CHAPTER 6

Investigating the Consistency of a Pro-market Perspective Amongst Conservationists

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Introduction

Neoliberal Conservation and Its Critics

In the last two decades, the field of biodiversity conservation has increasingly been characterised by the use of market logic (MacDonald 2010b; Büscher et al. 2012; Pirard 2012). Even though so-called 'market-based instruments' (MBIs), such as ecotourism, taxation and subsidies, have existed in conservation practise for quite some time, new instruments, such as payments for ecosystem services (PES), biodiversity derivatives and offsets and mitigation banking, have recently become more widespread (Landell-Mills and Porras 2002; Pattanayak et al. 2010; Arsel and Büscher 2012). Market-based instruments can be defined as mechanisms that attribute a price to nature (Pirard 2012), although their links to true markets are sometimes questionable (Pirard 2012; Muradian et al. 2013). Increasingly, MBIs are used in conservation because there is an expectation that they will deliver: (1) efficiency through the use of the market to internalise externalities (Brockington and Duffy 2011), (2) an economic rationale for conservation that decision makers understand (Daily 1997; Pearce and Barbier 2000), (3) new funding sources (Ferraro 2001; Balmford and Whitten 2003; Wunder 2007), and (4) potential "win–wins" by addressing both biodiversity conservation and poverty alleviation (Pagiola et al. 2005).

Market-based conservation practise has resulted in new and altered relationships between conservation organisations, the public and private sectors and local people (Sandbrook et al. 2013b). Mainstream environmental policy initiatives, including the study by 'The Economics of Ecosystems and Biodiversity' (TEEB) (TEEB 2010), the UN Environment Programme's 'Towards a Green Economy' report (UNEP 2011), the Convention on Biological Diversity's 'Strategic Plan for Biodiversity 2011–2020' paper (CBD 2010), the EU Biodiversity Strategy to 2020 report (European Commission 2011), and the UK's Natural Capital Committee document (www.naturalcapitalcommittee.org); these all promote the use of market-based instruments to conserve and manage nature.

Many biodiversity conservation organisations have increasingly promoted the use of markets and have formed partnerships with private sector actors (Igoe and Brockington 2007; MacDonald 2010b). These practises represent a departure from conservation norms that were prevalent up until two decades ago, when mainstream conservation organisations were more likely to embrace "values, approaches and missions that were deeply

incompatible" with private sector interests (MacDonald 2010b: 515) and to espouse alternative perspectives challenging neoliberal capitalism (Harvey 2003).

This neoliberal turn in conservation and the presumed win–win claims advanced by such perspectives have been the subject of criticism from within the social science community (Igoe and Brockington 2007; Arsel and Büscher 2012). Neoliberal conservation is defined as an "amalgamation of ideology and techniques informed by the premise that natures can only be 'saved' through their submission to capital and its subsequent revaluation in capitalist terms" (Büscher et al. 2012: 4). Such scholars see this trend as part of the wider political economic process of neoliberalisation (McCarthy and Prudham 2004; Igoe and Brockington 2007; Castree 2008)—the expansion of markets into increasingly broad areas of society over the last few decades (Sandel 2012). Given that neoliberal conservation "privileges as a solution the very structures and processes of neoliberal capitalism that produce the socio-ecological damages it seeks to redress" (Büscher et al. 2012: 14), critical social scientists question whether capitalist market mechanisms can resolve environmental problems (Igoe and Brockington 2007; Storm 2009).

Specifically, critical social scientists interrogate the process by which neoliberal conservation commodifies nature and question the outcomes of this process, which some have dubbed "Nature™ Inc." (Arsel and Büscher 2012). Castree (2008) argues that neoliberalism does not so much entail deregulation as require reregulation to reduce complex ecosystems into tradable commodities. This commodification process creates new types of value (Arsel and Büscher 2012) and facilitates new avenues for capital accumulation (Schurman and Kelso 2003; Harvey 2006). In addition to the moral critique of whether nature should be reduced to tradable commodities, scholars question the outcomes of this commodification process, which can result in privatisation (Heynen and Robbins 2005), social and economic displacement or exclusion (Brockington 2002), and the potential for elite-capture of newly available benefits (Igoe and Brockington 2007).

Further, McAfee (2012) argues that even though much attention has been focussed on the technical and institutional obstacles to implementing market-based approaches to conservation, this has detracted from the ways in which winners and losers are actively produced through the exchange process of markets. Indeed, the act of trading itself has significant redistribution consequences (Vira 2002). Thus, scholars argue that instead of creating synergistic growth and win–wins, the neoliberalisation of nature could result in winners and losers and potentially a reduction in biodiversity conservation effectiveness (Vira 2015).

The Circulation of Ideas Within Epistemic Communities

The critiques advanced by social scientists regarding neoliberal conservation seem to have had little impact on conservation professionals or decision makers. Büscher et al. (2012) observe that neoliberal solutions among conservationists seem to be the result of a consensus and seem not to be subjected to internal dissent. They propose that this lack of dissent is because neoliberal conservation functions as an ideology that has become socially (and ecologically) embedded through the generation of hegemonic governance structures and practises (Büscher et al. 2012). They write, "as an ideology it needs to be believed in; its central tenets should not be questioned" (Büscher et al. 2012: 15). Thus, they propose that critical perspectives, when voiced among conservation professionals, are not just ignored but also are actively suppressed or 'muted' in various ways, including through "the disciplining force of denial or disregard" (Büscher et al. 2012: 21).

Peck (2011) calls such a phenomenon, where various forms of evidence are ignored and policies reflect the strategies of those with certain interests, the result of 'fast policy'. He notes that in such contexts, what appears to be pragmatic policy learning is in fact policy replication operating within specific ideological parameters, with a 'push' toward particular solutions among policy entrepreneurs and decision makers (Peck and Theodore 2010b). These authors write that "there can be no doubt that canalized forms of transnational policy learning … embedded within tight ideological parameters—are playing heightened roles in animating" various policy landscapes (Peck and Theodore 2010b: 206).

The trend toward market-based practise in biodiversity conservation could be the result of shifting perspectives among conservationists as a 'community of practice', led by a similarly tight set of key decision makers. A community of practise (Lave and Wenger 1991; Wenger 2000) is defined as a "collection of people who engage on an ongoing basis in some common endeavor" (Eckert 2006: 683) and who share practises reflecting their collective learning (Wenger 2000; Eckert 2006). As a result, they develop shared ways of addressing recurring problems. Nonetheless, how do collective strategies within a community of practise shift and evolve? Who drives and decides what types of knowledge and tools are embraced or rejected within a community? Wenger (2000) and Peck and Theodore (2010b) refer to this process as an 'alignment' that coordinates perspectives, interpretations and action. Indeed, Peck and Theodore argue that such alignment comes from dense expert networks and epistemic communities of practise that "serve and sustain" policies (Peck and Theodore 2010b: 207).

Haas corroborates this link between alignment and epistemic communities, which he defines as "networks of knowledge-based experts" (Haas 1992: 2) who play key roles in articulating and framing problems and potential solutions within their particular communities. According to Haas (1992), such communities defer to these 'knowledge elites' who shape strategies and thinking within the community, resulting in the community of practise learning new patterns of reasoning and behaviour.

The propagation of ideas within epistemic communities usually involves close personal connections, shared ideologies and repeated interaction in a variety of settings. As such, international conference meetings and the geographic co-location of professionals are both examples of settings where such propagation and alignment of ideas could occur. Indeed, MacDonald (2010a) argues that high-profile meetings within the biodiversity conservation community provide important 'fields' for social and cultural reproduction; in other words, "moments when conservationists come together as a tangible (as opposed to imaginary) global community to reaffirm their values and beliefs" (Büscher et al. 2012: 18). This is also the case with geographic co-location.

Examined through the lens of this scholarship, one explanation for the increasing dominance of market-based interventions in conservation could be the emergence of an epistemic community, actively promoting the adoption of such approaches during the last two decades. Holmes (2011) suggests that such a community, a 'transnational conservation elite' that shares, replicates, amplifies and promotes ideas about market-based solutions to the conservation community, is emergent; however, he does not provide empirical evidence indicating the existence of such a transnational conservation elite.

Methods

This chapter uses Q methodology to empirically investigate perspectives on the role of markets in conservation among members of two distinct, but potentially overlapping, conservation communities. It does so by comparing the results of an earlier Q study conducted with delegates at the December 2011 International Congress for Conservation Biology (ICCB) in Auckland, New Zealand—hereafter referred to as 'the ICCB study' (Sandbrook et al. 2013b)—with new data collected using the same Q methodology instrument with staff members of conservation organisations based in and around Cambridge, UK—hereafter referred to as 'the Cambridge study'.

For this comparative study, we conducted semistructured interviews using Q methodology. The Q methodology increasingly has been used in the field of social science research on conservation (Sandbrook et al. 2013a) to study conservationists' subjective values and perspectives (Mazur and Asah 2013; Rastogi et al. 2013; Sandbrook et al. 2013b), as well as being used more and more in environmental research (e.g., Robbins 2000, 2006; López-i-Gelats et al. 2009; Brannstrom 2011). We employed the same Q methodology survey as the Sandbrook et al. (2013b) ICCB study, with 17 professionals working for conservation organisations located in and around Cambridge, UK, in February and March of 2013. We then conducted a direct comparison of the perspectives represented in both the ICCB and Cambridge datasets.

The city of Cambridge has one of the largest clusters of biodiversity conservation organisations and researchers in the world[1]; many are linked through the Cambridge Conservation Forum (CCF),[2] the Cambridge Conservation Initiative (CCI),[3] and the University of Cambridge Conservation Research Institute (UCCRI).[4] A number of staff of CCI member organisations are now housed together in a new campus building that serves as the hub for CCI (Stokstad 2016). This research included, but was not limited to, conservation professionals who were employees of conservation organisation partners of the Cambridge Conservation Initiative and affiliated with the University of Cambridge Conservation Research Institute.

The organisations with employees that took part in the interviews represent the various types, sizes and focusses of conservation organisations that exist in Cambridge. The Cambridge conservation community is made up of global intergovernmental organisations (IGOs) such as the United Nations Environment Programme World Conservation Monitoring Centre, the International Union for the Conservation of Nature, and the International Whaling Commission; internationally focussed, large biodiversity conservation organisations and networks such as Flora and Fauna International and Birdlife International; and much smaller conservation NGOs with a more limited remit and geographical focus.

The larger conservation organisations in Cambridge have more than 200 employees at their organisational headquarters, with partners and networks across more than 100–150 countries; their annual operational budgets are on the order of USD40–50 million. Those at the other end may have less than five employees and correspondingly smaller budgets. Many employees have Masters degrees (or equivalent) or PhDs. The Cambridge organisations represent what might be thought of as 'mainstream' conservation practise,

and do not include any organisations associated with radical opposition to market-based conservation. Many individuals from the Cambridge conservation community (typically those who are more senior members of larger conservation organisations) interact with other members of the global conservation community through participation in conferences, knowledge platforms and global convention meetings, as well as through employment mobility.

Nevertheless, the Cambridge conservation community also includes networks and initiatives, developed over approximately the last 15 years, that are designed to facilitate frequent interactions between conservation professionals, conservation science researchers and critical social scientists. Therefore, Cambridge-based conservation professionals and scientists might be more exposed to critical thinking on markets and conservation than is the norm in other contexts. The research for this chapter, therefore, sheds some light on whether this slightly unusual cluster of individuals and organisations reproduces or departs from the patterns observed at a gathering of conservation professionals at ICCB 2011.

Q Methodology

To undertake this research, we used Q methodology, a method used to quantitatively study respondents' subjectivity and first-person viewpoints (Watts and Stenner 2012). This methodology statistically measures the extent to which opinions and viewpoints are shared between respondents (Watts and Stenner 2012). It combines the qualitative study of perceptions with statistical analysis, revealing key qualitative viewpoints and allowing them to be understood at a high level of quantitative detail (Watts and Stenner 2012). Q methodology is designed to support the identification and disaggregation of "currently predominant social viewpoints and knowledge structures relative to a chosen subject matter" among a relatively small group of respondents (Watts and Stenner 2012: 42). Thus, the methodology "supports an understanding of the detailed composition of positions, making it suitable … to understand the perspectives of conservation professionals" (Sandbrook et al. 2013b: 235).

Q methodology begins by requiring respondents to arrange statements drawn from a literature review of the subject onto a grid, as shown in Fig. 6.1. These statements are known as the 'Q set'. We used the same 34 statement Q set developed and used in the ICCB study to enable comparison

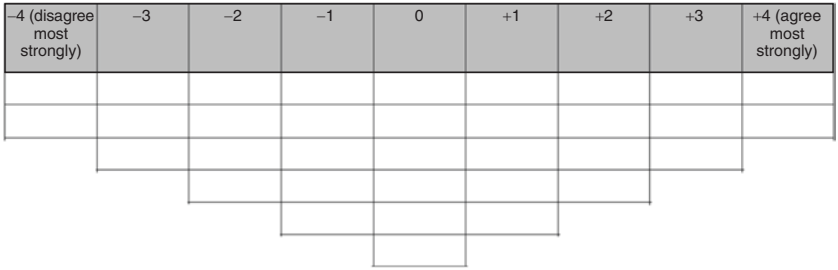

Fig. 6.1 Design of the Q methodology grid used

between the Cambridge and the ICCB data (Table 6.1). This Q set was originally developed by Sandbrook et al. (2013b) using a literature review and the authors' extensive interactions with conservation practitioners and organisations. It was designed to include statements across a continuum of perspectives on market-based approaches to conservation, and it was piloted with two respondents to ensure a balanced sample of statements across a range of perspectives (Sandbrook et al. 2013b).

The Q set of statements included statements about "ethics, pragmatism, ideology and local impacts" as well as a range of perspectives on market-based conservation (Sandbrook et al. 2013b: 11). To be appropriate for a Q study the statements in the Q set needed to be familiar to all respondents and to cover the range of views present within the respondent community.[5] Based on the authors' knowledge of the Cambridge conservation community we felt that the statements developed for the ICCB study met this criterion.

Participants

This Q survey was conducted with employees of conservation organisations located in and around the city of Cambridge. Participants included both those who worked for large international conservation organisations and smaller and for more locally focussed conservation organisations. All the organisations from which staff members were interviewed were involved to some extent in market-based conservation activities. Although the majority of participants were senior employees at the top of their organisational hierarchies, two respondents were mid-career professionals. Eleven were male and six were female. All but two participants were citizens of Organisation for Economic Co-operation and Development (OECD) countries.

Table 6.1 Factor comparison between the Cambridge and ICCB studies

	Cambridge Factor One		*ICCB Factor One*		*Cambridge Factor Two*		*ICCB Factor Two*		*Cambridge Factor Three*	
Statement	*Z-Score*	*Ranking*	*Z-Score*	*Ranking*	*Z-Score*	*Ranking*	*Z-Score*	*Ranking*	*Z-Score*	*Ranking*
1 Markets provide a new source of funding	0.855	2	1.512	3	1.139	2	0.686	−1	0.428	1
2 Markets provide a large source of funding	0.689	1	0.889	2	−0.831	−2	−0.45	−1	−0.391	−1
3 Markets provide a sustainable source of funding	0.684	1	0.785	1	−0.891	−3	−0.387	−1	−0.848	−2
4 Sufficient funds without turning to markets	−1.434	−3	−1.055	−3	−0.791	−2	−0.25	−1	0.305	1
5 Markets most efficient for allocating resources	−0.483	−1	−0.148	0	−0.91	−3	−1.214	−2	0.239	1
6 Markets preferable as conditional on performance	−0.125	0	0.138	0	−0.577	−1	−0.448	−1	−1.116	−3
7 Markets most effective when directly linked to conservation	1.081	3	1.541	4	1.527	3	1.304	3	−0.289	−1
8 Conservation should embrace market, not fight against it	0.885	2	0.508	1	−0.295	0	−1.017	−2	−0.189	−1
9 Biodiversity loss primarily driven by market capitalism	0.823	2	0.083	0	1.59	3	1.003	3	−0.441	−1
10 Biodiversity that cannot survive in the marketplace is not worth conserving	−2.242	−4	−2.011	−4	−2.058	−4	−2.157	−4	−2.174	−4
11 Markets too unpredictable for conservation purposes	−0.208	−1	−0.8	−2	0.719	2	0.758	2	0.318	1
12 Pragmatism not good reason to risk markets	−0.447	−1	−0.714	−1	−0.699	−1	0.828	2	−0.667	−2

(*continued*)

Table 6.1 (continued)

	Cambridge Factor One		*ICCB Factor One*		*Cambridge Factor Two*		*ICCB Factor Two*		*Cambridge Factor Three*	
Statement	*Z-Score*	*Ranking*	*Z-Score*	*Ranking*	*Z-Score*	*Ranking*	*Z-Score*	*Ranking*	*Z-Score*	*Ranking*
13 Decision makers understand monetary values	0.931	3	0.878	1	−0.496	−1	−1	−2	1.202	3
14 Opponents of markets are not living in the real world	0.808	1	−0.998	−2	−0.319	0	−1.518	−3	−0.037	0
15 Private sector partnership undermines conservation	−1.859	−4	−1.518	−3	−0.865	−2	0.492	1	−1.622	−3
16 No difference between commodity and ES markets	−1.201	−3	−0.97	−2	−1.202	−3	−0.775	−2	−1.355	−3
17 Market restructuring cannot deliver conservation	−1.2	−3	−1.159	−3	0.468	1	0.708	2	−0.152	0
18 Nothing really new about market-based approach	−0.314	−1	−0.583	−1	−0.752	−2	−0.058	0	0.449	2
19 By engaging in markets, actors find beneficial outcomes	0.796	1	1.039	2	0.219	1	0.232	0	0.811	2
20 Conservation market expansion has nothing to do with neoliberalism	−0.191	0	−0.176	0	−0.75	−1	−0.701	−1	−0.189	0
21 Conservation organisations should promote the economic valuation of nature	0.601	1	1.084	2	−0.667	−1	−1.425	−3	0	0
22 Conservation organisations should not support commodification of nature	−1.036	−2	−0.964	−2	0.158	0	1.482	4	−0.173	0
23 Markets cannot handle the unpredictable properties of ecosystems	0.107	0	−0.428	−1	1.156	2	1.4	3	1.268	3

24	Need more evidence on the impacts of market conservation	0.369	0	0.775	1	1.692	4	0.556	1	−0.515	−2
25	Putting a price on nature does not detract from other values	1.856	4	1.265	3	−0.345	0	−1.519	−4	0.231	0
26	Conservation choices ethical and political, not solely economic	1.45	4	1.554	4	2.144	4	1.874	4	1.103	2
27	Artificial substitutes may be more competitive than nature	0.516	0	0.155	0	1.218	3	0.225	0	1.898	4
28	Markets have negative impacts where limited exposure of them	−0.107	0	0.158	1	0.465	1	0.43	1	1.173	2
29	Market conservation increases inequality in local communities	−0.517	−1	0.104	0	0.753	2	0.426	0	0.297	1
30	Market transactions are voluntary, so cannot be exploitation	−0.926	−2	−1.532	−4	−1.425	−4	−1.287	−3	−1.783	−4
31	Markets provide livelihood opportunities for the poor	0.878	2	0.908	2	0.394	1	0.2	0	1.326	3
32	Markets deny poor people access to natural resources	−0.857	−2	−0.709	−1	−0.13	0	0.553	1	−0.906	−2
33	Market conservation creates local conservation incentives	1.014	3	1.143	3	0.619	1	0.134	0	2.022	4
34	Private sector partners constrain criticism of markets	−1.198	−2	−0.755	1	−0.26	0	0.916	2	−0.223	−1

Data Collection: The Interview

Data were collected from semistructured, face-to-face interviews with participants in quiet locations away from other people. At the start of the interviews, participants were promised anonymity and asked to share their personal views, as opposed to the views of their organisation. After briefly explaining the project and the Q methodology, respondents were asked to complete the Q survey, in which they sorted the set of 34 printed statements onto a standard distribution grid (see Fig. 6.1). Participants sorted statements over a relative range, from "strongly disagree" (−4) on one side of the grid to "strongly agree" (+4) on the other. This distribution grid required respondents to rank statements relative to other statements, indicating which statements they believed were the most important. Statements were shuffled so that they were presented in a different order to each respondent.

As the sorting took place, respondents were encouraged to explain the rationale for their choices of placement for each statement. In cases where respondents had questions about a statement, a limited explanation of its meaning was given in a way that sought not to introduce bias. After the survey was finished, respondents were asked to explain their reasoning behind statements they chose for the two extremes and for the statements in the middle of the distribution grid. This qualitative data helped in understanding the meaning and significance of participants' choices beyond each participant's sort. We took notes during the interviews as respondents explained their decisions for ranking certain statements, including verbatim quotes for the qualitative component of the data collection. These statements and quotes were then used to interpret and corroborate the results.

Even though participants were encouraged to follow the normal distribution of the grid, eight participants did not arrange their grid like this. Whereas having participants respond within the normal distribution is a practical way of encouraging them to prioritise statements relative to others, it is not essential for use of the method, as even unequally distributed statements reveal their relative level of agreement about each statement in relationship to the others (Brown 1980; Watts and Stenner 2012).

Q Data Analysis

The results of the Q survey, called Q sorts, were input into the PQMethod Software, which is specifically designed for Q methodological analysis. The software analysis requires three statistical steps: (1) correlation, (2) factor

analysis and (3) standard factor score computation (Watts and Stenner 2012). Correlation measures the degree of agreement between any two Q sorts and denotes their similarity in a correlation matrix. Factor analysis then searches for patterns of association between the measured variables in the matrix and reduces them into a small number of highly correlated viewpoints, called 'factors' (Watts and Stenner 2012). These factors then undergo 'rotation', which refers to the software plotting identified factors on a three-dimensional correlation matrix and rotating (e.g., moving or adjusting) the matrix to identify and eliminate sorts that are significantly associated onto more than one factor, therefore distinctly defining no factor. This analysis results in each factor identifying a subset of respondents within a Q study who rank-ordered the statements in a similar way, displaying similar perspectives about the provided statements.

For the Cambridge study, we used the software to rotate two, three and four factors and looked at the results. Ultimately, we decided to use and interpret the three-factor result, using two common decision-making criteria (Watts and Stenner 2012). First, we applied the Kaiser-Guttman criterion, which states that the Eigenvalue of a factor should be greater or equal to 1.00 (Watts and Stenner 2012). Second, we accepted Factors One, Two, and Three because they were the only factors that had two or more Q sorts that loaded significantly on each, a common criterion for factor selection (Watts and Stenner 2012).

During the rotation process, the PQMethod 'flags' specific Q sorts that are representative of particular factors. It then generates a 'typical' Q sort, which represents an ideal-type composite version of all Q sorts flagged for that factor. Data interpretation is then done by examining these ideal-type Q sorts alongside the qualitative data. Although not all Q studies include qualitative data, doing so allows for richer interpretation of the results and confirmation that the factor interpretation fits the views expressed by respondents during their interviews.

Narrative descriptions are then written to explain the perspectives defined by each factor. These descriptions, supported by direct quotations from respondents, are presented as results. It should be noted that the interpretation of Q results is a somewhat subjective process (Eden et al. 2005), and comparing factors between Q studies is still experimental, though some published studies have done so (e.g., Tuler and Webler 2009). We chose to do a direct, side-by-side comparison of the idealised factors of both the ICCB and Cambridge datasets to identify points of similarity and difference.

Results

Points of Consensus Among All Factors from Both Studies

All respondents from both the ICCB and Cambridge studies held a limited set of core beliefs, as evidenced by their similar ranking of five statements in the ideal-type sorts, suggesting a common recognition of some limitations of markets as conservation tools in both theory and practise (see Table 6.1). They collectively believed that biodiversity is worth conserving for its multiple values (statement 10), and that conservation choices are ethical and political, not solely economic (statement 26). Respondents from both studies recognised a fundamental difference between markets for traditional commodities and markets for ecosystem services (statement 16). They also recognised the potential for adverse consequences in the use of markets in conservation, including the possibility for exploitation (statement 30).

There was one statement that respondents from both studies did not express a strong opinion on, with relatively neutral responses. This statement was: "the expansion of market-based conservation has nothing to do with neoliberalism" (statement 20). Most Cambridge respondents (16 out of 17) asked (during their Q sort interview) for a definition of neoliberalism when they encountered this statement. Sandbrook et al. also noted in their ICCB study that there was a lack of familiarity among their respondents with this term (Sandbrook et al. 2013b).[6] When asked, interviewers from both studies provided participants with a general definition of neoliberalism that sought not to introduce a bias; however, given respondents' relative unfamiliarity with the term, it is not surprising that this statement did not attract strong views.

Indeed, it is interesting to note that the lack of recognition of this term, which is fairly dominant in the critical literature on markets and conservation, does lend weight to the argument that mainstream conservation practitioners and researchers are not engaging with these critiques (Sandbrook et al. 2013a). This raises the question of how to engage practising conservationists with the latest critical social science literature on conservation, and how social scientists can better communicate and disseminate their research to conservation professionals.

Factor One: Stability Across Both Studies

There was a high level of similarity between Factor One in each study. Respondents associated with this factor expressed support and enthusiasm for the use of market-based interventions in conservation. In comparing Factor One between the two studies, 13 statements were ranked exactly the same on the distributional grid, 17 statements were ranked within one integer of difference, and only four statements (out of a total of 34) were ranked by more than one integer of difference (see Table 6.1). Seven of the 12 respondents from the ICCB study were associated with Factor One, including two senior employees of large international conservation organisations, one government advisor and four academics, of whom two were conservation scientists and two were economists. Likewise, 7 of the 17 respondents from the Cambridge study were associated with Factor One, including four senior employees from large international conservation organisations, a senior employee from a mid-sized international conservation organisation, a senior employee of a local conservation organisation, and a senior employee of a national conservation organisation.

The collective group of respondents that were associated with Factor One were the least sceptical of any group about potential negative effects of markets in conservation. In terms of impacts on local people, respondents associated with Factor One saw little downside to engaging with market-based conservation. They disagreed that market-based conservation denies poor people access to natural resources (statement 32) and with the notion that market-based conservation increases inequality (statement 29). Instead, they saw potential for market-based conservation to create local incentives to support conservation (statement 33) and provide livelihood opportunities for the poor (statement 31). In terms of conservation outcomes, respondents associated with Factor One were indifferent to the idea that "there is a risk that in a market, artificial substitutes may become more competitive than nature at providing services" (statement 27). They were somewhat indifferent to the statement: "Markets have no way of dealing with unpredictable properties of ecosystems, and this makes them dangerous for conservation" (statement 23) and strongly disagreed with the idea that "conservation partnerships with the private sector are undermining conservation outcomes" (statement 15). This group saw little downside in turning to markets.

Unlike respondents to other factors, respondents associated with Factor One disagreed with the notion that markets are too unpredictable to be

used for conservation (statement 11). More strongly than respondents associated with other factors, these participants believed that "putting a price on nature does not detract from all the other reasons to value it" (statement 25).

Respondents associated with Factor One in both studies saw the use of markets in conservation as a realistic and necessary tool. They distinctively believed that markets provide both a large (statement 2) and sustainable (statement 3) source of funding for conservation, and clearly believed that sufficient funding to reverse biodiversity loss could not be raised through any method other than markets (statement 4). Respondents associated with this factor held a strong belief that markets can be restructured sufficiently to deliver conservation outcomes (statement 17) and saw markets as potentially helpful in delivering conservation outcomes. They were also the only group to agree with the statements: "Conservationists should embrace market-based capitalism, not fight against it" (statement 8) and "Conservation organisations should promote the economic valuation of nature" (statement 21).

Respondent 22[7] (from the Cambridge study) saw the framing of biodiversity in economic terms as beneficial, explaining that "the conservation community has struggled to express the value of ecosystems. And what we're seeing is that the economic camp is helping lead us into another way of valuing nature". Respondent 15 said: "[I]f we turn our back on monetising nature, we are missing a huge opportunity to embed conservation into our society". Likewise, Respondent 28 said:

[W]e used to be combative and confrontational, presenting to the rest of the world capitalism as the cause of the decline in biodiversity. Now we are moving into a much more mature frame of mind that says collaboration. Let's try to solve these problems together. Let's take what money, wealth, and capitalism can do at face value and help it do the right thing to make the world a better place.

Only four statements from the comparative Factor One sorts were ranked with more than one integer of difference. The Cambridge Factor One respondents agreed more firmly with the statements: "Biodiversity loss is primarily driven by market-based capitalism" (statement 9: Cambridge study, +2; ICCB, 0) and "Decision makers understand monetary values, so conservation should be framed in these terms" (statement 13: Cambridge study, +3; ICCB, +1). In the case of statement 30, "market-based conservation transactions are voluntary, so there is no possibility for exploitation", the ICCB study participants disagreed more strongly (Cambridge study, −2; ICCB, −4).

The largest amount of disparity between Factor One respondents from the two studies was their ranking of statement 14: "Those who oppose market-based conservation are not living in the real world" (Cambridge study, +1; ICCB, −2). This statement was met with verbal scepticism by many of the respondents, some of whom questioned the validity of such a statement in a research setting, despite being reminded that Q methodological research is based on understanding subjective opinions. We felt the statement was perhaps too ambiguous for participants to interpret—many said "it depends what you mean by the real world"; this may have been the reason for such a disparity in ranking of this statement between the Factor One-associated respondents from the two studies.

Various Sceptical Perspectives Within the Remaining Factors

The level of stability between the Factor One idealised sorts was not seen when comparing the remaining factors of the ICCB and Cambridge studies. Even though the remaining factors were distinguished from Factor One on several key points, each portrayed differently nuanced variations of caution and scepticism toward the use of markets in conservation.

Collectively, respondents associated with the remaining factors were not swayed by the rationale that markets provide large (statement 2) or sustainable (statement 3) sources of funding for conservation. Instead, they rejected this funding rationale. Respondent 26 (Cambridge Factor Two) said:

> I don't think that markets are providing a large source of funding for the right kinds of conservation, … and the jury is still out on whether markets provide a sustainable source of funding. Sufficient funding hasn't happened so far [for conservation], so why should it now?

Respondent 14 corroborated this point saying, "no evidence will support that markets provide a sustainable source of funding for conservation. We are miles away from that".

Those associated with the remaining factors differed from Factor One in that they gave a positive ranking for the statement: "Markets are too unpredictable to be used for conservation purposes" (statement 11). These respondents felt that because markets have no way of dealing with the unpredictable properties of ecosystems, it makes them dangerous for conservation (statement 23), while respondents associated with Factor One

from both studies were rather indifferent to this concern. Respondent 23 (Cambridge Factor Three) explained:

> We tend to place values on ecosystems and species based on what is predictable. But we know that a lot of ecosystem processes can be unpredictable. Markets cannot handle things that are unpredictable. We cannot totally depend on markets, because we need mechanisms for dealing with surprises.

Beyond these points of collective disagreement with Factor One, the remaining positions continued to be unique in character across both studies. Each expressed a different, nuanced perspective of caution and scepticism toward the use of markets in conservation. Sandbrook et al. defined the ICCB study's Factor Two as having "ideological scepticism of the underlying rationale for market-based conservation" (2013b). Details of Factors Two and Three in the Cambridge study are given in the following sections.

Cambridge Factor Two: Evidence-Oriented Market Sceptics

Respondents associated with the Cambridge study's Factor Two were sceptical of markets in conservation based on a perceived need for more evidence. Six respondents were flagged for the Cambridge Factor Two. This group included two senior employees from a large international conservation organisation, a senior and mid-level respondent from two large, international conservation organisations, one senior respondent from a national conservation organisation, and a senior employee of a small international conservation organisation.

Respondents associated with the Cambridge Factor Two believed strongly and distinctly that "more evidence is needed on the impacts of market-based conservation before we go too far" (statement 24). Respondent 26 explained that "a lot of people are announcing that partnerships with the private sector are the way forward in conservation, but there is not a lot of evidence behind it". Respondents soundly agreed that "biodiversity loss is primarily driven by market-based capitalism" (statement 9) and were sceptical that markets could be restructured sufficiently to deliver conservation outcomes (statement 17) They worried about the unpredictability of markets (statement 11) and were concerned that "there is a risk that in a market, artificial substitutes may become more competitive than nature at providing services" (statement 27).

Like the ICCB Factor Two, those associated with the Cambridge Factor Two disagreed somewhat with the rationale that "decision makers understand monetary values, so conservation should be framed in those terms" (statement 13). Instead, respondents felt that decision makers understand more than just economic arguments, and that conservationists do not necessarily have to cater to economic rationales for their arguments to be recognised. Respondent 16 said: "I don't think it's true that decision makers are only moved by the economic argument. Decision makers are moved by all sorts of reasons. It's a myth that they are only swayed by markets". Respondents did not think efficiency was a good reason to engage with markets in conservation (statement 5). Respondent 16 said: 'I don't think the concept of efficiency applies to biodiversity'.

Cambridge Factor Three: Social Outcome-Focused Realists

The ICCB study yielded two factors, while the Cambridge study yielded three factors. Respondents associated with Cambridge Factor Three saw the potential for the use of markets in conservation to benefit local people but were sceptical about the ability of markets to deliver biodiversity conservation outcomes. Three respondents were associated with this factor, including a senior employee of a small international conservation organisation, a senior employee of a small national conservation organisation, and a mid-level employee of a large international conservation organisation (its senior employees interviewed were flagged to either Factor One or Factor Two). When we ran a two-factor solution for the Cambridge study and compared it to the final three-factor solution, one of these respondents was flagged for Factor One in the two-factor solution, whereas the other two were flagged for Factor Two in a two-factor solution. This suggests that Factor Three is made up of hybrid viewpoints from both Factors One and Two from the Cambridge study. Indeed, Factor Three reveals a pragmatism for using markets that was reflected in both the ICCB and Cambridge studies' Factor One, together with a scepticism toward the ability of markets to deliver certain outcomes, which was reflected in the Cambridge Factor Two.

Respondents associated with Factor Three saw utility in using market-based conservation to create incentives for local people (statement 33) and believed that "market-based conservation provides livelihood opportunities for the rural poor" (statement 31). Although respondents associated with this factor saw the potential of markets to deliver positive social

outcomes, they recognised that social outcomes are context-specific and dependent on how market-based conservation initiatives are implemented. For example, unlike Factor One respondents, these respondents saw the possibility of markets having negative social impacts in places with limited experience with the market economy (statement 28). They also believed that even though market-based conservation is voluntary, this does not negate the possibility for it to be exploitive (statement 30). Respondent 19 said that "markets could go both ways. [They] could increase or decrease inequality"; respondent 23 agreed:

> [F]or a market to operate successfully, all actors need access to all information. Unfortunately, many people in local communities have limited information. If this is the case, if you introduce a market system, the local people end up losing out. But if the distribution of revenue is well done, the issue of inequality should not arise.

Even though those associated with this factor saw the potential for positive social impact from market-based conservation, respondents associated with it were less optimistic about the ability of markets to deliver biodiversity conservation outcomes. Like Factor Two, respondents linked to Factor Three strongly agreed that "there is a risk that in a market, artificial substitutes may become more competitive than nature at providing services" (statement 27). Respondent 27 said: "[S]uppose something comes along, product B, that's made very cheaply. Then the [ecosystem service] market would slump and we'd lose all traction. Markets have unpredictable slumps that are scary". Respondent 19 said: "I think markets are very risky, as we've experienced with the economic downturn. You should never rely on markets to solve the biodiversity problem".

Respondents associated with this factor seemed to be looking beyond markets for other means to conserve biodiversity. This was the only group that strongly disagreed with the idea that "market-based conservation is preferable to other forms because it is conditional on performance" (statement 6). This factor was also the only more sceptical factor with respondents who disagreed with the idea that "markets are most effective for conservation when they are directly linked to the delivery of conservation outcomes" (statement 7). These responses suggest that Factor Three participants do not believe that market-based conservation is the most preferable or effective means of doing conservation, either despite or because this form of conservation is sometimes linked to the delivery of conservation outcomes. Their disagreement with statements 6 and 7 implies that

this group is sceptical of the ability of markets to deliver on conservation outcomes, and believe that other methods of conservation may be more effective and better at ensuring biodiversity outcomes.

Interestingly, the wariness of those associated with Factor Three about the ability of markets to deliver conservation outcomes does not come from a feeling that there needs to be more evidence, as the Factor Two perspective suggested. On the contrary, Factor Three was the only factor across both studies where respondents disagreed with "we need more evidence on the impacts of market-based conservation before we go too far" (statement 24). Respondent 19 said, "we could keep going for more evidence. But in the end, we just need to do something".

Factor Three respondents did believe, along with Factor One, that "decision makers understand monetary values, so conservation should be framed in those terms" (statement 13). This statement postulates how decision makers behave, and although respondents agreed with this description, they did not agree with this statement on normative terms or approve of its reality. Respondent 23 explained that "politicians would prefer that conservation is conveyed in messages that are easier to understand. When you convert ecosystem services into [economic] values, this tends to convey a stronger message than if you just asked them to put money into something that they don't understand". Likewise, respondent 19 said: "I agree quite strongly that decision makers understand monetary values. I don't think they know what biodiversity actually means". However, signaling their disapproval with this reality, Factor Three is the only factor in which respondents convey disagreement with the idea that conservationists should embrace market-based capitalism (statement 8).

Discussion

This comparative study found a pro-market perspective that was consistent across both study groups, and three fragmented and more critical perspectives that differed across the study groups. Although some positive perspectives in each study group might have been expected given the rise of MBIs across the conservation community, the consistency of the statements that loaded onto the pro-markets Factor One across both studies is remarkable given that Q methodology is a sophisticated tool capable of uncovering highly detailed and nuanced subjective value positions (Watts and Stenner 2012). This result lends support to the suggestion that, although sampled in very different geographies, the individuals aligned

with Factor One in both studies were in fact members of a single transnational epistemic community, with a shared way of thinking about the role of markets in conservation.

In contrast to the consistency of Factor One, the other factors identified were distinct in character both within and across the two studies: Factor Two from the ICCB study was different in character than the Cambridge Factor Two, and the third factor that emerged from the Cambridge study offered an additional critical perspective toward the use of markets in conservation. This tension of perspectives over the use of MBIs in conservation existed not only between members of different conservation organisations, but between staff members within the same organisation. This occurred even within organisations that have advocated and adopted market-oriented conservation activities. The lack of consistency in these factors across the two study groups suggests that the individuals aligned with these factors belong to a more fragmented discursive community, in contrast to the result for Factor One in both studies.

Why might we find a shared, supportive perspective on the role of markets in conservation among conservationists sampled at different times, on opposite sides of the globe? One possibility is that those holding these views have been exposed to a consistent and influential set of global communications that have promoted this view, such as the 2010 'The Economics of Ecosystems and Biodiversity' study (TEEB 2010), or the Convention on Biological Diversity's 'Strategic Plan for Biodiversity 2011–2020' (CBD 2010). To our knowledge, no equivalent critical communication on the role of markets in conservation have been as influential, or similarly promoted, among conservationists.

A second possibility is that some of the individuals we sampled actively participate in transnational networks and events within which such ideas are created and circulated.[8] Participants in such networks might be expected to be more senior within their organisations because it is usually senior staff who attend the conferences and conventions central to the operations of such networks (Campbell 2010; MacDonald 2010a; Büscher 2014; Campbell et al. 2014). To investigate this possibility within our study's data, we examined the relationship between each respondent's relative seniority within each's conservation organisation, the relative size of the organisation, and the individual's association with each factor. One pattern that emerged was that senior-level respondents from large, internationally focussed conservation organisations were associated with the pro-market Factor One (Table 6.2). Likewise, respondents who loaded

Table 6.2 Respondents by seniority, organisation size and factor

Study	*Number*	*Size of organisation*	*Respondent's rank in organisation*	*Respondent's factor flag*
ICCB	1	University	Mid-level	1
ICCB	2	Large/Int'l	Senior	1
ICCB	3	Large/Int'l	Mid-level	2
ICCB	4	University	Mid-level	1
ICCB	5	Large/Int'l	Mid-level	2
ICCB	6	Large/Int'l	Mid-level	2
ICCB	7	Large/Int'l	Senior	1
ICCB	8	n/a	n/a	1
ICCB	9	Large/Int'l	Mid-level	2
ICCB	10	Small/Local	Mid-level	2
ICCB	11	University	Mid-level	1
ICCB	12	University	Senior	1
Cambridge	13	Large/Int'l	Senior	1
Cambridge	14	Large/Int'l	Senior	2
Cambridge	15	Large/Int'l	Senior	1
Cambridge	16	Large/Int'l	Senior	2
Cambridge	17	Large/Int'l	Senior	1
Cambridge	18	Large/Int'l	Senior	2
Cambridge	19	Large/Int'l	Mid-level	3
Cambridge	20	Large/Int'l	Mid-level	2
Cambridge	21	Large/Int'l	Senior	1
Cambridge	22	Medium/Int'l	Senior	1
Cambridge	23	Small/Int'l	Senior	3
Cambridge	24	Large/Int'l	Senior	n/a—did not flag
Cambridge	25	Small/Local	Senior	1
Cambridge	26	Small/Int'l	Senior	2
Cambridge	27	Small/Local	Senior	3
Cambridge	28	Medium/National	Senior	1
Cambridge	29	Medium/National	Senior	2

onto the more sceptical factors in both studies tended to hold mid-level positions or work for smaller, national or more locally focussed conservation organisations. This pattern was apparent even among employees of the same conservation organisations within our sample.

Given the scope of this study, the authors acknowledge that we are unable to say whether this retrospective observation on seniority exists outside of our sample. In particular, the Q methodology study design does not allow inferential conclusions to be drawn, regarding for instance the

relationship between association with factors and the demographic characteristics of the sample. These initial empirical data, however, do provide some support for Holmes's proposed epistemic community (2011)—a 'transnational policy elite'—promoting 'fast' neoliberal conservation policy (after Peck and Theodore 2010b). The expression of a nearly identical perspective about market-based approaches in conservation across individuals in senior positions within two distinct conservation networks suggests that there is a consistent and apparently durable pro-market perspective that exists and persists among elite conservation professionals from diverse geographies. This might be sharpened into 'alignment' (Wenger 2000; Peck and Theodore 2010a) at various points of overlap within the conservation community's transnational policy networks, and at events (e.g., international conferences) where such transnational elites come together (MacDonald 2010a).

In contrast to Factor One, the more sceptical perspectives found in Factor Two of the ICCB study, and the distinct Factors Two and Three from the Cambridge study, were nonuniform and lacked the alignment seen in the pro-market Factor One. This points to the fragmented nature of dissent within the conservation community among those who are more sceptical toward the dominant thinking about neoliberal conservation. These more sceptical factors, primarily voiced in our small and non-representative sample by mid-level conservation professionals and those in smaller, nationally or regionally focussed conservation organisations, provide some empirical substance to the suggested fractured nature of less dominant ideas, which lack the alignment of an actively promoted perspective.

Further, in examining the perspectives represented by these less dominant factors, it should be noted that each sceptical factor was sceptical primarily on the grounds of inconclusive evidence (Cambridge Factor Two), on-the-ground pragmatism (Cambridge Factor Three) or cautious pragmatism merged with a scepticism about whether markets are too unpredictable and problematic to be applied to conservation (ICCB study, Factor Two). In other words, despite being warier of market-based approaches, all the more sceptical factors represented viewpoints of support for the deployment of market-based policy under certain conditions.

Thus, even within the sceptical factors across both studies, we found no factor representing a critique that comes close to the perspective of critical social scientists studying the use of MBIs, despite the Cambridge respondents being part of a geographically co-located conservation network that includes such critical scholars. Indeed, the lack of familiarity with the term

'neoliberalism' among all participants corroborates this point. It would be very interesting to conduct similar research among the epistemic community of critical social science scholars writing about neoliberal conservation to establish whether a globally shared *critical* perspective on the role of markets in conservation exists among them, along the same lines as the consistent Factor One we identified among conservationists.[9]

The absence of strongly critical viewpoints among the conservationists in our study groups could be the outcome of what Büscher et al. (2012) have called the 'disciplining of dissent' within neoliberal conservation ideology. This could happen in two ways. First, despite the study participants being asked to express their personal viewpoints, they may have been reluctant to express critical views that are counter to the pro-market perspective that has so much momentum. Second, people with critical views may be absent from mainstream conservation research and practise organisations because they are not hired in the first place.

Concluding Remarks

This comparative study identified a strikingly consistent pro-market perspective surrounding the use of MBIs in conservation among two groups of conservation professionals, in two different contexts where conservation professionals convene. The similarity of this pro-market perspective corroborated the observation that the adoption of a particular neoliberal, market-led approach to conservation exists and persists within the broader biodiversity conservation community. The evidence also supports a growing body of research that suggests that pro-market and neoliberal approaches to conservation are embedded within the thought processes of some decision makers and staff of conservation organisations. This finding also lends some support to the proposed existence of a transnational conservation elite (Holmes 2011) that supports these developments. Second, this research corroborates earlier findings that pro-market perspectives in conservation are not altogether uncontested. Our comparative results show that the consistency of pro-market perspectives was matched by fragmented sceptical perspectives among other conservation professionals. The additional critical perspectives that emerged in the Cambridge study validates the ICCB study's findings that there is some tension in the way that conservationists think about markets (Sandbrook et al. 2013b), as well as a plurality of perspectives in the ways that conservationists value nature (Sandbrook et al. 2011).

The Q methodology offers the ability to quantitatively study subjectivity, allowing detailed comparison of perspectives. Although taking a comparative approach to Q studies is relatively new, this approach allows for further exploration into the perspectives of conservation actors and professionals across diverse conservation organisations and networks. This study, and future studies in this area, could be supplemented by other Q study designs, like the one followed by Rastogi et al. (2013), that use online surveys to measure the popular approval of viewpoints identified by Q. Further research could continue to explore the indications we have reported here regarding the influence of seniority and the extent to which leaders within large, internationally focussed conservation organisations circulate pro-market perspectives.

Notes

1. Cambridge Conservation Initiative: Transforming the landscape of biodiversity conservation. http://www.conservation.cam.ac.uk/. Accessed 12 February 2014.
2. Cambridge Conservation Forum. http://www.cambridgeconservationforum.org.uk/. Accessed 12 February 2014.
3. Cambridge Conservation Initiative: Transforming the landscape of biodiversity conservation. http://www.conservation.cam.ac.uk/. Accessed 12 February 2014.
4. University of Cambridge Conservation Research Institute. http://research-institute.conservation.cam.ac.uk/. Accessed 12 February 2014.
5. Even though we thought that all the statements would be familiar, given Sandbrook et al.'s 2013 testing of the Q sort in the original study, we actually found this not to be the case. One statement, which focused on the term 'neoliberalism' was unfamiliar to the Cambridge study participants. Indeed, this was a discovery of an ill-designed study question that ended up soliciting a response that was illuminating (see our discussion in the Results section of the chapter).
6. Although the term 'neoliberal' is not commonly invoked in biodiversity conservation conferences or email lists, promoters of market-based conservation "effectively associate the central elements of neoliberal conservation without using a single related word" (Igoe and Brockington 2007: 435). Büscher and Dressler (2007) call this a 'discursive blur'.
7. Note that all respondents from each study were given a unique number, as shown in Table 6.2, so as to not confuse respondents across both studies. Respondents 1–12 are from the ICCB study, while respondents 13–29 are from the Cambridge study.

8. Such network events include the IUCN's World Conservation Congress and the Society for Conservation Biology meetings (see MacDonald 2010a).
9. Such research could potentially be conducted at critical social science events such as "Grabbing Green" or the "STEPS: Resource Politics" conferences.

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