Article

E Nature and Space

EPE: Nature and Space
1–23

DOI: 10.1177/25148486221105153
journals.sagepub.com/home/ene
SAGE

Mainstreaming ecosystem services: The hard work of realigning biodiversity conservation

Daniel Chiu Suarez
Middlebury College, USA

Abstract

For over two decades, proponents of "ecosystem services" approaches have endeavored to transform the field of biodiversity conservation. In this article, I examine the work of the Natural Capital Project to show how the "mainstreaming" of ecosystem services has required not just hard work but specific forms of work performed by specific types of actors with specific sets of capabilities working through characteristic sorts of organizational contexts. I draw on key theorizations from organization studies to interpret the politics of ecosystem services and conceptualize the *conditions* (fragmented fields), *practices* (bricolage), *actors* (institutional entrepreneurs), and *power relations* (hegemonic) which have together comprised this work and underpinned ongoing efforts to realign the organizational forms and functions of mainstream conservation. I emphasize how tracing these micro-social foundations—the embedded agencies of those using ecosystem services to contextually negotiate real-world conservation interventions—is crucial to understanding the dynamics of broader and increasingly pronounced macro-institutional shifts in conservation.

Keywords

Ecosystem services, natural capital, institutional entrepreneurship, institutional bricolage, institutional change, organizational fields, boundary objects, hegemony

Highlights

- The rise of ecosystem services has required not just favorable conditions but identifiable forms of embedded agency and institutional work
- The rise of ecosystem services illustrates important dialectical linkages connecting situated micro-social practice with macro-structural change in conservation

Corresponding author:
Daniel Chiu Suarez, Middlebury College, 375 North Ave, Apt. 314, Burlington, VT 05401, USA.
Email: dsuarez@middlebury.edu

- Organization studies offer generative conceptual frameworks for parsing the contemporary politics and characteristic institutional dynamics of conservation
- Yet, critical scholarship emphasizing asymmetric and inequitable power relations remains crucial to properly interpret and fully explain these institutional dynamics

Introduction

In September 2016 at the World Conservation Congress in Honolulu, Inger Andersen, the Director-General for the International Union for the Conservation of Nature (IUCN),[1] delivered this admonition to the ten thousand delegates who had convened for the quadrennial summit:

> We are losing the battle. And that is why so many people are interested in trying to find more tools, more ways, and more narratives to resonate in important places. One of the things that is most critical is trying to better resonate in the halls of power. In the boardrooms. And, in the heart of the market economy.

Of course, Andersen's injunction to "better resonate in the halls of power" came after decades of intensive efforts among conservationists already endeavoring to institute precisely this call to action. These remarks begin to draw into focus an array of consequential institutional dynamics which have contributed to a pronounced change in mainstream conservation. To trace these dynamics, this article considers the politics of *ecosystem services:* a concept whose promise of "more tools, more ways, and more narratives to resonate in important places" has seized center stage in conservation and whose various elements have been adapted through a variety of practices to remold the goals, strategies, and institutional composition of conservation itself.

The term "ecosystem services" now refers to a burgeoning field of research and practice dedicated to analyzing (and where possible, measuring) the range of valuable "services" provided by nature to people: the air we breathe, the food we eat, the water we drink, the medicines we use, the recreation we enjoy, the inspiration we derive, the materials we harvest, and so on ad infinitum (Chan and Satterfield, 2020; Costanza et al., 2017; Dempsey and Robertson, 2012; Díaz et al., 2018; Gomez-Baggethun et al., 2010; Kull et al., 2015; Mcelwee, 2017). The proliferation of Payment for Ecosystem Services (PES) programs in recent years—referring to institutional arrangements designed to incentivize land-use practices aligned with given environmental or development objectives via direct compensation—represents one of the most prominent crystallizations of this emerging framework (Salzman et al., 2018). Indeed, PES has become a dynamic site of struggle where diverse actors, from critical observers and analysts to on-the-ground practitioners and activists are continuing to negotiate its nascent forms and functions (Shapiro-Garza et al., 2020).

Yet beyond these and an assortment of other contexts where the protean constructs of ecosystem services are finding expression in policy and practice, apprehending its constitutive operations and variegated politics has required adopting an expanded field of view: one that actively theorizes the heterogeneous sprawl of "people, institutions, capital flows, ideas, regulations, science, valuation methodologies, computer models and databases" that now comprise it (Dempsey, 2016: 17; Fletcher, 2019; MacDonald and Corson, 2012; Sullivan, 2017b) and its transnational entanglements within broader political-economic processes and cross-scalar power relations (Berbés-Blázquez et al., 2016; Fletcher and Büscher, 2017; Van Hecken et al., 2015). This article joins efforts to conceptualize this diversity of forms (Kolinjivadi et al., 2017a; Wilshusen, 2019) and wider "metacontext" (Brenner et al., 2010) implicated in the rise of ecosystem services. To this end, I bring together key concepts from organization studies to interpret the politics of ecosystem services and to parse the characteristic institutional dynamics these theorizations draw into focus: dynamics which have together served to shape, and arguably remake, conservation.

To develop this analysis, I examine the longstanding campaign built around ecosystem services: a movement that has been working strategically within (and on) the environmental movement for over two decades in an effort to "mainstream" ecosystem services approaches in conservation (Dempsey, 2016). A key aim and stated ambition of this campaign has been to reassert conservation's viability by better aligning its organizational forms and functions so that it "fits" more neatly within dominant discursive, institutional, and political-economic orders. At the center of this analysis are ecosystem services self-styled "evangelists" (Marris, 2009): the people who have been hard at work trying to construct a broad consensus around ecosystem services as "the way forward for conservation" (Armsworth et al., 2007). I draw from organizational-ethnographic research with leading proponents of ecosystem services to trace the constitutive practices that have animated their campaign to institutionalize ecosystem services as the prevailing framework for making sense of, advocating for, and ostensibly saving nature.

In particular, I analyze the work of the Natural Capital Project: an influential partnership established in 2006 between Stanford University, the World Wildlife Fund for Nature (WWF), and The Nature Conservancy (TNC)—joined later by the University of Minnesota and more recently by the Stockholm Resilience Center and Chinese Academy of Sciences—which was founded with the goal of using ecosystem services approaches to "align economic forces with conservation" (Natural Capital Project, 2016: 3). The group has remained at the vanguard of the ecosystem services movement since its inception and their work contains useful lessons for those seeking to understand the operational practices and political implications of ecosystem services more broadly. This article draws from a mixture of document analysis, targeted participant observation, and in-depth interviews ($n >$ 40) with current and former personnel, project collaborators, and participants engaged in an assortment of activities led by the Natural Capital Project between 2013 and 2017 (see *Appendix 1* for a summary). Interviewees included the group's leadership, technical experts, field-level practitioners, liaisons to and collaborators from its partner organizations, and participants at meetings convened by its personnel. I also examined abundant primary and secondary texts including reports, academic publications, technical guides, software manuals, training materials, presentation slides, and press coverage.

While researchers have contributed rich empirical analyses exploring some of the particular sites and policies where ecosystem services approaches have started to manifest, especially with respect to PES (Büscher, 2012; Corbera et al., 2007; Fletcher and Breitling, 2012; Kolinjivadi et al., 2020; McAfee and Shapiro, 2010; McElwee, 2012; Milne and Adams, 2012; Shapiro-Garza et al., 2020; Van Hecken et al., 2015), the focus of this article is on conceptualizing that movement's *agents:* the mobile experts who circulate and recur across these sites and work to operationalize those policies (Büscher, 2014; Holmes, 2011; Peck and Theodore, 2012). From this vantage, I join other scholars in advancing a more intimate portrait of institutional change (Berk and Galvan, 2009) through the perspectives and experiences of those working at the forefront of dispersed efforts to disseminate ecosystem services approaches widely across the vast networked assemblages of contemporary global environmental governance (Corson et al., 2014, 2019; Thaler, 2021).

As I will show, this campaign has required not just hard work but specific *forms* of work performed by specific types of actors with specific sets of capabilities working through characteristic sorts of organizational contexts. By zooming in to examine the distinctive features of this work in more granular detail, it becomes possible to trace important linkages connecting these situated micro-social practices—what Shapiro-Garza et al. (2020) describe as the "situated agency" of ecosystem services practitioners negotiating idiosyncratic outcomes in given contexts—with the actuation of much broader macro-structural shifts in mainstream conservation (Fletcher and Büscher, 2017; Kolinjivadi et al., 2017a). I thus try to recover in these institutional transformations—through close analysis of the particular, contextual operations necessary to producing such higher-order effects in conservation—a discernible yet appropriately tempered sense of agency and contingency within this process. At this finer resolution, attentive to the active and intentional

yet also deeply circumscribed, frequently unsuccessful, and often haphazard governance hacks being improvised through ecosystem services, a richer portrait of construction, alongside the expected dynamics of structures, comes into clearer focus. What emerges from this account, I argue, is a more nuanced appreciation of the "hard work" and forms of agency necessary to animating conservation's imperative to "better resonate in the halls of power" as well as a more precise understanding of the political effects arising from such operations.

While an eclectic set of literatures in political ecology, critical geography, and cognate fields has emerged documenting (and debating) the growing influence of ecosystem services approaches in environmental governance (Buscher et al., 2014; Dempsey, 2016; Dempsey and Robertson, 2012; Fletcher and Büscher, 2017; Gomez-Baggethun et al., 2010; Kolinjivadi et al., 2017a; Kolinjivadi et al., 2017b; Muradian et al., 2013; Robertson, 2006; Shapiro-Garza et al., 2020; Sullivan, 2018; Van Hecken et al., 2017), this article takes the further step of analyzing these developments through the peculiar lens of organization studies (Christiansen and Lounsbury, 2013; Hardy and Maguire, 2017; Thornton et al., 2012; Wooten and Hoffman, 2016). Bridging these two broad areas of research—namely, critical environmental scholarship around conservation and key strands of institutional theory—can enable a more complete explanation of what, exactly, ecosystem services are doing in (and to) conservation. More specifically, such a synthesis helps to illuminate the types of *conditions* (fragmented fields), *actors* (institutional entrepreneurs), *practices* (bricolage), and *power relations* (hegemonic) which have together underpinned the rise of ecosystem services and the forms of institutional change in which it is implicated.

Organization scholars have paid curiously little attention to biodiversity conservation despite its clear relevance to core questions of structure, agency, and change which preoccupy that field. At the same time, key theorizations derived from organization scholarship are seldom used by critical scholars of conservation (with some notable, yet varied, exceptions, e.g., Cleaver and de Koning, 2015; Fletcher, 2019; Ishihara et al., 2017; MacDonald, 2010a, 2010b; Rasmussen and Lund, 2018; Van Hecken et al., 2015; Wilshusen, 2019). Yet despite offering what I suggest are valuable conceptual insights, certain tendencies evident in mainstream organization literatures—particularly with respect to questions of power and inequity—remain somewhat at odds with core concerns foregrounded in critical scholarship (Hirsch and Lounsbury, 2015; Munir, 2015). As organization scholars Hardy and Maguire (2017: 274) acknowledge, such literatures too frequently "fail to reflect critically on outcomes" arising from these otherwise meticulously theorized dynamics of institutional change, the effects of which are often "assumed to be an improvement on an earlier situation." Indeed, they observe how "the notion of 'better' institutional arrangements is rarely problematized," while critical interrogation of winners and losers resulting as a consequence of these dynamics "is seldom addressed" (Ibid). As such, this article endeavors to situate the theorized institutional dynamics of conservation squarely within the vastly uneven power relations, entrenched political-economic structures, and hegemonic constellation of dominant actors that define its context: a circumstance that is well-rehearsed in critical environmental scholarship (MacDonald, 2010b) and illustrated quite clearly in the politics of ecosystem services (Dempsey, 2016).

Building on these emphases, this article therefore advances a synthesized approach to interpreting the rise of ecosystem services: organization studies offer useful frameworks for parsing its characteristic *conditions* (fragmented fields) and *actors* (institutional entrepreneurs), critical environmental scholarship embeds these dynamics within certain types of *power relations* (uneven and hegemonic), and both areas of research bring complementary means of describing the *practices* (bricolage) by which these institutional dynamics take expression. I ultimately use this combined framework to reinterpret but also to *invert* the auspicious political valence generally ascribed to these dynamics by mainstream organization scholars (as well as by the Natural Capital Project's own self-conceptions), largely on their own terms and by repurposing the same repertoire of concepts.

In the following sections, I set the stage for this analysis by first bringing together key theorizations derived from organization studies and by relating each of these conceptualizations, in turn, to the politics of conservation and ecosystem services. Then, I briefly introduce the main operations and underlying strategic logic of the Natural Capital Project itself. Finally, drawing on examples from their work, I offer a more extended analysis conceptualizing the specific roles that ecosystem services practitioners have played in the enactment of broader political and institutional realignments in conservation. I conclude by reiterating how these dynamics are conditioned, and indeed made possible, through vastly asymmetrical power relations.

Conceptual framework

Brockington et al. (2008: 9) use the term *mainstream conservation* to describe "a particular historical and institutional strain of western conservation" which now "dominates the field […] in terms of ideology, practice, and resources" (Brockington and Duffy, 2010; Büscher and Fletcher, 2019; Cavanagh and Benjaminsen, 2017). In this sense, the organizations constituting the Natural Capital Project (e.g., WWF, TNC, Stanford) represent unambiguous embodiments of "mainstream conservation" and its operations take shape within, and must be understood through, this central positioning within the elite conservation establishment (Holmes, 2011). The empirical and analytical focus of this article is limited primarily to the institutional dynamics of this narrower (albeit powerful) variant of conservation. That said, it should be recognized alongside—and is frequently in tension with—a much broader and more diverse field of ecological politics and practice, encompassing an array of different traditions positing alternative visions for what "conservation" is and could be and who it must involve (Büscher and Fletcher, 2019, 2020; Collard et al., 2015; Domínguez and Luoma, 2020; Eichler and Baumeister, 2018; Gavin et al., 2015).

From an organizational perspective, mainstream conservation can be understood as an "organizational field" in that it constitutes an ensemble of "frequently and fatefully" engaged actors and institutions (Scott, 1994). Maguire et al. (2004: 659) explain this conceptualization in more detail:

> Composed of sets of institutions and networks of organizations that together constitute a recognizable area of social life […] an organizational field develops through patterns of social action that produce, reproduce, and transform the institutions and networks that constitute it. Through repeated interactions, groups of organizations develop common understandings and practices that form the institutions that define the field and, at the same time, these institutions shape the ongoing patterns of interaction from which they are produced.

Organization scholars distinguish between "mature" and "emerging" fields (Battilana, 2006; Battilana et al., 2009; Hardy and Maguire, 2017; Maguire et al., 2004). "Mature" fields are conceived as more structured and strongly institutionalized social arenas where participants possess widely shared and broadly accepted understandings of their respective roles and relationships. Its members express a high degree of awareness of their involvement within some "common enterprise," producing relatively stable patterns of interaction (whether cooperative, conflictual, or otherwise). In contrast to mature fields, theorizations of "emerging fields" (as well as those in crisis) depict more loosely organized and less coordinated collections of organizations with only weakly entrenched "proto-institutions" patterning their interactions (Ibid). Here, actors share a fainter, more fissured sense of mutual concern and shared endeavor, with their roles and relationships remaining more latent and potential than established and regularized. Whereas individuals and organizations in mature fields will tend to interact with each other more than with those "outside" their field, here the involvement of field members can be much more permeable. As

such, norms remain unclear, identities remain fluid, values may conflict, and rules and rationalities regularly cross wires.

Applying this framework, organization scholars have contributed many cases pointing to characteristic types of ***conditions*** that they suggest are most conducive to enabling institutional change (Clemens and Cook, 1999). These literatures stress how organizational fields which are fragmented by multiple institutional orders and riven by different logics—conditions which are especially characteristic of conservation—are uniquely susceptible to institutional change (Lounsbury and Boxenbaum, 2013). Despite the long vintage of mainstream conservation (Adams, 2004), its variegated configurations across diverse scales and locales seem to be marked, if not defined, by these qualities: its politics are fragmented by a kaleidoscopic multiplicity of interests, epistemologies, and institutional logics intersecting (and abrading) in different ways in practically any given real-world conservation context. It is cacophonous, unsettled, and continually adapting. Indeed, as critical scholars of conservation have shown, the sorts of hegemonic accommodations and broad institutional realignments of conservation analyzed in this article—in other words, its conjunctural "fitting" to dominant logics—long precede the specific politics of ecosystem services. At different times and in varying combinations, conservation has adjusted itself to and been implicated in broader historical formations of colonialism, nationalism, science, environmentalism, international development, and, more recently, the forms of market rule characteristic of neoliberal capitalism (Brockington et al., 2008; Büscher and Fletcher, 2014, 2019; Castree and Henderson, 2014; Fletcher et al., 2014; Igoe et al., 2010; MacDonald, 2010b; West and Brockington, 2012; Wilshusen and MacDonald, 2017). Institutional theorists converge on precisely these sorts of emerging and disrupted organizational fields as constituting exceptionally dynamic contexts marked by heightened contingency, instability, and responsiveness to the specific practices of institutional change in which ecosystem services are now being mobilized.

To a striking degree, these theorizations tend to revolve around a recurrent type of ***actor*** that is frequently implicated in, and arguably decisive to, bringing about field-level change: the "institutional entrepreneur" (Hardy and Maguire, 2017). As my analysis of the Natural Capital Project's work will make clear, practitioners of ecosystem services represent quintessential examples of institutional entrepreneurs. From this perspective, the involvements of such actors in effecting institutional change—whether in the creation of new institutions or the transformation of existing ones—are distinguished less by formally prescribed powers or authorities but rather by how these actors are *embedded*: they are uniquely situated in bridging roles between diverse organizational contexts and possess the requisite cross-cutting connections, legitimacy, and translational abilities needed to maneuver effectively between them. Under these conditions, with these proficiencies, and from this positioning, these types of actors display distinctive capabilities for subverting "existing rules and practices associated with the dominant logic(s)" in a field and for brokering coalitions to "institutionalize the alternative rules, practices or logics they are championing" (Garud et al., 2007: 962). In this case, the field is conservation and the "rules, practices, or logics they are championing" belong to ecosystem services.

The specific ***practices*** undertaken by such actors can be understood as a form of "bricolage" (Christiansen and Lounsbury, 2013; Cleaver and de Koning, 2015; Ishihara et al., 2017; Rasmussen and Lund, 2018). Institutional bricolage refers to mechanisms of "institutional and organizational change where solutions to problems involve a recombination of available and accessible institutional elements" (Christiansen and Lounsbury, 2013: 203). As Frances Cleaver (2012: 45) writes, institutional bricolage can be conceived as a process whereby actors "draw on existing formulae […] to patch or piece together institutions in response to changing situations." Put simply, it involves making do with what is on hand by rearranging, recombining, and redeploying resources of various kinds to deal with new problems and opportunities (Baker and Nelson, 2005: 333; Berk and Galvan, 2009). In this way, the eponymous "bricoleurs" who perform this

dynamic creatively assemble novel social formations using the remains and debris left over from past events, extant structures, and historical legacies. What arises from such processes are chimeric institutions and syncretic organizational forms crafted from "a patchwork of the new and second hand," including "habitual ways of doing things; well-worn practices adapted to new conditions; [and] organizational arrangements invented or borrowed from elsewhere" (Cleaver and de Koning, 2015: 5).

This understanding of institutional bricolage is closely connected to the concept of the "boundary object" (Star and Griesemer, 1989). This term is used to describe how actors utilize mutually intelligible representations (i.e. *boundary objects*, such as ecosystem services themselves) to translate between, broker arrangements among, and thereby bring together different social worlds (Abson et al., 2014; Suarez and Corson, 2013). As I will show, the activities that comprise various "mainstreaming" efforts revolve around a central process defined by the constant recombination and situational deployment of boundary objects which are constituted via the technical operations of ecosystem service science (often in the form of maps, calculations, and other metrical representations). These boundary objects, in turn, must be wielded through tactical and contextually improvised interventions involving "an active assembly of parts" and "the adaptation of norms, values, and arrangements to suit a new purpose" (Cleaver, 2002: 20). As theorists of bricolage emphasize, such efforts result in dynamics of organizational change which are "forged in practice through daily interactions, the necessary improvisation involved in social life" (Ibid, 16) and enacted through a messy "process of piecing together shaped by individuals acting within the bounds of circumstantial constraint" (Ibid, 17). This sense of situationally cobbling together elements of available institutional logics into contextually shaped, syncretic organizational forms defines the work of the Natural Capital Project and how its personnel use ecosystem services. And it is through these types of practices that adherents of ecosystem services have contributed to pronounced shifts that are continuing to transform the field of conservation.

Van Hecken et al. (2015: 73) suggest that to understand the politics of ecosystem services "we must acknowledge the dynamic interplay between agency and structure, where emergent political processes reflect both the agency of current actors and the influence of historically embedded structures, practices, and legacies." Accordingly, this article theorizes how the micro-social practices constitutive of ecosystem services are simultaneously "influenced by and implicated in the ongoing stabilization and evolution of political-economic macrostructures" (Kaghan and Lounsbury, 2011: 75). Untangling the "embedded agencies" implicated in the rise of ecosystem services thus requires pursuing a mode of explanation attuned both to "the analytical status of macro-regulatory contexts for human agency" and "the everyday lives of the people producing on-the-ground cultural systems through which macro-processes are always interpreted and shaped" (Rankin, 2003: 710). In conceptualizing the distinctive ways that practitioners of ecosystem services maneuver across the fragmented organizational field of conservation in their efforts to realign (and thereby "save") conservation, I trace an important dialectical relation between their improvised deployments of ecosystem services and broader institutional realignments now widely visible in mainstream conservation. From this vantage, I show how ecosystem services have become literally instrumental in carrying out the everyday translations that are in effect remolding conservation—context-by-context, piece-by-piece—into new forms that its proponents suggest will better "fit" with more dominant political projects and prevailing institutional orders: the specific means by which practitioners can transmute what they have come to regard as a dangerously incongruent "nature" into a more safely realigned "natural capital," with major implications for conservation.

This analysis raises troubling questions about the ***power relations*** that underpin this whole process. These institutional dynamics take shape, and indeed are made possible, through deep power asymmetries. As Ken MacDonald (2010b: 521) notes, "under the structuring influence of

an 'external' environment increasingly governed by the global institutionalization of neoliberalism, organizations that had sought to extend their spatial reach readily adjusted their operating practice and organizational structure to better align with this shifting institutional context" (see also Holmes and Cavanagh, 2016). The rise of ecosystem services can be interpreted within this dynamic as a reflection of continuing and concerted efforts to maintain biodiversity conservation as a priority in the face of wider discursive, institutional, and political-economic shifts in its surrounding context (Suarez and Corson, 2013). Yet beyond merely reflecting these broader patterns, ecosystem services also provide important operational means by which conservationists can respond to these encompassing institutional transformations: an adaptable set of practices through which these "exterior" shifts can be integrated into the ongoing redefinition of the organizational forms and functions "interior" to conservation itself.

In this regard, the institutional change arising from ecosystem services—how it is used to situationally rearticulate conservation to better accord with dominant logics—may serve to further reinforce the entrenched alliances and dominant actors that Antonio Gramsci characterized collectively as a "historic bloc" (Gramsci, 1971). While certain organization scholars have compared the incumbent-undermining activities undertaken by institutional entrepreneurs to the subversive role played by Gramsci's "organic intellectuals" (Levy and Scully, 2007), in the case of ecosystem services they seem more akin to Gramsci's "ideological functionaries" (Igoe et al., 2010). In other words, their role, while oriented toward the destabilization of some existing status quo, can be hegemonic rather than subversive in character: these actors may serve to perpetuate rather than undermine broader power asymmetries. I therefore pose as a concluding question whether a crucial outcome of this process—and the distinctive institutional dynamics that comprise it—could, in effect, amount to the reproduction of uneven power relations and the intensification of hegemonic patterns of political and economic order.

After introducing the work of the Natural Capital Project in the following section, I then offer extended analysis illustrating the characteristic *conditions* (fragmented fields), *practices* (bricolage), and *actors* (institutional entrepreneurs) involved in realigning biodiversity conservation using ecosystem services. I conclude by reiterating the importance of *power relations* (hegemonic and uneven) to making sense of the institutional dynamics described throughout this article.

The Natural Capital Project

The Natural Capital Project was established in 2006 with the broad aim of "aligning economic forces with conservation" (Natural Capital Project, 2016: 3). They have described themselves as "a team of optimistic and committed academics, software engineers, and practitioners" that have been "working together for over a decade to integrate the value nature provides to society into all major decisions" (Natural Capital Project, 2017: 1). To further this aim, they "harness world-class research capacity and pair it with the latest technology and practical, local know-how" in order to "empower governments, communities, corporations, and multilateral investment institutions to map and measure the goods and services they depend on" (ibid). Organizationally, the Natural Capital Project represents a partnership of "world-class research universities […] advancing new science together with, inspired by, and implemented through two of the world's largest NGOs" (Natural Capital Project, 2021). To summarize their approach to new audiences, its personnel would often display a simple diagram representing their "theory of change" (Figure 1).

The Natural Capital Project was initially founded as a partnership between Stanford University, The Nature Conservancy (TNC), and the World Wildlife Fund for Nature (WWF), followed later by the University of Minnesota. The group recently extended its formal partnership to include the Stockholm Resilience Center and Chinese Academy of Sciences. At the time of this writing, they have over sixty active members including a large interdisciplinary expert staff comprised of

ecologists, hydrologists, economists, communication specialists, software engineers, and GIS analysts, plus a host of postdoctoral researchers, doctoral students, and interns (as well as dozens of student and staff "alumni"). While many of its personnel wear multiple "hats" (e.g., software development, ecological modeling, biological fieldwork, academic writing, community engagement, and so forth), its two NGO partners will typically lead efforts to connect with local organizations and field-level practitioners while its academic partners will handle many of the technical and conventionally "scientific" aspects of its mainstreaming work.

The Natural Capital Project's list of collaborators is extensive. In addition to various subunits within its partner organizations (e.g., departments and research centers at its academic partners, regional bases, and thematically focused units in WWF and TNC), the group lists over a hundred collaborations with organizations from around the world, including governments, other universities and scientific organizations, land management authorities, local and international NGOs, development banks, and prominent corporations. These collaborations are spread across a range of locales (see Figure 2) and different thematic foci, encompassing scientific research output, spatial planning processes, the design of PES-type arrangements, convening meetings and conferences, and a wide range of other activities (Mckenzie et al., 2014; Ruckelshaus et al., 2013). The volume of requests that the Natural Capital Project receives seeking their expertise now far outstrips their capacity to respond, which has prompted them to carefully select partnerships based on areas of thematic or geographical interest, the perceived influence of prospective partner organizations, and their potential for "replicability" and "scalability."

At the heart of the Natural Capital Project's work, however, is its flagship modeling toolkit, the Integrated Valuation of Ecosystem Services and Tradeoffs (InVEST). The technical elaboration and numerous "in situ" applications of InVEST over the past 15 years closely track the development of the organization (see Dempsey, 2016: 105–121). They created InVEST with the aim of providing practical tools for quantitatively valuing and mapping ecosystem services in ways they anticipated would be relevant, readily operational, and likely to influence real-world decision-making. Whether helping to design municipal-level public payment programs for upstream watershed stewardship, supporting national spatial planning processes to manage impacts from infrastructure development, trying to mitigate operational risks to corporate supply chains, or intervening in any other domain

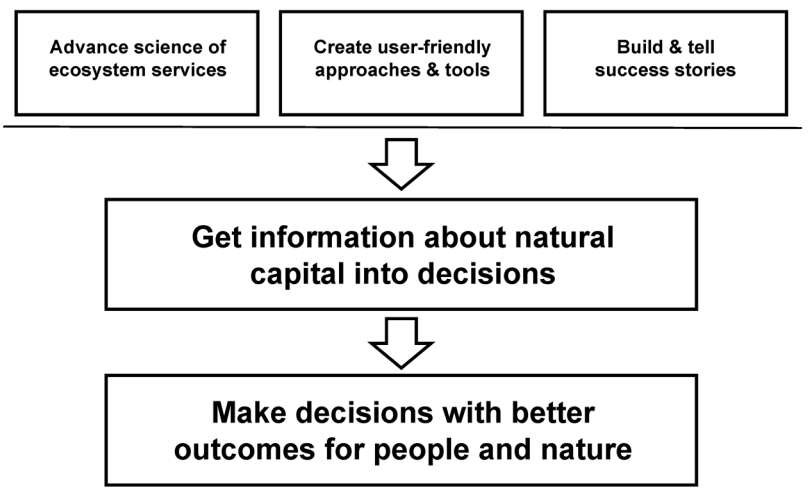

Figure 1. The "theory of change" diagram that Natural Capital Project personnel often displayed when introducing its approach to new audiences.

Figure 2. Geotagged map from the Natural Capital Project noting locales where they have worked, with the accompanying caption: "The Natural Capital Project approach allows global decision-makers to consider nature's diverse benefits. Each pin on this map indicates a place [where] we have worked with partners to find solutions in a distinct decision context" (Natural Capital Project 2021).

where choices with ecological implications are going to be made, InVEST was designed to equip practitioners with the tools they needed to incorporate ecosystem services systematically into their decision-making calculus.

InVEST's capabilities have grown steadily since its inception: it can now be used to model changes in habitat, terrestrial and marine carbon storage, scenic views, crop pollination, coastal protection, nature-based recreation and eco-tourism, fisheries and aquaculture, and a broad range of hydrological processes. The platform spatially portrays where combinations of these ecosystem services occur in relation to where people occur across a landscape. The tool thus facilitates the comparison of different management options, now with their ecosystem service impacts depicted alongside existing measures. Along with an assortment of specific output metrics, what comes out are different kinds of maps: maps depicting present conditions, maps depicting likely future conditions (given current trajectories), and maps depicting possible future conditions (under alternative management scenarios). By drawing ecosystem services explicitly into these maps and in terms commensurate with other more conventional economic values (such as agricultural production, timber harvest, and so forth), InVEST is intended to expand the vision of decision-makers, prompting them to see important new dimensions of the landscapes they manage and to perceive previously unrecognized trade-offs, win-win opportunities, and greener pathways to achieve desired policy goals. It provides the basis for re-fashioning existing approaches—whether to spatial planning, the design of new policies, optimizing investments, or virtually anything else—now with a more complete reckoning of the "true" costs and benefits.

Interdisciplinary teams of experts from the Natural Capital Project have enacted this process many dozens of times across diverse governance contexts around the world (see Figure 2; Guerry et al., 2015; Posner et al., 2016; Ruckelshaus et al., 2013). Indeed, as they are careful to emphasize, they are only one group among a much wider community of practice undertaking similar efforts. These interventions consistently shared some version of this basic strategy: assemble baseline conditions, develop divergent scenarios, compare those scenarios in terms of their respective ecosystem service implications, and use these contrasting model outputs to (hopefully)

influence the choices of relevant decision-making authorities—nudging them toward the demonstrably "better" and presumably more sustainable course of action.

While these practices are all directed toward influencing the behavior of those responsible for potential environmental impacts (i.e., "decision-makers"), I suggest that a key effect of this process, taken in aggregate and repeated again and again in intervention after intervention, is to change the internal logics and institutional composition of conservation itself. Although the Natural Capital Project's stated mission is articulated around a vision of "aligning economic forces with conservation," when considering the operative power relations shaping these dynamics, this process may in fact work in reverse: as a realignment of *conservation* around a particular conception of "economic forces."

A synthesized analysis of the politics of ecosystem services

Conditions: fragmented fields

As noted earlier, conceptualizations of organizational fields—whether mature, emerging, or disrupted—have converged around "the presence of multiple institutional orders or alternatives (Clemens and Cook, 1999: 459) as *the* key condition that makes them unstable and especially conducive to change (Seo and Creed, 2002). In such contexts, institutional subjects experience an array of contradictory norms, rules, and rationalities—a condition which, again, saturates biodiversity conservation—forcing actors to deal with situations where disjointed institutional logics are continually intersecting (Thornton et al., 2012). For illustration, consider this presentation slide projected during a discussion of the Natural Capital Project's long-term ecosystem services work on the west coast of Vancouver Island, which begins to portray this sense of institutional multiplicity (Figure 3).

The diverse range of actors depicted in this image is fairly typical of the Natural Capital Project's growing portfolio of on-the-ground projects and interventions. In this case, their efforts connected multiple federal, provincial, and municipal government agencies, First Nations, and a range of sectoral interests each relating to the landscape in different, overlapping, and potentially incompatible ways. Each of these stakeholders brings their own unique institutional settings which Natural Capital Project personnel have had to learn to situationally and often simultaneously engage. As one of the group's lead scientists put it during a speech, their work requires "integrating many different agendas. It integrates the agenda of poverty alleviation; of human health and security; of economic development; of business value; of biodiversity conservation; all with the ultimate goal of bringing together all of these communities in joint efforts to create a more sustainable future." A practitioner working for one of the Natural Capital Project's counterpart organizations explained in similar terms how their shared "transdisciplinary and multidisciplinary effort has really required that kind of stitching together of distinct threads from different siloed departments, agencies, organizations, and so forth."

Maneuvering effectively among such diverse combinations of groups and the distinctive epistemic, political, and institutional terms on which they operate, can be a delicate and demanding task. The head of one prominent conservation organization, addressing the Natural Capital Project at one of its annual symposia, stressed just how fraught these types of mainstreaming operations can be:

> To understand who these values matter to, and the institutional context, and who is making decisions, and to really do analyses that can have an impact, you have to be there. You have to go. You can't do it from 35,000 feet. You have to go collect real contextual information and be working with local partners who understand the politics and understand how different arguments are going to resonate. I saw

Figure 3. Identification of stakeholders engaged during a marine spatial planning process undertaken by the Natural Capital Project in partnership with the west coast aquatic management board (WCAMB) in British Columbia on the west coast of Vancouver Island (Bernhardt et al., 2012).

> someone cringing at the back of the room when I started talking about gorillas as ATM machines. Sensitivity to audience is very important [audience laughter]. Know how to present the information, how to talk about economic values, and whether to say things like 'present value' or put it in more layman's terms or if you need to pump up the jargon depending on the audience you're working with.

Organization scholars describe how fragmented fields involving "conflicting and overlapping pressures stemming from multiple institutional logics create interpretive and strategic ambiguity" (Lounsbury and Boxenbaum, 2013: 4). In turn, these conditions can force (or perhaps enable) institutional subjects to respond "locally, creatively, incrementally, and more or less reflexively" (Lawrence et al. 2011: 57) to new and changing situations—circumstances which are, again, ubiquitous in conservation. From this perspective, the inhabitation of multiple social realities (as illustrated in Figure 3 and as described in the quotes above and in the following sections) routinely creates "slippages" (Streeck and Thelen, 2005) which can significantly advantage those with the appropriate skills and positioning to exploit them. As institutional subjects "occupy multiple simultaneous positions in multiple fields," they are regularly negotiating such slippages: contradictions produced by the frictions among plural and overlapping logics (Lawrence and Suddaby, 2006: 248). It is here that certain actors can find especially opportune conditions "to engage in activities of contestation and reconceptualization" aimed at altering the institutions in which they are embedded (Ibid).

Practices: bricolage and boundary objects

It is in precisely these sorts of fragmented fields that possibilities for institutional bricolage are most heightened. In this context, the metrical representations constituted via ecosystem services science play a crucial role. As practitioners of ecosystem services themselves readily acknowledge, the concept functions as a kind of brokering language for reconciling different actors, interests, and

understandings in biodiversity conservation. These translations have come to depend on specific practices involving the continuous production of "boundary objects": mutually intelligible representations which can be used to translate between and thereby bring together different social words, incongruent logics, and divergent political projects, while simultaneously maintaining distinct meanings within each (Star and Griesemer, 1989).

One Natural Capital Project operative explained how she would mobilize this dynamic by using the example of road construction. She described a workshop she led in South East Asia where she was able to use ecosystem services to turn a proposed road into an overlapping point of interest for the government officials in attendance—i.e., as a boundary object—which served as the basis for drawing connections, highlighting dependencies, and establishing sites for potential cooperation:

> I basically weaved in all the ministries in the room and how they were in one way or another impacted or dependent on that road and what happened with that road. I talked about how roads increased deforestation, so there you have the Ministry of the Environment. And with lots of deforestation you have increased sedimentation, so there you have the Ministry of Agriculture. And then you have the Ministry of Livestock and Fisheries, because a lot these streams are habitat for fish. And there you have livestock and the Department of Rural Development, where lots of communities depend on these services. Then you have the Ministry of Transport, because a lot of these rivers in [Country] are critical for transport. And the story went on. […] Our theory of change is really about these networks: establishing these relationships and these links between these various people.

Her use of the word "weaved" is instructive. By highlighting the value of the ecological functions potentially impacted by the construction of this road she uses ecosystem services as a kind of needle-and-thread, drawing links between ordinarily fractious government agencies and foregrounding their shared interest in coming together around the management of those impacts (albeit for different reasons). The intended effect of these maneuvers was straightforward: to demonstrate in multiple specific ways a compelling need for conservation.

Natural Capital Project personnel were keenly aware of this dynamic and leveraged it knowingly in their work. As one of the group's more senior analysts put it, "tools and models and analysis don't make decisions. Those things I almost think about as a method, a *boundary object*, for bringing stakeholders to the table." Another field-level operative likewise stressed how maps represented a particularly "good way of integrating diverse knowledge systems and different perspectives. […] Because they are at the boundary of these knowledge systems, they are very good boundary objects for working in this space and for getting people to engage." One of the Natural Capital Project's green economy specialists emphasized in similar terms how "water" could be used to perform these translational functions. "The water story can be a powerful story to tell and a powerful tool to bring these various issues together," she suggested, because it was "connected to so many problems, so many sectors, and so many solutions. Water tells a really good story. Water brings people together."

Again, beyond these specific examples—roads, maps, water, and many others—it is important to stress how this dynamic operates at the center of most of the Natural Capital Project's engagements and, as an encompassing strategy, how it animates the ecosystem services movement more broadly. Through skillful deployments of ecosystem services, its practitioners rearticulate biodiversity conservation to fit a wide array of incongruent sensibilities. They perform a peculiar alchemy transmuting the conservation of "nature" (something that might not hold much inherent interest) into the safeguarding of "natural capital" (something that can, through the ecosystem services it provides, be tailor-made to represent whatever combination of value propositions happen to be relevant in any given situation). As different social worlds come into contact across the sprawling, refractory interventions that comprise contemporary conservation, its technicians face a multiplicity of

constituencies and types of disjunctions marking the boundaries between them. To deal with such situations, conservationists—habitually positioned at the interstices of diverse boundaries and constantly having to code-switch between them—mobilize ecosystem services discourse as a source of boundary objects to navigate across these social worlds, build bridges between them, and generally smooth frictions among them. The framework of ecosystem services thus equips practitioners with a vast and theoretically endless arsenal of boundary objects: a discursive Swiss Army Knife suitable for virtually any occasion (Suarez and Corson, 2013). Through this process, "old arrangements are modified and new ones invented" as "institutional components from different origins are continuously reused, reworked, or refashioned to perform new functions" (Cleaver and de Koning, 2015: 4).

Actors: institutional entrepreneurs

These translational capacities and sustained practices of boundary-spanning, brokering, and intermediation serve as the crucial micro-social foundations for the rise of ecosystem services. Indeed, beyond the glancing illustrations highlighted in this article, Natural Capital Project personnel themselves consistently explained the general features of their work in precisely these terms. Through these practices, ecosystem services provide specific means by which conservation can be operationally recast, context by context, into something that can fit with the manifold and situationally recombinant institutional logics that define its field. The Natural Capital Project is emblematic of this process and its personnel have directed very significant and painstaking efforts around precisely these maneuvers. Across numerous projects, they have honed their abilities to craft (and recraft as necessary) a shape-shifting conservation congruent with and ostensibly indispensable to a range of contextually shaped development priorities, economic imperatives, and whatever other sets of logics happen to be situationally relevant. These characterizations share unmistakable and detailed resemblances with theorizations of "institutional entrepreneurs" and the types of capacities, practices, and positioning that enable such actors to "hop and bridge from one social world to another" (Thornton and Ocasio, 2005: 117) as they involve themselves in the task of forming and transforming institutions: a dynamic that organization researchers have now documented across numerous settings (Hardy and Maguire, 2017).

Organization scholars stress how institutional entrepreneurs must be able to marshal the right kinds and combinations of support in order to disrupt established field-level patterns and overcome expected resistance from "field incumbents"—an especially daunting task in heterogeneous organizational fields marked by such diverse constituencies. The Natural Capital Project again provides a useful illustration. As one of the group's more seasoned field operatives explained, "ecosystem services means speaking different languages to different groups and understanding what they each care about." Another of their mainstreaming specialists who had been working on projects in East Africa compared this sense of cross-institutional discernment with the perceptive acuity of a "chameleon" and asserted that this ability to "change colors" was the essential trade skill that defined the core of their work. Further toying with this metaphor, yet another senior member of the group explained: "Because ecosystem services is this holistic framework, its versatility, its multiple dimensions, its multiple applications, means that the chameleons can change their color but can still draw on the approach to make connections between people and nature that speaks to different perspectives." A more senior advisor to the Natural Capital Project who was directing corporate engagement activities at one of their partner NGOs stressed the need to sharpen precisely these abilities at a keynote for one of the group's annual symposia. "I would encourage everyone to become multilingual," she began. Breaking down the maneuvers by which ecosystem services approaches could be shepherded into corporate settings, she explained the importance of mapping out and shrewdly assessing the roles of different decision-makers across entire organizations. "Really understanding those

perspectives is key," she continued. "You have to be able to tell your story in different ways and emphasize different pieces of it to sell to different audiences."

Organization scholars suggest that these proclivities for code-switching enable institutional entrepreneurs to more readily "identify political opportunities, frame issues and problems, and mobilize constituencies" (Maguire et al., 2004: 658) as they maneuver across diverse boundaries to gather scattered resources, negotiate coalitions, and attempt to triangulate re-worked institutional settlements. The Natural Capital Project was fairly candid about these ambitions. The group was, as one of the group's co-founders argued, "sitting right at the place, or one of the places, at the boundaries between worlds, where change can be most effective." Yet another long-time member of the group elaborated more extensively on this understanding:

> Boundary work, like the iterative engagement that [the Natural Capital Project] does is quietly recognized as being important to lots of decision processes. Boundary organizations facilitate interactions, they help people communicate with common vocabulary to develop shared understandings of topics. They help identify pathways for people to engage with policy. And we really try to identify policy-relevant research areas. We talk to people on both sides and try to get them in a room together.[2]

He was explicit that groups like the Natural Capital Project "don't only serve a variety of actors across a complex science-policy landscape. They actually shape that landscape by building partnerships and institutions. They actively shape the network." Leveraging a distinctive combination of conditions, practices, positioning, and skills—all recognizable to scholars of institutional entrepreneurship—the Natural Capital Project have thus led a campaign to "discredit [a] status quo" (i.e., conservation-as-usual) while presenting "the alternative practices they are championing" (i.e., those syncretized via ecosystem services) "as necessary, valid, and appropriate in ways that resonate with other field members" (Hardy and Steve, 2008: 204). These efforts are being undertaken with an overarching aim of better aligning what proponents of ecosystem services have come to see as a dangerously incongruent conservation. In this way, ecosystem services are intended to ease frictions and defuse antagonisms between the traditional logic of conservation and those of its potential rivals, thereby fitting conservation more safely into the logical grain of what many conservationists have come to apprehend to be superordinate political projects. The situational yet widespread mobilization of this strategy by ecosystem services practitioners—dispersed across a sprawling array of conservation interventions and working organizational context by organizational context—are what constitute the everyday, micro-social labors of re-purposing conservation to suit the overriding logics that have increasingly encroached on it: a higher-order effect now widely visible to observers and analysts.

Power: organic intellectuals or ideological functionaries?

Hardy and Maguire (2017: 274) lament that "much of the research on institutional entrepreneurship ignores the power relations that pervade institutional fields." An interesting exception can be found in the work of Levy and Scully (2007) who compare Antonio Gramsci's (1971) characterizations of "hegemony" with the theorized dynamics of instability and contingency which define organizational fields. Here, they draw parallels between the roles of "institutional entrepreneurs" (as developed in organization studies) and the roles of "organic intellectuals" (as discussed in Gramsci's writing) and the ways in which both types of actors go about destabilizing established patterns of social order. Relying on "the skillful coordination and deployment of resources, a sophisticated analysis of field structures and processes, diplomatic acuity in constructing alliances, and creative agility in responding to evolving circumstances," both organic intellectuals and institutional entrepreneurs, in working to overturn existing institutions, could be interpreted as mounting similar

kinds of counter-hegemonic challenges to status quo power relations (Levy and Scully, 2007: 982). As I have suggested, these are indeed precisely the sorts of skills and positioning that the Natural Capital Project have had to cultivate and now rely on to do their work. However, while Levy and Scully describe the potential of institutional entrepreneurship as a catalyst for an "emancipatory process" (Ibid, 979)—as effecting the displacement of entrenched interests and a means of "overcom[ing] structural power by outmaneuvering field dominants" (Ibid, 976)—these dynamics can start to appear rather inverted when applied to ecosystem services and conservation.

Once again, the Natural Capital Project offers a useful illustration. For instance, in 2016, Peter Kareiva—a co-founder of the group and an iconic figure in the ecosystem services movement—suggested at one of their annual symposia that the "mainstreaming" of ecosystem services was "about changing everything, it was actually that radical." Yet, as he continued, he also went on to characterize the turn to ecosystem services essentially as a bid for "relevance":

> What we really meant, way back, 15 years ago […] what we were all feeling was that the things we cared about did not seem relevant anymore. It was really about relevance […] and natural capital is one way of entering relevance. It was really about these things that we care about, these things we think are so deeply important, and we look around, we look at much of the world, and we see it's a trivial part of the discussion.

But relevance to whom, exactly? At a separate event framed around whether "money can grow on trees" (i.e., whether "capitalism" and "nature" were truly at odds), Kareiva addressed this point directly. "That adversarial position," he lamented. "If business is an adversary of nature, *nature doesn't stand a chance*." Looking back, Kareiva explains how the rise of ecosystem services was, most of all, an expression of this need to convert conservation from something "trivial" into something "relevant"—something more broadly amenable to "the people who have the future of the planet in their hands," as another of the Natural Capital Project's co-founders put it, and something that could, as IUCN's Secretary-General had admonished, "better resonate in the halls of power, in the boardrooms, and in the heart of the market economy." By refashioning conservation around ecosystem services, and by transmuting nature into natural capital, their cause could be renewed: rendered legible to the governing vision cast by those powerful decision-makers persistently failing to see, to care about, or to fund conservation. Faced with overwhelming odds, the conservation of nature, Kareiva suggests, had to prove it was worth keeping around.

The outcome of this strategy—within mainstream conservation at least—has been dramatic (Buscher et al., 2014) and ecosystem services approaches have indeed gone very mainstream in that context (Suarez and Dempsey, 2018). As one of the Natural Capital Project's lead scientists explained, "at the time that [we were] founded ten years ago, this idea of natural capital, ecosystem services, nature's benefits to people, was not part of the dialogue at TNC and WWF the way it is today." Kareiva similarly marveled at "how much has changed" over the past two decades, asserting that there was "zero percent overlap" between what he characterized as old-school conservation (with its anachronistic preoccupations with "species" and "algebra") and what had come to replace it. "If I were at a Nature Conservancy meeting," he remarked, "I think there is zero percent overlap in the discussion. […] It's just not what's talked about. What's talked about is natural capital. And that's really changed the discussion in conservation."

Understood in these terms, the institutional entrepreneurship being undertaken through ecosystem services is indeed contributing to the *destabilization* of a locally-defined status quo (i.e., the established institutions and organizational forms and functions of conservation) but it appears to do so by *stabilizing* conservation within a wider status quo (i.e., by "fitting" it more neatly into prevailing discursive, institutional, and political-economic orders with which conservation is believed to not be sufficiently congruent). While these efforts could, in a sense, be regarded as displacing

incumbent interests, institutions, and logics—namely, those "inside" conservation—institutional entrepreneurs accomplish this displacement by systematically importing and installing in their place a variety of elements drawn from more broadly dominant interests, institutions, and logics from "outside" conservation.

To develop this point further, I turn to Igoe et al.'s (2010: 489) analysis of mainstream conservation. Convergent with the analysis presented here, they draw on Gramsci as a means of apprehending "how such a complex and heterogeneous movement" (i.e., conservation) "appears to be dominated by a relatively narrow set of ideas and institutional agendas," a circumstance "most clearly visible in the operations of conservation BINGOs" (Ibid).[3] In this interpretation, the Natural Capital Project's efforts to realign conservation to better accord with dominant logics would not reflect the work of organic intellectuals but instead draws into focus the operations of actors Gramsci thought of as "ideological functionaries." In contrast to organic intellectuals, the "ideas and worldviews" championed by ideological functionaries were "closely associated with the interests of ruling elites" (Ibid, 491). Igoe et al. elaborate further on this crucial distinction:

> [B]oth groups exhibited competencies for making statements about the world, of being 'in the know', and the ability to explain the world in ways that were understandable and appealing to a broad cross-section of society. Since those in power publicly sanctioned ideologue intellectuals as the true holders of legitimate and valid knowledge, however, members of this class held a much higher position of authority, visibility, and credibility vis-à-vis the general public. Consequently, they had an enormous impact on the legitimation and propagation of the ruling class's understanding of the world. (Ibid)

The portrait that emerges is of an organizational field whose established rules of the game and attendant status quo are indeed being challenged and overturned. And operationally constituting that process, context-by-context, is the institutional entrepreneurship—the diffusely distributed micro-social practices of bricolage—undertaken by figures akin to Gramsci's "ideological functionaries." This characterization of ideological functionaries, with similar skills yet inverse effects to those of organic intellectuals, matches closely in its details with the theorized dynamics of institutional entrepreneurs. Somewhat worryingly, however, it recasts the institutional entrepreneurs of ecosystem services not as plucky opponents to but champions of ruling elites and the hegemonic alignment of forces that sustains them. What this process seems to describe is the ironing out of discordant wrinkles: social formations (as in certain elements of conservation) not sufficiently subordinated to more dominant political projects and sources of potential resistance, or at least unintelligibility, to their imperatives (MacDonald and Corson, 2012).

Some organization scholarship seems to anticipate these concerns. Hardy and Maguire (2008: 211–212), for instance, consider the possibility that rather than reflecting "a radical reconfiguration of power relations in the field," institutional entrepreneurship could instead be interpreted as "aligning change with—and often embedding it in—existing values, logics, and practices, which results in minimal change in power relations" (Ibid). Thornton et al. (2012, 3) similarly observe how "more micro processes of change are built from translations, analogies, combinations, and adaptations of more macro institutional logics." Accordingly, in the case of ecosystem services, the logics currently being imported from broader institutional orders, creatively syncretized, and ingrained into conservation continue to depend—as they always have—on the specific sources from which these elements are drawn and on the power relations configuring those operations. In this context, the situational improvisations performed by groups like the Natural Capital Project are taking shape through an encompassing political context defined by profound power asymmetries (MacDonald, 2010a, 2010b). Indeed, these uneven power relations are arguably what enable this kind of work in the first place. As Kareiva himself asserted, the rise of ecosystem services—and the putative need to mainstream it in conservation—represents a specific strategic response in

the face overriding political projects whose logics conservationists perceive they must abide and whose dominance, whether or not they like it, they have nevertheless learned to accept as unassailable (Dempsey, 2016; Gomez-Baggethun et al., 2010; MacDonald and Corson, 2012).

Conclusion

In conceptualizing the hard work of mainstreaming ecosystem services, this article has sought to contribute what Shapiro-Garza et al. (2020: 11) describe as "an entangled micro-macro analysis" that links the lived "experience of structural constellations" with the "the very production of these constellations." The Natural Capital Project—working alongside a host of allied organizations—have helped to enact pronounced field-level shifts as they continue to reinvent mainstream conservation, context-by-context, piece-by-piece, through ecosystem services. Understood as institutional entrepreneurs, the Natural Capital Project has worked diligently to transpose syncretized logics from "outside" conservation "into" conservation through practices of institutional bricolage. These actors thus perform the everyday operational work of reconfiguring the constitutive forms and functions of conservation.

These efforts are undertaken with the aim of bringing conservation more safely into accordance with prevailing macro-institutional logics, thereby ostensibly reproducing conservation as a viable political project capable of advocating for nature. Yet the extent to which their stated goal of having some reciprocal influence on "the halls of power" and among "the people who have the future of the planet in their hands"—the main rationale for embarking on this fateful campaign built around ecosystem services in the first place—remains uncertain. While mainstream conservation is visibly changing, the dominant societal logics that were supposed to be "realigned" by this turn to ecosystem services have remained difficult to meaningfully budge through these strategies (Dempsey 2016; Dempsey and Suarez, 2016; Feger et al., 2017; Gallagher et al., 2017; Guerry et al., 2015; Mckenzie et al., 2014; Posner et al., 2016; Ruckelshaus et al., 2013).

What these approaches have effectively been mobilized to do, however, is to adjust conservation itself to better accommodate the demands of those dominant logics. Thus, while ecosystem services might not have delivered on the nominally "radical" ambitions of the Natural Capital Project's founders, the rise of ecosystem services has at least served to reshape the internal logics and institutional composition of mainstream conservation. Insofar as these organizational realignments of conservation involve subordinating its forms and functions around a hegemonic conception of "economic forces," then the political operations enacted through ecosystem services, taken in aggregate, may in effect serve to intensify existing power asymmetries, undermine more plausibly counter-hegemonic and radical alternatives, and further evacuate conservation of whatever critical stirrings and oppositional potential it may have had.

Acknowledgements

I would like to thank Nancy Peluso, Chris Ansell, David Winickoff, Patrick Baur, Sara Nelson, Esteve Corbera, Jessica Dempsey, Peter Wilshusen, Cora Kircher, and the members of Land Lab at UC Berkeley who provided useful commentary and suggestions on earlier stages of this research.

Declaration of conflicting interests

The author declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This work was supported by a doctoral research fellowship from the Social Sciences and Humanities Research Council of Canada (SSHRC) and a Doctoral Dissertation Research Improvement Grant from the National Science Foundation (NSF DDRIG Grant ID #1556862).

Supplemental material

Supplemental material for this article is available online.

Notes

1. In 2019, Andersen was appointed Executive Director of the United Nations Environmental Programme (UNEP)
2. Their usage of "boundary organizations" was derived from Cash et al. (2003) and Guston (2001).
3. Big International Non-Governmental Organizations (BINGOs)

References

Abson DJ, Von WH, Baumgärtner S, et al. (2014) Ecosystem services as a boundary object for sustainability. *Ecological Economics* 103: 29–37. Elsevier B.V.

Adams W (2004) *Against Extinction: The Story of Conservation*. London: Earthscan. DOI: 10.1017/CBO9781107415324.004.

Armsworth P, Chan KMA, Daily G, et al. (2007) Ecosystem-service science and the way forward for conservation. *Conservation Biology* 21(6): 1383–1384.

Baker T and Nelson RE (2005) Creating something from nothing: Resource construction through entrepreneurial bricolage. *Administrative Science Quarterly* 50: 329–366.

Battilana J (2006) Agency and institutions: The enabling role of Individuals' social position. *Organization* 13(5): 653–676.

Battilana J, Leca B and Boxenbaum E (2009) How actors change institutions: Towards a theory of institutional entrepreneurship. *The Academy of Management Annals* 3(1): 65–107.

Berbés-Blázquez M, González JA and Pascual U (2016) Towards an ecosystem services approach that addresses social power relations. *Current Opinion in Environmental Sustainability* 19: 134–143.

Berk G and Galvan D (2009) How people experience and change institutions: A field guide to creative syncretism. *Theory and Society* 38(6): 543–580.

Bernhardt J, Guerry AD, Mckenzie E, et al. (2012) InVEST Scenarios Case Study: Vancouver Island, Canada.

Brenner N, Peck J and Theodore N (2010) Variegated neoliberalization: Geographies, modalities, pathways. *Global Networks* 2(2010): 182–222. Available at: http://onlinelibrary.wiley.com/doi/10.1111/j.1471-0374.2009.00277.x/abstract (accessed 18 July 2014).

Brockington D and Duffy R (2010) Capitalism and conservation: the production and reproduction of biodiversity conservation. *Antipode* 42(3): 469–484.

Brockington D, Duffy R and Igoe JJ (2008) Nature Unbound: Conservation. *Capitalism and the Future of Protected Areas*: 1–250. DOI: 10.4324/9781849772075.

Büscher B (2012) Payments for ecosystem services as neoliberal conservation: (reinterpreting) evidence from the Maloti-Drakensberg, South Africa. *Conservation and Society* 10(1): 29.

Büscher B (2014) Selling success: constructing value in conservation and development. *World Development* 57: 79–90.

Büscher B and Fletcher R (2014) Accumulation by conservation. *New Political Economy* (July): 1–26. DOI: 10.1080/13563467.2014.923824.

Büscher B and Fletcher R (2019) Towards convivial conservation. *Conservation and Society*: 1–14. DOI: 10.4103/cs.cs.

Büscher B and Fletcher R (2020) *The Conservation Revolution: Radical Ideas for Saving Nature Beyond the Anthropocene*. Brooklyn: Verso Books.

Buscher B, Dressler W and Fletcher R (2014) *Nature Inc: Environmental Conservation in the Neoliberal Age*. Tucson: University of Arizona Press.

Cash DW, Clark WC, Alcock F, et al. (2003) Knowledge systems for sustainable development. *Proceedings of the National Academy of Sciences of the United States of America* 100(14): 8086–8091.

Castree N and Henderson G (2014) The capitalist mode of conservation, neoliberalism and the ecology of value. *New Proposals: Journal of Marxism and Interdisciplinary Inquiry* 7(1): 16–37.

Cavanagh CJ and Benjaminsen TA (2017) Political ecology, variegated green economies, and the foreclosure of alternative sustainabilities. *Journal of Political Ecology* 24: 200–216.

Chan KMA and Satterfield T (2020) The maturation of ecosystem services: Social and policy research expands, but whither biophysically informed valuation? *People and Nature* 2(4): 1021–1060.

Christiansen LH and Lounsbury M (2013) Strange brew: Bridging logics via institutional bricolage and the reconstitution of organizational identity. *Research in the Sociology of Organizations* 39(B): 199–232.

Cleaver F (2002) Reinventing institutions: Bricolage and the social embeddedness of natural resource management. *European Journal of Development Research* 14(2): 11–30.

Cleaver F (2012) *Development through Bricolage: Rethinking Institutions for Natural Resource Management*. New York: Routledge. DOI: 10.1080/08941920.2013.821380.

Cleaver F and de Koning J (2015) Furthering critical institutionalism. *International Journal of the Commons* 9(1): 1–18. Available at: http://www.thecommonsjournal.org/index.php/ijc/article/view/URN%3ANBN%3ANL%3AUI%3A10-1-116918/484.

Clemens ES and Cook JM (1999) Politics and institutionalism: Explaining durability and change. *Annual Review of Sociology* 25(1999): 441–466.

Collard R-C, Dempsey J and Sundberg J (2015) A manifesto for abundant futures. *Annals of the Association of American Geographers* 105(2): 322–330.

Corbera E, Kosoy N and Tuna NM (2007) Equity implications of marketing ecosystem services in protected areas and rural communities: Case studies from Meso-America. *Global Environmental Change* 17: 365–380.

Corson C, Campbell L and MacDonald K (2014) Capturing the personal in politics: ethnographies of global environmental governance. *Global Environmental Politics* 14(3): 21–40.

Corson C, Campbell LM, Wilshusen P, et al. (2019) Assembling global conservation governance. *Geoforum; Journal of Physical, Human, and Regional Geosciences* 103: 56–65. Elsevier.

Costanza R, de Groot R, Braat L, et al. (2017) Twenty years of ecosystem services: How far have we come and how far do we still need to go? *Ecosystem Services* 28: 1–16. Elsevier B.V.

Dempsey J (2016) *Enterprising Nature: Economics, Markets and Finance in Global Biodiversity Politics*. Hoboken, NJ: Wiley Blackwell.

Dempsey J and Robertson M (2012) Ecosystem services: Tensions, impurities, and points of engagement within neoliberalism. *Progress in Human Geography* 36(6): 758–779.

Dempsey J and Suarez DC (2016) Arrested development? The promises and paradoxes of "selling nature to save it". *Annals of the American Association of Geographers* 106(3): 653–671.

Díaz S, Pascual U, Stenseke M, et al. (2018) Assessing nature's contributions to people. *Science (New York, N.Y.)* 359(6373): 270–272.

Domínguez L and Luoma C (2020) Decolonising conservation policy: How colonial land and conservation ideologies persist and perpetuate indigenous injustices at the expense of the environment. *Land* 9(3): 11–14.

Eichler L and Baumeister D (2018) Hunting for justice: An indigenous critique of the North American model of wildlife conservation. *Environment and Society: Advances in Research* 9(1): 75–90.

Feger C, Mermet L, McKenzie E, et al. (2017) Improving Decisions with Biodiversity and Ecosystem Services Information: A Theory-based Practical Context Diagnostic for Conservation - Technical Background Paper. (May).

Fletcher R (2019) On exactitude in social science: A multidimensional proposal for investigating articulated neoliberalization and its 'alternatives'. *Ephemera: Theory and Politics in Organization* 19(3): 537–564.

Fletcher R and Breitling J (2012) Market mechanism or subsidy in disguise? Governing payment for environmental services in Costa Rica. *Geoforum; Journal of Physical, Human, and Regional Geosciences* 43(3): 402–411. Elsevier Ltd.

Fletcher R and Büscher B (2017) The PES conceit: Revisiting the relationship between payments for environmental services and neoliberal conservation. *Ecological Economics* 132: 224–231. Elsevier B.V.

Fletcher R, Dressler W and Buscher B (2014) Nature inc.: the new frontiers of environmental conservation. In: Buscher B, Dressler W and Fletcher R (eds) *Nature Inc.: Environmental Conservation in the Neoliberal Age*. Tucson: University of Arizona Press, pp.3–21.

Gallagher L, McKenzie E, Feger C, et al. (2017) Creating successful valuing nature initiatives: A guide to analysing local context and developing strong theories of change.

Garud R, Hardy C and Maguire S (2007) Institutional entrepreneurship as embedded agency: An introduction to the special issue. *Organization Studies* 28(7): 957–969.

Gavin MC, McCarter J, Mead A, et al. (2015) Defining biocultural approaches to conservation. *Trends in Ecology and Evolution* 30(3): 140–145.

Gomez-Baggethun E, de Groot R, Lomas PL, et al. (2010) The history of ecosystem services in economic theory and practice: From early notions to markets and payment schemes. *Ecological Economics* 69(6): 1209–1218. Available at: http://www.sciencedirect.com/science/article/pii/S092180090900456X (accessed 27 January 2014).

Gramsci A (1971) *Selections from the Prison Notebooks of Antonio Gramsci* Translated by Quintin Hoare and Geoffrey Nowell Smith. New York: International Publishers.

Guerry AD, Polasky S, Lubchenco J, et al. (2015) Natural capital and ecosystem services informing decisions: From promise to practice. *Proceedings of the National Academy of Sciences* 112(24): 7348–7355.

Guston DHD (2001) Boundary organizations in environmental policy and science: An introduction. *Science, Technology, & Human Values* 26(4): 399–408. Available at: http://www.jstor.org/stable/10.2307/690161.

Hardy C and Maguire S (2017) Institutional Entrepreneurship and Change in Fields. In: *The SAGE Handbook of Organizational Institutionalism*, pp. 261–280. DOI: 10.4135/9781446280669.n11.

Hardy C and Steve M (2008) Institutional entrepreneurship. In: Greenwood R, Oliver C and Suddaby R (eds) *The Sage Handbook of Organizational Institutionalism*. Thousand Oaks, CA: Sage Publications. https://dx.doi.org.libproxy.berkeley.edu/10.4135/9781849200387.n8.

Hirsch P and Lounsbury M (2015) Toward a more critical and 'powerful' institutionalism. *Journal of Management Inquiry* 24(1): 96–99.

Holmes G (2011) Conservation's friends in high places: Neoliberalism, networks, and the transnational conservation elite. *Global Environmental Politics* 11(4): 1–21. Available at: http://www.mitpressjournals.org/doi/abs/10.1162/GLEP_a_00081 (accessed 3 July 2014).

Holmes G and Cavanagh CJ (2016) A review of the social impacts of neoliberal conservation: Formations, inequalities, contestations. *Geoforum; Journal of Physical, Human, and Regional Geosciences* 75: 199–209.

Igoe JJ, Neves K and Brockington D (2010) A spectacular eco-tour around the historic bloc: Theorising the convergence of biodiversity conservation and capitalist expansion. *Antipode* 42(3): 486–512.

Ishihara H, Pascual U and Hodge I (2017) Dancing with storks: The role of power relations in payments for ecosystem services. *Ecological Economics* 139: 45–54. Elsevier B.V.

Kaghan W and Lounsbury M (2011) Institutions and work. *Journal of Management Inquiry* 20(1): 73–81.

Kolinjivadi V, Bissonnette JF, Zaga Mendez A, et al. (2020) Would you like some fries with your ecosystem services?: McDonaldization and conservation in Prince Edward Island, Canada. *Geoforum; Journal of Physical, Human, and Regional Geosciences* 111: 73–82. Elsevier.

Kolinjivadi V, Van Hecken G, Almeida DV, et al. (2017a) Neoliberal performatives and the 'making' of payments for ecosystem services (PES). *Progress in Human Geography*: 1–23. DOI: 10.1177/0309132517735707.

Kolinjivadi V, Van Hecken G, Rodríguez de Francisco JC, et al. (2017b) As a lock to a key? Why science is more than just an instrument to pay for nature's services. *Current Opinion in Environmental Sustainability* 26–27: 1–6.

Kull Ca, Arnauld de Sartre X and Castro-Larrañaga M (2015) The political ecology of ecosystem services. *Geoforum; Journal of Physical, Human, and Regional Geosciences* 61: 122–134. Elsevier Ltd.

Lawrence TB and Suddaby R (2006) Institutions and institutional work. In: Stewart Clegg, Hardy C, Lawrence TB and Nord WR (eds) *Sage Handbook of Organization Studies*. London: Sage, pp.215–254.

Levy D and Scully M (2007) The institutional entrepreneur as modern prince: The strategic face of power in contested fields. *Organization Studies* 28(7): 971–991.

Lounsbury M and Boxenbaum E (2013) Institutional logics in action. *Research in the Sociology of Organizations* 39(A): 3–22.

Lawrence TB, Suddaby R and Leca B (2011) Institutional work: Refocusing institutional studies of organization. *Journal of Management Inquiry* 20(1): 52–58. DOI: 10.1177/1056492610387222.

McAfee K and Shapiro EN (2010) Payments for ecosystem services in Mexico: nature, neoliberalism, social movements, and the state. *Annals of the Association of American Geographers* 100(3): 579–599.

MacDonald KI (2010a) Business, biodiversity and new 'fields' of conservation: The world conservation congress and the renegotiation of organisational order. *Conservation and Society* 8(4): 256–275.

MacDonald KI (2010b) The devil is in the (bio)diversity: Private sector "engagement" and the restructuring of biodiversity conservation. *Antipode* 42(3): 513–550.

MacDonald KI and Corson C (2012) 'TEEB begins now': A virtual moment in the production of natural capital. *Development and Change* 43(1): 159–184.

McElwee PD (2012) Payments for environmental services as neoliberal market-based forest conservation in Vietnam: Panacea or problem? *Geoforum; Journal of Physical, Human, and Regional Geosciences* 43(3): 412–426. Elsevier Ltd.

Maguire S, Hardy C and Lawrence TB (2004) Institutional entrepreneurship in emerging fields: HIV/AIDS treatment advocacy in Canada. *Academy of Management Journal* 47(5): 657–679.

Marris E (2009) Biodiversity: Putting a price on nature. *Nature* 462(7271): 270–271.

Mcelwee P (2017) The metrics of making ecosystem services. *Environment and Society: Advances in Research* 8: 96–124.

Mckenzie E, Posner S, Tillmann P, et al. (2014) Understanding the use of ecosystem service knowledge in decision making: Lessons from international experiences of spatial planning. *Environment and Planning C: Government and Policy* 32(2): 320–340.

Milne S and Adams B (2012) Market masquerades: Uncovering the politics of community-level payments for environmental services in Cambodia. *Development and Change* 43(1): 133–158.

Munir KA (2015) A loss of power in institutional theory. *Journal of Management Inquiry* 24(1): 90–92.

Muradian R, Arsel M, Pellegrini L, et al. (2013) Payments for ecosystem services and the fatal attraction of win-win solutions. *Conservation Letters* 6(4): 274–279.

Natural Capital Project (2016) The Natural Capital Project Strategic Plan. Palo Alto.

Natural Capital Project (2017) Fact Sheet: Natural Capital Project. DOI: 10.4135/9781452276236.n183.

Natural Capital Project (2021) Natural Capital Project Website. Available at: https://www.naturalcapitalproject.org (accessed 20 November 2017).

Peck J and Theodore N (2012) Follow the policy: A distended case approach. *Environment and Planning A* 44(1): 21–30.

Posner SM, McKenzie E and Ricketts TH (2016) Policy impacts of ecosystem services knowledge. *Proceedings of the National Academy of Sciences* 113: 7.

Rankin KN (2003) Anthropologies and geographies of globalization. *Progress in Human Geography* 27(6): 708–734.

Rasmussen MB and Lund C (2018) Reconfiguring frontier spaces: The territorialization of resource control. *World Development* 101: 388–399.

Robertson M (2006) The nature that capital can see: Science, state, and market in the commodification of ecosystem services. *Environment and Planning D: Society and Space* 24(3): 367–387.

Ruckelshaus M, McKenzie E, Tallis H, et al. (2013) Notes from the field: Lessons learned from using ecosystem service approaches to inform real-world decisions. *Ecological Economics* 115: 11–21. The Authors.

Salzman J, Bennett G, Carroll N, et al. (2018) The global status and trends of payments for ecosystem services. *Nature Sustainability* 1(3): 136–144. Springer US.

Scott WR (1994) Conceptualizing organizational fields. Linking organizations and societal systems. *Systemrationalität und Partialinteresse*: 203–221. DOI: 10.2307/249774.

Seo M-G and Creed WED (2002) Institutional contradictions, and institutional change: A dialectical perspective. *Academy of Management Review* 27(2): 222–247.

Shapiro-Garza E, McElwee P, Van Hecken G, et al. (2020) Beyond market logics: Payments for ecosystem services as alternative development practices in the global south. *Development and Change* 51(1): 3–25.

Star SL and Griesemer JR (1989) Institutional ecology, `translations' and boundary objects: Amateurs and professionals in Berkeley's museum of vertebrate zoology, 1907-39. *Social Studies of Science* 19(3): 387–420.

Streeck W and Thelen K (2005) Beyond continuity: Institutional change in advanced political economies. *Beyond Continuity: Institutional Change in Advanced Political Economies*: 1–39. DOI: 10.1007/s13398-014-0173-7.2.

Suarez DC and Corson C (2013) Seizing center stage: Ecosystem services, live, at the convention on biological diversity!. *Human Geography* 6(1): 64–79.

Suarez DC and Dempsey J (2018) Ecosystem services. In: Castree N, Hulme M and Proctor JD (eds) *Companion to Environmental Studies*. New York: Routledge, pp.173–178.

Sullivan S (2018) Making nature investable: From legibility to leverageability in fabricating 'nature' as 'natural capital'. *Science & Technology Studies* 31(3): 47–76.

Sullivan S (2017b) On 'natural capital', 'fairy Tales' and ideology. *Development and Change* 48(2): 397–423.

Thaler GM (2021) Ethnography of environmental governance: Towards an organizational approach. *Geoforum; Journal of Physical, Human, and Regional Geosciences* 120: 122–131. Elsevier Ltd.

Thornton PH and Ocasio W (2005) *Institutional Logics (R Greenwood, C Oliver, R Suddaby, et al. eds)*. London: Sage. DOI: 10.1086/210361.

Thornton PH, Ocasio W and Lounsbury M (2012) *The Institutional Logics Perspective: A New Approach to Culture, Structure, and Process*. Oxford: Oxford University Press.

Van Hecken G, Bastiaensen J and Windey C (2015) Towards a power-sensitive and socially-informed analysis of payments for ecosystem services (PES): Addressing the gaps in the current debate. *Ecological Economics* 120: 117–125. Elsevier B.V.

Van Hecken G, Kolinjivadi V, Windey C, et al. (2017) Silencing agency in payments for ecosystem services (PES) by essentializing a neoliberal 'monster' into being: A response to Fletcher & Büscher's 'PES conceit'. *Ecological Economics* 144: 314–318. Elsevier.

West P and Brockington D (2012) Introduction: Capitalism and the environment. *Environment and Society: Advances in Research* 3(1): 1–3.

Wilshusen PR (2019) Environmental governance in motion: Practices of assemblage and the political performativity of economistic conservation. *World Development* 124: 104626. Elsevier Ltd.

Wilshusen PR and MacDonald KI (2017) Fields of green: Corporate sustainability and the production of economistic environmental governance. *Environment and Planning A* 49(8): 1824–1845.

Wooten M and Hoffman AJ (2016) Organizational Fields Past, Present and Future.