the proportion of papers in which the term is present in title, abstracts, and keywords.

all indications that our language is shifting toward interrogating the mechanisms of decision-making, rather than taking those mechanisms as given and navigating them.

The chapters in the second section of the book dig deeply into issues of governance, power, and the way that specific policies or models of natural resource management play out for those most affected. Kestikalo (chapter 5) focuses on the role of theory in environmental change studies, particularly the importance of institutionally based perspectives in understanding how responses to emerging environmental issues should consider ways that existing systems already select and bias decision paths. She argues for a broader institutional perspective that views actors as formed, enabled, and constrained by the larger social systems in which they act. Thus, discussions of change must be informed by how institutional systems may be self-reinforcing and costly to change. Consistent with Keskitalo's call, Kiaka et al. (chapter 6) take a critical look at the community-based natural resource management (CBNRM) model that has come to dominate conservation in parts of Africa. Although CBNRM was designed to tackle poverty and marginalization, it has created opportunities for certain actors to benefit over others in the resulting commodification of natural resources. Understanding the mechanisms that keep this model so prominent is important when assessing its value. Finally, Sapkota et al. (chapter 7) use a relational lens to contrast government-community relationships for forest management in Nepal and Australia. They propose a four-part typology of relationships that

emphasizes the role of practice, problem framing, and worldview in shaping the ways in which community actors are involved in forest governance across diverse settings. These chapters triangulate upon the importance of examining our institutions as limiting mechanisms for achieving a just future.

Engagement and Elicitation

Keywords in *SNR* publications also reflect some interesting shifts in how we talk about our work with stakeholders and the public. IASNR was born in the US public land management context, where “human dimensions” specialists sought to understand the values, concerns, behaviors, and preferences of land managers, recreationalists, community leaders, and the public, with a significant focus on participatory methods to consult with them in natural resource decision-making. There has been a commensurate shift in terminology from *participation* and *collaboration* toward *engagement*, a trend we believe reflects greater appreciation of multiple knowledge systems including local and Indigenous knowledge and the value of two-way modes of communication (figure 1.3). The approaches used for such engagement have also become more diverse, with increasing attention to visual and digital methods.

The third section of this volume includes chapters that explore some of the emerging theoretical and methodological approaches that reflect our contemporary understanding of engagement and the importance of eliciting local or community knowledge and local control over natural resource management. When institutions fail, or are seen to fail, the public increasingly can turn to resistance rather than engagement in the modes made available by governments. Parkins (chapter 8) explores this by highlighting the diversity of ways that public participation is conceptualized and practiced, mapping out three distinct modes of scholarship on participatory environmental governance: (i) generative and relational pragmatic approaches rooted in trust-building, collaboration, and inclusive decision-making; (ii) critical approaches characterized by confrontation and debate; and (iii) more radical and activist approaches with resistance as a form of governance from the ground up. He stresses that each conceptualization has implications for how governance issues are understood and addressed and how public participation success is measured. Jadallah et al. (chapter 9) describe how early work on public or community engagement failed to appreciate the important power differentials between

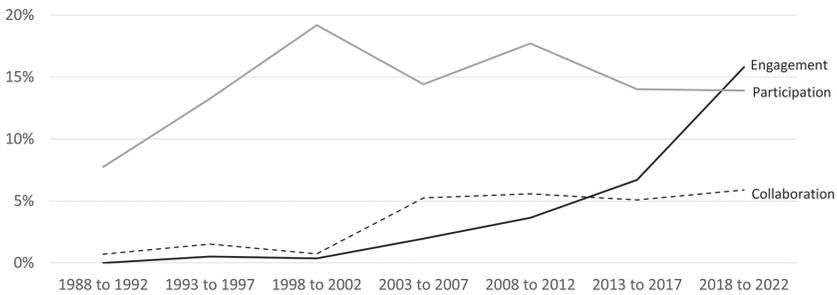


FIGURE 1.3. Selected engagement-related term use in SNR papers over time based on the proportion of papers in which the term is present in title, abstracts, and keywords.

decision-makers and the public, and between different groups within society. They challenge scholars working in this area to be more attentive to issues of power and privilege in their work. Whether the engagement techniques used are novel or long-established, Jadallah et al. remind us of the importance of designing participatory approaches that support individual and collective social learning processes, which offer more lasting and greater mutual value than simply social license to make resource-management decisions. Hafferty et al. (chapter 10) and Lamoureux et al. (chapter 11) provide critical reviews and conceptual frameworks that help us better understand how digital, visual, and arts-based methods are (or should be) deployed in NRSS. They point to the significant role of changes in communication technology, including the ubiquity of smartphones (and built-in cameras), artificial intelligence and cloud computing, and online collaborative technologies such as Zoom. Recognizing that a digital divide remains globally, these tools present both challenges and opportunities to shrink distances and empower new voices to improve engagement and elicitation of perspectives for decision-making. These chapters present important systematizations of established and emerging concepts and methods to inform the next decade of NRSS.

Relationships and Place

The way in which human relationships to nature and places have been conceptualized and discussed in NRSS scholarship has also evolved over time,

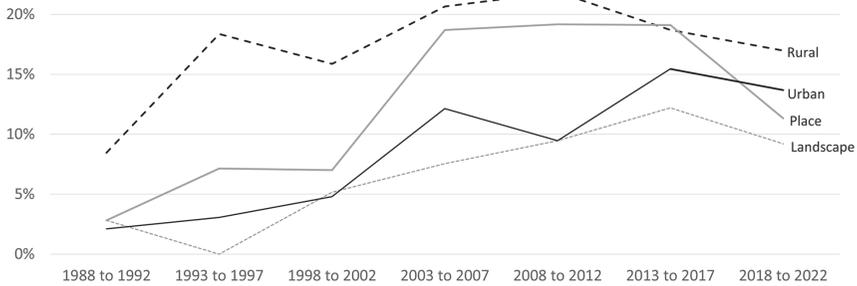


FIGURE 1.4. Selected place-related term use in SNR papers over time based on the proportion of papers in which the term is present in title, abstracts, and keywords.

consistent with the above transitions. While attention to the significance of place or local context in shaping human attitudes and behaviors around natural resources peaked a decade ago, attention to landscape-scale work has grown, and our collective scholarship has expanded to encompass more urban settings alongside traditional foci on pristine natural or rural areas (figure 1.4). While not yet captured in our search of SNR keywords, the contributions to this volume reflect a growing embrace of the concept of relationality, which often rejects a strict duality of humans and nature and instead focuses attention on the deep material, cultural, and spiritual relationships that link human and nonhuman actors in natural resource landscapes.

The last section of this volume presents work that challenges NRSS scholars to think more systematically and broadly about social science concepts and theories that link biophysical settings to human attitudes and behaviors toward the environment and natural resource management. Initially, Jones and Walton (chapter 12) provide a thorough review of the evolution of theoretical constructs used in the vast pro-environmental behavior literature. They organize this complex body of work into an integrated model aimed at being more adaptable to diverse communities, groups, settings, and contexts. Their work illustrates the culmination of decades of largely Global North scholarship on the individual and collective drivers of environmental concern and a look forward to how this area of research may become more inclusive. The rest of these authors in this section embrace a more relational approach in response to the legacies of colonization, oppression,

and exploitation that have defined much of our shared Western natural resource management theories and practices. West et al. (chapter 13) opine about the ways that our practices of theorizing need to change to deal with such responsibilities during the Anthropocene. They describe three ways to decolonize our knowledge practices to avoid strengthening the modernist practices that have fueled our current challenges: situating theory, practicing theory, and theorizing together. Cockburn et al. (chapter 14) problematize the concept of stewardship and highlight the specificity and role of place and culture in unpacking what it means to be a steward of natural resources. Williams and Miller (chapter 15) conclude the section by noting how dominant ideas of place in NRSS have (until recently) explicitly or implicitly privileged notions of stability in which human actors are rooted in familiar social and biophysical landscapes. Recognizing the rapid pace of global migration and change, as well as the arguments for de-centering humans in studies of place, the authors propose the metaphor of rhizomes as a preferred model to capture the nonlinear interconnections between human and nonhuman actors, linkages across both time and space, and the role of resilience and adaptation as a complement to permanence and stability.

Concluding Thoughts

We present with humility what we see as a fresh picture of a field in reflection and transition, that focuses on *how* we do what we do more than *what* we do (figure 1.5). Together, these chapters evidence an increasing willingness to question the foundations of our field to respond to the scale of challenges we collectively face. There are many connections between the sections, and the chapters could have been assembled in different ways. We chose the book sections based on the natural clusters we saw in the submissions—themselves undoubtedly influenced by the approach we took to encourage diversity in authorship—and in our own reflections on trends in our field. As a group, these chapters cross-cut the typical approach in IASNR to focus on different natural resource sectors (e.g., forestry, recreation, agriculture, energy) and instead present a suite of theoretical concepts, methods, and critiques of our shared practices that can be easily applied across multiple domains. Consistent with today's diversity discourse, the chapters also deploy their

