



Environmental governance in motion: Practices of assemblage and the political performativity of economistic conservation[☆]



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ABSTRACT

This article critically explores the dynamic, constitutive processes that animate economistic conservation and sustainable development as an expression of governance-beyond-the-state. I focus attention on governance in motion—expanding logics, hybrid practices, diffuse networks, and shifting social technologies that incrementally reshape power dynamics and the institutional domains that enable and constrain them. While the majority of institutional approaches to environmental governance emphasize intentional designs rooted in collective choices, less attention has been focused on dynamic processes of assemblage resulting from differentially coordinated actions across interrelated networks. Building from Foucauldian perspectives on governmentality and biopower, I argue that processes of assemblage help to constitute new techniques of governance aligned with the language and practices of economics. I examine two business and biodiversity initiatives—the Natural Capital Finance Alliance and the Business and Biodiversity Offsets Programme—in terms of five practices of assemblage: authorizing knowledge, forging alignments, rendering technical, reassembling, and anti-politics. I highlight four dimensions of political performativity associated with business and biodiversity initiatives that exemplify environmental governance in motion: discursive amplification, organizational articulation, institutional re-shaping, and technical instrumentation. Governance in motion reflects the distributed power dynamics of diverse individuals and collectives in generating economistic techniques of governance.

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1. Introduction

The language and practices of economics currently constitute a primary frame of reference for most transnational environmental governance. Within the narrower domain of conservation governance—where collective efforts focus on the protection and sustainable use of biological diversity—nature has been recast as natural capital, catalyzing a broad range of initiatives such as payment for ecosystem services, biodiversity offsetting, and natural capital accounting. These activities, in turn, have precipitated novel organizational networks joining private sector actors with non-profit and multi-lateral agencies operating largely beyond spheres of state-led governance. Moreover, they engage new participants such as investment houses and insurance companies and encourage restructuring of existing conservation organizations to accommodate economistic approaches. How have these constitutive processes unfolded and how have they transformed conservation governance and sustainable development?

This article critically examines the dynamic, constitutive processes that animate economistic conservation and sustainable development as an expression of governance-beyond-the-state (Swyngedouw, 2005). I focus attention on governance in motion—the expanding logics, hybrid practices, diffuse networks, and shifting social technologies that incrementally reshape power dynamics and the institutional domains that enable and constrain them. A relational view of governance in motion confronts the challenge of accounting for a range of elements such as discourses, actor-networks, organizational forms, and governance techniques that constantly shift and change relative to overlapping institutional boundaries. I explore practices of assemblage as incremental, distributed processes that join economistic logics, organizational forms, calculative social technologies, and devices as a means of accommodating increased private sector engagement (MacDonald, 2010a). From this perspective, power relationships may be spread across interconnected but uncoordinated domains of activity while producing broad cumulative effects.

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interrelated but diffuse networks. In particular, I emphasize the political performativity of economic environmental governance in terms of distributed agency and institutional dynamism. Building from Foucauldian perspectives on governmentality and biopower (e.g., Foucault, 2008), I argue that processes of assemblage help to constitute new techniques of governance aligned with the language and practices of economics that have significantly reshaped conservation organizational structures and processes over time.

In drawing upon assemblage approaches, the article offers three types of contributions to critical studies of environmental governance at the intersection of power and institutions. First, it offers a conceptual vocabulary that examines constitutive processes associated with neoliberal governmentality and biopower. In particular, it expands understandings of economic forms of governance operating beyond the state. Second, the article presents an explicitly relational view of governance in motion in contrast to dominant institutional analyses and regime theories that emphasize social structural designs. It thus points to the continuous labor of creating and adapting techniques of governance as opposed to resultant formations. Third, it turns attention to the diffuse power dynamics that animate governmentality and biopolitics in which actions can be uncoordinated and spread across overlapping networks while still producing significant cumulative effects. It discusses these outcomes as forms of political performativity. Overall, and in line with other contributions in this special issue, this work adds to critical perspectives on conservation (e.g., Büscher, Fletcher, & Dressler, 2014), development studies (e.g., Mosse, 2005), and institutionalism (e.g., Cleaver & de Koning, 2015; Hall, Cleaver, Franks, & Maganga, 2014).

The article unfolds in four parts. In the first section, I present a conceptual framing that situates economic conservation governance in relation to wider discussions of governance-beyond-the-state, governmentality, and biopolitics. In order to discuss governance as a process within these three domains, I join two conceptual streams: assemblage and performativity. Assemblage captures the coming together of diverse elements such as discourses, institutional forms, and calculative social technologies. Performativity relates to the ways in which these elements act in the world cumulatively, producing the economization of people and things.

The article's second section situates the study of economic conservation governance relative to international summits and other major events. These venues provide temporally and spatially constrained arenas in which diverse actors come together to shape conservation governance agendas and practices. I summarize collaborative event ethnography as a methodological approach for observing and capturing perspectives on governance in motion as it is enacted and constructed.

The third part of the article presents business and biodiversity as a primary domain of economic conservation featuring different practices of assemblage. I introduce two prominent examples of business and biodiversity initiatives: the Natural Capital Finance Alliance (NCFA) and the Business and Biodiversity Offsets Programme (BBOP). I describe each program in terms of logics, actor-networks, institutional boundaries, organizational forms, social technologies, and devices. I then comparatively analyze the initiatives in relation to specific practices of assemblage following Li (2007a, 2007b): authorizing knowledge, forging alignments, rendering technical, reassembling, and anti-politics.

The fourth section discusses the political performativity of practices of assemblage, emphasizing how business and biodiversity initiatives help to reinforce and augment the language and practices of economics within the domain of conservation governance. I highlight four dimensions of political performativity: discursive amplification, organizational articulation, institutional re-shaping, and technical instrumentation. Each of these incremental, cumula-

tive effects helps to expand economic logics, practices, and organizational forms at the same time as they generate discursive and social structural hybridities that are not purely economic.

2. Economic environmental governance beyond the state

With the unfolding of the UN-sponsored Sustainable Development Goals (SDGs) and continuing efforts to imagine and materialize a Global Green Economy in the wake of the 2012 United Nations Conference on Sustainable Development (Rio + 20), critical work aimed at analyzing the constitutive processes associated with economic environmental governance draws attention to approximately three decades of activities aimed at joining the language and practices of economics with the goals of nature protection and sustainable development. In this context, conservation governance emphasizes economic incentives that seek to make nature legible and manageable as natural capital via a range of symbolic and material shifts to measure, commodify, establish markets for, and abstract nature through financialization (Büscher, 2014; Büscher et al., 2014; Dempsey, 2016; Dressler & Roth, 2010; Fletcher, 2013, 2014; Holmes & Cavanagh, 2016; Sullivan, 2013, 2014, 2017; Turnhout, Neves, & de Lijster, 2014; Wilshusen, 2014; Wilshusen & MacDonald, 2017).¹

A key question surrounding economic approaches to conservation centers on the extent to which they produce market-oriented outcomes that contribute to the protection or sustainable use of biological diversity. Some research suggests that their translation into practice may be limited or different than advertised. Multiple studies on payments for ecosystem services (PES) programs, for example, find that they perform more like state-led subsidy arrangements rather than markets (e.g., Fletcher and Brietling, 2012; McAfee & Shapiro, 2010). Similarly, efforts to implement biodiversity offsetting have been limited by significant transaction costs and minimal long-term monitoring among other constraints (e.g., Benabou, 2014; Maron et al., 2012). Focusing specifically on "for-profit conservation ... biodiversity conservation financed through and undertaken with the aim of generating profitable returns for its investors," Dempsey and Suarez (2016: 654, 665) find that private capital flows are "small, marginal, and geographically constrained." Characterizing for-profit conservation as "nonperformative," they caution against overstating the reach and impact of economic conservation given that "the rhetoric ... has so outpaced the capital flows from which it was supposed to emerge."

In highlighting the lack of economic work performed by conservation finance, Dempsey and Suarez (2016) leave open the possibility that economic approaches tied to ecosystem services and natural capital may perform political work beyond the boundaries of financial transactions. A primary objective of this article is to explore this possibility; the ways in which economic approaches to conservation are politically performative above and beyond the economic work that they may or may not achieve. As I discuss below, *political performativity*, in this sense, refers to the ways in which the diffuse, incremental labor of assembling disseminates economic logics and modes of governance to non-economic domains of activity such as conservation.

An initial entry point for analyzing economic conservation centers upon governance-beyond-the-state, which Swyngedouw (2005: 199) defines as

"The emergence, proliferation and active encouragement ... of institutional arrangements of 'governing' which give a much

¹ While there is significant tension among conservation actors surrounding the reframing of nature as "natural capital," the numerous initiatives associated with business and biodiversity have worked extensively to define the term in ways that encompass economic and non-economic valuation (NCC, 2019).

greater role in policy-making, administration and implementation to private economic actors on one hand and to parts of civil society on the other in self-managing what until recently was provided or organized by the national or local state.”

As “institutional ensembles” featuring horizontal networks including private sector, civil society, and some state actors, this type of governance emerged in the 1990s following the rise of neoliberalism. Governance-beyond-the-state was thus built upon promises of correcting perceived failures of state-led development by enabling wider participation and enhancing efficiencies in pursuing “good governance” outcomes. Swyngedouw (2005: 1991) emphasizes the “Janus-faced” character of such distributed institutional arrangements, pointing to the ways in which they “consolidate new technologies of government” and “profoundly restructure the parameters of political democracy.” He notes in particular the possibility that “the democratic character of the political sphere is increasingly eroded by the encroaching imposition of market forces that set the ‘rules of the game.’”

In addition to political performativity, a second purpose of this article is to examine what governance-beyond-the-state looks like in the context of transnational conservation activities framed in terms of business and biodiversity. How do these private sector-oriented initiatives emerge and develop over time? How do they shape broader institutional dynamics and power relationships? Business and biodiversity initiatives offer prominent examples of the Janus-faced tendencies of governance-beyond-the-state.

Governance-beyond-the-state can be understood as the intersection of diverse social structural elements—e.g., formal and informal rule systems and formal organizations—but also dynamic social relationships. Drawing upon Foucault’s (1991, 2008) notion of governmentality, Swyngedouw (2005) emphasizes how dynamic institutional ensembles emerge over time, producing different governance logics, organizational arrangements, and methodologies (see also Dean, 2010, 2013; Fletcher, 2010; Li, 2007b). In particular, governance-beyond-the-state dramatically diminishes the role and legitimacy of the public sector and elevates the importance of diffuse private sector and non-governmental networks. Moreover, in his writing on neoliberal governmentality, Foucault (2008) described a reorganization of the role and authority of the state in a manner that shifted governance techniques to focus on the responsibilities and actions of individuals and collectives rather than a broader public (see Lemke, 2001). Lemke (2002) notes that this refocusing of responsibility toward the individual and away from public authority incrementally realigned power relationships in society, leading to a highly consequential move from formal to informal modes of governance that draw together new constellations of actors such as NGOs and private firms alongside state agencies.

In addition to governance-beyond-the-state and neoliberal governmentality, Foucault’s presentation of biopower offers a third, related domain within which to situate an analysis of economic conservation. In contrast to sovereign power, Foucault (2003: 241) described biopower as expressions of government in which authority is applied to enhance the health and vitality of a population; the power to “make live and let die” (see Nealon, 2007). International conservation efforts offer excellent examples of biopower in which measures aimed at the protection and sustainable use of biological diversity seek to nurture and sustain human and non-human life across whole populations (see Biermann & Mansfield, 2014; Cavanagh, 2014, Oels, 2005; Youatt, 2008). A key consideration in this context is the extent to which conservation initiatives shape neoliberal techniques of governance in ways that are not purely economic. For example, how might the imperative of nature protection interface with logics of economic efficiency to produce distinctive conservation governance arrangements?

In building on the literatures on governmentality and biopower, I focus attention on the constitutive processes that animate and reproduce economic conservation, emphasizing how overlapping networks associated with business and biodiversity initiatives imagine and enact governance-beyond-the-state.

To move in this direction, I merge two conceptual streams—*assemblage* and *performativity*—that capture both dynamic social processes and structural elements to characterize environmental governance in motion—the diffuse agency and institutional dynamism that can generate novel, informal techniques of governance.

Assemblage captures the coming together of diverse elements such as discourses, institutional forms, and calculative social technologies. These processes enable complex, rhizomic interrelationships and distributed agency in response to certain desired outcomes or concerns (Anderson & McFarlane, 2011; Deleuze & Guattari, 1987; Li, 2007a, 2007b). While definitionally broad and open to wide interpretation and debate, *assemblage* approaches foreground the continuous unfolding and shifting of socio-technical arrangements as well as the multi-faceted constitutive work that animates social life.²

In characterizing environmental governance in motion, I focus on dynamic processes of assembling, disassembling, and reassembling across action arenas in relation to specific initiatives over time. Li (2007a: 264–5) highlights three characteristics of *assemblage* that inform my analysis. First, it emphasizes processes of becoming in contrast to most work on governmentality that focuses on resultant formations or structures. It further highlights the contingency of these processes through which elements assemble, disassemble, and re-assemble as constitutive work unfolds. Second, the terminology of *assemblage* centers upon the diverse and ongoing practices that incrementally produce intersections of people and things over time. These practices account for the continuous labor that “must exist to keep any *assemblage* together” (Li, 2007a: 287). Third, *assemblage* approaches present a diffuse, often uncoordinated, view of agency that is both powerful in its cumulative work and non-totalizing. In this sense, practices of *assemblage* tend to unfold from “an existing repertoire, a matter of habit, accretion, and bricolage” (Li, 2007a: 265).³

In combination with *assemblage*, *performativity* turns attention to processes of economization in which people and things co-produce, enact, and materialize the world as economic (Callon, 2007; Çalişkan & Callon, 2009; MacKenzie et al., 2007; Muniesa, 2010). In using the terms “economization” and “economistic,” as opposed to static descriptors like “economic,” I emphasize the ways in which dynamic structures and processes are constituted and achieved. *Performativity* of economics refers to “the capacity of economic models and technologies to remake the world in their own image.” However, not all economic theories, models, and technologies are equally performative, leading to the question of how and why certain economic approaches achieve greater institutional and political support relative to others (Fourcade, 2011: 1724).

In this article I join perspectives on *assemblage* and *performativity* to explore the dynamic processes that animate expressions of neoliberal governmentality and biopower in the context of international biodiversity conservation. This perspective brings into

² For a discussion on the use and mistranslation of “*assemblage*” from the French term “*agencement*” found in Deleuze and Guattari (1987), see Phillips (2006). Regarding broad and indeterminate definitions of “*assemblage*,” see Anderson and McFarlane (2011). In Foucauldian terms, the coming together of discourses, organizational and institutional forms, social technologies, devices and related elements constitutes an “*apparatus*” (*dispositif*)—more a “system of relations” than a static social structure (Foucault, 1980: 194; Dean, 2013). On the comparison between “*assemblage*” and Foucault’s term *dispositif*/apparatus see Legg (2011) and Li (2007a).

³ The term “*bricolage*” in this context refers to practices that combine diverse, often unrelated symbolic and material elements to create new institutional arrangements (see Cleaver & de Koning, 2015).

view a broader scope of interrelationships compared to most institutional discussions of environmental governance. In looking at governance in motion in particular, I examine first the ongoing work that creates, maintains, and transforms governance arrangements through practices of assemblage. I then explore the political work that these practices achieve in reinforcing and augmenting neoliberal techniques of governance. Political performativity in this sense turns attention to the ways in which the language and practices of economic conservation dynamically reproduce themselves and extend to new action arenas. Major international events provide important sites for observing these processes over time.

3. Environmental governance in motion at major events

In this section, I discuss major events such as international summits as a means of observing environmental governance in motion. In summarizing the collaborative methodological approach underlying my analysis, I point to ongoing work that examines how major events contribute to the production of economic forms of governance (e.g., Corson, Campbell, Wilshusen, & Gray, 2019; Gray et al., 2019). Major events are important to studies of environmental governance given their high visibility and concentrated work in moving forward particular policy agendas and ideological perspectives (MacDonald, 2010a). Even when major events do not produce projected outcomes they can be viewed as “political theater” that reinforces certain expressions of legitimacy and authority shaping governance. Amid the political theater of major events, important social processes of governance in motion are on display. Power dynamics in this context tend to unfold across action arenas establishing “particular codes of conduct, standards of responsible behavior, and the production of particular kinds of subjects” (Death, 2011: 4; Oels, 2005). Tracking practices of assemblage at major events thus focuses attention on the symbolic and material “contents” of conservation governance in specific contexts.

Expanding upon this foundation, I adopted a methodological approach for this study known as collaborative event ethnography (CEE). CEE critically examines how major events shape global environmental governance, combining “rapid or time-constrained ethnographic assessment with institutional and organizational ethnography ... to capture engagements between scientific experts, decision-makers, and private sector and NGO actors in the context of a time-condensed meeting” (Brosius & Campbell, 2010: 248; Campbell, Corson, Gray, MacDonald, & Brosius, 2014). Collaborative research groups have examined the 2008 World Conservation Congress, the 2010 Conference of the Parties to the Convention on Biological Diversity, the 2012 United Nations Conference on Sustainable Development (Rio + 20), the 2014 World Parks Congress, and the 2016 World Conservation Congress (e.g., Brosius & Campbell, 2010; Campbell, Gray, Fairbanks, Silver, & Gruby, 2013; Campbell et al., 2014; Corson, Brady, Zuber, Lord, & Kim, 2015; Fletcher, 2014; MacDonald & Corson, 2014). Published work highlights how meetings shape governance agendas surrounding biodiversity targets (Campbell, Hagerman, & Gray, 2014), small island nations (Gruby & Campbell, 2013), and defining protected areas (Corson et al., 2014) among other topics. In line with Death (2011) findings, other work tied to CEE has emphasized how meetings help to reshape the organizational order of conservation governance (MacDonald, 2010a, 2010b; MacDonald & Corson, 2012; Wilshusen & MacDonald, 2017). Meetings intensify the economization of environmental governance while simultaneously containing and reconfiguring dissent and resistance (Corson et al., 2015; Fletcher, 2014).

This article draws upon qualitative data gathered as a member of multiple collaborative event ethnography (CEE) groups includ-

ing the 2012 United Nations Conference on Sustainable Development and the 2014 World Parks Congress. It also draws upon insights gained at the 2015 World Forum on Natural Capital and the 2016 World Conservation Congress. With a core focus on observing and recording public sessions, collecting written materials, and conducting interviews at each event, CEE groups additionally examined related documents, websites, and publicly available videos following events.

The qualitative data gathering and analysis presented in this article falls in line with grounded theory approaches framed in terms of situational analysis (Clarke, Friese, & Washburn, 2018). During the months leading up to each event, we examined in detail the structure, themes, and schedule for each event, identifying frames such as “corporate sustainability” and “business and biodiversity” as areas of focus. The selection of cases emerged from the events and developed longitudinally, including the Natural Capital Finance Alliance at Rio + 20 in 2012 and biodiversity offsetting and natural capital accounting at the World Parks Congress in 2014. I followed the trajectories of the initiatives both online and across multiple events through the end of 2016. Sub-teams collectively transcribed recordings of public sessions (approximately 15 two-hour sessions from each event) and then collaboratively coded transcripts and field notes, which included perspectives from informal interviews. This iterative, grounded approach to theory building led to the development of a working vocabulary to describe economic conservation initiatives used in the following section as well as the focus on practices of assemblage and political performativity at the center of my analysis of governance in motion.

4. Business and biodiversity as an economic domain of governance

Business and biodiversity captures the diverse efforts of environmental NGOs, corporate sustainability coalitions, individual firms, UN agencies, and multilateral organizations such as the World Bank to enable the private sector to benefit from and contribute to the conservation and sustainable use of biological diversity. While business interests actively engaged in formal and informal deliberations tied to sustainable development and the Rio Conventions in the 1980s and early 1990s, business and biodiversity came into view more coherently in the late 1990s and early 2000s (MacDonald, 2010a). It grew along with terminology such as natural capital and ecosystem services as a way of framing nature’s contributions to economic development and related strategies such as payment for ecosystem services (PES). New financial opportunities generated by these approaches can produce incentives for resource users (agriculture, forestry, tourism) and entrepreneurs (carbon traders, conservation bankers) to pursue biodiversity as a potential means of enhancing profits. Just as importantly, business and biodiversity initiatives can help private sector actors to avoid regulatory, reputational, and other kinds of risks. In the face of challenges tied to creating new business models in support of biodiversity conservation—measuring, commodifying, establishing property rights, managing liability, navigating regulatory regimes—new transnational partnerships emerged to provide guidance to private firms and the international conservation and development communities (Bishop, Kapila, Hicks, Mitchell, & Vorhies, 2009).

Rather than a monolithic program, business and biodiversity is best understood as a constellation of networked initiatives. A prominent example stems from The Economics of Ecosystems and Biodiversity (TEEB) initiative’s 2012 report for business. TEEB for Business was co-produced by representatives from IUCN, UNEP, Earthmind (a Swiss NGO), BSR (a consortium of businesses for social responsibility), the World Business Council on Sustainable

Development (WBCSD), the Global Reporting Initiative (GRI), Price-waterhouseCoopers, and Conservation International (CI). Along with other TEEB reports, TEEB for Business was presented at multiple international meetings, which helped to generate momentum for subsequent efforts by working groups with many of the same actors. With the products of these efforts in place, conservation organizations such as IUCN and the Secretariat for the Convention on Biological Diversity (CBD) now prominently feature business and biodiversity on their websites and have established durable organizational structures including IUCN's Global Business and Biodiversity Programme and the CBD's Global Platform on Business and Biodiversity.

In the remainder of this section, I comparatively analyze two influential business and biodiversity initiatives: the Natural Capital Finance Alliance and the Business and Biodiversity Offsets Programme. I have developed the following working vocabulary to describe these types of activities: (1) spoken and written discourse to capture *logics*, (2) the convergence of diverse individual and collective actors in social networks to establish *actor-networks*,⁴ (3) institutional agreements, policies, and program standards and procedures to delineate *institutional boundaries*, (4) programmatic structure to establish *organizational form*, (5) approaches and methodologies evident as strategies, programs, platforms, initiatives, and related activities to indicate *social technologies*, and (6) the products, instruments, or mechanisms generated from social technologies to highlight *devices*. Social technologies comprise the locus of collective work that present certain assumptions for action (*logic*), bring together particular configurations of actors, inspire the formation of organizational forms within institutional boundaries, and lead to the production of outputs (*devices*) to legitimize and create momentum for each initiative.

4.1. The Natural Capital Finance Alliance (NCFA)

The Natural Capital Finance Alliance, formerly known as the Natural Capital Declaration (NCD), provides a prominent example of how representatives of NGOs, businesses, and multilateral organizations enact and extend the logic and practices of business and biodiversity within diffuse networks operating beyond the state. The NCD was launched at the 2012 Corporate Sustainability Forum (part of Rio + 20) and comprises a voluntary commitment aimed at the finance sector to encourage biodiversity conservation—"a finance-led initiative, endorsed at CEO-level, to integrate natural capital considerations into loans, equity, fixed income and insurance products as well as in accounting, disclosure, and reporting frameworks" (NCFA, 2019a: np).

Jointly organized by the United Nations Environment Programme's Finance Initiative (UNEP-FI) and the Global Canopy Programme (a U.K.-based NGO), signatories to the NCD commit to four action areas focused on (1) understanding how natural capital figures into a financial institution's operations, (2) embedding "natural capital considerations" within financial products and services, investments, and insurance policies, (3) working toward development of an "integrated reporting" platform that accounts for natural capital, and (4) working toward global consensus on "integrating natural capital into private sector accounting and decision-making." In October 2016 the NCD changed its name to the Natural Capital Finance Alliance to better reflect its evolving mission and activities. As of June 2019, the NCFA identified forty-seven signatories and another thirteen "supporters." (NCFA, 2019b: np).

⁴ My use of the term actor-network is informed by but narrower in scope compared to Actor-Network-Theory associated with Bruno Latour, Michel Callon, John Law and others (e.g., Latour, 2005). In particular, I mainly emphasize the interaction of human actors.

The NCD's organizing logic identifies specific ways that firms can improve economic returns by enhancing profit-making opportunities or by reducing operational, regulatory, legal, reputational, market, and financial risks by accounting for and disclosing impacts on natural capital. It targets the finance sector as an important driver of economic valuation and thus a key conduit for integrating natural capital in economic decision-making more broadly, seeking to transform vulnerabilities into new financial opportunities.

Organizationally, the NCFA brings together new actors in the conservation governance arena such as investment management firms, banks, and insurance companies. For example, actors who contributed to the launch of the NCD in 2012 at Rio + 20 such as Calvert Investments, Infraprev (a Brazilian pension fund), FIRA/Banco de México (a Mexican agricultural trust fund), and the International Finance Corporation (part of the World Bank Group) exemplify the NCFA's loose network of signatories and supporting organizations. The latter designation reinforces connections between finance firms and non-governmental and multi-lateral organizations such as Conservation International, the TEEB Initiative and the Convention on Biological Diversity. The NCFA maintains connectivity across its network via a secretariat based at UNEP-FI and the Global Canopy Programme that coordinates the alliance's activities with the support of a steering committee composed of representatives from finance institutions (NCFA, 2019c).

Implementation plans for the Natural Capital Declaration illustrate how the alliance pursues a finance sector-oriented social technology focused on natural capital accounting and disclosure, offering a road map for calculating and translating ecological goods and services to make them legible and actionable within finance institutions' "operations, risk profiles, customer portfolios, supply chains, and business opportunities" (NCFA, 2019a: np). Emulating existing corporate social responsibility initiatives, the NCD calls for an integration of natural capital considerations within loans, equities, bonds, insurance products, and financial accounts (Mulder et al., 2013). The NCD presents flexible institutional boundaries based on voluntary compliance, especially when compared to regulatory standards with formal compliance mechanisms. It provides recommendations on assessing, valuing, and publicly reporting natural capital dependencies and impacts.

The Natural Capital Finance Alliance primarily coordinates the voluntary actions set down in the Natural Capital Declaration. In this sense, the declaration functions as a device that serves as a conduit for natural capital accounting and disclosure (social technology). In theory, signatories voluntarily review and modify their activities in ways that benefit each firm's performance while mitigating impacts on biodiversity. Further, the collective work of promoting and maintaining the NCD joins finance sector actors with non-governmental and multilateral organizations to continually build natural capital accounting and disclosure as an approach to economic environmental governance. The work of the NCFA connects to other related initiatives that embrace the same social technology and have produced similar types of devices. For example, the NCD recommends a range of products that allow firms to measure their dependencies and impacts on natural capital including the Integrated Biodiversity Assessment Toolkit (IBAT) maintained by a consortium including Birdlife International, Conservation International, IUCN, and the U.N. World Conservation Monitoring Centre as well as the Integrated Valuation of Environmental Services and Tradeoffs (InVEST) program produced by the Natural Capital Project.

4.2. The Business and Biodiversity Offsets Programme (BBOP)

Biodiversity offsetting enables businesses—extractive industries and land developers in particular—to pursue environmentally dis-

ruptive activities while ostensibly restoring similar biologically diverse areas elsewhere. As an example of a business and biodiversity initiative, offsetting provides a well-established methodology that joins conservation organizations like IUCN, Forest Trends, and Fauna and Flora International, third-party consulting firms and service providers, and major corporations such as Rio Tinto and Shell.

BBOP (2018: np) describes itself as “a collaboration of more than 80 leading organizations and individuals including companies, financial institutions, government agencies and civil society organizations.” Compared to the Natural Capital Finance Alliance, BBOP constitutes a more established organization, including a secretariat staffed by Forest Trends and the Wildlife Conservation Society (WCS), and an advisory group led by an executive committee. The secretariat coordinates and implements the program’s activities, working closely with the executive committee, with representatives from business, finance institutions, civil society, and government. BBOP thus generates a broad actor-network including funders such as the United Nations Development Programme (UNDP), the Global Environment Facility (GEF), and the International Finance Corporation (IFC).

Biodiversity offsetting is predicated on the premise that negative environmental effects from a development activity can be compensated by ecological restoration or improvement at a similar, proximal site. The language of compensation has led to two dominant frames—No Net Loss (NNL) and Net Positive Impact (NPI)—that inform action objectives. Within the context of what is called the Mitigation Hierarchy, businesses first seek to avoid, minimize, or restore their negative environmental impacts on site. If, after going through these steps, residual degradation remains, then industries are expected to compensate for damages somewhere else, achieving at least “no net loss” and ideally “net positive gain” (BBOP, 2013; Gardner et al., 2013).

Similar to the NCF, the business case for biodiversity offsetting revolves around risk mitigation and economic efficiency, pointing to certain institutional boundaries that shape activities surrounding business and biodiversity offsetting. For example, regarding access to finance, many enterprises pursuing expensive infrastructure development projects need to adhere to global performance standards in order to attain loans. In voluntarily pursuing biodiversity offsets, businesses can satisfy the IFC’s Performance Standard 6 related to biodiversity conservation. Since a significant number of lenders responsible for international project financing endorse IFC Performance Standards, companies seeking loans for infrastructure development face strong incentives to use offsets as a means of adhering to the biodiversity requirements (BBOP, 2013). Further, private sector actors confront regulatory parameters in some contexts such as the United States, the United Kingdom, and Australia. In most cases, however, offsetting is a non-compulsory option.

The collective work of the BBOP network seeks to advance biodiversity conservation via a social technology centered on compensating for or offsetting negative impacts to allow resource extraction or land development. In contrast with natural capital accounting and disclosure under the NCF, offsetting efforts seek to guide on-the-ground projects in ways that directly protect or mitigate environmental impacts. Similar to NCF, however, BBOP has dedicated most of its efforts to establishing overarching standards and a calculative methodology to synchronize how biodiversity offsetting occurs globally. A primary output or device from this work is The Standard on Biodiversity Offsets, which provides a set of guidelines that businesses, service providers, financing agencies, and others voluntarily follow to navigate the complex process of designing, implementing, and assessing offset projects. It combines ten principles with associated criteria and indicators aimed at generically defining best practices. The Standard further encapsu-

lates a calculative methodology that enables different interested parties to translate complex ecologies to measurable impacts and commensurable tradeoffs transferrable to another site, allowing businesses and service providers to construct “measurable conservation outcomes” that “compensate for residual adverse biodiversity impacts” (BBOP, 2012: 17).

The Mitigation Hierarchy is another important device that enables and mobilizes biodiversity offsets within the private sector. Most importantly, it provides a framing mechanism that schematically abstracts, simplifies, and homogenizes biodiversity in ways that compartmentalize negative impacts and enable compensatory tradeoffs. The Mitigation Hierarchy was on prominent display at the 2014 World Parks Congress, for example, as a symbolic tool that allowed extractive industry representatives and their NGO partners to encapsulate their arguments suggesting that mining could occur in ways that did not significantly disrupt biodiversity near protected areas (Table 1).

A comparison of the two business and biodiversity initiatives brings each one’s defining features into view as assemblages characteristic of governance-beyond-the-state. As economic forms, the logics of both initiatives train conservation objectives to the economic performance of private firms. Whether framed in terms of natural capital accounting and disclosure in the finance sector (NCF) or compensation for adverse biodiversity impacts by developers and industries (BBOP), activities by all participants focus on achieving nature protection by internalizing environmental impacts and dependencies with in private firms’ decision-making.

Corporate and financial sector actors working alongside NGO partners and third-party service providers dominate business and biodiversity actor-networks. Conservation governance processes tied to these initiatives unfold largely outside the boundaries of traditional state-centered arenas, although biodiversity offsetting activities interface with public sector regulatory bodies in some contexts. In both cases, the institutional boundaries of governance-beyond-the-state center upon economic incentives for private companies such as enhanced profit margins and firm reputation or access to international finance capital.

Finally, both business and biodiversity initiatives are built around calculative methodologies that mesh with a rationale and incentive structure that promises economic and techno-managerial efficiencies. For the NCF, accounting and disclosure leads to recognition and then valuation of finance-sector firms’ dependencies and impacts on natural capital. BBOP accounts for “measurable conservation outcomes” by equating, shifting, and compensating for impacts with the objective of achieving “no net loss” or “net positive impact.” Taken as a whole, business and biodiversity presents one type of economic conservation with different social technologies alongside other manifestations such as payments for ecosystem services. While they rely centrally on the language and practices of economics, they are not purely economic given their entanglements with nature protection.

5. Assembling business and biodiversity

Building upon my presentation of business and biodiversity as an economic domain of governance that exemplifies governance-beyond-the-state, I turn in this section to constitutive processes of economization and governance in motion. In her discussion of community forestry as a “technical field fit to be governed and improved,” Li (2007a, 2007b: 265, 286) identifies generic practices of assemblage that inform my analysis of economic governance in motion: authorizing knowledge, forging alignments, rendering technical, reassembling, and anti-politics. *Authorizing knowledge* situates and consolidates certain bodies of knowledge including affirmation of assumptions and containment

Table 1
Comparison of Business and Biodiversity Initiatives.

	Definition	Natural Capital Finance Alliance (NCFA)	Business & Biodiversity Offsets Programme (BBOP)
Logics	Rationales for collective action	Account for and report on natural capital in finance sector. Internalize environmental costs Enhance economic efficiencies and reduce risks of participating firms	Compensate for environmental degradation tied to resource extraction and development Enhance economic efficiencies and reduce risks of participating firms
Actor-Networks	The convergence of diverse actors types in social networks	Loose network of signatories and supporting organizations: finance sector firms, NGOs, UN agencies, multi-laterals	Structured network of client firms and supporting organizations: multi-national corporations, NGOs, consulting firms, service providers, multi-laterals, government agencies.
Institutional Boundaries	Institutional agreements, policies, program standards and procedures that enable and constrain collective action	Voluntary commitment to comply with recommendations for assessing, valuing, and publicly disclosing natural capital dependencies and impacts	Voluntary commitment to comply with standards for planning and implementing biodiversity offsets. Adherence to IFC Performance Standard 6 permits access to international finance capital
Organizational Forms	Core programmatic structure that enables collective action	Core group of paid staff surrounded by NGO and corporate participants forming a secretariat, steering committee, and working groups	Core group of paid staff from host NGOs surrounded by NGO, corporate, and service provider participants to form secretariat, executive committee, and advisory group
Social Technologies	Approaches, methodologies, and techniques evident as strategies, programs, platforms, initiatives, and related activities	Natural Capital Finance Alliance promotes natural capital accounting and disclosure among finance sector signatories via a calculative methodology	BBOP establishes partnership, standards, and calculative methodology for compensatory biodiversity offsetting
Devices	Products of work generated by business & biodiversity initiatives evident as mechanisms, tools, instruments, which provide conduits for social technologies	Natural Capital Declaration; sectoral natural capital accounting and risk assessment tools; disclosure reports; related tools (IBAT, InVEST)	Standard for Biodiversity Offsets; Mitigation hierarchy

of critique. *Forging alignments* refers to processes that join diverse parties' objectives within a domain of activity. *Rendering technical* captures activities that simplify and order complex relationships and challenges so that technocratic responses can be applied. *Reassembling* attends to adding or reorienting elements within a domain of activity to align with new rationales or approaches. *Anti-politics* centers upon actions that recast "political questions as matters of technique," circumscribing the scope of what is to be governed and how.⁵ I build from Li's (2007a, 2007b) presentation to explore the constitutive work that produces and sustains the two business and biodiversity initiatives described above as well as the power dynamics precipitated by practices of assemblage.

5.1. Authorizing knowledge: the translational power of the business case

The organizing logics for the NCFA and BBOP present distinct rationales that build from "the business case" as a legitimizing discourse. In emphasizing specific ways that firms can improve economic efficiency by enhancing profit-making opportunities or by reducing risks, the business case provides a portal that translates nature protection objectives into the language and practices of economics. The NCFA targets the finance sector as an important driver of economic valuation and thus a key conduit for integrating natural capital in economic decision-making more broadly. BBOP's pursuit of "No Net Loss" and "Net Positive Impact" allows firms to mitigate regulatory, financial, and reputational risks through ecological compensation (offsetting).

With the rise of corporate social responsibility programs over the last three decades, "the business case" provides a translational frame that readily accommodates notions of "valuing nature" associated with economics and accounting. At the same time, it incor-

porates related constructs such as "competitive advantage" and "risk management." In the NCFA and BBOP examples, actors joined elements of the business case, biodiversity conservation, and sustainable development to frame a legitimizing discourse in concert with voluntary reform and corporate social responsibility. Framing risk minimization and profit maximization as coupled with business reform ethics (e.g., "environmental stewardship") trains the ecological to the economic. In other words, the imperative to conserve biodiversity is contained within the constraints of economic efficiency and risk reduction assumed by the business case.

The NCFA links the largely non-material, future-oriented logic of finance with the construct of natural capital in ways that simultaneously abstract nature from a material grounding and make it fluid as a potential financial instrument. It constructs legitimacy in terms of economic internalization where the recognition, importation, and disclosure of natural capital "considerations" within financial instruments ostensibly produce better decision-making and greater transparency across signatory firms' portfolios. BBOP, in turn, establishes legitimacy through simplification and homogenization of ecological complexity across sites, producing a type of spatial fix that allows clients to avoid or remove risk.

The language of economics that animates initiatives like the NCFA and BBOP is widely enacted and sanctioned at large events such as Rio + 20. For example, in a 2012 report prepared for the summit entitled "The Business Case for the Green Economy" UNEP's executive director states,

"It . . . makes sense that as we switch to a more resource efficient and Green Economy—one in which economic growth, social equity, and human development go hand-in-hand with environmental security—business and industry will be a key driving force. Planet, people, profit is the mantra already adopted by many companies in the pursuit of corporate sustainability, but if we are truly to transform the economic paradigm then it needs to be adopted by many, many more. From corner stores, to medium-sized enterprises and international conglomerates, there needs to be an understanding that nature provides us with valuable resources and services that must be accounted

⁵ Li (2007a: 265) discusses a sixth practice of assemblage, "managing failures and contradictions," to capture actions that simplify and divert attention from irreconcilable assumptions, superficially diffusing latent tensions through compromise. These activities were largely absent from the public displays that I observed at major events but likely play an important role in assembling economic conservation.

for, and that it is only by safeguarding these resources and services that we improve our own livelihoods and those of future generations" (UNEP, 2012: 1).

At major events, representatives of conservation NGOs, private firms, and multilateral organizations among others augment and promote the business case via panels that recount experiences with approaches such as natural capital accounting. The 2012 launch of the Framework for Corporate Action on Biodiversity and Ecosystem Services at Rio + 20 brought together representatives from the Convention on Biological Diversity, IUCN, UNEP-FI, Fujitsu, Nestlé, Dow Chemical Company, and Anglo American. The NGOs and multilateral organizations worked to elevate the framework to raise their profile while touting connection to major corporations. The corporate representatives from Fujitsu, Nestlé, Dow Chemical, and Anglo American provided testimony on how the Framework might play out in practice while simultaneously promoting their companies' corporate sustainability efforts.

As non-coercive expressions of biopower, business and biodiversity initiatives reinforce and amplify a dominant logic in which efforts to protect or sustainably use nature are situated almost exclusively within the domain of commerce in which voluntary transactions produce "socially responsible" outcomes. In contrast with more coercive or disciplinary forms of biopower, such as state-led administration or community-based management, business and biodiversity casts governance as largely non-regulatory where commercial activities simultaneously support profit-making, environmental protection, and social progress. The translational power of the business case emerges from framing a frictionless co-dependency between private sector performance and public desires such as nature protection. It thus solidifies assumptions about private sector participation, minimal regulation, economic efficiency, and accumulation that align with reform neoliberalism.

5.2. Forging alignments: the production of diffuse networks and soft institutional boundaries

Business and biodiversity networks feature diverse organizational forms ranging from formalized structures to ephemeral working groups. While BBOP constitutes an organizational partnership with full-time staff and governance arrangements, the NCFA falls somewhere in between these two poles, comprising a secretariat and a steering committee. Initiatives like the NCFA and BBOP tend to generate more or less stable networks that may link to governments but are primarily oriented towards private sector firms, NGOs, and others that operate beyond the state. Moreover, network building produces partnerships, alliances, compacts, and councils that often generate new networks. Networks connect private sector actors with conservation and development organizations through projects, events, and related activities.

By helping to make natural capital legible and manageable within the finance sector, the NCFA establishes a platform built around voluntary incentives. Similarly BBOP relies on the Standard for Biodiversity Offsets to establish principles, criteria, and indicators. Business and biodiversity thus produces soft institutional boundaries structured around voluntary compliance while deferring any regulatory considerations to local contexts. In addition to constituting a new actor-network, the NCD augments demand for independent, third party accounting and certification, feeding additional organizational forms tied to corporate sustainability. For example, the "NCD Roadmap" encourages connections to related initiatives such as the UN-backed Principles for Responsible Investment (PRI), the World Bank's Wealth Accounting and Valuation of Ecosystem Services (WAVES), and the Global Reporting Initiative (GRI) (Mulder et al., 2013).

Major events such as the 2014 IUCN World Parks Congress offer perspective on the ways in which different actors forge alignments in relation to business and biodiversity initiatives like biodiversity offsetting. A panel organized around "Cross Sectoral Perspectives on the Mitigation Hierarchy" included representatives from the International Council on Mining and Metals (ICMM), BHP Billiton (an Anglo-Australian transnational mining, metals, and petroleum company), Conservation International (CI), the Wildlife Conservation Society (WCS), and Total (a French transnational oil and gas company). Business representatives reinforced an image of the corporation as a "good citizen" while NGO representatives portrayed their work as "watchful partners." In each instance, panelists emphasized the importance of corporate-NGO partnerships, where on stage presentations characterized the alliances as a hand-in-hand journey to overcome risks and fears related to their respective constituencies. Panel participants reported that they dedicated significant time and effort to establishing and maintaining partnerships, with events playing an important role in making new connections and expanding networks.

By configuring an action arena in which diffuse networks and soft institutional boundaries enable participants to voluntarily pursue "virtuous" economic growth, business and biodiversity initiatives elevate and legitimize private sector actors within conservation arenas. On one level, it is unsurprising that activities centered upon business and biodiversity would provide a conduit for private sector engagement in conservation governance. At the same time, the expansion of networks, initiatives, and partnerships points to a significant reshaping of the organizational architecture of conservation over the past three decades. For example, the strategic partnerships on display at the 2014 World Parks Congress point to a broader circuitry of corporate-NGO interrelationships including employee exchanges, corporate representation on NGO boards, and NGO reorganization to accommodate connectivity to the private sector. Major events provide successive opportunities to establish connections and to cultivate partnerships and networks. Additionally, as I discuss below, initiatives such as the NCFA and BBOP provide shifting but stable pathways for private sector engagement and influence within formal decision-making arenas such as the Convention on Biological Diversity.

5.3. Rendering technical: the co-production of calculative social technologies

Business and biodiversity initiatives produce social technologies and devices as a means of translating rationales for governing into practical instruments that can guide action. To a considerable extent, the NCD and BBOP function as platforms that allow natural capital to perform work within the finance and business sectors. Practices of assemblage that produce social technologies associated with business and biodiversity are simultaneously entrepreneurial, managerial, and technical. Emerging in the form of frameworks, platforms, programs, and initiatives, they represent a central medium of activity that merges profit-seeking, managing for efficiency, strategy implementation, as well as accounting for and reporting on impacts. Social technologies such as natural capital accounting and biodiversity offsetting emerge from lead organizations with business and biodiversity networks such as UNEP-FI, the Global Canopy Program, Forest Trends, and Flora and Fauna International. They develop devices such as the Natural Capital Declaration that target private sector clients with the objective of enabling voluntary changes to how firms do business. As a niche platform, the NCD internalizes natural capital considerations in order to engage finance sector actors and advance environmental valuation practices within financial products and services. It pivots from entrepreneurial incentives that might enhance returns or reduce risks but depends largely on accounting procedures to

establish transparency. Similarly, BBOP deploys the Standard for Biodiversity Offsets as an accounting and voluntary compliance framework that legitimizes compensatory claims by businesses.

With these programs and initiatives serving as conduits for social technologies, creating devices becomes the central focus of activity associated with business and biodiversity networks. Devices typically employ a “how-to” orientation aimed at instigating certain types of action. The results—including knowledge products (reports, case studies, guidelines, frameworks), toolkits, standards, and protocols—enable natural capital accounting or biodiversity offsetting to materialize in practice. The NCD provides a set of general principles that have subsequently been refined into sector specific assessment tools for finance sector firms to adopt. The Standard for Biodiversity Offsets, in contrast, comprises a detailed set of guidelines aimed primarily at extractive industries and land development companies, within which the Mitigation Hierarchy schematically represents commensurable ecologies in terms of “no net loss” or “net positive impact.”

Remarks from a senior advisor to the transnational mining company Anglo American at the 2012 Corporate Sustainability Forum (part of Rio + 20) in a session focused on “corporate action on biodiversity and ecosystem services” suggest how firms use devices to create an interface with business and biodiversity initiatives:

“We have a socioeconomic assessment tool kit, which has recently won a number of international awards for the best tool of its kind. It provides a structured approach for dealings with communities and it includes biodiversity. We have a number of formal agreements, most particularly in this context with Fauna and Flora International. They review our biodiversity action plans and we’re extending a partnership to work with them on something called the high-level biodiversity risk and opportunity assessment. ... [I]t provides for a consistent approach, it provides for developing our people, and we’ve trialed it at 13 of our mine sites.”

The quote draws attention to the ways in which business and biodiversity initiatives organize the labor of assemblage around accounting methodologies, positioning NGOs and third party consultancies as technical service providers. In this sense, conservation governance activities shift away from a public service orientation toward providing technical services to “responsible” private sector firms. Biodiversity offsetting, for example, requires significant scientific and engineering expertise that may be available within multinational corporations like Anglo American but also derives from partnerships with conservation NGOs like Fauna and Flora International. Similarly, implementation of the NCD relies on natural capital accounting and disclosure techniques drawing on the work of certified accountants as well as NGOs and consultancies. In both cases, enacting economistic approaches casts business and biodiversity as a techno-managerial domain that can simplify and homogenize complex ecologies within orderly socio-political contexts. Moreover, social technologies such as natural capital accounting and biodiversity offsetting establish authoritative approaches for judging voluntary compliance in ways that necessarily circumscribe what constitutes measurable conservation outcomes.

5.4. Reassembling—expansion of economistic governance techniques

The dynamism of business and biodiversity is evident in the reorientation and extension of elements to align with evolving economistic techniques. For example, in the United States, where biodiversity offsetting has been pursued actively since the 1980s, mitigation banking developed as a means by which land developers and other interested parties could pay third party service pro-

viders to create offsets in compliance with requirements under the Clean Water Act stipulating “no net loss” of wetlands (Robertson, 2006). BBOP’s best practices set down in the Standard for Biodiversity Offsets builds from and extends this model, encouraging subfields of activity framed as “biodiversity banking” in which third party technical service providers produce offsets on behalf of business clients based on voluntary rather than regulatory compliance.

A second example of reassembling has unfolded in part from the work of the Natural Capital Finance Alliance, which has contributed to the work of the Natural Capital Coalition. The coalition emerged from the TEEB for Business network as a means of coordinating the efforts of numerous organizations to create consistency across diverse natural capital accounting methodologies. The coalition’s main focus initially was the Natural Capital Protocol, “a framework designed to help generate trusted, credible, and actionable information for business managers to inform decisions” (NCC, 2017: np). The NCF’s lead organizations—the Global Canopy Programme (GCP) and UNEP’s Finance Initiative (UNEP-FI)—focused in particular on creating a finance sector supplement to the protocol, taking elements of the Natural Capital Declaration and repositioning them relative to wider natural capital accounting efforts. These efforts were on display at the 2015 World Forum on Natural Capital in which representatives of the NCF’s lead organizations participated actively in the launch of the protocol. They reported that partnering with the coalition allowed the NCF to augment its impact but also to stay current in a rapidly expanding “space” that did not exist when the NCD launched in 2012.

Reassembling shapes non-coercive expressions of biopower by expanding the economistic governance techniques that animate social technologies. BBOP’s incorporation of biodiversity banking from the United States regulatory context to a global arena under the Standard for Biodiversity Offsetting significantly extended its reach and has stimulated the expansion of technical services consultancies to respond to client demand from corporate partners such as Anglo American. Similarly, natural capital accounting expands and reinforces activities across multiple arenas including the NCF in response to the voluntary measurement and disclosure requirements of the Natural Capital Declaration. Reassembling thus augments the logic of business and biodiversity, amplifies actor-networks, and encourages the development of new social technologies and devices in ways that enable economistic governance techniques to guide business practices but, more importantly, to orient much of the work of conservation NGOs, consultancies, multilateral organizations, and state agencies.

5.5. Anti-politics—assemblage as erasure

As discussed above, practices of assemblage associated with business and biodiversity focus on building and refining natural capital accounting and biodiversity offsetting as technical pursuits (Li, 2007a, 2007b). As a result, they tend to erase political fault lines by focusing work on techno-managerial efficiencies and valuing nature, which are construed as neutral and objective (see Dempsey, 2016). BBOP, for example, positions the Mitigation Hierarchy as a means of assessing and compensating for negative residual impacts while masking a range of social and environmental impacts that do not fit the Standard (Benabou, 2014). An illustration of how this type of masking occurs incrementally by invoking tools and procedures took place at the 2014 World Parks Congress during a panel focused on the Mitigation Hierarchy and biodiversity offsetting. In response to a question about indigenous rights, both corporate and NGO panelists centered their responses on existing company policies and the ability of the hierarchy (the device) to handle such issues. A senior environment manager at BHP Billiton remarked,

"It's a really important point ... which we actually call out explicitly in our criteria for biodiversity offsets ... that they must be appropriate and not result in any additional, unacceptable impacts. So, [we] absolutely want to avoid any circumstance where we're either impacting on traditional usages or traditional rights."

The response from the BHP Billiton representative effectively recognizes the concern about indigenous rights but redirects responsibility away from the company and onto the criteria embedded in the Standard for Biodiversity Offsets.

A second example turns attention to valuing nature through accounting techniques. The Natural Capital Finance Alliance has aligned much of its work with the Natural Capital Coalition, creating a finance sector supplement to the Natural Capital Protocol. By focusing on natural capital accounting and disclosure and channeling participants' efforts toward constructing and operationalizing metrics, assemblage centers on improving techno-managerial efficiencies. Expert panels on natural capital accounting are a common feature at international events. For example, the 2014 World Parks Congress featured back-to-back panels on "Protected Areas, Natural Capital Accounting, and Economic Valuation," including presentations from representatives of the Australian Bureau of Statistics, the World Bank's WAVES Program, Conservation International, and the United Nations Statistics Division. In building upon frameworks such as the System of Economic-Environmental Accounting (SEEA), talks emphasized the promise of grounding decision-making in increasingly sophisticated metrics and data pools. In each case, frameworks and standards may seek to account for challenges such as traditional rights and customary practices yet attempts at reducing impacts and enhancing efficiencies are cast as technical and procedural steps that tightly circumscribe and defuse politically charged concerns.

Building upon writing that analyzes the production of conservation and development initiatives as outside of politics (e.g., [Mosse, 2005](#)), anti-politics as constitutive process may rely on strategic actions aimed at circumventing or diluting contentious issues such as indigenous rights (see [Kirsch, 2014](#)). At the same time, anti-politics unfolds from the professional cultures brought together around business and biodiversity: corporate, accounting, technical, and managerial. From this perspective, power relationships are shaped predominantly by techniques of measurement—what [Turnhout et al. \(2014\)](#), call "measurementality"—that anchor conduct in certain professional practices while simultaneously hiding or distancing participants, concerns, and practices seen as external to techno-managerialism ([Table 2](#)).

Taken together, practices of assemblage produce symbolic and material ensembles that have reconfigured power relations surrounding conservation governance over the past three decades. They weave a relational tapestry that sanctions and enables economic logics, privileges private and non-profit sector partnerships and networks, and elevates voluntaristic and calculative social technologies and devices. Assembling thus entwines the scientific and technical aspects of conservation governance with economic and corporate-managerial approaches and practices, constituting novel, informal techniques of government. In this sense the diffuse labor of assemblage—governance in motion—has incrementally constructed an array of overlapping arenas of economic conservation.

6. The political performativity of economic conservation

In addition to characterizing constitutive processes and power dynamics associated with economic conservation, analysis of practices of assemblage points to several ways in which business and biodiversity initiatives can be viewed as politically performa-

tive. While, current conservation finance endeavors have produced limited returns for investors ([Dempsey & Suarez, 2016](#)), there is still the possibility that the ongoing labor of assemblage performs other kinds of constitutive work that enable distinctive governance techniques.⁶ In this section, I explore four dimensions of political performativity: discursive amplification, organizational articulation, institutional reshaping, and technical instrumentation. To what extent, then, are business and biodiversity initiatives politically performative? How does the diffuse, incremental labor of assembling disseminate economic rationalities and techniques of government to non-economic domains of activity such as conservation?

One way to examine political performativity is to consider how business and biodiversity initiatives have helped to discursively amplify an economic rationale of governance in relation to biodiversity conservation. As I have noted, the logic of business and biodiversity builds largely from the core assumption of the business case—decisions that produce positive environmental and social outcomes will also yield positive economic returns for participating firms. While it is unsurprising that initiatives aimed at greater private sector participation in conservation would emphasize economic efficiency, the ongoing development of business and biodiversity initiatives suggests that the logic of the business case informs a broader sphere of interactions beyond the economic efficiency of individual firms. In this sense, business and biodiversity initiatives help to broaden the perceived legitimacy of "people-planet-profit" formulations, in which notions of virtuous green growth promise economic returns that significantly reduce or eliminate social and environmental degradation.

Just as importantly, the logic of business and biodiversity initiatives contributes to a privatization of authority within conservation governance. While focusing efforts on strengthening private sector actions that might enhance biodiversity conservation, NCFA, BBOP and similar endeavors extend the role of entrepreneurial actors within voluntary rule systems. In the context of economic conservation, situating authority as auto-referential (incumbent upon individuals or firms) characterizes what [Dean \(2010: 196\)](#) calls "technologies of agency" or strategies that render individuals responsible for their own actions. The amplification of the business case along with related discursive frames such as "valuing nature" and "green growth" emerges clearly in historical perspective as initial efforts to expand private sector engagement in international biodiversity conservation (see [MacDonald, 2010b](#)) developed into constellations of business and biodiversity initiatives with global reach. The logic of the business case, which emphasizes the roles and responsibilities of individual firms, took shape in IUCN and WBCSD reports from the early 2000s, evolving into initiatives such as TEEB for Business (2010), the Natural Capital Declaration (2012), and the Natural Capital Coalition (2014).

A second dimension of political performativity centers on organizational articulation. Business and biodiversity initiatives exemplify the "horizontally organized, polycentric ensembles" characteristic of governance-beyond-the-state ([Swyngedouw, 2005: 1992](#)), joining private sector and civil society actors alongside some representatives of the public sector. As governance processes in motion, organizational articulation captures how these networks shift, change, and interrelate dynamically, allowing economic approaches to expand and develop even as organizational structures change form. The growth of the Natural Capital Coalition

⁶ While the analysis in this article centers on the political performativity of economic conservation in transnational arenas, it raises the question of how practices of assemblage might transform on-the-ground conservation governance activities. Of the initiatives examined here, the material impacts on the protection and sustainable use of biodiversity in situ would be most evident in specific offsetting projects in which particular landscapes are transformed while others are protected through compensatory measures (see [Benabou, 2014](#); [Maron et al., 2012](#)).

Table 2
Comparison of Practices of Assemblage (following Li, 2007a, 2007b).

	Definition	Natural Capital Finance Alliance (NCFA)	Business & Biodiversity Offsets Programme (BBOP)
Authorizing Knowledge	Consolidation of certain bodies of knowledge; affirmation of assumptions and containment of critique	The action frame links “the business case” with “valuing nature” to promote economic internalization	The action frame links “the business case” links “nature protection” and adherence to standards to promote compensatory responses
Forging Alignments	Processes that join diverse parties’ objectives within a domain of activity	Diffuse network encourages finance-NGO links, supports working groups, and establishes structure for signatory action. Platform organized around voluntary incentives	Network links corporate clients with NGO partners, service providers, and transnational agencies and sectoral councils. Voluntary standard orients action
Rendering Technical	Activities that simplify and order complex relationships in support of technocratic initiatives	Work centers on natural capital accounting and reporting. Finance orientation abstracts nature from material grounding; constructs nature as fluid investment capital	Standard for Biodiversity Offsets establishes a calculative and voluntary compliance framework. Offsetting relies on simplification and homogenization of ecological complexity across sites
Reassembling	Adding or reorienting elements within a domain of activity to align with new rationales or approaches	Extension of natural capital accounting and disclosure work targeting finance sector to building the Natural Capital Coalition and the Natural Capital Protocol	Expansion of biodiversity offsetting within “biodiversity banking” arena in which third party service providers conduct all offsetting activities for business clients
Anti-politics	Actions that tend to erase political fault lines, focusing work on techno-managerial efficiencies	Work focuses on optimizing techno-managerial efficiencies by establishing metrics, accounting methodologies, and reporting platforms	Activities focus on design of biodiversity offsets using Standard as technical frame of reference

(NCC) out of TEEB for Business illustrates this process of connection and expansion. The NCC was designed to aggregate projects, methodologies, organizations, and networks dedicated to natural capital accounting, thus producing wider connectivity and coordination across numerous, often disparate initiatives that have emerged during the last decade. It includes approximately 250 member organizations representing diverse elements of the private sector, corporate sustainability networks, conservation NGOs, universities, multi-lateral organizations, standard setting and disclosure organizations, accounting firms and associations, and consulting groups (NCC, 2019). As I noted above, the NCFA is a member and has played a central role in expanding the coverage of the coalition’s Natural Capital Protocol to include the finance sector.

In terms of political performativity, organizational articulation significantly increases the reach but also the density of actor-networks operating beyond the state. These expanding networks have attained increasing presence and influence within conservation governance circles but also have drawn new actors into the business and biodiversity arena and have led conservation NGOs and multi-lateral organizations to reorganize much of their work in terms of natural capital accounting. The collective work of producing the Natural Capital Protocol was featured prominently at multiple events such as the 2015 World Forum on Natural Capital, which included panels with representatives from the World Bank, PricewaterhouseCoopers, Credit Suisse, Conservation International, and the Institute of Chartered Accountants in England and Wales.

The institutional reshaping derived from business and biodiversity initiatives is a third way to examine political performativity. While it is important to note that economic forms do not define all conservation governance, they do encourage a reorientation of activities away from state-led governance arenas and an adaptation of existing governance arrangements to accommodate economic approaches. On one level, the Convention on Biological Diversity establishes the formal institutional boundaries for transnational conservation governance with nation states as the signatory parties. On another level, however, business and biodiversity initiatives animate important parallel arenas that shape the agenda and structure of the formal arena. For example, the soft institutional boundaries surrounding biodiversity offsets (volun-

tary compliance, economic incentives) create opportunities for land developers and extractive industries to pursue exceptions to strict nature protection policies. At the 2014 World Parks Congress, several panels focused on the extent to which different categories of protected areas established by IUCN might constitute “no go zones” for activities such as mineral extraction. Mining company representatives deployed the Mitigation Hierarchy to promote “win-win” scenarios in which companies might engage in mineral extraction within some types of protected areas and use biodiversity offsets to compensate for ecological impacts. Organizational platforms like BBOP along with devices such as the Standard for Biodiversity Offsets establish the structural conduits necessary to adapt protected areas policies.

A second example highlights how business and biodiversity networks have reshaped rule systems under the Convention on Biological Diversity and IUCN. Given the emergence of networks like the Natural Capital Coalition (NCC) and internal units—IUCN’s Global Business and Biodiversity Programme and the CBD’s Global Platform on Business and Biodiversity—a growing number of advocates has successfully carried forward policy motions on private sector engagement and natural capital at major events. Decisions taken at multiple conferences of the parties to the CBD (COP 10 in 2010 and COP 11 in 2012) to promote greater business engagement led to the creation of the Global Partnership for Business and Biodiversity. Similarly, representatives of the NCC and business and biodiversity programs played an important role in the passage of motions on natural capital and biodiversity offsetting at the 2016 IUCN World Conservation Congress. The motions were framed to support further study or to develop formal policies and thus served as conduits for incremental institutional shifts that solidify natural capital and biodiversity offsetting within formal rule systems.

Finally, business and biodiversity is politically performative in its focus on technical instrumentation—the production of entrepreneurial, techno-managerial, and calculative social technologies and devices. While there may be some parallels between technocratic practices associated with state-led modes of governance, economic approaches center upon incentive structures that enhance private sector performance relative to the protection or sustainable use of biodiversity, positioning state agencies as enablers of busi-

ness and biodiversity initiatives. As with institutional reshaping, each initiative with its particular social technology and devices contributes to a constellation of actions that may be coordinated but also operates independently. Taken together, TEEB, the Natural Capital Declaration, the Business and Biodiversity Offsets Programme, and the Natural Capital Protocol, among several others, steer much of the labor of assemblage toward environmental accounting. These calculative practices exemplify what [Dean \(2010: 197\)](#) labels “technologies of performance,” which encompass “the mobilisation of benchmarking rules that are set as state-imposed parameters against which (self-)assessment can take place and which require the conduct of a particular set of performances” . . . producing “‘calculating individuals’ within ‘calculable spaces’ and incorporated within ‘calculative regimes’” ([Swyngedouw, 2005: 1998](#)).

The calculative social technologies associated with natural capital accounting and biodiversity offsetting produce devices that feature prominently at major events. In line with economic approaches, business and biodiversity initiatives launch or promote platforms, protocols, decision-making tools and other instruments as products in search of clients. Events such as the 2014 World Parks Congress and the 2016 World Conservation Congress each had a business and biodiversity pavilion that, on one level, functioned as a trade show to promote platforms and products like the Natural Capital Declaration, the Natural Capital Protocol, The World Bank’s Wealth Accounting and the Valuation of Ecosystem Services (WAVES) program, and the Natural Capital Project’s InVEST tool. In this regard, calculative social technologies merge entrepreneurial and techno-managerial practices to emulate private-sector markets in knowledge products and services.

These four types of political performativity suggest how practices of assemblage reinforce and amplify economic conservation incrementally, where the conduct of conduct unfolds from the discourses, organizational and institutional forms, and social technologies described above. The example of business and biodiversity represents one action arena among several others such as payment for ecosystem services that helps to weave a broader governance tapestry. Initiatives such as the NCF or BBOP shape certain dimensions of economic conservation more than others. For example, they do not centrally emphasize the creation of markets or the privatization and commodification of natural resources. Rather, they facilitate this work in other arenas by expanding the role and influence of private sector and non-governmental actors in conservation governance, enabling actor-networks across the private and non-governmental sectors and expanding a self-regulating apparatus operating beyond the state.

7. Conclusion

The three-part analysis presented in this article characterizes the production of economic conservation in relation to governance-beyond-the-state, governance in motion, and political performativity. In particular, I have emphasized constitutive processes that bring economic forms of governance into being, drawing upon public displays at major events to illustrate how these arrangements emerge and evolve over time.

First, in line with [Swyngedouw \(2005\)](#) analysis of governance-beyond-the-state, the structure of economic conservation comes into view as a rhizomic tangle of interrelated elements including logics, actor-networks, institutional and organizational forms, social technologies, and devices. In building upon critical studies of governance rooted in the Foucauldian constructs of governmentality and biopolitics, I have developed a working vocabulary to describe business and biodiversity initiatives and thus highlight the shape and extent of evolving techniques of governance in the

context of international conservation. The power of economic forms of environmental governance flows from a vision that pursues techno-managerial efficiencies joined with virtuous development (e.g., green growth, sustainability). Unfolding over the past three decades within neoliberal political economies, business and biodiversity initiatives have contributed to the formation of informal techniques of governance that have reshaped conservation in the image of economics, incrementally remarking the “rules of the game.” As TEEB coordinator Pavan Sukhdev remarked in a 2011 presentation emphasizing the importance of assigning value to nature: “economics has become the currency of policy” ([Sukhdev, 2011: np](#)).

Second, following the three characteristics of assemblage identified by [Li \(2007a, 2007b\)](#)—contingent processes of becoming, continuous labor, and diffuse agency—conservation governance emerges as a constellation of practices that animates configurations of elements associated with governmentality: authorizing knowledge, forging alignments, rendering technical, reassembling, and anti-politics. In contrast with institutional design and related approaches, I have emphasized ongoing practices of assemblage to capture governance in motion—continuous labor joining people and things rooted in diffuse, differentially coordinated agency across multiple actor-networks. While these practices help shape formal governance processes such as those tied to the Convention on Biological Diversity, business and biodiversity initiatives generate informal, economic techniques of governance situated in the private and non-governmental domains. In particular, my analysis offers a different perspective in relation to collective choice and elite-driven explanations of global environmental governance. The distributed agency associated with assemblage is powerful given the co-production of voluntary initiatives that train nature protection to economic and techno-managerial efficiencies. In this light, economic forms of governance result largely from the incremental accretions of dispersed activity that performs symbolic and material work contributing to a cumulative shift in conservation governance over time.

Finally, I have explored four ways in which practices of assemblage are politically performative, reinforcing and amplifying the discourses, organizational and institutional forms, and practices associated with economic conservation. This set of findings is important because it suggests how economic approaches can have far-reaching political impacts within the domain of conservation governance even when they do not yield significant economic returns. Broadening discussion to contemplate political performativity foregrounds how the set of relations within an action arena are constantly in motion—assembling, disassembling, and reassembling—in ways that can lead to the spread of quickly evolving, self-regulating economic approaches such as natural capital accounting. Turning attention to environmental governance-in-motion highlights the dynamic, distributed processes of assemblage that produce discursive and social structural hybridities, subordinating conservation to the language and practices of economics. In critically analyzing patterns and processes of neoliberal governmentality, a clearer picture emerges of how business and biodiversity initiatives designed to engage and reform the private sector have significantly restructured the conservation governance domain that created them.

Declaration of Competing Interest

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