



Society & Natural Resources

An International Journal

ISSN: (Print) (Online) Journal homepage: <https://www.tandfonline.com/loi/usnr20>

Science for Success—A Conflict of Interest? Researcher Position and Reflexivity in Socio- Ecological Research for CBNRM in Namibia

Stasja Koot, Paul Hebinck & Sian Sullivan

To cite this article: Stasja Koot, Paul Hebinck & Sian Sullivan (2020): Science for Success—A Conflict of Interest? Researcher Position and Reflexivity in Socio-Ecological Research for CBNRM in Namibia, *Society & Natural Resources*, DOI: [10.1080/08941920.2020.1762953](https://doi.org/10.1080/08941920.2020.1762953)

To link to this article: <https://doi.org/10.1080/08941920.2020.1762953>



© 2020 The Author(s). Published with
license by Taylor & Francis Group, LLC.



Published online: 21 May 2020.



Submit your article to this journal



Article views: 1517



View related articles



View Crossmark data



Citing articles: 3 [View citing articles](#)

REVIEW ARTICLE

OPEN ACCESS



Science for Success—A Conflict of Interest? Researcher Position and Reflexivity in Socio-Ecological Research for CBNRM in Namibia

Stasja Koot^{a,b} , Paul Hebinck^{a,c} , and Sian Sullivan^d 

^aSociology of Development and Change, Wageningen University, Wageningen, the Netherlands;

^bDepartment of Geography, Environmental Management and Energy Studies, University of Johannesburg, Auckland Park, South Africa; ^cDepartment of Agricultural Economics and Extension, University of Fort Hare, Alice, South Africa; ^dResearch Centre for Environmental Humanities, Bath Spa University, Bath, United Kingdom

ABSTRACT

This paper emphasizes the importance of researcher position and reflexivity for professionals in the ecological and development sciences. We draw on critical discourse analysis (CDA) to analyze a selection of scientific papers written by Namibian Community-based Natural Resource Management (CBNRM) professionals and their relationships with public discourse regarding this conservation and development program. These papers mainly show "success" whilst disregarding "failure" of elements in the program that elsewhere are highly criticized (especially trophy hunting and ecotourism). In addition, they seem to disregard questions concerning researchers' conflicts of interest that bear on the papers' "objectivity." We argue that such positions beg more transparency and epistemological accountability. In particular, we propose greater disclosure and reflexivity regarding researcher positioning as an important methodological response for illuminating when and how researchers have an interest in specific outcomes of their research, so as to enhance interpretation of the knowledge produced by such research.

ARTICLE HISTORY

Received 4 October 2019

Accepted 23 April 2020

KEYWORDS

CBNRM; conflict of interest; critical discourse analysis; Namibia; objectivity; professionals; researcher position; reflexivity; methodology

Introduction

A recent debate on trophy hunting in the Letters section of *Science* turned in an interesting direction when the writers of the first letter, written by opponents of import bans on trophy hunting trophies (Dickman et al. 2019), were asked to provide information about their potential conflicts of interest after the journal received criticism about these scholars' researcher positions. Thus far, *Science* Letters had not asked authors to declare their conflicts of interests. In this case, four out of the five authors had financial links with trophy hunting groups, including the Dallas Safari Club and Safari Club International Foundation (together providing less than 1% of one of the authors' projects, the Ruaha Carnivore

CONTACT Stasja Koot  kootwork@gmail.com  Sociology of Development and Change, Wageningen University, Wageningen 6700 HB, the Netherlands; Department of Geography, Environmental Management and Energy Studies, University of Johannesburg, Auckland Park 2006, South Africa.

© 2020 The Author(s). Published with license by Taylor & Francis Group, LLC.

This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives License (<http://creativecommons.org/licenses/by-nc-nd/4.0/>), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way.

Project). The authors also work for, or are connected with, professional global conservation organizations such as the Indigenous and Community Conserved Areas (ICCA) Consortium and the Sustainable Use and Livelihoods Specialist Group (SULi) of the International Union for the Conservation of Nature (IUCN), which receives close to 5% of their funding from hunting-related sources (Berg 2019). In addition to these international organizations, authors work for smaller (national or local) initiatives, including the Ruaha Carnivore Project and the Namibian Association of CBNRM (Community-based Natural Resource Management) Support Organizations (NACSO) (Berg 2019) that actively promote trophy hunting as a source of income (NACSO 2020).

Science has now reconsidered its policy “to ensure that authors of Letters also make readers aware of financial and advisory competing interests” (Berg 2019, 874). In this paper we focus on CBNRM in Namibia to explore questions regarding such significance of researcher position(ality) in shaping research findings steeped in a rhetoric of “success,” and the epistemological importance of both disclosing and reflecting on the influence of this positionality. We highlight the significance of researcher positionality in shaping research choices and findings in conservation and/or development research, by pointing toward circumstances in which there is a conflict of interest because scholars also work for conservation and/or development organizations with material interests in the findings of their research.

The importance of qualitative methodologies, epistemologies and philosophies for ecology and conservation is well-acknowledged and gaining more attention (see, for example, Bennett et al. 2017; Moon et al. 2019; Sutherland et al. 2018). We contribute to a growing literature in conservation social sciences and conservation humanities through a semi-structured critical discourse analysis (CDA) of a collection of ecological papers concerning community-based natural resource management (CBNRM) in Namibia written by professionals in this field. The research reported in these papers is “objectivist” in that it is based on the assumption that an “objective reality” exists that can be accurately researched and represented (Moon et al. 2019). Our critique of such evaluative studies that (re)iterate specific outcomes and claim findings of “success,” follows Haraway’s (1988) call for an “epistemic turn” in social research that more stringently conceptualizes knowledge as situated and plural. This perspective implies that knowledge production through empirical research also demands epistemological accountability in the form of transparency and reflexivity regarding researcher positionality, and specifically how these dimensions may shape research findings and interpretations. Ecological and other research produced through “objectivism” may thus be better understood by including consideration of the subject position of researcher(s) (Escobar 2006; Grosfoguel 2007). This implies that all of us, as researchers, develop an attitude of self-reflexivity so as to become better attuned to, and able to specify, potential conflicts of interest and their consequences (Twyman, Morrison, and Sporton 1999).

This proposition applies to science practices more generally, but here we focus on professionals who have an interest in the outcomes of their own research in the particular context of CBNRM in Namibia. As explicitly understood in the field of political ecology, “the science of nature is loaded with power that permeates scientific inquiry, research agendas, and practices on the ground” (Ramutsindela et al. 2016, 10; see also Fairhead and Leach 1996), giving rise to calls for transparency and reflexivity in

disciplines relevant for development and conservation, such as geography (Sidaway 2000) and political ecology (Neimark et al. 2019; Ramutsindela et al. 2016; Stott and Sullivan 2000). Academic communities “bring knowledge constructs into being and enable their circulation” (Büscher 2014, 87): thus, how “fields of academic discourse interact is an essential starting point from which to challenge the more negative manifestations of such interactions and to develop practises of accountability which do not simply reduce reflexivity to the logics of accounting” (Sidaway 2000, 266). This situation begs transparency regarding researcher positionality such that readers are able to interpret results in clearer connection with the contexts of their production. We suggest that transparency regarding both researcher position and self-reflexivity on this position are as crucial for research purporting to be objective as for qualitative approaches where such reflexivity tends to be more explicitly required for research legitimacy. Indeed, from this perspective, “research is enhanced by acknowledgement that the social world, the academic world, and the personal world of the researcher are intermingled and co-created through the ongoing process of social life” (O'Reilly 2012, 521).

Social Constructivism

A social constructivist position in social science emerged during the 1960s alongside the view derived from the work of Popper (1972) that science is—and ought to be—objective and thus “value-free.” Popper’s position was critiqued by diverse academics (Berger and Luckmann 1966; Latour 2004). Berger and Luckmann (1966), for example, argued that the interpretation of reality is not independent from observers, but instead is socially constructed: the sociology of knowledge thus sets out to analyze the processes through which knowledge is made, essentially demanding a well thought-through epistemological analysis. The central argument is that “the science of nature [...] shapes ideas of nature as well as policies and practices of nature conservation, preservation and science” (Ramutsindela et al. 2016, 10). Moreover, “scientific (and technological) practice and knowledge reflect not only the natural world but also social influences—for instance, of professional position, social class, or gender” (Law and Singleton 2000, 766). This constructivist stance also applies to ecology, making it “important that researchers consider the influence of their underlying philosophy on how they approach their research and interpret their data” (Moon et al. 2019).

Much ecological research instead originates in an objectivist Popperian research philosophy which centralizes the idea that research is detached from “the environment” where an “objective truth” exists. Such objectivist assumptions occlude the significance of subjective choices, interpretations and power relations in even the most positivist endeavors in science. “Objective” and “constructionist” (Moon et al. 2019) views of reality, therefore are not as clear-cut or opposed as they might seem, with objective research also affected by constructive (and thus subjective) interests held by researchers. Social scientists instead take as a starting point that the divide between themselves and the subjects of their research is not very clear cut (Koot 2016). Self-reflexivity regarding our subjectivity and the social complexity within which this is shaped, is thus part and parcel of a constructivist empirical research program (Moon et al. 2019).

We proceed to introduce our conceptualization of success and failure in Namibian CBNRM in connection with broader CBNRM discourses and examples, before moving to our case-study research. But first, a note about ourselves. All three of us have long-term experience of research in Namibia, in relation to nature conservation, tourism, land reform, agriculture, politics, indigenous peoples, and of course CBNRM. The first author has been conducting research in the country since 1999 and also worked there for a 5-year period as a professional in ecotourism. The second author's engagement with Namibia began in the mid-2000s, primarily through fieldwork and supervision of Master and PhD students with a focus on CBNRM and recently in collaboration with the public law firm Legal Assistance Center in Windhoek. The third author has carried out independent academic anthropology and ecology research in north-west Namibia since 1992, witnessing and researching key moments and tensions in the establishment of CBNRM in this context.

Success, Failure and Namibian CBNRM

Mosse (2004) shows that both success and failure can become policy-oriented framings that mask project effects “on the ground,” and the structuring effects of “success” or “failure” have been observed in research on nature conservation (Büscher 2013; Catalano et al. 2019; Sullivan 2002; To and Dressler 2019) and development (Büscher 2014; Clemens, Kenny, and Moss 2007; Kimanthi and Hebinck 2018; Nandigama 2019; Svarstad and Benjaminsen 2017). Blaikie (2006, 1946), in his critical assessment of CBNRM, finds that “[t]here are success stories too, although they are stories told by the initiating agencies themselves” (see also Büscher 2013; Sullivan 2002). Presenting CBNRM’s success is part of a global discourse that is reproduced through international networks of government officials in recipient countries, multi-lateral and bi-lateral agencies, elites, philanthropists and NGOs (Blaikie 2006; Holmes 2011; Ramutsindela, Spierenburg, and Wels 2011). As To and Dressler (2019, 582) explain in relation to Payments for Environmental Services (PES), success can become part of a discourse that serves “as an effective vehicle to deflect attention from the weakness of the forestry sector, to generate new funding for the sector’s survival,” thus also functioning to mask failures.

This relationship between success and funding is emphasized by Ramutsindela, Spierenburg, and Wels (2011, 89) who also find that “[i]t is the academic community that primarily seems to feed these discourses with ongoing presentations of scientific developments and findings.” “Success” in these analyses is based on “[t]he discursive power of the theoretical benefits to environment and community of CBNRM, the need to proclaim success to other international audiences, and the diffuseness and range of the social and environmental objectives” (Blaikie 2006, 1954). In such circumstances, and as observed for Namibian CBNRM, “[c]ritique is [...] particularly unwelcome,” even though “widely publicized elaborations of success [may] present a rather unrealistic picture of the possibilities for the national conservancy policy to improve livelihoods in the country’s communal areas as a whole” (Sullivan 2002, 171). Other observers note that success narratives of aid projects may be related to an absence or exclusion of independent assessments (Svarstad and Benjaminsen 2017, 482) and observed “failures” in

terms of particular project outcomes (Catalano et al. 2019). Given this situation, and notwithstanding the value and importance of research by professionals in the field of CBNRM who work daily in this field, we suggest that it is important to ask why, and how, success stories may originate from “initiating agencies,” and to consider the broader methodological and epistemological implications of potential conflicts of interest in both the design of such studies and the interpretation and presentation of findings.

Relatively independent research suggests that CBNRM programs globally may fall short of their high expectations (Berkes 2004; Dressler et al. 2010; Leach, Mearns, and Scoones 1999), an observation echoed in relatively independent studies of CBNRM in different contexts in Namibia (see below). Failures in terms of the gap between presented visions and the execution of these visions are observed as a feature of market-based dimensions of CBNRM (Fletcher 2014). Catalano et al. (2019) argue that observations of *failure* in conservation could be exploited more effectively by conservation professionals in terms of generating improvements in outcomes. At the same time, responses to such failures can themselves become a means of legitimizing and “selling” particular interventions (to communities, donors, consultants, states, and so on) in a competitive world (Büscher 2014; To and Dressler 2019) to favor technical, depolitized, “objective solutions” (Büscher 2013) and thereby amplify particular forms of expertise and intervention based on numerical abstractions of socio-economic concerns.

For Namibian CBNRM, critical concerns deriving from relatively independent research rest on a connected series of observations: development dimensions such as power relations, different and contested layers of authority, and ideologies are often ignored (Gargallo 2015; Koot and Van Beek 2017); a strong focus on economic benefits may crowd out attention to other relevant factors such as strong cultural attachments to place and cultural dimensions generating social cohesion and resource value (Jacquet and Delon 2016; Koot 2019; Silva and Mosimane 2014); a tendency to homogenize communities in relation to ethnicity, leading to poor understanding of how tensions may arise as state and private sector interests intersect with diverse local structures (Gargallo 2015; Sullivan 2002); a prevalence of neo-colonial labor relations in trophy hunting practices (Hewitson 2017; Koot 2019); limited incomes deriving from CBNRM-related activities (Paksi and Pyhälä 2018); and dependency on sometimes reducing donor support, plus increases in poaching in some cases (Nuulimba and Taylor 2015; Lubilo and Hebinck 2019). We suggest that ignoring these complexities while promoting “success” may prove unsustainable in the long term.

In what follows, we outline our methodological approach before considering recent instances of the scientific and public presentation of CBNRM in Namibia as “a success.” In our discussion we draw attention to how science can evolve into a tool that reiterates conservation successes, in part through ignoring disconfirming evidence that is dissonant with discourses of “success” (Sullivan 2018). It is not our intention to debate the (Namibian) CBNRM model in-depth (see, among others, Berkes 2004; Bollig 2016; Dressler et al. 2010; Gargallo 2015; Koot 2019; Koot and Van Beek 2017; Leach, Mearns, and Scoones 1999; Paksi and Pyhälä 2018; Schnegg 2018; Schnegg and Kiaka 2018; Silva and Mosimane 2014; Sullivan 2002, 2006). Our argument and conclusion is essentially a methodological and epistemological one, urging greater self-reflection and

transparency regarding researcher position and the ways this may contribute to bias in ostensibly objective analyses of CBNRM in Namibia and elsewhere.

Method

We drew on critical discourse analysis (CDA) (Van Dijk 1993) in reading a series of interconnected scientific papers published in ecological journals (specifically Angula et al. 2018; Naidoo, Weaver, De Longcamp, et al. 2011; Naidoo et al. 2016; Naidoo, Weaver, Stuart-Hill, et al. 2011; Störmer et al. 2019; Weaver and Skyer 2003), and popular media statements linked to these articles, all of which address CBNRM and important components (notably tourism and trophy hunting) in Namibia. In CDA, the analytical focus is “*on the role of discourse in the (re)production and challenge of dominance* [which is] the exercise of social power by elites, institutions or groups, that results in social inequality, including political, cultural, class, ethnic, racial and gender inequality” (Van Dijk 1993, 249–250, emphasis in original). Crucially, such dominance addresses “the relations between power and discourse” that includes “patterns of access to (public) discourse for different social groups” (Van Dijk 1993, 249). This means we also highlight how academic findings feed and produce public discourse.

Since we are working with published interpretations of findings rather than primary qualitative data transcripts we did not subject these texts to a formal or coded textual analysis (as, for example, one of us has applied elsewhere to public consultation transcripts relating to new biodiversity offsetting conservation policy in England, see Sullivan and Hannis 2015). Instead, the texts on Namibian CBNRM were read closely and were selected because they frequently refer to each other and represent a nexus of analyses presenting CBNRM or its crucial elements as a success for nature conservation and the development of marginalized groups. The most important variables we used for this sample were first, that they address Namibian CBNRM for which the crucial elements of trophy hunting and ecotourism emerge as critical, and second, that they have been written by professionals in organizations whose work is to promote and implement exactly this CBNRM model. We also closely read a series of secondary public and media sources that directly communicate findings from the peer reviewed texts identified above (for example, Brown 2017; Brown and Potgieter 2019; IRDNC 2011; NAPHA 2016). The number of public sources is endless, and thus we have focused on examples from institutions with direct connections to the Namibian CBNRM program and links to the NGOs and donors that have created the primary literature. We also closely read a connected and large body of academic literature reporting on long-term research endeavors concerning Namibian CBNRM that was not written by professionals working for implementing organizations and that tends to be more circumspect about some of its outcomes (see, for example, Gargallo 2015; Koot 2019; Koot and Van Beek 2017; Lubilo and Hebinck 2019; Paksi and Pyhälä 2018; Schnegg 2018; Schnegg and Kiaka 2018; Silva and Mosimane 2014; Sullivan 2002, 2006).

As Fairclough (2012, 454) argues, CDA assumes that coherent accounts of relationships between social structures and social events depend on mediating categories and social practices, “articulated together to constitute social fields, institutions, and organizations” (see also Fairclough, Mulderrig, and Wodak 2011). Analyzing and “unpacking”

these articulations can assist with understanding the establishment and sustenance of varied structures in society including “governments, academic and professional disciplines, and other authoritative institutions” as well as the workings of “language, knowledge, power, and authority in general” (Dewey 2016, 455). Building on the work of philosopher Michel Foucault, CDA proposes to understand “objectivity and truth” to be “sites of struggle among competing systems of discourse,” such that “[w]hat is scientific at any particular historical juncture is determined by which system is dominant and not which system is true” (Radford 1992, 418). CDA very specifically investigates “what structures, strategies or other properties of text, talk, verbal interaction or communicative events play a role in these modes of reproduction” (Van Dijk 1993, 250; see also Fairclough 2012), focusing specifically on dominance in power relations, and how specific discourses play out to maintain positions of dominance through reproducing particular ideologies and values (Fairclough 2012).

In the next sections, we explore how a self-perpetuating discursive reproduction of “success” regarding specific elements of Namibian CBNRM is a feature of scientific publications concerning CBNRM that are written by proponents of this program who are often also employees of organizations whose existence is linked with these same elements of the program. We suggest that these findings of success are sustained through disregarding different perspectives and disconfirming evidence.

Results

In this section, we demonstrate first how the selected papers present the Namibian CBNRM program as successful, and second how these presentations are communicated to the larger public.

The Scientific Success Story of Namibian CBNRM

The papers referred to above (Angula et al. 2018; Naidoo, Weaver, De Longcamp, et al. 2011; Naidoo et al. 2016; Naidoo, Weaver, Stuart-Hill, et al. 2011; Störmer et al. 2019; Weaver and Skyer 2003) have been written by professionals working for organizations that have collaboratively instigated and supported CBNRM initiatives throughout the country, through work financed by and linked with especially WWF Namibia, WWF US, the Ministry of Environment and Tourism (MET) and the Namibian Association of CBNRM Support Organizations (NACSO). The CBNRM model has been promoted since before independence (1990), accelerating since independence and leading to a current total of 86 communal area conservancies (NACSO 2020). Communal area conservancies are “self-governing, democratic entities, run by their members, with fixed boundaries that are agreed with adjacent conservancies, communities or land owners” (NACSO 2020). The model is based on the commodification of nature, predominantly through ecotourism and trophy hunting initiatives from which local people are supposed to realize economic values from fauna and flora, and thus be incentivised to conserve these (inter)nationally valued natures (Koot and Van Beek 2017; Sullivan 2006).

In 2003, at the fifth World Parks Congress in South Africa, scholars working at WWF Namibia and NACSO presented their work on conservancies as a movement that

has led to “significant environmental, social and economic gains,” and that these “highly successful conservancies [...] still have massive upside potential to increase income and benefits” (Weaver and Skyer 2003, 2). Based on the recovery of wildlife populations and the increase of tangible benefits for conservancy members, this “remarkably innovative and effective community conservation movement” was framed as creating “impressive returns” which are “unprecedented in Namibia, or perhaps, elsewhere in Africa” (Weaver and Skyer 2003, 3–5). This positive discourse is iterated in subsequent work by CBNRM professionals (Angula et al. 2018; Naidoo, Weaver, De Longcamp, et al. 2011; Naidoo et al. 2016; Naidoo, Weaver, Stuart-Hill, et al. 2011; Störmer et al. 2019). For example, the effects of trophy hunting and ecotourism on economic benefits are asserted as showing statistically “that biodiversity in a large socio-ecological system in Namibia has a positive effect on the generation of benefits” (Naidoo, Weaver, Stuart-Hill, et al. 2011, 315; cf. Naidoo et al. 2016), and that the “program has led to increasing economic benefits for 230 000 people resident to communal conservancies” (Naidoo, Weaver, De Longcamp, et al. 2011, 452).

In a time where trophy hunting receives ever more public criticism (Batavia et al. 2019; Hannis 2016; Koot 2019), anti-trophy hunting sentiments are neutralized in these texts as simply “Western opposition” (Naidoo et al. 2016, 629; see also Angula et al. 2018; Nuulimba and Taylor 2015). It is argued that “income from trophy hunting is critical” especially in the early years of a conservancy, and that “the meat from hunted animals makes tangible the economic benefits that wildlife conservation can deliver,” making public activism for hunting bans “likely to have a very negative impact on Namibia’s CBNRM program” (Naidoo et al. 2016, 636). This positive tone regarding trophy hunting is iterated in Angula et al. (2018), who focus on the voices and perceptions of local communities. They found that a very high percentage, namely 90%, was happy with trophy hunting with 91% not in favor of a trophy hunting ban. The paper was a response to “[i]ncreasing public opposition to trophy hunting from people living in many developed Western countries,” amidst a “failure to understand how trophy hunting of wildlife and its benefits and costs are perceived by local communities” (Angula et al. 2018, 26).

CBNRM Success and Public Institutions

Such scientific “success” stories legitimise this particular form of CBNRM in the broader conservation movement, to the private sector and parties representing their interests, and to civil society. Integrated Rural Development and Nature Conservation (IRDNC), a ground-breaking CBNRM NGO in Namibia, thus calls CBNRM “a small African success story” that should be copied globally (IRDNC 2011, 13). The Namibian Chamber of the Environment (NCE), an umbrella, lobby and fundraising association for the broader environment sector in Namibia, uses similar ideas to further promote the crucial role of trophy hunting (NCE 2019). The NCE’s CEO explains how trophy hunting is essential for conservation, discounting critique on the basis that there is “much confusion and misconception, particularly in the urban industrialized world and thus by most Western tourists that visit Namibia, about the role of hunting in conservation,” in which “the problem is essentially one of ignorance” (Brown 2017). Drawing on Naidoo

et al. (2016), a recent opinion piece published by NCE frames Namibian CBNRM as “an exceptional conservation success story,” due to its usage of “the full value of our rhinos and other wildlife to fund conservation and sustainable development” through ecotourism and trophy hunting (Brown and Potgieter 2019).

In another example, the Namibian Professional Hunting Association (NAPHA), the body that represents the interests of the trophy hunting industry, embraces this discourse of success stating:

I shall leave it to an internationally respected conservation organisation, the WWF, to point out the benefits that trophy hunting brings to Communal Conservancies in Namibia through a study undertaken by them between 1998 and 2013. The title of this study is “*Complimentary [sic] benefits of tourism and hunting to communal conservancies in Namibia*”. It must be stressed that this study piece, unlike many of the pseudo-studies available on the internet, has been peer reviewed and independently verified. (NAPHA 2016, 12, emphasis in original)

The paper referred to here (Naidoo et al. 2016) was indeed written by WWF professionals, but it is unclear what research is indicated by “the pseudo-studies available on the internet.” NAPHA also demonstrates a critical stance toward the positioning of research (and “pseudo-scientists” more generally) in stating that:

[t]he above facts and figures [drawing on Naidoo et al. 2016] were not thought up, nor drawn from the ether, nor amended or altered to further an agenda, *they are the truth* [...] when one delves further into the studies tabled at conferences, or published on the internet, one has to ask oneself where and how their facts and figures were derived, what their motives are and, most importantly of all, who financed their studies. Far too many of the reports that I read were published by, what I call “pseudo-scientists” moulding their findings to suit their agenda, or to satisfy their paymasters. (NAPHA 2016, 19, emphasis added)

Here, one paper (namely Naidoo et al. 2016) supporting NAPHA’s interests is deemed an example of “good science” that presents “the (objective) truth.” All other, unspecified studies opposed to NAPHA’s position (in this case on trophy hunting) are “bad science” conducted by “pseudo-scientists,” even though paradoxically NAPHA ignores any contextual positioning regarding the paper that supports their own interests.¹ In the following section we move to a deeper discussion of what we think is happening in these examples and why.

Discussion

In this section, we consider further how the selected academic publications (as referenced above) and their public influence contribute to power and knowledge dynamics, bringing the concept of cognitive dissonance to bear in explaining possible bias in science and public discourse in our case research.

Science for Success, Power and Knowledge

In the examples traced above, science is used selectively by public organizations to promote their own activities, illustrating how peer reviewed research may “travel” to become part of larger public discourse (cf. Büscher 2014). In this way

professionally-affiliated scientists of such publications are shown to be important political actors with effects in the public sphere. Relatively independent scholars of the same issues and cases have tended to be more critical in their analyses, finding complex and uneven outcomes of Namibian CBNRM structures and activities. In the scientific discourse of success, such critique tends to be disregarded, and the power conservation NGOs, donors and investors deploy to use science to legitimise their own organizations and a specific conservation ideology is downplayed. These actors, however, also “exploit the cracks between constructions and realities of complex and contradictory socio-ecological dynamics” so as “to gain legitimacy, credibility, and support” (Büscher 2013, 5). In doing so, both disregarding and actively preventing publication of inconvenient academic findings is not unknown. In relation to Namibian CBNRM, Sullivan herself, for example, has been “subjected to attempts to close down publication of disconfirming evidence, through personal and legal threats” (Sullivan 2018, 8).

If knowledge is constructed through a web of actors who are not necessarily all attributed the same powers and authority, then differential power relations need to be foregrounded in terms of understanding *whose* knowledge is able to count in public discourse regarding conservation. This pertains too to the nature of the social relationships between those collecting and interpreting data, and those interviewed or otherwise engaged with so as to provide data for interpretation by professionals (i.e., researchers/academics, practitioners) (Chambers 1997). These in-field interactions are not embedded in and shaped by relations of equality and tend themselves to generate expectations, occlude local realities, and encourage socially desired answers to questions asked. In combination, and as observed by postcolonial scholars such as Achille Mbembe (2017), practices enacting the creation of “objective knowledge” may become part and parcel of an ongoing colonial discourse that continues to support processes of appropriation.

In Namibian CBNRM, the people (making a) living in the communal area conservancies comprising the backbone of the program are thereby expected to perform in particular ways, as “environmental subjects” (cf. Agrawal 2005) bound by the rules and regulations of a conservancy, as codified in the conservancy constitution and sanctioned by national policy. The governance dimensions of this “environmentality” point toward how, without any apparent coercion, institutions at different scales of operation manage to discipline people to act in certain ways to achieve particular environmental and investment goals (Agrawal 2005; Fletcher 2010). A conservancy’s Constitution and the data-gathering “Event Book” are examples of how environmentality is exercised in practice in this context: data collection ensures the conservancy community enact conservancies as per design, as well as delivering the data that classify certain animals as problem animals and/or potential valuable trophies (Hewitson 2017). The Event Book here thus operates as a regulatory device exhibiting the subtleties of indirect rule, but also the various indirect mechanisms and discourses that encourage local people to (self-)regulate their behavior so as to act as desired by “the outside world,” namely the state, donors and NGOs (Lubilo and Hebinck 2019). The success of CBNRM is largely determined by the degree to which this creation of environmental subjects succeeds in part through disregarding contradictory evidence.

Cognitive Dissonance and Disregarding Contradictory Evidence

Some professional actors might not address “difficult questions on contradictory material realities” because these “are seen as disruptive and thus preferably avoided” (Büscher 2013, 7). This situation raises the question of how and why this avoidance and exclusion takes place, when there are clear arguments and peer-reviewed literatures that point to different and disruptive outcomes. Namibian CBNRM relies on a discourse around multiple wins for environmental conservation, local development and business through strengthening market-based approaches to wildlife conservation (in particular ecotourism and trophy-hunting), as well as increasing the area of land available for this (Naidoo et al. 2016). As shown above, critique has been particularly unwelcome in this context because circumstances ostensibly appear perfect for public showcasing of “success.” At the same time, the ideological basis for proclamations of success (Büscher 2013, 2014; Sullivan 2006), specifically a deep belief in market solutions for problems in conservation and development, appears to create a climate for disregarding “failure” posed by observed gaps between vision and execution (Fletcher 2014, 88). Building on the work of social psychologist Festinger (1957), Sullivan (2018) has alluded to cognitive dimensions at work (for all of us) in maintaining ideological beliefs, highlighting in particular that in order to sustain beliefs in the presence of disconfirming evidence, individuals and groups of people often work harder to strengthen, rather than change, existing beliefs. Given senses of identity imbricated with beliefs about reality, the social psychology argument is that it is less psychologically threatening to sustain beliefs through “managing-out” (i.e., actively disregarding) disconfirming evidence, than it is to change beliefs through incorporating information dissonant with beliefs. In our example above of statements published by NAPHA, this appears to be done by embracing only one scientific paper that is congruent with the already established NAPHA agenda.

A consequence of this aversion to cognitive dissonance is a simplification of complex matters. In the Namibian trophy hunting debate, for example, those critical of trophy hunting are dismissed as coming from Western countries and as ignorant and unworthy of engagement, in contrast to the professionals (some of them themselves “Westerners”) who understand the arguments correctly (Angula et al. 2018; Brown 2017; Naidoo et al. 2016; Nuulimba and Taylor 2015). Angula et al. (2018, 30) speak about anti-trophy hunting sentiments “in wealthy Western countries” but do not engage substantively with expressed concerns. Instead of engaging with critique and providing a nuanced picture—we have spoken to many conservationists in Namibia and South Africa (so “non-Westerners”) who do not favor trophy hunting, for a variety of reasons, and most trophy hunters are themselves “Westerners”—they create an abstract group of people (“Westerners”) as “ignorant.” In doing so, they simultaneously strengthen their existing belief *and* their own position as experts, thereby ignoring important arguments expressing diverse concerns about trophy hunting.

Adding further complexity, like other contexts globally, Namibia’s relation with “the West” is historically a colonial one that continues to affect contemporary social relations (Mbembe 2017), especially in activities such as trophy hunting and ecotourism that have a strong neo-colonial character. This dimension tends to be neglected, echoing what has been termed “imperialist amnesia” (Fletcher 2012) sustained in part by avoiding some African perspectives on trophy hunting as an objectionable activity marked by

a racist and neo-colonial character that privileges Western and African elites (Mkono 2019).

Another simplification is the constant reminder of material and economic benefits in a simplification of “development” to purely economic parameters. Naidoo et al. (2016), for example, use perhaps questionable shadow-pricing methods to create equivalence between different kinds of meat, through equalizing the value of “wild meat” distributed from animals hunted in the conservancy with the price of buying meat produced through commercial farming (Jacquet and Delon 2016; Sullivan 2018). In doing so, it is suggested that a substantial fraction—32%—of overall conservancy income went to conservancy members in the form of meat from hunted animals (Naidoo et al. 2016, 632). In response, Jacquet and Delon (2016, 910) suggest that “[t]he authors’ results and thus conclusions rest so squarely on the estimated value of meat that their assumptions should have been made more clear.” Furthermore, Sullivan (2018) observes that income received by conservancies is amplified in this analysis, especially since (usually unequal) distributions of game meat to conservancy members does not in reality equate to income to these members. Overall, then, the rosy analysis offered in Naidoo et al. (2016) and re-presented in popular discourse by NAPHA (2016) appears built on ignoring (at least) three important dimensions: 1. both meat and income are unequally distributed to conservancy members; 2. the calculations of income flowing to conservancies are constructed in ways that may unrealistically inflate the amounts received; and 3. large proportions of the overall revenues created through tourism and trophy-hunting businesses are directed to entrepreneurial activities by non-conservancy members, boosted by being able to deploy relatively cheap conservancy labor (Hewitson 2017; Koot 2019; Sullivan 2018). While a variety of private tourism and hunting companies have made good profits in wildlife-rich communal area conservancies which seem rarely included in analyses of conservancy income-generation, cash handouts to conservancy members have been poor and cannot be relied on (Sullivan 2006). At the same time, CBNRM can constrain people’s livelihood activities in a variety of ways: autonomy is reduced (Sullivan 2006); human-wildlife conflicts are exacerbated (Paksi and Pyhälä 2018; Schnegg and Kiaka 2018; Silva and Mosimane 2013); and possibilities for agriculture, hunting and gathering are constrained (Koot and Van Beek 2017). Whilst the creation of jobs and the production of meat through CBNRM is clearly relevant, an avoidance of complex structural and historical contexts creates tension in communities “on the ground,” as well as posing questions for the sustainability of these relatively new governance organizations (Koot 2019; Schnegg and Kiaka 2018; Silva and Mosimane 2014; Sullivan 2018).

Bias and Reflexivity

In follow-up work to Naidoo et al. (2016), Angula et al. (2018, 30), state:

Our survey was conducted opportunistically during community meetings and was restricted to conservancy members. A large number of respondents were employed in some manner by the conservancy, and employment-related variables were significant predictors of responses on benefits generated from, and satisfaction towards, trophy hunting. Given that our sample is biased towards respondents who are associated with conservancies,

future work should sample a broader sample of rural residents to determine whether rural communities at large in Namibia share these same views.

This acknowledgement of potential bias is important. In this study, short surveys were conducted at a time when communal area conservancies were organizing their annual audits, meaning that actively involved members would be there who might also be expected to be those supportive of CBNRM broadly and of trophy hunting specifically. As a written survey it is additionally likely that the survey excluded non-literate, and non-English speaking people, and/or to have included such demographics through assistance in completing the form by the researchers themselves (employees working for WWF). Our suggestion is that these circumstances might shape responses into socially acceptable ones, with bias built-in to the research design. From a methodological point of view, then, it is not surprising the research found that “employment-related variables were significant predictors of responses on benefits generated from, and satisfaction toward, trophy hunting” (Angula et al. 2018, 30).

This situation gives the percentages of 90% (in favor of hunting) and 91% (against a hunting ban) a completely different meaning, and begs the question why the authors, all WWF employees, wanted to study and publish these results in the first place. We appreciate the authors’ openness about the study’s potential bias. At the same time we suggest that such conflicts of interest here are a crucial element of the study that requires more scrutiny at all levels (including by peer reviewers and journal editors), since this contextual information appears crucial for interpreting the results of the research. In this example specifically some doubt is placed on the assertion that the survey data “gives a voice to the viewpoints of local communities on the trophy hunting debate, a debate in which they have been almost entirely ignored” (Angula et al. 2018, 30). Or, at least, to return to our opening comments, the findings beg further questions of whose voices and views have been counted and how. The authors suggest that a conclusion is being drawn in which a potentially incorrect generalization is made to a similarly incorrectly homogenized community, namely a small selection of trophy-hunting-supporting elites in each conservancy. Angula et al. (2018) also assert that not one of the respondents raised any ethical concerns about hunting for sports by wealthy individuals who mostly come from a much wealthier background in the West. The example survey provided in the paper, however, suggests that this particular issue was not included in the questions asked. These tactics, then, permit a depoliticized legitimization of trophy hunting to be affirmed through so-called “objective” research, which again also neatly aligns with WWF’s political stance in Namibia on this entrepreneurial strategy.

Conclusion

Our CDA of several recent research papers and connected public discourse regarding CBNRM in Namibia illustrates how researcher position(ality) shapes seemingly “value-free” and “objective” research. This situation can be critical for research outcomes, particularly in generating research that aligns with specific institutional ideologies in ways that have significant local effects. Objective research is often infused with and affected

by all kinds of subjective, constructive assumptions shaped by power and position, as well as interest and ideology, requiring open reflection so as to be accountable to readers about the knowledge thus generated. This situation is particularly important when professionals do research in which they have a material interest in its outcomes (MacDonald 2005). In sum, our contribution is to argue that it is important *especially* for professionals to be clear about their positionality in research, since they often do not have an independent relation to their research, and may in fact have a conflict of interest.

Our research has contextual and historical limitations as a regional, Namibian study with a focus on CBNRM. Its wider applicability, however, lies in the importance of critically analyzing articulations of failure and success in other parts of the world, such as East Africa (Kimanthi and Hebinck 2018; Svarstad and Benjaminsen 2017), as well as beyond the African continent (Nandigama 2019; To and Dressler 2019) and in different disciplines. As mentioned in the introduction, disciplinary reflexive responses are part of disciplines such as geography (Sidaway 2000) and political ecology (Neimark et al. 2019; Ramutsindela et al. 2016), both highly relevant for conservation and development. We propose that researcher positionality significance begs more systematic acknowledgement in other disciplines through which socio-ecological research is conducted and that this recommendation applies also to peer reviewers (which is admittedly hard because of anonymity requirements) and especially to journal editors. The example we outlined at the start of this paper, in which the editor-in-chief of *Science* emphasized the importance of authors' potential conflicts of interest (Berg 2019) speaks volumes in this regard.

We also need to be wary of assuming that a *mention* of positionality automatically *resolves* that position since there will always be things we do not and cannot know. At the same time, this “partial unknowability is not a call to abandon all attempts at reflexivity” (Sidaway 2000, 266), but a call to “inscribe into our research practices some absences and fallibilities while recognizing that the significance [and uptake] of this does not rest entirely in our own hands” (Rose, 1997, 138). We are not suggesting that professionals should be demotivated to do research. We are proposing instead that a fuller contextualization of epistemological approach, researcher position and interests is crucial for other readers, including reviewers and journal editors, to be able to more accurately understand and interpret research findings.

Note

1. Perhaps ironically, one of us was in fact a reviewer for Naidoo et al. (2016), and as such contributed to NAPHA’s affirmation of the paper’s status as “peer reviewed and independently verified”.

ORCID

Stasja Koot  <http://orcid.org/0000-0001-8625-7525>
Paul Hebinck  <http://orcid.org/0000-0003-2349-8545>
Sian Sullivan  <http://orcid.org/0000-0002-0522-8843>

References

Agrawal, A. 2005. Environmentality: Community, intimate government, and the making of environmental subjects in Kumaon, India. *Current Anthropology* 46 (2):161–90. doi:10.1086/427122.

Angula, H., G. Stuart-Hill, D. Ward, G. Matongo, R. Diggle, and R. Naidoo. 2018. Local perceptions of trophy hunting on communal lands in Namibia. *Biological Conservation* 218:26–31. doi:10.1016/j.biocon.2017.11.033.

Batavia, C., M. Nelson, C. Darimont, P. Paquet, W. Ripple, and A. Wallach. 2019. The elephant (head) in the room: A critical look at trophy hunting. *Conservation Letters* 12 (1):1–6. doi:10.1111/conl.12565.

Bennett, N. J., R. Roth, S. C. Klain, K. Chan, P. Christie, D. A. Clark, G. Cullman, D. Curran, T. J. Durbin, and G. Epstein. 2017. Conservation social science: Understanding and integrating human dimensions to improve conservation. *Biological Conservation* 205:93–108. doi:10.1016/j.biocon.2016.10.006.

Berg, J. 2019. Editorial addendum (post date 24 October 2019). *Science* 365 (6456):874.

Berger, P., and T. Luckmann. 1966. *The social construction of reality: A treatise in the sociology of knowledge*. London: Penguin Books.

Berkes, F. 2004. Rethinking community-based conservation. *Conservation Biology* 18 (3):621–30. doi:10.1111/j.1523-1739.2004.00077.x.

Blaikie, P. 2006. Is small really beautiful? Community-based natural resource management in Malawi and Botswana. *World Development* 34 (11):1942–57. doi:10.1016/j.worlddev.2005.11.023.

Bollig, M. 2016. Towards an arid Eden? Boundary-making, governance and benefit-sharing and the political ecology of the new commons of Kunene Region, Northern Namibia. *International Journal of the Commons* 10 (2):771–99. doi:10.18352/ijc.702.

Brown, C. 2017. The link between hunting & tourism in Namibia. <https://africageographic.com/blog/hunting-tourism-namibia/> (accessed 7 February, 2020).

Brown, C., and G. Potgieter. 2019. Opinion: How hunting black rhino contributes to conservation in Namibia. <https://africageographic.com/blog/opinion-how-hunting-black-rhino-contributes-conservation-namibia/> (accessed 7 February, 2020).

Büscher, B. 2013. *Transforming the frontier: Peace parks and the politics of neoliberal conservation in southern Africa*. Durham, NC: Duke University Press.

Büscher, B. 2014. Selling success: Constructing value in conservation and development. *World Development* 57:79–90. doi:10.1016/j.worlddev.2013.11.014.

Catalano, A., J. Lyons-White, M. Mills, and A. Knight. 2019. Learning from published project failures in conservation. *Biological Conservation* 238:108223. doi:10.1016/j.biocon.2019.108223.

Chambers, R. 1997. *Whose reality counts? Putting the first last*. London: Intermediate Technology Publications.

Clemens, M., C. Kenny, and T. Moss. 2007. The trouble with the MDGs: Confronting expectations of aid and development success. *World Development* 35 (5):735–51. doi:10.1016/j.worlddev.2006.08.003.

Dewey, S. 2016. (Non-)use of Foucault's archaeology of Knowledge and Order of Things in LIS journal literature, 1990–2015. *Journal of Documentation* 72 (3):454–89. doi:10.1108/JD-08-2015-0096.

Dickman, A., R. Cooney, P. Johnson, M. Louis, and D. Roe. 2019. Trophy hunting bans imperil biodiversity. *Science* 365 (6456):874. doi:10.1126/science.aaz0735.

Dressler, W., B. Büscher, M. Schoon, D. A. N. Brockington, T. Hayes, C. A. Kull, J. McCarthy, and K. Shrestha. 2010. From hope to crisis and back again? A critical history of the global CBNRM narrative. *Environmental Conservation* 37 (1):5–15. doi:10.1017/S0376892910000044.

Escobar, A. 2006. Difference and conflict in the struggle over natural resources: A political ecology framework. *Development* 49 (3):6–13. doi:10.1057/palgrave.development.1100267.

Fairclough, N. 2012. Critical discourse analysis. *International Advances in Engineering and Technology* 7:452–87.

Fairclough, N., J. Mulderrig, and R. Wodak. 2011. Critical discourse analysis. In *Discourse studies: A multidisciplinary introduction*, ed. T. Van Dijk, 357–78. London: SAGE Publications.

Fairhead, J., and M. Leach. 1996. *Misreading the African landscape: Society and ecology in a forest-savanna mosaic*. Cambridge: Cambridge University Press.

Festinger, L. 1957. *A theory of cognitive dissonance*. Redwood City: Stanford University Press.

Fletcher, R. 2010. Neoliberal environmentality: Towards a poststructuralist political ecology of the conservation debate. *Conservation and Society* 8 (3):171–81. doi:10.4103/0972-4923.73806.

Fletcher, R. 2012. The art of forgetting: Imperialist amnesia and public secrecy. *Third World Quarterly* 33 (3):423–39. doi:10.1080/01436597.2012.657476.

Fletcher, R. 2014. Taking the chocolate laxative: Why neoliberal conservation “fails forward”. In *NatureTM Inc.: Environmental conservation in the neoliberal age*, eds. B. Büscher, W. Dressler, and R. Fletcher, 87–107. Tucson: University of Arizona Press.

Gargallo, E. 2015. Conservation on contested lands: The case of Namibia’s communal conservancies. *Journal of Contemporary African Studies* 33 (2):213–31. doi:10.1080/02589001.2015.1065575.

Grosfoguel, R. 2007. The epistemic decolonial turn: Beyond political-economy paradigms. *Cultural Studies* 21 (2–3):211–23. doi:10.1080/09502380601162514.

Hanns, M. 2016. Killing nature to save it? Ethics, economics and rhino hunting in Namibia. Future Pasts working paper 4. <https://www.futurepasts.net/fpwp4-hanns-20>.

Haraway, D. 1988. Situated knowledges: The science question in feminism and the privilege of partial perspective. *Feminist Studies* 14 (3):575–99. doi:10.2307/3178066.

Hewitson, L. 2017. Following elephants: Assembling knowledge, values and conservation spaces in Namibia’s Zambezi region. PhD Diss., University of Leicester.

Holmes, G. 2011. Conservation’s friends in high places: Neoliberalism, networks, and the transnational conservation elite. *Global Environmental Politics* 11 (4):1–21. doi:10.1162/GLEP_a_00081.

IRDNC. 2011. *Lessons from the field: Community-based natural resource management*. IRDNC’s experience in Namibia. Windhoek: IRDNC.

Jacquet, J., and N. Delon. 2016. The values behind calculating the value of trophy hunting. *Conservation Biology* 30 (4):910–1. doi:10.1111/cobi.12749.

Kimathi, H., and P. Hebinck. 2018. ‘Castle in the sky’: The anomaly of the millennium villages project fixing food and markets in Sauri, western Kenya. *Journal of Rural Studies* 57:157–70. doi:10.1016/j.jrurstud.2017.12.019.

Koot, S. 2016. Perpetuating power through autoethnography: My unawareness of research and memories of paternalism among the indigenous Hai//om in Namibia. *Critical Arts* 30 (6): 840–54. doi:10.1080/02560046.2016.1263217.

Koot, S. 2019. The limits of economic benefits: Adding social affordances to the analysis of trophy hunting of the Khwe and Ju/'hoansi in Namibian community-based natural resource management. *Society & Natural Resources* 32 (4):417–33. doi:10.1080/08941920.2018.1550227.

Koot, S., and W. Van Beek. 2017. Ju/'hoansi lodging in a Namibian Conservancy: CBNRM, tourism and increasing domination. *Conservation and Society* 15 (2):136–46. doi:10.4103/cs.cs_15_30.

Latour, B. 2004. How to talk about the body? The normative dimension of science studies. *Body & Society* 10 (2–3):205–29. doi:10.1177/1357034X04042943.

Law, J., and V. Singleton. 2000. Performing technology’s stories: On social constructivism, performance, and performativity. *Technology and Culture* 41 (4):765–75. doi:10.1353/tech.2000.0167.

Leach, M., R. Mearns, and I. Scoones. 1999. Environmental entitlements: Dynamics and institutions in community-based natural resource management. *World Development* 27 (2):225–47. doi:10.1016/S0305-750X(98)00141-7.

Lubilo, R., and P. Hebinck. 2019. ‘Local hunting’ and community-based natural resource management in Namibia: Contestations and livelihoods. *Geoforum* 101:62–75. doi:10.1016/j.geoforum.2019.02.020.

MacDonald, K. 2005. Global hunting grounds: Power, scale and ecology in the negotiation of conservation. *Cultural Geographies* 12 (3):259–91. doi:10.1191/1474474005eu330oa.

Mbembe, A. 2017. *Critique of black reason*. Durham, NC: Duke University Press.

Mkono, M. 2019. Neo-colonialism and greed: Africans' views on trophy hunting in social media. *Journal of Sustainable Tourism* 27 (5):689–704. doi:10.1080/09669582.2019.1604719.

Moon, K., D. A. Blackman, V. M. Adams, R. M. Colvin, F. Davila, M. C. Evans, S. R. Januchowski-Hartley, N. J. Bennett, H. Dickinson, and C. Sandbrook. 2019. Expanding the role of social science in conservation through an engagement with philosophy, methodology, and methods. *Methods in Ecology and Evolution* 10 (3):294–302. doi:10.1111/2041-210X.13126.

Mosse, D. 2004. Is good policy unimplementable? Reflections on the ethnography of aid policy and practice. *Development and Change* 35 (4):639–71. doi:10.1111/j.0012-155X.2004.00374.x.

NACSO. 2020. Registered communal conservancies. <http://www.nacso.org.na/conservancies> (accessed 7 February, 2020).

Naidoo, R., C. Weaver, M. De Longcamp, and P. Du Plessis. 2011. Namibia's community-based natural resource management programme: An unrecognized payments for ecosystem services scheme. *Environmental Conservation* 38 (4):445–53. doi:10.1017/S0376892911000476.

Naidoo, R., C. Weaver, R. Diggle, G. Matongo, G. Stuart-Hill, and C. Thouless. 2016. Complimentary benefits of tourism and hunting to communal conservancies in Namibia. *Conservation Biology* 30 (3):628–38. doi:10.1111/cobi.12643.

Naidoo, R., C. Weaver, G. Stuart-Hill, and J. Tagg. 2011. Effect of biodiversity on economic benefits from communal lands in Namibia. *Journal of Applied Ecology* 48 (2):310–6. doi:10.1111/j.1365-2664.2010.01955.x.

Nandigama, S. 2019. Performance of success and failure in grassroots conservation and development interventions: Gender dynamics in participatory forest management in India. *Land Use Policy*. doi:10.1016/j.landusepol.2018.05.061.

NAPHA. 2016. *Position paper: The importance of hunting towards conservation*. Windhoek: NAPHA. http://www.napha-namibia.com/fileadmin/user_upload/Position_Paper2.pdf (accessed 4 May, 2020)

NCE. 2019. Namibian chamber of environment. <https://www.n-c-e.org/> (accessed 7 February, 2020).

Neimark, B., J. Childs, A. J. Nightingale, C. J. Cavanagh, S. Sullivan, T. A. Benjamin, S. Batterbury, S. Koot, and W. Harcourt. 2019. Speaking power to "post-truth": Critical political ecology and the new authoritarianism. *Annals of the American Association of Geographers* 109 (2):613–23. doi:10.1080/24694452.2018.1547567.

Nuulimba, K., and J. Taylor. 2015. 25 Years of CBNRM in Namibia: A retrospective on accomplishments, contestation and contemporary challenges. *Journal of Namibian Studies* 18:89–110.

O'Reilly, K. 2012. Ethnographic returning, qualitative longitudinal research and the reflexive analysis of social practice. *The Sociological Review* 60 (3):518–36. doi:10.1111/j.1467-954X.2012.02097.x.

Paksi, A., and A. Pyhälä. 2018. Socio-economic impacts of a national park on local indigenous livelihoods: The case of the Bwabwata National Park in Namibia. *Senri Ethnological Studies* 99: 197–214.

Popper, K. 1972. *Objective knowledge*. Oxford: Oxford University Press.

Radford, G. P. 1992. Positivism, Foucault, and the fantasia of the library: Conceptions of knowledge and the modern library experience. *The Library Quarterly* 62 (4):408–24. doi:10.1086/602496.

Ramutsindela, M., G. Miescher, M. Boehi, and T. Hammel. 2016. Introductory notes on the politics of nature and science. In *The politics of nature and science in Southern Africa*, eds. M. Ramutsindela, G. Miescher, and M. Boehi, 9–19. Basler Afrika Bibliographien.

Ramutsindela, M., M. Spierenburg, and H. Wels. 2011. *Sponsoring nature: Environmental philanthropy for conservation*. London: Routledge.

Rose, G. 1997. Situating knowledges: positionality, reflexivities and other tactics. *Progress in Human Geography* 21 (3):305–20. doi:10.1191/030913297673302122.

Schnegg, M. 2018. Institutional multiplexity: Social networks and community-based natural resource management. *Sustainability Science* 13 (4):1017–30. doi:[10.1007/s11625-018-0549-2](https://doi.org/10.1007/s11625-018-0549-2).

Schnegg, M., and R. Kiaka. 2018. Subsidized elephants: Community-based resource governance and environmental (in)justice in Namibia. *Geoforum* 93:105–15. doi:[10.1016/j.geoforum.2018.05.010](https://doi.org/10.1016/j.geoforum.2018.05.010).

Sidaway, J. 2000. Recontextualising positionality: Geographical research and academic fields of power. *Antipode* 32 (3):260–70. doi:[10.1111/1467-8330.00134](https://doi.org/10.1111/1467-8330.00134).

Silva, J., and A. Mosimane. 2014. “How could I live here and not be a member?”: Economic versus social drivers of participation in Namibian conservation programs. *Human Ecology* 42 (2): 183–97. doi:[10.1007/s10745-014-9645-9](https://doi.org/10.1007/s10745-014-9645-9).

Silva, J., and A. Mosimane. 2013. Conservation-based rural development in Namibia: A mixed-methods assessment of economic benefits. *The Journal of Environment & Development* 22 (1): 25–50. doi:[10.1177/1070496512469193](https://doi.org/10.1177/1070496512469193).

Störmer, N., L. Weaver, G. Stuart-Hill, R. Diggle, and R. Naidoo. 2019. Investigating the effects of community-based conservation on attitudes towards wildlife in Namibia. *Biological Conservation* 233:193–200. doi:[10.1016/j.biocon.2019.02.033](https://doi.org/10.1016/j.biocon.2019.02.033).

Stott, P., and S. Sullivan, eds. 2000. *Political ecology: Science, myth and power*. London: Edward Arnold.

Sullivan, S. 2002. How sustainable is the communalizing discourse of ‘new’ conservation? The masking of difference, inequality and aspiration in the fledgling ‘conservancies’ of Namibia. In *Conservation and mobile indigenous peoples: Displacement, forced settlement, and sustainable development*, eds. D. Chatty and M. Colchester, 158–87. Oxford: Berghahn Press.

Sullivan, S. 2006. The elephant in the room? Problematising ‘new’ (neoliberal) biodiversity conservation. *Forum for Development Studies* 33 (1):105–35. doi:[10.1080/08039410.2006.9666337](https://doi.org/10.1080/08039410.2006.9666337).

Sullivan, S. 2018. Dissonant sustainabilities? Politicising and psychologising antagonisms in the conservation-development nexus. Future Pasts working paper 5. <https://www.futurepasts.net/fpwp5-sullivan-2018>.

Sullivan, S., and M. Hannis. 2015. Nets and frames, losses and gains: Value struggles in engagements with biodiversity offsetting policy in England. *Ecosystem Services* 15:162–73. doi:[10.1016/j.ecoser.2015.01.009](https://doi.org/10.1016/j.ecoser.2015.01.009).

Sutherland, W., L. Dicks, M. Everard, and D. Geneletti. 2018. Qualitative methods for ecologists and conservation scientists. *Methods in Ecology and Evolution* 9 (1):7–9. doi:[10.1111/2041-210X.12956](https://doi.org/10.1111/2041-210X.12956).

Svarstad, H., and T. Benjaminsen. 2017. Nothing succeeds like success narratives: A case of conservation and development in the time of REDD. *Journal of Eastern African Studies* 11 (3): 482–505. doi:[10.1080/17531055.2017.1356622](https://doi.org/10.1080/17531055.2017.1356622).

To, P., and W. Dressler. 2019. Rethinking ‘success’: The politics of payment for forest ecosystem services in Vietnam. *Land Use Policy* 81:582–93. doi:[10.1016/j.landusepol.2018.11.010](https://doi.org/10.1016/j.landusepol.2018.11.010).

Twyman, C., J. Morrison, and D. Sporton. 1999. The final fifth: Autobiography, reflexivity and interpretation in cross-cultural research. *Area* 31 (4):313–25. doi:[10.1111/j.1475-4762.1999.tb0098.x](https://doi.org/10.1111/j.1475-4762.1999.tb0098.x).

Van Dijk, T. 1993. Principles of critical discourse analysis. *Discourse & Society* 4 (2):249–83. doi:[10.1177/0957926593004002006](https://doi.org/10.1177/0957926593004002006).

Weaver, C., and P. Skyer. 2003. Conservancies: Integrating wildlife land-use options into the livelihood, development, and conservation strategies of Namibian communities. Paper presented at the Vth World Parks Congress, 8–17 September, Durban, South Africa.