



Opening the black box of conservation philanthropy: A co-produced research agenda on private foundations in marine conservation

Rebecca L. Gruby^{a,*}, Ashley Enrici^b, Michele Betsill^c, Elodie Le Cornu^d, Xavier Basurto^e, Research Co-Designers¹

^a Department of Human Dimensions of Natural Resources, Colorado State University, 1480 Campus Delivery, Fort Collins, CO 80523, USA

^b Lilly Family School of Philanthropy, Indiana University, USA

^c Department of Political Science, Colorado State University, USA

^d Department of Human Dimensions of Natural Resources, Colorado State University, USA

^e Nicholas School of the Environment, Duke University, USA

ARTICLE INFO

Keywords:

Marine conservation
Biodiversity conservation
Philanthropy
Environmental governance
Foundations
Non-state actors

ABSTRACT

In the ‘new Gilded Age’ of mega-wealth and big philanthropy, academics are not paying enough attention to private foundations. Mirroring upward trends in philanthropy broadly, marine conservation philanthropy has more than doubled in recent years, reaching virtually every globally salient marine conservation issue in all corners of the planet. This paper argues that marine conservation philanthropy warrants a dedicated research agenda because private foundations are prominent, unique, and under-studied actors seeking to shape the future of a “frontier” space. We present a co-produced social science research agenda on marine conservation philanthropy that reflects the priorities of 106 marine conservation donors, practitioners, and stakeholders who participated in a research co-design process in 2018. These “research co-designers” raised 137 unique research questions, which we grouped into five thematic research priorities: outcomes, governance roles, exits, internal foundation governance, and funding landscape. We identify issues of legitimacy, justice, and applied best practice as cross-cutting research priorities that came up throughout the five themes. Participants from the NGO, foundation, and government sectors identified questions within all five themes and three cross-cutting issues, underscoring shared interest in this work from diverse groups. The research we call for herein can inform the practice of conservation philanthropy at a time when foundations are increasingly reckoning with their role as institutions of power in society. This paper is broadly relevant for social and natural scientists, practitioners, donors, and policy-makers interested in better understanding private philanthropy in any environmental context globally.

1. Introduction

We are living in the ‘new Gilded Age’: an era of mega-wealth and big philanthropy [1]. As Skocpol [2, p.433] has observed, “In the current period of sharp accumulations of wealth at the very top, philanthropic giving is booming with many societal reverberations.” Mirroring upward trends in philanthropy generally, marine conservation philanthropy (hereafter: ocean philanthropy) is reported to have more than doubled in the past decade [3]. Private foundations are connected to virtually every globally salient marine conservation issue in all corners of the planet [4], and are gaining recognition as “increasingly important

players within the world of ocean finance” [5, p.2]. Akin to keystone species in ecosystems, we suggest that private foundations may be examples of “keystone actors” in marine social-ecological systems [6,7], with a profound and disproportionate influence on conservation agendas, research, organizations, networks, policy, and the local societies affected by these interventions.

Yet, philanthropy has received little research attention in general, and in the field of marine conservation in particular. Social scientists have described organized philanthropy as a “black box” and “vast research frontier” deserving urgent attention in light of the increasing influence of foundations in governance and public policy in sectors like

* Corresponding author.

E-mail address: Rebecca.Gruby@colostate.edu (R.L. Gruby).

¹ A collective co-author representing the 106 marine conservation donors, practitioners, and stakeholders who informed this paper.

education, health, civil rights, immigration, and the environment [8,9]. This paper builds on calls for social science research on philanthropy broadly [2,9,10] and marine conservation finance specifically [5,11,12] to outline a co-produced research agenda on ocean philanthropy. The agenda presented here reflects research priorities identified by 106 marine conservation donors, practitioners, and stakeholders through a research co-design process in 2018. While our focus is on social science research questions, some aspects of the agenda are relevant to the natural sciences as well (e.g., questions about foundation outcomes).

This co-produced research agenda responds to an urgent need for applied research that can inform the practice of ocean philanthropy during a time when the field may be particularly receptive to change. Institutionalized philanthropy is facing a “reckoning” [13] that parallels other contemporary social movements in questioning inequality and institutions of power in society. As [14] notes “we are seeing some soul searching in philanthropy” that is opening a unique opportunity for reflection and reform. Change is afoot in the marine conservation community as well – including philanthropy – where practitioners and scholars are becoming increasingly vocal about a need to reflect on practices that contribute to socially just, legitimate, effective, and equitable marine conservation [15,16]. We contend that rigorous research on ocean philanthropy can help inform the field at a critical juncture – particularly when that research addresses the interests of people who are in a position to use it. While our focus is on applied research, we also recognize the significant potential for this research agenda to advance theory in diverse literatures, ranging from the nascent literature on marine finance [5,11,12], to more established bodies of work, for example, on non-state environmental governance agents [17].

The paper proceeds as follows. First, we argue the need for a research agenda on ocean philanthropy, and then we describe the co-production process through which this particular agenda was developed. Next, we outline identified research needs related to five themes: 1) outcomes, 2) governance roles, 3) exits, 4) internal governance, and 5) funding landscape. We then discuss overarching research priorities that arose across the five themes. We identify these as ‘cross-cutting research priorities’ in the inter-related issues of: 1) legitimacy, 2) justice, and 3) applied best practices. We hope this research agenda inspires a timely body of empirical scholarship that can inform contemporary debates and practice in ocean philanthropy, and ultimately advance the contribution of foundations to effective, equitable, and enduring marine conservation globally. While our focus here is on ocean philanthropy, we note that the questions and issues we raise are not limited to marine contexts. This paper is broadly relevant for scholars, practitioners, donors, and policy-makers interested in better understanding private philanthropy in any environmental context.

2. The need for a research agenda on ocean philanthropy

Although the term “philanthropy” refers broadly to all voluntary contributions to the public good [18], we focus on private foundations as the primary organizational form through which private wealth is directed towards public goals. First to emerge in the U.S., private foundations are tax-subsidized non-profit organizations that support “charitable activities” primarily by making grants [19]. Private foundations’ funding comes from individuals, families, or corporations whereas public charities’ funding is often derived from a larger pool of individuals. Typically governed by a board of directors and a professional staff, private foundations are diverse in terms of their funding sources and the role of benefactors in foundation governance [8,20–22]. For example, while independent foundations and family foundations both derive funding from individual donor or families, benefactors play a role in the governance of family foundations but not in independent foundations. Corporate foundations are created and funded by private companies as a separate legal entity, although they have close ties to the corporation and its interests. Hereafter we use “foundation” as

shorthand for private foundations.

A 2017 report from California Environmental Associates revealed a number of interesting patterns related to ocean philanthropy [4]. The report found that between 2010 and 2014, the bulk of foundation funding for ocean-related issues went to science, fisheries management and protected areas, with a geographic focus in North America, Europe and the Coral Triangle. Historically, just five foundations – the Gordon and Betty Moore Foundation, David and Lucile Packard Foundation, Walton Family Foundation, Marisla Foundation, and Oak Foundation – have contributed the majority of ocean philanthropy. The field is diversifying, however, as different foundations (e.g., Minderoo Foundation) and donor collaboratives (e.g., Oceans 5) are entering onto the scene. The five largest ocean foundations contributed 77% of overall ocean philanthropy in 2010, but only 57% in 2014, even as overall spending has increased. Issues like illegal, unreported, and unregulated fishing, seafood markets, and ocean acidification are attracting more attention and funding, and donors are shifting to new geographies, especially in North Asia and South America.

We argue that ocean philanthropy deserves a focused research agenda for four interrelated reasons. First, the oceans represent a unique context for philanthropy. Throughout history, humans have had a rich and varied relationship with the ocean [16]. Today, oceans are often seen and portrayed as a frontier – for science, for development, for conservation, and for governance [23]. They also represent a canvas for human inspiration and ingenuity about alternative forms of development [24,25]. Contemporary interest in the oceans by governments, scientists, the private sector, NGOs, and philanthropic foundations has risen drastically over the last decade [26]. As one of many powerful actors jockeying to define the future of the world’s oceans, philanthropic foundations warrant more attention and better understanding.

Second, and relatedly, philanthropic foundations are becoming increasingly prominent actors in marine conservation as evidenced by growing levels of funding [5]. Within the overall philanthropic sector, the oceans still attract a small percentage of funding. In 2015, the environmental sector received just 2% of all foundation grant-making in the United States, with the oceans receiving just 7% of that [27]. However, within the marine conservation field, philanthropic funding is significant and trending up, from \$252 million in 2010 [4] to \$621 million in 2016 [27].² Data on marine conservation funding is still incomplete and often incomparable [28], making it difficult to assess the relative contributions of different types of donors (e.g., governments, private foundations, multilateral institutions). Indeed, research on marine conservation funding landscapes has been identified as an important priority, both in the literature and in our research co-design process [12,28]. While a full picture of marine funding flows remains elusive, emerging efforts (e.g., the California Environment Associate’s Our Shared Seas Funding Reports, and the Funding the Ocean website: <https://fundingtheocean.org/>) are beginning to identify some trends. Grant funding (i.e. funds that do not have to be repaid) from philanthropic foundations and official development assistance (ODA) sources were roughly equal in 2016, amounting to about \$620 million and \$634 million respectively [27]. However, it should be noted that when all financial flows are included (grants, loans, and export credits), ODA funding still significantly exceeds philanthropic funding for marine conservation [27]. For example, in the last 50 years the World Bank has allocated more than \$2.48 billion to marine fisheries and approximately 47% (~\$1.17 billion) were targeted to marine small-scale fisheries on issues related to conservation, productivity, and supporting people and their communities, particularly after the year 2000 [29]. Looking forward, there is reason to believe that the upward trend in foundation funding for the oceans will continue in light of the rise of oceans on

² CEA made methodological changes in successive reports that means these numbers aren’t perfectly comparable. However, they are still useful indicators of total funding and changes over time.

international conservation and development agendas [26], the increasing recognition of the inadequacy of funding for marine conservation [11,30], and the historically low percentage of overall philanthropic funding directed to the oceans (less than 1% of all philanthropic spending since 2009) [5].

However, funding is only one way to assess the relative importance of foundations, and additional research is needed to understand all the different forms of influence foundations wield in marine conservation and with what effects (see Section 4.2). The significance of foundations can be understood within the shift from government to governance in the environmental sector, whereby non-state actors are playing increasingly important roles in governance processes, structures, and institutions [31]. For a review of environmental philanthropy scholarship relevant to this paper, we direct readers to our work in [35], where we synthesize the literature to outline a research agenda on foundations as agents of environmental governance. Briefly, we emphasize here that foundations often direct “not only their money but also their time, ideas, and political leverage toward influencing public policy” [9, p.442]. Donor engagement also extends beyond formal public policy arenas, to shape the diffusion of ideas about development, conservation, democracy, and the role of aid in general [32–34]. Foundations may also contribute to field-building and social movements by bringing together ideas, policies, organizations, networks in particular issue areas [35]. Additionally, foundations often focus on neglected or new issues, where they can have an outsized influence relative to their spending power [9, 36]. In the oceans, a good example is the prominent role of foundations in supporting the global movement to establish large-scale marine protected areas, which now account for the majority of ocean space under protection globally [37]. Additional research is needed to better understand the level and type of philanthropic influence on marine conservation governance.

Third, and relatedly, a better understanding of foundations is important because they may be unique from other types of funders or governance agents [35]. As a form of “private power directed at a public purpose” [36] U.S. foundations enjoy a high level of autonomy and independence enabled by relatively loose government regulation and oversight, and few legal accountability and transparency obligations [9]. The only legal accountability mechanisms for private foundations in the U.S. are “minimal” procedural standards – e.g., a rule that they must disburse 5% of their assets every year and a tax form annually with basic details about trustees, employees, salaries, and assets [36]. Given that foundations also have no voting constituency (as do governments) and no consumers or shareholders (as do businesses), some philanthropy scholars have concluded that “foundations are not, in effect, accountable to anyone” [38, p.53]. Although sometimes a target of critique, foundations’ independence may offer a unique advantage in that they can support high-risk innovative initiatives that governments or the private sector are unwilling or unable to support [36]. Additionally, unlike multilateral donors which work through governments (e.g. multilateral development banks) [39], foundations are more nimble and can skip the state entirely to work directly with local community organizations [40]. Finally, Reich [36] also points out that because most foundations have endowments designed to exist in perpetuity, they are in a unique position to identify and address problems that have much longer time horizons. Better understanding of the similarities and differences among foundations and other types of funders as agents of marine governance in practice is important for building more complete theories of conservation finance, conservation and development, and environmental governance more broadly [41]. It can also offer important practical insights about opportunities and limitations that may be unique to these actors, informing the way foundations approach their work and how grantees, governments, communities, and others engage with foundations.

Our final argument for a research agenda on ocean philanthropy is that private foundations remain poorly studied and understood [10,36]. There has been particularly little research on philanthropy in the

environmental sector [35], and virtually none on ocean philanthropy. We are aware of just one paper that is explicit in its focus on the role and impacts of foundations in marine conservation [42]. At the same time, scrutiny and critique of the philanthropic sector generally is increasing in the media [1,43,44] and in the environmental sector, via a small scholarly literature dominated by critical perspectives [35]. Practitioners and scholars alike have begun calling for more pluralist, empirical, international, and multi-disciplinary research on philanthropy [2,10,35]. We believe the academic community can add nuance, complexity, and empirical work to contemporary debates and reforms.

3. Methods: research co-design

The impetus for this paper emerged from a shared interest among the co-authors and staff at the David and Lucile Packard Foundation and Margaret A. Cargill Philanthropies in better understanding the roles and impacts of foundations on marine conservation in Fiji and Palau in the context of their plans to end programs in these countries. With funding from the Packard Foundation, we led a research co-design process in 2018 to co-produce an empirical research agenda with marine conservation stakeholders in Fiji and Palau, and foundations working in marine conservation globally. Our goal was to develop a research agenda that reflects stakeholder research interests and needs on this broad topic, in order to guide our own and others’ research on ocean philanthropy. This paper reports the themes and questions that were raised throughout this process.

Our research co-design process is embedded in a participatory research approach known as knowledge co-production. Knowledge co-production is an iterative process that “bring(s) people with different knowledge and expertise, or from different sectors of society, into partnership with those with formal scientific training to develop knowledge and engage with its use in policy and practice” [45, p.3]. By bridging scientific research with other ways of knowing, co-production processes build coalitions of actors with shared ownership over knowledge, which can increase the legitimacy, credibility, salience, and use of that knowledge in decision-making [45,46]. Research co-design is the first stage of knowledge co-production. It is a “critical time” in which researchers and non-academic partners collaboratively identify research questions and jointly conceptualize a project that meets their shared interests [47,48].

As Moser [47] explains, there is no standard approach to co-designing research projects: it must be context-specific. Our research co-design process involved a combination of interviews, workshops, and one meeting with local fisherfolk. Given our interests in Fiji and Palau, we focused on reaching people who live and work there. We spent two weeks each in Fiji and Palau consulting in person with current and former foundation grantees and non-grantees who interact with or are impacted by foundation-supported marine conservation initiatives. We consulted with Packard Foundation staff through individual interviews and a group workshop during a two-day visit to the Foundation’s headquarters in Los Altos, California. Finally, to help ensure the broader relevance of our research agenda, we interviewed staff from six other foundations working in marine conservation in other regions around the world. Ultimately, we engaged 106 people affiliated with a range of organizations, including foundations, intergovernmental organizations, large international NGOs, local or regional NGOs, national government, and universities (see Table 1). A majority of the research participants are practitioners who either work for foundations or engage directly with foundations through their work in marine conservation. At least 67% of all participants were affiliated with foundations either as staff (25 participants³) or as current or former foundation grantees (at least 46 participants³). All of the foundation staff who participated in the research

³ We did not systematically collect data from research participants about all types of funders they had experience working with.

Table 1
Summary of participants in research co-design process.

Professional Affiliation	Research participants
Local or regional NGO	36
Foundations	25
Informed citizen	13
Large international NGO	12
National government	9
University or research organization	8
Private consultant	2
Intergovernmental organization	1
Total	106

work for private foundations, primarily private family foundations.

We have embraced a multi-faceted relationship with the Packard Foundation as a funder, research co-design participant, and (in later stages of our continuing work) a research subject. In addition to sitting for interviews during the research co-design process, Foundation staff facilitated introductions to colleagues in other foundations working on ocean issues and sharing internal documents (i.e., grant proposals, grant reports, internal program briefs), as well as lists of grants and grantees to guide our efforts to identify appropriate contacts in Fiji and Palau. To help manage any conflicts of interest, we convened a Research Advisory Committee⁴ that is tasked with upholding the accountability of the project in pursuing rigorous research in a culturally appropriate way, with a multi-faceted and balanced perspective on foundations. The committee meets twice a year to provide feedback and makes recommendations to the research team.

During the research co-design process, we asked participants for their perspectives on the most important research questions about foundation funding and exits, and on all other aspects of our research design, including culturally appropriate research methodologies and outputs. We took detailed notes during these discussions, which we later uploaded to QSR Nvivo for a systematic thematic analysis using open coding. We shared a high-level summary of the emergent research themes with all participants, as well as our Research Advisory Committee, inviting a round of feedback that informed our final research design for our continuing research on ocean philanthropy.⁵ The research co-design process raised many more sub-themes and questions than can be addressed in a single project. In publishing the detailed results of our research co-design process, we hope to attract additional attention by funders, scholars, and practitioners to fulfilling identified research needs.

The specific characteristics of our co-design process influenced the emergent research agenda in several ways. First, there is a geographical bias to the conservation contexts of Fiji and Palau, which present a number of unique political, cultural, and ecological characteristics as Pacific large ocean nations. Second, there may be a substantive bias toward foundation exits and related issues, such as evaluating foundation impacts, due to the timing and motivation of the research co-design process alongside exits of several influential marine conservation foundations in the above geographies. Third, there is a disciplinary bias toward social science research, given the lead researchers' primary interests and training in the social sciences. Fourth, given that all of the foundation staff we engaged work for private foundations, this research agenda might omit some questions or issues that may be specific to other types of foundations (e.g. community or independent foundations) or

funder collaboratives, or over-emphasize questions that are not as relevant to these funder types. Fifth, this research agenda reflects heavy engagement of individuals affiliated with foundations as staff or grantees, with relatively less representation from non-grantee practitioners. Additionally, the perspective of resource users or other local stakeholders who are affected by marine philanthropy are significantly under-represented.

We maintain that the research agenda presented here is a broadly relevant starting point for understanding ocean philanthropy globally for several reasons. First, we framed our discussions with research co-design participants as broadly as possible, encouraging questions about any aspect of ocean philanthropy. Second, the majority of participants in the research co-design process are employees of foundations or NGOs that work in marine conservation beyond Fiji and Palau, and/or on projects with colleagues who work outside of these contexts. Additionally, many participants have had experience with diverse types of private foundations and funder collaborators, as well as government funding agencies and multilateral funding agencies. Participants drew on these broader experiences and perspectives. Third, the predominance of private foundation staff in our research design process mirrors the predominance of private foundations in marine philanthropy more broadly: 16 of the 20 highest spending philanthropic funders between 2010 and 2016 are private foundations [3]. A potential bias toward questions relevant for private foundations makes sense in this context. Furthermore, despite heavy representation of foundation staff and grantees in this study, we did not perceive a strong pro-foundation bias in our consultations. Research participants held a diverse range of interests and attitudes toward foundations, including some that were quite critical. Participants' interest in research 'for' and 'on' foundations – both instrumental and critical research – is reflected in the agenda itself. Finally, the broad research themes and many of the specific research questions raised herein resonate strongly with issues raised in the broader environmental philanthropy literature [35], as well as our experience and observations with ocean philanthropy in other contexts we've worked in (e.g. Mexico, Indonesia, Bermuda, Rapa Nui (Easter Island), Kiribati, U.S.). We believe that most if not all of the questions raised in our co-design process would be relevant to marine and terrestrial conservation initiatives wherever foundations work.

Finally, a note about our approach to authorship. Participatory researchers too seldom recognize the intellectual contributions of their collaborators through co-authorship [49]. We acknowledge the significant intellectual contributions of research co-design participants to this paper through a collective co-author named "research co-designers". We regret that we are unable to name participants individually, due to confidentiality restrictions in our IRB protocol.⁶ This admittedly limits the potential benefits of authorship for participants and their organizations, and it also limits their responsibility. Recognizing these limitations and constraints, we include the collective co-author to signal the importance of participant contributions to this work in a meaningful way that goes beyond a line in an acknowledgments section. While participants in the research co-design process did not write or review this paper, it is constituted by their ideas and experiences: their collective contributions made it possible.

In the sections that follow, we describe the research themes and sub-themes that emerged from the research co-design process, and then turn to a discussion of cross-cutting research priorities that emerged throughout the themes. We preserved the original language participants used to describe their questions to the greatest extent possible. Questions were lightly edited for clarity and/or to generalize the question beyond the Fiji/Palau context, to preserve anonymity, and occasionally, to turn an observation or speculation into a question.

⁴ Committee members include Heather D'Agnes (Senior Program Officer, Environment Program, Walton Family Foundation), Kristin Goss (Professor of Public Policy and Political Science, Duke University), King Sam (Director, Palau National Marine Sanctuary), Suliana Siwatibau (Director, Fiji Environmental Law Association).

⁵ This research is funded through 2022 by the Packard Foundation and MACP.

⁶ Learning from this experience, our new IRB protocol allows us to invite research participants to be listed by name in our future work on ocean philanthropy.

4. Results: a co-produced research agenda on ocean philanthropy

Participants in the research co-design process raised 137 unique research questions (see Table 2 for a summary with examples). There are many possible ways to organize these questions. Ultimately, we opted

for a topic-oriented approach, grouping the questions into 5 major topical themes and 17 sub-themes informed by our disciplinary lens of environmental governance. There was generally broad and even interest among participants across the overarching research themes, with the exception of “funding landscape,” which received relatively less attention. Participants from the philanthropic, NGO, and government sectors

Table 2

Summary of research themes and sub-themes raised through the research co-design process. The number in parentheses next to each theme and sub-theme indicates the number of unique individuals who raised questions within each theme and sub-theme, as an indicator of relative interest in these topics. The five themes (outcomes, governance roles, exits, internal governance, funding landscape) and the sub-themes within them are listed in decreasing order of prevalence. The examples of specific questions are the two most commonly raised questions within each sub-theme. The five specific questions that received the most overall interest are indicated by bolded font.

Theme	Sub-theme	Examples of specific research questions
Outcomes (40)	<i>Effectiveness (21)</i>	What factors contribute to the success or failure of philanthropic-supported marine conservation? Did foundations do more good than harm? Are foundations making the right kind of difference?
	<i>Durability (18)</i>	How durable are philanthropic-supported marine conservation agendas? What factors contribute to the durability of philanthropic-supported marine conservation agendas?
	<i>Social outcomes (12)</i>	Does foundation funding create ‘conservation economies’ dependent on external funding? How does conservation funding affect local culture and knowledge systems; livelihoods and communities; and customary rights?
	<i>Diffusion (2)</i>	To what extent do philanthropic-supported marine conservation agendas expand to other contexts and geographies?
Governance roles (33)	<i>Agenda-setting (23)</i>	How do foundations influence marine conservation priorities of countries, organizations, and individuals? How does philanthropic funding for charismatic marine conservation issues affect local attention/resources for other issues identified as locally important?
	<i>Capacity-building (11)</i>	To what extent does capacity-building from foundation support in the NGO sector spill over into the public sector? What is the role of foundations in building marine conservation networks?
	<i>Governance network (9)</i>	How does foundation funding affect cooperation and conflict within conservation networks? Do foundations complement, supplement, or replace government responsibilities?
	<i>Innovation (4)</i>	What role do foundations play in sparking innovation and experimentation?
	<i>Institutional change (2)</i>	How do foundations influence marine governance and policy change? How do foundations contribute to changes in cultural and behavioral norms?
	<i>Convening (2)</i>	What is the importance of foundations’ convening activities?
Exits (31)	<i>Impacts of exits (24)</i>	Who fills the funding void associated with a foundation exit, and with what implications? What are the impacts of foundation exits on grantee organizations, relationships and agendas, and what factors shape those impacts?
	<i>Exit process (15)</i>	How, when, why do foundations decide to exit a geography? What strategies, resources, and skills do grantees use to successfully manage the impacts of an exit by a major donor?
Internal governance (27)	<i>Priority setting (16)</i>	How do foundations decide who to give their money to? How do donors determine their conservation priorities and what is the role of local actors in that process?
	<i>Monitoring, evaluation, and learning (7)</i>	How and when do foundations define success for their programs? How do boards or trustees evaluate success or failure, and how does that affect program officer decision-making?
	<i>Grant administration (6)</i>	How does administrative burden affect the type of grantees that can access foundation funds? What are the implications of invitation-only application processes for diversity, equity, and inclusion of grantees?
	<i>Accountability and transparency (5)</i>	To whom do foundations hold themselves accountable? How can more transparency contribute to equity in grant-making?
	<i>Donor-grantee relationships (4)</i>	How do donor/grantee relationships affect grant-making, including funding allocations? What contributes to successful donor-grantee relationships?
Funding landscape (10)		What is the total amount of foundation funding that flows into a country or region for marine conservation? How would a local philanthropic community function differently from one dominated by foreign foundations?

raised questions in all five themes, and participants from both foundations and NGOs also raised questions within all but four of the sub-themes.⁷ There were many sub-themes without questions from government representatives, but there were far fewer participants from the public sector overall, so this does not necessarily indicate lack of interest. In this section we describe the main themes, sub-themes and research questions. In Section 5, we then discuss cross-cutting research priorities that emerge throughout the topical themes.

4.1. What are the outcomes of ocean philanthropy?

The scale and pace of marine conservation initiatives has increased in response to growing anthropologic stressors (e.g., pollution, over-fishing, climate change, biodiversity loss) and the international conservation targets designed to address them [15,50]. As these initiatives proliferate globally, scholars have argued for more rigorous and systematic evaluation of their outcomes [12,51]. Despite a trend toward “strategic” philanthropy (project-oriented, with an emphasis on specific, measurable goals), there have been few academic, peer-reviewed studies of the social and ecological outcomes of environmental philanthropy, including ocean philanthropy [35]. Rather, environmental foundations tend to conduct their own monitoring and evaluation using internal staff or hired consultants [35,52,53]. On the one hand, these efforts have been criticized as insufficient in terms of lacking independence and transparency (most reports are not made public), focusing on successes rather than challenges, and lacking sufficient timescales (evaluation of longer term or post-project outcomes is rare) [12,54]. On the other hand, scholars have warned about dangers of “obsessive measurement disorder,” which can lead foundations to focus on initiatives with easily measurable outcomes [55]. While the right role and type of evaluation in environmental philanthropy is debated in the literature, the participants in our study identified research on the outcomes of foundation-supported marine conservation initiatives as a top priority. In light of the debates described above, we are not necessarily advocating that foundations focus more on measuring outcomes; there is a need to reflect more on this significant interest in understanding outcomes better from a variety of perspectives, as well as the mechanisms and implications for doing so.

Within this theme, the primary area of interest was in measuring the effectiveness of foundation-supported marine conservation agendas in achieving their intended objectives, from both instrumental and normative perspectives. Participants posed questions such as: Are these conservation agendas achieving their intended goals (both social and ecological), and, are they making the “right” kind of difference? We use the word “agenda” here to signal interest in the effectiveness of specific projects as well as the broader suite of discourses, initiatives, policies, organizations, networks, and relationships that emerge from foundation engagement in marine conservation. Participants were not only interested in understanding whether foundation-supported agendas succeed or fail to achieve their objectives, they also wanted to know *why*. In this regard, they raised questions about how diverse factors influence the success of ocean philanthropy, including: the duration and consistency of funding, changes in foundation and grantee staff, support from local government and legislation, shifts in donor priorities, management style of foundations, efficacy of theories of change, and choice of conservation strategies. A second line of questioning about outcomes focused more on the unintended and/or indirect social outcomes of philanthropic-supported biodiversity conservation initiatives. In this regard,

participants were most interested in specific impacts to local livelihoods, economies, customary rights, gender equity, culture, and knowledge systems.⁸

In addition to questions about the nature of foundation outcomes, participants raised questions about the durability of those outcomes. While one participant questioned whether durability in philanthropic-supported marine conservation agendas should be the goal (vs. adaptive capacity, for example), there was significant interest in understanding what happens to these agendas when the funding ends, and what factors contribute to durability. Finally, a handful of participants raised questions about whether and how foundation-supported marine conservation agendas ‘scale up’ to new contexts and geographies, and with what consequences.

4.2. What do foundations do? Governance roles

This theme encompasses questions about the things ocean foundations do to advance their agendas by engaging with marine conservation governance systems, which include the institutions, structures, and processes through which decisions are made about the marine environment [31,56]. Non-state actors, such as scientists, NGOs, and private companies, are recognized as playing important roles in marine conservation governance [26]. To the extent that foundations influence marine conservation governance systems, they may be understood as non-state governance actors, although they are rarely recognized as such in scholarship or practice. In our experience, foundations don’t think of themselves as governance actors, and participants in our research design process certainly didn’t frame their questions as questions of “governance”. However, they asked questions about the roles foundations play in shaping policy, influencing priorities, bringing groups together, and so on. We suggest these are questions about governance roles that may be interpreted using concepts environmental governance scholars use to study how state and non-state governance actors gain and enact authority, (e.g., agenda-setting, convening, capacity building, and others in Table 2) [17]. By framing this set of questions as questions about governance roles, we aim to situate research interest in foundations in a literature that offers a common language and conceptual framework to name, describe, and systematically understand their diverse and unique roles in marine conservation, as funders and beyond.

A clear priority within this research theme is the role foundations play in influencing marine conservation agendas at all scales – from individual conservation leaders, to organizations, countries, and at the global level. This line of questioning was often connected to an observation that foundations do play powerful agenda-setting roles in marine conservation. Participants identified a need to better document, understand, and in some cases, rethink this role and as well as the specific mechanisms (both overt and indirect) through which it is carried out. Examples of specific questions include: How do incentives to demonstrate success to donors shape the types of conservation approaches that grantees pursue? How do foundations coordinate and collaborate with one another to advance marine conservation agendas? How can we rethink the relationship between donors and grantees to empower local conservation actors in advancing their own priorities?

Interest in foundations’ capacity-building role encompassed questions about why foundations choose to invest (or not) in capacity-building and how they pursue it. Participants also raised questions about whether and how capacity-building in the NGO sector spills over into the public sector, and the ethical implications of helping to launch new organizations and encouraging them to move into particular areas of work. Questions that we conceptualize within the “governance networks” sub-theme relate to how foundations – both directly and indirectly – affect conflict, cooperation, and competition within

⁷ These sub-themes attracted relatively less interest from research participants broadly. NGO representatives raised questions in the ‘cooperation, conflict, and competition’ and ‘donor-grantee relationships’ sub-themes; donors raised questions about convening and diffusion.

⁸ As social scientists using participant input to design our own research, we focused our conversations on social impacts.

conservation networks, and the unique roles foundations play in comparison to other actors like governments or conservation NGOs. The role of foundations in sparking innovation and influencing policy and other institutional processes - key issues in broader debates about the role of foundations in democratic societies [36] - also emerged within our research co-design process, although they received relatively less attention than we expected given their prominence in the literature.

Overall, this research theme reflects participant interest in how foundations work to achieve system-level influence. There was broad recognition that foundations are playing important roles in marine conservation governance. The identified research priority is to systematically describe those roles, assess their implications, and inform deliberation about the right role for philanthropy in the future.

4.3. Understanding donor exits

This research theme relates to foundation exits, or the ending of funding relationships. Exits are an inherent part of most grant-making programs, and a defining feature of the time-limited initiatives preferred in strategic approaches to marine philanthropy. Yet, as Kibbe [57, p.50] observes of the philanthropic field generally: “little is known about the effects of foundation exits on the work, the grantees, and the related field. Given the frequency and ubiquity of foundation exits, the literature is painfully thin.” This is certainly true of ocean philanthropy. We are aware of just one published study that asks: What happens to coral reef conservation after conservation and management donors leave?, and their focus is on ODA funders, not foundations [58]. While the emergence of this research theme in our study is unquestionably linked to the foundation exit processes that motivated our work in Fiji and Palau, we find that the issue of exits is gaining traction much more broadly as donors, grantees, and others are thinking more deeply about the ‘when’ and ‘why’ of exits, and how to manage exits responsibly and effectively in marine conservation contexts. In 2019, for example, a session our research team co-organized on donor exits for the annual meeting of the Biodiversity Funders Group’s Marine Conservation Program was elevated to a plenary session, signaling its salience within the donor community. Our research design process highlights that exits are a key concern beyond the donor community as well.

Participants in our research design process identified questions about exit processes and the impacts of exits. In terms of exit processes, the most common question was: How, when, and why do foundations decide to exit? Uncertainty about how foundations make these decisions resonate with questions about foundation decision-making as described in Section 4.4. Overall, there was an interest in applied research that can inform donors about how to design ‘respectful’ exit processes (raised mostly by donors), as well as lessons and strategies for grantees about how to successfully navigate the exit of a major donor (raised mostly by grantees).

Questions about the impacts of foundation exits centered on impacts for grantees and local governments - and they push researchers to develop understanding about what accounts for differential impacts across diverse geographies, or for larger conservation NGOs versus smaller, local organizations. Related to the issue of funding landscape (Section 4.5), there was also interest in simply understanding the level of the funding void that is created by foundation exits and who fills that void - do national governments step in, for example? Importantly, exits were not only discussed in terms of risk and vulnerability. Donors and grantees alike also raised the question of what opportunities exits may present for new marine conservation actors and agendas.

4.4. How are foundations governed?

Scholars recognize that foundations have a “politically, legally, culturally and socially authorized independence” that makes them “one of the most unrestricted contemporary organizations forms” [8, p.4]. Yet, empirical and systematic understanding of how foundations operate

as organizations remains extremely limited. As Callahan [59] argues: “The sector largely remains a black box, and answers to some of the most basic questions about philanthropy are still elusive.” Questions arising in this research theme resonate with this broadly recognized need to better understand the inner-workings of foundations, both in terms of how they make decisions and govern themselves internally, and in terms of how they structure their relationships and grant-making processes. While there is a popular trope about philanthropy that “if you know one foundation, you know one foundation,”⁹ our research co-design process highlights the uniqueness of individual foundations as an empirical question warranting systematic attention. While acknowledging that each foundation may be unique in some ways, research participants - including donors - highlighted the value of distilling patterns of similarities and differences across organizations that can inform self-reflection and learning at the field level. Implicit in their identification of foundation governance as a priority was a recognition on the part of research participants that these internal organizational processes matter deeply because they affect all other aspects of a foundation’s work, including their outcomes, exits, governance roles, etc.

The sub-theme on internal priority-setting processes attracted the most interest. Here, participants raised descriptive questions about how foundations make decisions about who, what, and where to fund, as well as normative questions about the “right” type of decision-making processes and how foundations can better account for equity in their decision-making. Other areas of interest included mechanisms for evaluation, and, to a lesser extent, accountability and transparency. Participants raised questions about how foundations define and evaluate success of their funded initiatives and themselves, and how they incorporate learning into their grant-making. Interest in accountability and transparency centered on who foundations hold themselves accountable to, and how transparency could enhance equity in grant-making. There was less attention to accountability and transparency than we expected, given that these are key areas of concern within broader public debates about philanthropy. Questions about grant administration processes reflected interest in understanding the procedures through which foundations solicit proposals and manage their grant-making, as well as the implications of these processes for distributional equity. Participants asked, for example: How does administrative burden, grantee solicitation processes, and donor flexibility affect who can access foundation funding? Finally, participants posed questions about the different ways that foundation-grantee relationships are structured, and how those relationships shape funding decisions.

4.5. What is the funding landscape?

Foundations are not required to disclose information about their funding allocations - a problem of transparency well recognized by scholars [12,38] and the media [61]. There has been progress in understanding philanthropic funding landscapes in recent years, including in ocean philanthropy. For example, Callahan [61] refers to a “transparency movement” in philanthropy led in part by the Foundation Center, which incidentally created the Funding the Ocean website with funding from a number of ocean foundations. However, as Callahan [61] reflects of the philanthropic field broadly, “none of these efforts go nearly far enough.” There is still wide variation in the type and level of information ocean foundations publicly share about their grants. For example, while some foundations working in marine conservation have public, searchable online grant databases, others don’t have websites at all. As we mention in the introduction, the marine finance sector “continues to be hampered by poor data availability, quality, and transferability which stymies more accurate estimates of marine funding,” [28, p.7]. The implications are many. A lack of clarity on who is funding what limits the ability of conservation practitioners and donors to set

⁹ See, for example, [60].

informed goals and collaborate in achieving those goals; identify issues or areas that need funding; and hold foundations and their grantees accountable [28].

Although the ‘funding landscape’ theme is the most well recognized research gap in the literature, this research theme received much less attention in our research co-design process than the others. This may be because as relative insiders many of the participants may have (or believe they have) a good sense of the funding flows that matter to them. Still, some participants articulated a need for basic descriptive data about the level, ratio, and reliance on foundation funding for marine conservation funding in particular geographies – questions that resonate with calls for better transparency and tracking systems for marine philanthropy.

We also include within this theme a distinct line of inquiry about how the particular characteristics of foundations that comprise a given ocean philanthropy ‘landscape’ matter. In this regard, participants were particularly interested in understanding how a foundation’s status as foreign or local shapes the types of things they can and cannot do in a given geography. For example, how would a local philanthropic community function differently from one constituted by foreign foundations? Although closely linked to the “governance roles” theme, we include those questions within this theme to emphasize that understanding the ‘funding landscape’ is about more than tracking funding sources and levels.

5. Cross-cutting research priorities

As we analyzed the emergent research themes, a number of cross-cutting research priorities became apparent. Here we present three priorities that we consider cross-cutting because they arose in at least four out of the five themes: 1) legitimacy, 2) justice, and 3) applied best practices. We note that these priorities resonate with conversations taking place within the marine conservation field more broadly about the relationships between legitimacy, justice, and effectiveness of marine conservation practice [15].

5.1. Legitimacy

There were questions in every theme about the ‘right,’ ‘ethical’ or ‘appropriate’ role of philanthropy in marine conservation — in other words, things philanthropy *ought* to be doing from a normative perspective. For example, participants raised questions about what the *right* role of money should be in conservation, what a *respectful* foundation exits looks like, whether durability is the *right* goal for philanthropic-supported marine conservation agendas, and whether foundations *do more good than harm*. As one program officer reflected, “What should philanthropy be paying for? I frankly didn’t ask myself this question enough”. Many participants questioned whether some

roles being performed by foundations may be more appropriately fulfilled by others, such as government or local funding organizations.

Broadly, we see these as questions about legitimacy. The concept of legitimacy is complex, with sociological definitions emphasizing the social acceptability of a right to exercise power, and philosophical normative theories that focus more on whether power is exercised “appropriately and responsibly” and by which criteria [62–64]. Although we didn’t explicitly probe this issue at the time of research, we suspect that participants’ questions about the “right” processes, outcomes, activities, etc. of ocean philanthropy encompass both dimensions of legitimacy – social acceptability, and conformity to recognized standards of behavior (e.g., principles of democratic governance, equity, etc.). While legitimacy is not a concern unique to ocean philanthropy, our research co-design process suggests there is significant interest in reflecting on how foundations can cultivate and maintain legitimacy in light of shifting social conditions and attitudes towards both philanthropy and marine conservation.

5.2. Justice

While justice and legitimacy can be related (e.g. justice can be a normative criterion through which legitimacy is assessed), they are not the same (e.g., unjust policies/organizations can still have legitimacy for some groups). In the literature on environmental justice, there is a normative focus on fairness, often expressed in terms of rights [65]. A long lineage of environmental justice research, activism, and scholarship [66] has informed a contemporary conceptual framework for environmental justice that distinguishes three dimensions of justice: recognitional justice, procedural justice, and distributional justice (see Fig. 1 for definitions of each). We identified questions throughout the research agenda about all three types of justice, leading us to identify justice as a second cross-cutting issue. Some of the questions about justice were evaluative, focusing on whether ocean foundations are achieving different types of justice in practice. Others were more forward-looking and instrumental, probing for guidance on how ocean foundations can pursue justice in their internal processes, governance roles, exits, and outcomes. Examples of questions relating to distributional justice include: To whom are foundations giving power and influence, and with what consequences? Does foundation funding reinforce gender inequities? What are the implications of invitation-only grant application processes for diversity and equity among grantees? Questions about procedural justice related to foundation accountability and transparency and focused in particular on the “right” type of consultation between foundations and grantees in foundation decision-making and agenda-setting. Finally, examples of questions relating to recognitional justice included: Do foundations’ priorities align with those of local governments, NGOs, and civil society? How well do foundations respond to what’s truly needed? How much do

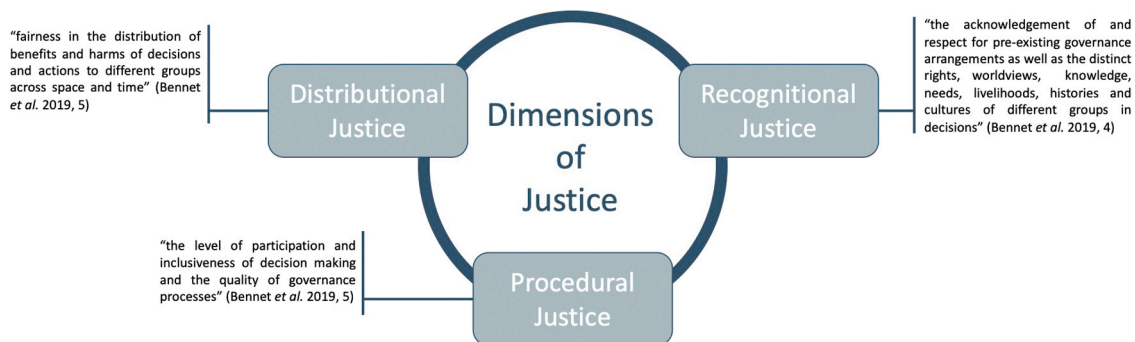


Fig. 1. Definitions of three types of environmental justice.

foundations know about the local contexts they work in?

5.3. Applied best practices

Given how this research agenda was developed, it is unsurprising that there was also a strong emphasis on applied research that could inform practice. Importantly, this applied focus included more instrumental questions that can inform specific objectives and activities (e.g. How can donors best help grantees prepare for an exit?), as well as bigger-picture and critical questions that prompt a more general reflexivity (e.g. What is the role of foundations in relation to the government?) Although our participants' focus on applied research is not a surprising point, it is an important one. When we initiated this work, we were unsure about whether people would be interested or willing to discuss their thoughts about ocean philanthropy. Our expectations were exceeded not only in terms of the number of people willing to have this conversation, but also by the depth of their interest, thoughtfulness, and eagerness for research that could help understand and inform ocean philanthropy. Generally, participants in our research co-design process signaled constructive interest in knowledge (including critique) that could help make philanthropic-supported marine conservation as socially and ecologically successful as possible.

6. The way forward

This paper presents a co-produced research agenda on ocean philanthropy informed by stakeholder interests. While some of the research themes confirm known research gaps (outcomes, funding landscape), others identify emerging issues (exits) and issues that haven't received much attention at all in the academic literature (governance roles and internal governance). Notably, interest across the research themes was broadly distributed across participating stakeholder groups – there was no topic that was narrowly of interest to funders vs. practitioners or government officials, for example. Although we believe this research agenda will be salient for the conservation community broadly, no research agenda is comprehensive, including this one. This agenda reflects a particular set of interests at a particular moment in time. We hope it will be used as a starting point for a broader research agenda that can evolve with the field over time. In future work, it will be particularly important to attend to the interests and needs of those communities directly impacted by ocean philanthropy, which are under-represented in this study. It will also be important to identify additional questions or issues that may be specific to a particular type of foundations (independent, community, or family) or funder collaboratives.

It must be acknowledged that scholars wishing to engage with this research agenda may encounter challenges. First, the fact that many ocean foundations fund science could lead to real or perceived conflicts of interest for researchers, or a reticence to studying foundations and their outcomes [10]. At a time when state budgets for science funding are also shrinking, this is a legitimate concern [67,68]. A second challenge relates to data access, or at least a perceived inability to access data on foundations. As Rogers [10, p.539] writes, “the people and the institutions involved in mega philanthropy are difficult for scholars to access.” However, we believe these are challenges that can be overcome. The transparency movement in ocean philanthropy is already unlocking new data about funding flows, and well-tailored research designs can also help with data access. Taking our own experience as an example, we have found that a participatory research design that embeds foundations within the research process can enable researchers to build the relationships and trust necessary to tackle potentially sensitive questions constructively, and access information and people that may otherwise be out of reach. To help manage conflicts of interest, research teams can engage independent research advisory committees, as we have done. We also point out that many of the questions identified in this research agenda don't require access to foundation staff or documents to answer. For example, some questions about exits, governance roles, outcomes,

legitimacy, and justice can be answered through research in the places and with the organizations foundations invest in, where many researchers have existing relationships and contextual knowledge. Indeed, there is plenty of existing research – including some of our own work, for example, on large-scale marine protected areas [69] and small-scale fisheries [29,70,71] – that already considers the outcomes of philanthropic-supported marine conservation initiatives, although it's not explicitly framed as such. In cases like these, studying ocean philanthropy is a matter of extending the research gaze to more explicitly include foundations.

In summary, private foundations represent a gaping hole in marine conservation scholarship. Here we argue they are simply too important to ignore. We call upon social scientists to begin paying more attention to ocean philanthropy, whether as a research focus or as a component of the broader social-ecological systems that we work in. Working in partnership with marine conservation practitioners and stakeholders, the academic community can and should help to open the black box of ocean philanthropy.

CRediT authorship contribution statement

Rebecca L. Gruby: conceptualization, methodology, formal analysis, data collection, writing-original draft preparation, project administration, funding acquisition. **Ash Enrici:** conceptualization, methodology, formal analysis, data collection, writing-review and editing, project administration. **Michele Betsill:** Conceptualization, methodology, data collection, writing-review and editing, project administration, funding acquisition. **Elodie Le Cornu:** Conceptualization, formal analysis, writing-review and editing. **Xavier Basurto:** Conceptualization, methodology, writing-review and editing, funding acquisition. **Research co-designers:** Contributed data in the form of ideas, perspectives, and experiences, and reviewed and provided feedback on a summary of research themes.

Acknowledgments

This research was supported with grants from the David and Lucile Packard Foundation (Grant numbers 2017-66579 and 2018-68274) and Margaret A. Cargill Philanthropies (Grant number 1810-05974). We thank Lisa Campbell and Noella Gray for discussions that contributed to our thinking about marine philanthropy, and Jeffrey Blackwatters for research assistance. This research is approved by the Colorado State University Institutional Review Board for the protection of human subjects (protocol 18-7869H). We thank members of our Research Advisory Committee, Heather D'Agnes, Kristin Goss, King Sam, and Suliana Siwatibau, for their guidance throughout all stages of our research.

Conflict of interest

Consistent with a knowledge co-production approach, we have embraced a multi-faceted relationship with our funders who also serve as research participants and research subjects at various stages of the project. We have convened an external research advisory committee to help manage any conflicts of interest that arise from this arrangement.

References

- [1] E. Kolbert, *Gospels of Giving for the New Gilded Age* | The New Yorker, The New Yorker. (2018). (<https://www.newyorker.com/magazine/2018/08/27/gospels-of-giving-for-the-new-gilded-age>).
- [2] T. Skocpol, Introduction, *PS Polit. Sci. Polits* 49 (2016) 433–436, <https://doi.org/10.1017/S1049096516000652>.
- [3] CEA Consulting, *A Decade of Ocean Funding: Trends during 2010–2020, Our Shared Seas*, 2021. (<https://oursharedseas.com/funding/funding-report/>).
- [4] California Environmental Associates, *Our Shared Seas: A 2017 Overview of Ocean Threats and Conservation Funding*, 2017. (<https://www.packard.org/insight/oursharedseas>).

- [5] C.C.C. Wabnitz, R. Blasiak, The rapidly changing world of ocean finance, *Mar. Policy* 107 (2019), 103526, <https://doi.org/10.1016/j.marpol.2019.103526>.
- [6] H. Österblom, J.-B. Jouffray, C. Folke, J. Rockström, Emergence of a global science-business initiative for ocean stewardship, *Proc. Natl. Acad. Sci. USA* 114 (2017) 9038–9043, <https://doi.org/10.1073/pnas.1704453114>.
- [7] R.T. Paine, A note on trophic complexity and community stability, *Am. Nat.* 103 (1969) 91–93.
- [8] T. Jung, J. Harrow, New development: philanthropy in networked governance—treading with care, *Public Money Manag.* 35 (2015) 47–52, <https://doi.org/10.1080/09540962.2015.986880>.
- [9] K.A. Goss, Policy plutocrats: how America's wealthy seek to influence governance, *PS Polit. Sci. Politics* 49 (2016) 442–448, <https://doi.org/10.1017/S1049096516000676>.
- [10] R. Rogers, Why the social sciences should take philanthropy seriously, *Society* 52 (2015) 533–540, <https://doi.org/10.1007/s12115-015-9944-9>.
- [11] M. Bos, R.L. Pressey, N. Stoeckl, Marine conservation finance: the need for and scope of an emerging field, *Ocean Coast. Manag.* 114 (2015) 116–128, <https://doi.org/10.1016/j.ocecoaman.2015.06.021>.
- [12] R. Blasiak, C.C.C. Wabnitz, T. Daw, M. Berger, A. Blandon, G. Carneiro, B. Crona, M.F. Davidson, S. Guggisberg, J. Hills, F. Mallin, E. McManus, Karim oud-Chih, J. Pittman, X. Santos, L. Westlund, H. Wetterstrand, K. Wiegler, Towards greater transparency and coherence in funding for sustainable marine fisheries and healthy oceans, *Mar. Policy* 107 (2019), 103508, <https://doi.org/10.1016/j.marpol.2019.04.012>.
- [13] G. LaMarche, Big Philanthropy Faces a Reckoning, Too, 2020. (<https://www.thenation.com/article/politics/philanthropy-politics-billionaires/>).
- [14] B. Pitkin, Moving the Rooms of Power: Participatory Philanthropy is Gaining More Traction, Medium, 2020. (<https://billpitkin.medium.com/moving-the-rooms-of-power-participatory-philanthropy-is-gaining-more-traction-64971ddd593b>).
- [15] N.J. Bennett, L. Teh, Y. Ota, P. Christie, A. Ayers, J.C. Day, P. Franks, D. Gill, R. L. Gruby, J.N. Kittinger, J.Z. Koehn, N. Lewis, J. Parks, M. Vierros, T.S. Whitty, A. Wilhelm, K. Wright, J.A. Aburto, E.M. Finkbeiner, C.F. Gaymer, H. Govan, N. Gray, R.M. Jarvis, M. Kaplan-Hallam, T. Satterfield, An appeal for a code of conduct for marine conservation, *Mar. Policy* 81 (2017) 411–418, <https://doi.org/10.1016/j.marpol.2017.03.035>.
- [16] E.H. Allison, J. Kurien, Y. Ota, The Human Relationship with Our Ocean Planet, 2020. (<https://oceanpanel.org/blue-papers/HumanRelationshipwithOurOceanPlanet/>).
- [17] M.M. Betsill, M. Milkoreit, The performance of agency in earth system governance, in: M.M. Betsill, T.M. Benney, A.K. Gerlak (Eds.), *Agency in Earth System Governance*, 1st ed., Cambridge University Press, 2020, pp. 73–85, <https://doi.org/10.1017/9781108688277.006>.
- [18] S. Daly, Philanthropy as an essentially contested concept, *Voluntas* 23 (2012) 535–557, <https://doi.org/10.1007/s12666-011-9213-5>.
- [19] Council on Foundations, Foundation Basics, Council on Foundations, 2020. (<https://www.cof.org/content/foundation-basics>).
- [20] J.C. Jenkins, J.T. Carmichael, R.J. Brulle, H. Boughton, Foundation funding of the environmental movement, *Am. Behav. Sci.* 61 (2017) 1640–1657, <https://doi.org/10.1177/0002764217744839>.
- [21] D. Tedesco, American foundations in the Great Bear Rainforest: philanthrocapitalism, governmentality, and democracy, *Geoforum* 65 (2015) 12–24, <https://doi.org/10.1016/j.geoforum.2015.07.003>.
- [22] Foundation Source, What Is a Foundation? Definitions, Types & Rules, Foundation Source, n.d. (<https://foundationsource.com/learn-about-foundations/what-is-a-private-foundation/>).
- [23] P.E. Steinberg, The ocean as frontier, *Int. Soc. Sci. J.* 68 (2018) 237–240, <https://doi.org/10.1111/issj.12152>.
- [24] Making Other Worlds Possible, University of Minnesota Press, 2015. (<https://doi.org/10.5749/j.ctt130jtq1>).
- [25] A.E. Bolton, B.A. Dubik, J.S. Stoll, X. Basurto, Describing the diversity of community supported fishery programs in North America, *Mar. Policy* 66 (2016) 21–29, <https://doi.org/10.1016/j.marpol.2016.01.007>.
- [26] L.M. Campbell, N.J. Gray, L. Fairbanks, J.J. Silver, R.L. Gruby, B.A. Dubik, X. Basurto, Global oceans governance: new and emerging issues, *Annu. Rev. Environ. Resour.* 41 (2016) 517–543, <https://doi.org/10.1146/annurev-environ-102014-021121>.
- [27] California Environmental Associates, Funding Report, Our Shared Seas, 2018. (<https://oursharedseas.com/funding/funding-report/>).
- [28] M.F. Berger, V. Caruso, E. Peterson, An updated orientation to marine conservation funding flows, *Mar. Policy* 107 (2019), 103497, <https://doi.org/10.1016/j.marpol.2019.04.001>.
- [29] J. Hamilton, X. Basurto, H. Smith, J. Virdin, How does the World Bank shape global environmental governance agendas for coasts? 50 years of small-scale fisheries aid reveals paradigm shifts over time, *Glob. Environ. Change* 68 (2021), 102246, <https://doi.org/10.1016/j.gloenvcha.2021.102246>.
- [30] D.A. Gill, M.B. Mascia, G.N. Ahmadi, L. Glew, S.E. Lester, M. Barnes, I. Craigie, E. S. Darling, C.M. Free, J. Geldmann, S. Holst, O.P. Jensen, A.T. White, X. Basurto, L. Coad, R.D. Gates, G. Guannel, P.J. Mumby, H. Thomas, S. Whitmee, S. Woodley, H.E. Fox, Capacity shortfalls hinder the performance of marine protected areas globally, *Nature* 543 (2017) 665–669, <https://doi.org/10.1038/nature21708>.
- [31] M.C. Lemos, A. Agrawal, Environmental governance, *Annu. Rev. Environ. Resour.* 31 (2006) 297–325, <https://doi.org/10.1146/annurev.energy.31.042605.135621>.
- [32] T. Bartley, How foundations shape social movements: the construction of an organizational field and the rise of forest certification, *Soc. Probl.* 54 (2007) 229–255, <https://doi.org/10.1525/sp.2007.54.3.229>.
- [33] R.J. Brulle, J.C. Jenkins, Foundations and the environmental movement: priorities, strategies, and impact. *Foundations for Social Change: Critical Perspectives on Philanthropy and Popular Movements*, 2005, pp. 151–173.
- [34] M. Goldman, The birth of a discipline: producing authoritative green knowledge, *World Bank-style, Ethnography* 2 (2001) 191–217.
- [35] M. Betsill, A. Enrici, E. Le Cornu, R. Gruby, Philanthropic Foundations as Agents of Environmental Governance: A Research Agenda, *Environmental Politics*. (In Press).
- [36] R. Reich, Repugnant to the whole idea of democracy? On the role of foundations in democratic societies, *PS Polit. Sci. Politics* 49 (2016) 466–472, <https://doi.org/10.1017/S1049096516000718>.
- [37] R.L. Gruby, N.J. Gray, L.M. Campbell, L. Acton, Toward a social science research agenda for large marine protected areas: social science and large MPAs, *Conserv. Lett.* 9 (2016) 153–163, <https://doi.org/10.1111/conl.12194>.
- [38] J.L. Fleishman, The foundation: a great American secret; how private wealth is changing the world, *Public Aff.* (2007).
- [39] T.L. Gutner, Banking on the Environment: Multilateral Development Banks and Their Environmental Performance in Central and Eastern Europe, MIT Press, 2002.
- [40] X. Basurto, J. Virdin, H. Smith, R. Juskus, Strengthening governance of small-scale fisheries: an initial assessment of theory and practice, Oak Found. (2017). (<https://nicholasinstitute.duke.edu/content/strengthening-governance-small-scale-fiseries-initial-assessment-theory-and-practice>).
- [41] C.C. Gibson, K. Andersson, E. Ostrom, S. Shivakumar, *The Samaritan's Dilemma: The Political Economy of Development Aid*, Oxford University Press on Demand, 2005.
- [42] M.F. Mallin, D.C. Stolz, B.S. Thompson, M. Barbesgaard, In oceans we trust: conservation, philanthropy, and the political economy of the Phoenix Islands Protected Area, *Mar. Policy* 107 (2019), 103421, <https://doi.org/10.1016/j.marpol.2019.01.010>.
- [43] K. Odede, Closing the race gap in philanthropy demands radical candour, *The Guardian*, 2020. (<http://www.theguardian.com/global-development/2020/sep/07/closing-the-race-gap-in-philanthropy-demands-radical-candour>).
- [44] A. Giridharadas, Beware Rich People Who Say They Want to Change the World, *The New York Times*. (2018). (<https://www.nytimes.com/2018/08/24/opinion/sunday/wealth-philanthropy-fake-change.html>).
- [45] C. Wyborn, P. Leith, J. Hutton, M. Ryan, J. Montana, L. Gallagher, *The Science, Policy and Practice Interface*, Luc Hoffmann Institute, 2017.
- [46] M.C. Lemos, J.C. Arnott, N.M. Ardoon, K. Baja, A.T. Bednarek, A. Dewulf, C. Fieseler, K.A. Goodrich, K. Jagannathan, N. Klenk, K.J. Mach, A.M. Meadow, R. Meyer, R. Moss, L. Nichols, K.D. Sjöstrom, M. Stults, E. Turnhout, C. Vaughan, G. Wong-Parodi, C. Wyborn, To co-produce or not to co-produce, *Nat. Sustain.* 1 (2018) 722–724, <https://doi.org/10.1038/s41893-018-0191-0>.
- [47] S.C. Moser, Can science on transformation transform science? Lessons from co-design, *Curr. Opin. Environ. Sustain.* 20 (2016) 106–115, <https://doi.org/10.1016/j.cosust.2016.10.007>.
- [48] C. Wyborn, A. Datta, J. Montana, M. Ryan, P. Leith, B. Chaffin, C. Miller, L. van Kerkhoff, Co-producing sustainability: reordering the governance of science, policy, and practice, *Annu. Rev. Environ. Resour.* 44 (2019) 319–346, <https://doi.org/10.1146/annurev-environ-101718-033103>.
- [49] D. Sarna-Wojcicki, M. Perret, M.V. Eitzel, L. Fortmann, Where are the missing coauthors? Authorship practices in participatory research, *Rural Sociol.* 82 (2017) 713–746, <https://doi.org/10.1111/ruso.12156>.
- [50] L. Boonzaier, D. Pauly, Marine protection targets: an updated assessment of global progress, *Oryx* 50 (2016) 27–35.
- [51] P.J. Ferraro, J.N. Sanchirico, M.D. Smith, Causal inference in coupled human and natural systems, *Proc. Natl. Acad. Sci. USA* 116 (2019) 5311–5318, <https://doi.org/10.1073/pnas.1805563115>.
- [52] D. Leat, Grantmaking foundations and performance measurement: playing pool? *Public Policy Adm.* 21 (2006) 25–37.
- [53] M. Morris, Foundation officers, evaluation, and ethical problems: a pilot investigation, *Eval. Program Plan.* 30 (2007) 410–415.
- [54] L. Zivetz, J. Cekan, K. Robbins, Building the evidence base for post project evaluation: Case study review and evaluability checklists, *Valuing Voices*, from: <http://valuingvoices.com/wp-content/uploads/...>, 2017.
- [55] J. Petrovich, *Exiting Responsibly: Best Donor Practices in Ending Field Support*, Robert Wood Johnson Foundation, Princeton, NJ, 2011.
- [56] N.J. Bennett, T. Satterfield, Environmental governance: a practical framework to guide design, evaluation, and analysis, *Conserv. Lett.* 11 (2018), e12600, <https://doi.org/10.1111/conl.12600>.
- [57] B. Kibbe, Breaking up is hard to do, *Found. Rev.* 9 (2017), <https://doi.org/10.9707/1944-5660.1350>.
- [58] T.R. McElanahan, N.A. Muthiga, C. Abunge, A.T. Kamukuru, E. Mwakalapa, H. Kalombo, What happens after conservation and management donors leave? A before and after study of coral reef ecology and stakeholder perceptions of management benefits, *PLoS One* 10 (2015), e0138769, <https://doi.org/10.1371/journal.pone.0138769>.
- [59] D. Callahan, Still in the Dark: Why Philanthropy Remains a Black Box, *Inside Philanthropy*, 2015. (<https://www.insidephilanthropy.com/home/2015/6/4/still-in-the-dark-why-philanthropy-remains-a-black-box.html>).
- [60] A. Shirk, If You've Met One Foundation... You've Met One Foundation, *Philanthr. News Dig.* (2018). (<http://philanthropynewsdigest.org/columns/the-sustainable-nonprofit-if-you-ve-met-one-foundation-you-ve-met-one-foundation>).
- [61] D. Callahan, Who Will Watch the Charities?, *The New York Times*, 2015. (<https://www.nytimes.com/2015/05/31/opinion/sunday/who-will-watch-the-charities.html>).
- [62] S. Bernstein, Legitimacy in intergovernmental and non-state global governance, *Rev. Int. Polit. Econ.* 18 (2011) 17–51.

- [63] Legitimacy of Philanthropic Foundations: United States and European Perspectives, Russell Sage Foundation, 2006. (<https://www.jstor.org/stable/10.7758/9781610444613>).
- [64] S. Harman, The Bill and Melinda Gates Foundation and legitimacy in global health governance, *Glob. Gov. Rev. Multilater. Int. Organ.* 22 (2016) 349–368.
- [65] M. McDermott, S. Mahanty, K. Schreckenberg, Examining equity: a multidimensional framework for assessing equity in payments for ecosystem services, *Environ. Sci. Policy* 33 (2013) 416–427.
- [66] D.E. Taylor, Introduction: the evolution of environmental justice activism, research, and scholarship, *Environ. Pract.* 13 (2011) 280–301, <https://doi.org/10.1017/S1466046611000329>.
- [67] V.J. Bakker, J.K. Baum, J.F. Brodie, A.K. Salomon, B.G. Dickson, H.K. Gibbs, O. P. Jensen, P.B. McIntyre, The changing landscape of conservation science funding in the United States, *Conserv. Lett.* 3 (2010) 435–444.
- [68] E. Zavaleta, D.C. Miller, N. Salafsky, E. Fleishman, M. Webster, B. Gold, D. Hulse, M. Rowen, G. Tabor, J. Vanderryn, Enhancing the engagement of US private foundations with conservation science, *Conserv. Biol.* 22 (2008) 1477–1484.
- [69] R.L. Gruby, L. Fairbanks, L. Acton, E. Artis, L.M. Campbell, N.J. Gray, L. Mitchell, S.B.J. Zigler, K. Wilson, Conceptualizing social outcomes of large marine protected areas, *Coast. Manag.* 45 (2017) 416–435, <https://doi.org/10.1080/08920753.2017.1373449>.
- [70] M. Schlüter, E. Lindkvist, X. Basurto, Interplay of top-down interventions and bottom-up self-organization shapes opportunities for transforming natural resource governance, *Mar. Policy* (2021).
- [71] S. Gelcich, C.J. Donlan, Incentivizing biodiversity conservation in artisanal fishing communities through territorial user rights and business model innovation, *Conserv. Biol.* 29 (2015) 1076–1085.