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Intimate Mediations of For-Profit Conservation Finance: Waste, Improvement, and Accumulation

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Abstract

How to understand the marriage between accumulation and conservation? The paper draws from extensive research into one value chain, from the broker in New York City to a wildlife-friendly cattle business in Kenya. Making this enterprise return in money requires intimate and relentless efforts to transform wasteful conduct across a range of institutions and people; we focus on the attempted production of *NGO economicus, homo economicus plus*, and *bos Taurus economicus.* Drawing from feminist and postcolonial theorists of capitalism, we emphasize how green capitalist value production does not always hinge on extinguishing other-than-capitalist-social relations but rather attempts to mobilize and harness such differences, including non-profit-seeking values, logics and relations. The paper concludes by reflecting on the temporal challenges facing for-profit conservation finance, including those posed by previous regimes of accumulation that it relies on but also wants to overcome.

Keywords: biodiversity conservation, impact investing, waste, financialization of nature, Kenya, feminist political economy, postcolonial theory, neoliberal conservation

Sticky Dollar Bills

At the end of January 2016, one of us attended a conference on conservation finance at the mid-town Manhattan offices of Credit Suisse. The meeting focused on how to make conservation projects capable of returning in both profits and positive biodiversity outcomes—projects that were, as organizers repeatedly stated, "investable, scalable, and repeatable." The closing speaker, an executive at a major bank, started his remarks with a "famous" joke adapted to the conservation finance context: Two economists are walking down the street, and one says, "Hey, look—there is a $20 bill lying over there." The other one says, "It can't be—someone would have picked it up already!"

Titters followed. The speaker went on to say that the securities market actually works like this works every day—picking up every nickel, dime, and penny, eliminating inefficiencies. He paused and looked out at the crowd of 250 or so, mostly people in dark suits, and continued: "But in environmental markets, in conservation markets, there are twenty hundred thousand dollar bills on the ground. But they are heavy. Some of them seem glued to the ground … They require a ton of work to actually lift them to help drive positive change."

For the executive, those hundred thousand dollar bills laying on the ground are inefficiencies in the market; they are opportunities to save nature and produce capitalist value *at the same time*. The joke reflects a mainstream economic framing of environmental problems: contemporary economic processes have externalities—those wasted but willing bills laying on the pavement, awaiting the right conditions to enter circulation.

We have spent the last three years following attempts to pick up these hundred thousand dollar bills, seeking to understand this attempt to make biodiversity conservation an asset class worthy of investment. Are investors profiting from efforts to mitigate the sixth extinction? And if so, how are they doing it? We begin to answer these questions through a detailed study along the value chain of what we call "for profit conservation finance" (FPCF), the kind of work called for by geographers studying green and social finance (Christophers 2016; Rosenman 2018). In approach, we draw inspiration from scholars of millennial development such as Roy (2010) and Mitchell and Sparke (2015), who chronicle the emergence of a rhetorically kinder and gentler development more focused on poverty elimination, not only growth. But such millennial development must still be market-oriented as much as possible, and ideally profitable. And so, in *Poverty Capital*, Roy asks: "How can the entrepreneurial talents, social capital, and sweat equity of the poor be converted into new forms of capital?" (2010, 26). We too focus on understanding how non-accumulative, often non-profit energies of conservation are marshalled (or attempted to be) into an accumulative form. In our case, investments are meant to not only reduce poverty but also improve the life prospects of diverse nonhumans and biological diversity.

In tracing an investment facilitated by NatureVest – located in New York City - into a conservation business called GrazingWorks – located in the Kenyan central highlands - and the broader set of relationships and processes that make this investment possible, we did not find spectacular new commodifications, profiteering, nor market-making 'all the way down'; rather we observed attempts to create resilient market subjects and social relations, something more like capacity building all the way down. But capacity building for what? To what end? We suggest that what is going on in FPCF can be understood as a part of the ongoing liberal project that attempts to transform waste and wasteful conduct into capitalist value (Gidwani 2008), a "will to improve" (Li 2007) meets return-generating finance. That is, all along the value chain are efforts to modify and produce appropriate economic and environmental behavior – a "crusade against…wasteful conduct" (Gidwani 2008:xxi) - an analytic emphasized in neoliberal environmentality literature (e.g. Fletcher 2010) that we couple with attention to return generation, capital circulation and colonial histories.[1] Understood this way, our study traces an attempted "waste-to-value" conversion in action, an effort that involves intimate, challenging mediations attempting to transform wasteful conduct in the direction of three ideal types: what we've termed *NGO economicus, homo economicus plus,* and *bos Taurus economicus*.[2]

The paper moves from a general discussion of FPCF, including engagement with the literature, outlines our approach, and then digs into the research and analysis. While we stick close to this one value chain in order to understand how conservation is (attempted to be) transformed into capital, in the final section of the paper we return to the question of those sticky dollar bills on the ground – the challenging nature of efforts to solve environmental crisis through the magic of the market and, in particular, through the discipline of return-oriented green finance. To do so, we telescope out, arguing that the difficulties facing FPCF reside in the multiple temporalities that are in constant tension: the fast rhythms of investment capital, the patient time needed to transform "wasteful" conduct, as well as the longer histories of the settler-colonial past and present.

Encountering Conservation Finance: conceptual and methodological starting points

The Credit Suisse conference that opened this paper is aligned with the "impact investing" or "social finance" movement— investments that aim to return not only in money but also in other

[1] We utilize the terminology FPCF rather than the umbrella term neoliberal conservation in an effort to be specific about the subject of our study. Neoliberal conservation encompasses many processes - from the rise of ecosystem services discourse, market-making, and to the insertion of return-generating capital in a wide array of natural settings that might be deemed conservation-oriented.

[2] *bos Taurus* is the Latin name for the most common type of cattle.

social and/or ecological benefits (e.g. Mitchell 2017, Rosenham 2018). This movement is part of the broader ‘millennial development’ trend noted above but also linked to a rise in ‘millennial philanthropy’ or philanthrocapitalism (Mitchell and Sparke 2016; Holmes 2013) where the super-rich invest in mechanisms targeted at entrenched social and environmental problems. Mitchell and Sparke (2016) summarize the zeitgeist of millennial philanthropy as “opportunistically shor[ing] up global market practices and rationalities through local social projects that at once acknowledge and cover for market failure while simultaneously cultivating new market subjects” (727). This description could easily be applied to FPCF by adding environment or conservation to the social.

Some scholars working under the umbrella of neoliberal conservation describe this kind of green investment practice as growing, driven by investors seeking promising new sites, spaces, and processes for accumulation (e.g. Sullivan 2013, Büscher 2014). Büscher and Fletcher (2015) go as far to argue that these conservation investments represent a not only an attempt to save nature through capitalist efforts but also a kind of environmental fix for the most recent accumulation crisis. Similarly, Sullivan (2013) suggests conservation is being re-made as a “spectacular frontier for capital investment” (200). Yet rendering biodiversity conservation investable is hardly a smooth process. Those dollar bills are heavy and sticky: it is difficult to generate revenue from conservation and thus, difficult to make a robust asset class for investors – one with an attractive risk-return profile (Dempsey and Suarez 2016, Asinyabi 2018, although see Kay 2018 for a North American counter-story). As such, the capital circulating in FPCF is not—for the most part—market rate. Instead, FPCF is primarily populated by investors willing to invest in high-risk, low-return projects -- hardly a “rational” market position.

The arrested development of this asset-in-the-making challenges the typical political economic explanation – one driven by accumulative urges and broader political economic trends. FPCF does not have the same aims as what we call “extractivist finance”, finance that depletes ecosystems and erodes human well-being, unburdened by delivery of multiple impacts. Indeed, participants in conservation finance often position their kind of investing and profiting against “Wall Street” or “The City”. The conservation investment field is rife with born-again stories of people who turned away from Wall Street, or, as is increasingly common, people who entered business school armed with degrees in natural resource management or ecology. These are not corporate raiders of the type depicted in Karen Ho’s (2009) ethnography of Wall Street, where she emphasizes the rise of shareholder value. In her account, restructurings and lay-offs to "cut the fat", as well as the flexible labour culture of Wall Street, facilitated a cavalier attitude about job losses. In FPCF, as with social finance and millennial development, the purpose is often to create jobs and support livelihoods, with success measured not only in profits returned, but also of numbers of jobs created and hectares of land protected.

We could approach for-profit conservation financiers as if they were the same old bankers, scampering about to obtain the highest yield available. Instead, our approach is to take these actors, their motivations and investment practices seriously; we study and try to understand—as in Ho's 2009 study of Wall Street—the "everyday, embodied practices" (Ho 2009:294) of biodiversity asset making. The contemporary push to make assets is animated by the possibility for new kinds of accumulation, but we do not agree that it is "first and foremost about capital; generating value that is of use in and to contemporary capitalism," as Büscher argues (2014:203). As Mitchell and Sparke (2016) note about millennial philanthropy (see also Rosenham 2018), FPCF is also animated by recognition of fundamental problems in capitalism, as well as moral desires to "do good" and perhaps "right wrongs"; it is inspired less by Gordon Gekko than by Muhammad Yunus. Recognizing difference in intent does not mean all is well. Scholars of both millennial philanthropy like Mitchell and Sparke (2016) and Foucault-inspired scholars working in neoliberal conservation, such as Fletcher (2010) draw out the coercive aspects of seemingly softer governance mechanisms that use economic incentives to "behave in conservation-friendly ways" (Fletcher 2010, 204), in the process "critically transforming", "biological, linguistic, cultural and epistemological diversity" (Sullivan 2013, 200) in the direction of market or financialized subjectivities.

What conceptual framing of capitalism can allow us to hold on to these heterogeneous drivers, desires and rationalities while avoiding a Pollyannish vision of green financial intentions and the formidable disciplinary power wielded when concentrated wealth decides to save the planet? Complementing the scholarship on millennial philanthropy and neoliberal environmentality, we find much grist from post-colonial and feminist scholars of development and capitalism. Scholars like Gidwani (2008) and Tadiar (2015) refuse unifying, homogenizing theorizations of capitalist social relations that limit political options and erase social worlds, while not ignoring the structuring power of dominant socio-economic relations, norms and codes – including those of large financial institutions and concentrated wealth. Drawing from Marx, Althusser, and postcolonial critiques of historicism *a la* Chakrabarty, Gidwani theorizes capitalism "as an incomplete totality constantly striving for self-adequacy" (xxiii). Read through Gidwani, biodiversity conservation asset making, and indeed capitalism in general, requires us to understand a "complex whole", "*where production activity oriented to profit-taking for accumulation interdigitates with other value-creating or normative practices*" (2008:198; emphasis original). For example, conservation finance must be made to cohere with conservation science, which has its own truth-making logics and practices, ones that certainly can be colonial in orientation (Forsyth 2011), but not accumulative at their core (see also Li 2007). Conservation investments must return in money, but not only money – and that matters.

It is important to note that we are not calling conservation finance more than, or other than, capitalist (c.f. Gibson-Graham 2006). Rather, Gidwani's point – which we think is crucial - is that capitalist value and social relations are forged out of more than just the law of value. Capitalism is a system of production that is fully dominant, but its activities cannot be understood as "mere expressions of … capital" (2008:xxiv). As with Roy's (2010) study of microfinance, Gidwani pushes us to think about how capital "draws its force by attempting to divert or attach itself to other kinds of energy or logic—cultural, political, non-human—whose contributions, like those of history's subalterns, are erased from conventional accounts" (xix). FPCF makes it abundantly clear that capital cannot declare from on high, "Make assets and create profit from conservation!" Rather, the production of biodiversity conservation as an asset class involves the power of the investor class and the dealmakers trying to pick up the sticky dollar bills as they negotiate other bodies, values, epistemologies, and practices—work that must continue, relentlessly, to make the asset class.

Studying FPCF

Building from this conceptual base, our research traces attempts to suture capital to other energies and logics, with all the attendant challenges (Roy 2010). Our approach brings a detailed study of green finance across the value chain from top (investor) to tail (vested project) to literatures on neoliberal conservation and impact investing. We examine what happens throughout the value chain when actors attempt to address poverty and extinction through the cultivation of bankable projects. This involves following the money, yes, but we also pay close attention to the construction of socio-ecological conditions of production and reproduction necessary so for-profit capital can flow (see also Tsing 2000, Tadiar 2015), which includes attempts to build new market-oriented subjects (Fletcher 2010).

Our research is multi-sited, ranging from attendance at conferences such as the one in New York, to interviewing more than 40 dealmakers, managers, and other proponents of this nascent asset class in Africa, North America, and Europe, including a field trip to Kenya to visit three vested projects. In this paper, we drill down into one investment arrangement, focusing on an upstream institution "NatureVest" and the investments they have facilitated into Grazing Works. Our overarching research focuses on the work of middle managers, NGO employees and experts as they attempt to pick up those heavy dollar bills. Ours is not a study of community impacts, nor do we interview pastoralists who are the target producers.

One final note on methodological approach. While we prioritize a deep-dive into one circuit of conservation capital, it would be ahistorical and un-geographical of us to understand FPCF as *only* a set of everyday, embodied practices (c.f. Ho 2009); these asset-making processes do not occur independently of extractive finance or wider liberal capitalist social relations, present and past. Impact investing remains deeply reliant upon extractivist finance; the capital meant to deliver so-called "impact" arrives, as all capital does, "dripping blood and dirt from head to toe" (Federici 2004: 64, paraphrasing Marx). So while conservation finance distinguishes itself from extractive capital, it is made possible by both the longue durée of colonial-capitalist accumulation and contemporary extractivism. For example, investable conservation depends on the massive wealth of ultra-high-net-worth families who are able to invest with little return; they can afford to engage in high risk, low return investments precisely because of the system of accumulation they are seeking to transcend. Such concentrations of wealth are not only the result of wage labour exploitation, but also the "superexploitation" (Mies 1986) of a huge array of people, natures, and relations that are necessarily unvalued if capitalism is to be reproduced. If we are to understand the operations of biodiversity capital in the present, we must remain attuned to the historical processes of colonialism and difference-making that contribute to structuring contemporary mechanisms of conservation, which we turn to in the conclusion.

From New York City to GrazingWORKS

NatureVest, based in New York City, is the conservation investing unit of The Nature Conservancy (TNC).[3] It seeks private capital to support TNC work beyond charitable and state capital, to build economic independence from donors and the work associated with chasing the next benefactor. Reflecting growing relationships between big finance and big conservation (e.g. Sullivan 2013, MacDonald 2010), its advisory board includes high-profile financiers such as Doug Petno, head of Commercial Banking at JP Morgan Chase & Co., and Muneer Satter, a former Goldman Sachs partner. These experts provide NatureVest with advice, contacts and help to "think about tricky structures" (NV), but NatureVest is officially governed by the main board of TNC. NatureVest aims to place 1 billion USD in return-oriented conservation projects by 2020.[4]

NatureVest is a "conservation finance platform"; when we called it a "fund", our interviewee carefully corrected us: "We're a team within TNC structuring investment opportunities that support our mission and raise capital … we don't have a pool of capital" (NV). There is no point raising a bunch of capital to have it just sit there, she said, explaining, "I see a lot of evidence that the structuring of these transactions … is very complex, is very expensive, is very time consuming and is not recoverable through the economics of a transaction or even of a fund". As powerful as capital is, it cannot simply declare something like conservation to be profitable. Conservation as an accumulation strategy relies on alignments that are "complex", "expensive", or "time consuming". This kind of financing is more akin to barter than much-touted green financial markets, she went on to explain. "It's not like we're dealing with gold bullion and wool," the interviewee said (NV). "There's no secondary market … We're still some ways off from that".

Where can yield be found in conservation projects that largely rely on aids and grants? Conservation capital flowing through NatureVest relies on intimate knowledge of places and projects from TNC project staff on the ground; these people are their "origination engine" (NV). Deal origination is not easy: "Most of my colleagues are biologists or conservation scientists …

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[3] To cite these interviews, we use the initialisms of the organizations with which the interviewees were associated: upstream financial managers at NatureVest we use "NV", for a TNC staff member in East Africa we use "TNC", and for interviews with on-the-ground project staff, including the head of the social enterprise, we use "GW".

[4] To date, NV has helped place investment in mechanisms ranging from a debt-for-nature swap in the Seychelles to facilitating a stormwater credit trading program in Washington, D.C, totaling at least US$174.4 million in placement across six projects. The vast majority of that sum, US$134 million, went to land acquisitions in the northwestern United States, an activity that looks quite similar to standard Nature Conservancy practice but with an element of cost recovery (NatureVest, nd; Gunther 2015).

who have never thought about a transaction structure … You know, we talk about providing people with cash flow glasses" (NV). NatureVest staff screen and help structure deals proposed by TNC staff, but are also doing "a lot of capacity building", working closely with TNC field staff to "understand what makes a viable deal and how conservation can be done using investment capital" (NV). This arrangement is similar to what Roy (2010, 31) describes in microfinance, with emerging alliances between those who "control access to the poorest" (and we would add, conservation spaces) – often NGOs - and commercial banks who "control access to capital". TNC staff all over the world are being asked to don their "cash flow glasses", which means looking for revenue possibilities, a good regulatory environment, and the right "last mile execution partner that can actually ensure the conservation outcome" (NV). Such glasses have not tended to identify carbon market projects, reflecting a generalized sentiment among upstream financial managers the ecosystem service markets were not capable of enough revenue "to be the only source of payment on an investment" (NV). Rather, we saw an array of investments in conventional commodities like cattle meant to have conservation benefits.

Placing Conservation Capital in Kenya

<u>NGOs - the origination engine:</u> In 2015, NatureVest enabled an investment into GrazingWorks, a social enterprise based in Kenya's central-northern rangelands and headquartered in Lewa Conservancy (see figure 1). But the story really begins with those with NGOs who mediate access to people and space for international capital - in this case, The Nature Conservancy (TNC) and the Kenya-based Northern Rangelands Trust (NRT). TNC is interested in the region's wildlife, who rely on land shared with pastoralists and their cattle. According to TNC, the threats to wildlife stem from "population growth and climate change"; "[l]onger droughts and increased human-wildlife interactions threaten a balance that has held for generations" (Molinar and Kaiser 2015). In response, TNC focuses on changing grazing management because, as a TNC interviewee outlined, "the lack of grass, the competition of grass for livestock and for wildlife is the killer threat in this system in northern Kenya" (TNC).

INSERT FIGURE 1 HERE

This same TNC staff member originated the deal in question after having worked in the area for 15 years, building from preexisting relationships with NRT, the parent NGO (see figure

2). NRT's main goals are to "transform people's lives, secure peace and conserve natural resources" in Kenya (NRT, n.d.) and its primary approach to these goals is through the establishment and management of 33 community conservancies. These conservancies are extra-state governance structures that enforce organization-wide standards on land use, particularly related to livestock grazing. Creating and running conservancies is expensive; NRT documents show a total budget of approximately US$2.8 million, which works out to an average of around US$90,000 per conservancy (see NRT 2015). NRT hopes to expand its community conservation model across Kenya and East Africa but is highly dependent on aid money, which is never guaranteed. As such, NRT is constantly searching for other revenue sources for expansion, as well as to support the ongoing management of its existing conservancies, which are spread across more than 44,000 km^2 – 8% of Kenya's land mass.

INSERT FIGURE 2 HERE

The social enterprise: NRT-T: Toward this effort, NRT spun off a social enterprise, NRT-T, that focuses on finding "ways to create business lines that are in support and enabling the conservation and livelihood missions of [NRT]" (TNC). Interviewees saw the sustainable commodities activities of NRT-T, especially cattle production, as the organization's most promising initiatives, marking a shift away from fickle high-end tourism as the revenue driver for conservation in the region. One TNC representative emphasized that the organization's focus on livestock markets was crucial for unlocking support for conservation in communities:

> Your local Samburu pastoralists, who live in a mud hut in the middle of nowhere, who has got their cows as their asset … they just don't understand it [tourism]. But all of a sudden, when a conservation organization comes in and starts talking about the livestock market that's down the road instead of a three-day walk, and we're going to pay a premium back to the conservancy and we're going to do it repeatedly at the right time of year, and it's all going to be performance based, all of a sudden that conservation has relevance. (TNC)

The Nature Conservancy is providing NRT-T with technical support and grants, including grants for the livestock market business line, GrazingWorks (GW). To enable its expansion, NatureVest facilitated the injection of up to US$7 million into GrazingWorks. An interviewee (TNC) explained the origins of the investment, which began with an existing TNC donor open to a different kind of financial relationship. This donor-investor was prepared to contribute US$7 million to the business and wanted half of that to be a loan (at 1 percent interest), but was flexible on how the other half was structured, expressing willingness for it to be non-return oriented. The original deal labelled the other US$3.5 million as equity stake. As of submitting this article, only the loan has been extended, with the remaining US$3.5 million not yet deployed in anticipation of some key changes to GrazingWorks' business model. This willingness to accept a range of investment structures, including non-return investments, is indicative of the quasi-philanthropic-investment mindset of investors active in FPCF (e.g. a 'donor-investor'); however, the move to return-oriented investment remains important even if it is not seeking market rates of return – we elaborate on this in the next section.

The business, GrazingWorks, tries to make money so it can repay the loan while also achieving conservation and development goals. To do so, it functions as a cattle trader. It buys cattle from pastoral communities organized through the 33 NRT conservancies. These communities were already selling cattle at markets (several days walk away), but GrazingWorks brings the market to them: "So the livestock guy calls say, James at Kalama Conservancy and says, 'Hey, on June 13th we want to come do a market… So James, the conservancy manager, gets it all organized … [GrazingWorks] pays cash directly to the man or the woman who is selling the cows that day" (TNC).

After purchasing the cattle, GrazingWorks transports them to ranches and conservancies with better grass in the fertile Laikipia region, nestled between Kenya's central highlands and arid north. Land in this region is concentrated in the hands of white ranchers, international institutions, and Kenyan elites (a point we return to later). There the cattle are "finished" – fattened up and slaughtered. Ideally, GrazingWorks sells cattle for more than they cost to buy, transport, and fatten; it then invests money in buying more cattle. It is, from a distance, a straightforward M-C-M' circuit, albeit one mediated by numerous organizations - a community conservancy organized by an NGO funded by international aid does the work of organizing a cattle market that allows the social enterprise to access an input to production needed to generate return meant to pay back the investor.

Project managers reported that communities like this program because they can avoid risks they face when they walk their cattle to markets, during which "the animal's quality degrades, sometimes they lose weight as they're walking forty kilometers or so to a market"

(GW). Further, we were told that bringing the market to the communities avoids cattle theft, a significant problem in the area. Additionally, for every cow purchased GrazingWorks pays the community a small amount (approximately Ksh2000 or US$20) that they can invest in community projects like schooling or wells. And they also contribute to the conservancy fund. The market and the payments are important for the work of the "parent" NGO (NRT); they help to secure the legitimacy of the conservancy, of this governance relation, and of NRT. The sale is also subject to a county government cattle tax, which we were told is not regularly paid in other non-GrazingWorks cattle markets. In 2015, the project contributed a total of about Ksh1.1 million (around US$110,000) to county governments.

But what about conservation? First, bringing the market to conservancies provides more opportunities for herders to sell their cattle, thus potentially reducing the numbers of cattle, and overgrazing is viewed by conservationists as a key problem for wildlife in the area. But second, and more importantly, GrazingWorks only brings a cattle market to NRT conservancies who behave per the guidelines set out by NRT, who rates conservancies on criteria related to governance, financial transparency, grazing, and security. The cattle market is a "performance-based purchase", and "only conservancies that meet a certain high score become eligible to be participating in the livestock to markets program" (TNC). Those who don't make the grade do not have a market, "And they get frustrated and they call up and say, 'You've got to bring the market', and we say, 'Well, you've got to get your leadership figured out, there's a lot of corruption going on, or it's not working', or whatever" (TNC). That is, TNC and NRT like the market because it gives them a carrot to encourage communities to conduct themselves according to NRT amd TNC criteria. As TNC staff explained: "What we're trying to do is incent behavior change. We're trying to get people to graze their cows better, and to not nub every piece of grass down to the bare ground" (TNC).

The Intimate Mediations of For-Profit Biodiversity Conservation

An investable, bankable project, one able to produce revenue to pay investors, is realized here through intensifying existing economies and relationships—by rationalizing cattle markets. GrazingWorks is trying to reshape the existing cattle economies of pastoralists into a form that can yield for investors. But its business model is tied to the interests of NRT and TNC—NGOs whose aspirations cannot be understood as entirely capitalist. So the question is, how does capital attach itself to these other non-profit energies and logics? What work must be done to enable capital's "parasitic existence" (Gidwani 2008, xix)? Harnessing non-profit energies depends on intimate mediations of social relations between organizations, communities, people and cattle. It requires new visions of the 'conduct of conduct', diffused across organizations and spaces, through market and non-market mechanisms, and aimed at contrasting, perhaps irreconcilable, ends.

Our use of intimate mediation is inspired in general by feminist readings of capitalism that center and understand bodies as "mediating apparatuses… for the transaction and transmission of quantities and qualities of power and value", as site of negotiation between realms of social life that are "imperfectly aligned with the social field of exchange" (Tadiar 2015, 153, see also Federici 2004). Along these lines, Roy (2012) describes the value chain of micro-finance as involving "intimate mediations", value chains that involve much more than a debtor-lender relationship or simple circulations of money, as one involving deeply personal negotiations of "crafting selves" across large distances – for both lenders and for predominantly female recipients, across diverse ways of knowing, seeing, and living. Roy's emphasis on 'intimate mediations' and Tadiar's emphasis on the body as mediating apparatus resonates with Foucauldian-inspired scholars of neoliberal conservation (e.g. Fletcher 2010). In particular, Sullivan's 2013 paper in this journal draws from both Foucault and Federici, concerned with the kind of homogenizing forces of such tools and techniques that render phenomena - subjects, territories, social relationships - "intelligible and governable through insertion into financialized logics" (212). Roy, Tadiar and Gidwani compliment Sullivan's work by emphasizing incompleteness and struggle - the meditations - as well emphasizing omnipresent more-than-capitalist drivers (a point we draw out below).

As this work suggests, rendering conservation investable involves intimate work. It involves engagements with closely-held, personal-political values and identities of all those involved: beliefs about what makes a good or right way to live, work or invest; notions of wealth, honor and truth held by pastoralists and conservationists; and it also involves attempts to transform the way people reproduce themselves and, in our case, transform the bodily morphologies of cattle. These negotiations involve a wide range of actors, from pastoralists to conservation scientists to investment managers. Underlying this marriage of conservation and accumulation we found not spectacular new commodifications, but a rather massive effort of capacity building. In upstream banks and in on-the-ground projects, managers struggle to build needed infrastructures—the subjects, territories, and social relationships—able to accept return-generating and livelihood-producing investments into the restoration or protection of ecosystems.

To what end, these efforts? We've come to understand all this capacity building as animated by an ongoing dual (but not always coordinated) liberal and capitalist effort to eliminate waste. Waste, as Gidwani writes, plays a crucial role in market society/liberalism: waste is the "constitutive outside of political modernity", that "which must be continuously acted upon and improved" (2012: 278). Eradicating waste was central to the English enclosures and it was a justification for colonialism, land theft, and violence throughout the world (Gidwani 2012; Goldstein 2013; Marx 2006 [1841]), a project that involved the marking of the *right* use of land from the immoral, the wasteful. Think of the supposedly wasted lives of peasants toiling on degraded lands; lives deemed to be more efficiently lived as factory labourers and the land deemed better used for sheep production, transitions accomplished via enclosing land from common use. As Gidwani sees it, John Locke's "On Property" chapter is exemplary of a "relentless battle against inefficiencies, or waste, of all sorts" (2012:280), a battle that is simultaneously moral- and interest-based, as is the case with liberalism in general. "Capital always draws its economic vitality and moral sanction from programs to domesticate and eradicate waste," writes Gidwani (275).

Conservation finance can be understood similarly; it aims to create the conditions for distinctively economic and environmental conduct that is more compatible with accumulation, a project inseparable from transforming wasteful conduct of all sorts. Those sticky dollar bills on the sidewalk in the opening vignette represent widespread waste and inefficiencies that private capital is called upon to eliminate: wastes like degraded assets ripe for improvement, including so-called overgrazed lands, un-rationalized forests, depleted fisheries, and inefficient supply chains. But there is also the waste of charity, aid, and grants that are inefficiently distributed and lead to dependencies. And, entwined with the above, there are "deficient" people with inefficient ways of thinking and acting who degrade assets: pastoralists or local communities, but also NGO actors. Through the steady application of capitalist discipline and incentives, conservation finance seeks to rectify all these inefficiencies—as Gidwani would say, to "right" and "purge" “various forms of waste—unruly conducts, things, and natures” (2008:xx) - not only for the sake of accumulation, but also driven by a moral imperatives.[5]

An analytic of waste helps us stay attuned to both efforts to intervene in conduct – as in neoliberal environmentality (Fletcher 2010) – alongside efforts to produce financial return, a relationship that sometimes aligns easily and other times is filled with frictions. To illustrate this argument, we move back to the empirics. We focus on attempts to produce three ideal types: *NGO economicus, homo economicus plus,* and *bos Taurus economicus.*

NGO economicus

Rationalizing NGOs is a central component of for-profit biodiversity finance. There are various targets here—organizations and individuals—beginning with TNC staff themselves, who are adjusting to their cash flow glasses. One TNC staff member explained how the NatureVest advisory board, loaded with business and financial experts, led him to become more judicious in evaluating the investment potential of projects. By taking a debt stake, and perhaps an equity position in the future, the investor, by way of TNC, is able to enact greater discipline on conservation projects and partners (as well as on itself):

> [O]ften a loan structure forces the project to be more critical about how we’re measuring success, both in terms of livelihood and biodiversity goals. And maybe be a little bit tighter on the design and the implementation of that project than if it were just a grant … When you know you’ve got to pay that money back, you know you can’t just say, ‘Uh, well, we didn’t make enough money this quarter selling cows, so we’ll try and do better next time’. It’s actually, ‘No, we’ve got a deficit, we’ve got to make up for that’. So I think it introduces more rigour which … helps us create more sustainable thinking within the systems and the cultures with which we’re trying to do this. (TNC)

The director of the social enterprise spin-off (GW), who came from the private sector, repeatedly emphasized the need to eradicate the donor mindset, which was leading to inefficiencies in the organization. This shift to revenue generation and away from charity/aid was a site of conflict in NRT and within the communities, but the director pushed back at those critical of the enterprise approach. Given that donor support is never guaranteed, he suggested that the long-term resiliency of NRT-conservancies must involve self-sustaining economies. This

[5] Fletcher (2010) discusses neoliberal environmentality as moving away from moral calculus towards that of cost-benefit (see page 175), while (often deeply colonial) morality is front and center in Gidwani’s analysis and throughout the efforts of participants in FPCF, including in “upstream” actors like NGOs and financial institutions.

point was also made by a representative of a major NRT donor we happened to meet on our trip to NRT-T headquarters. We were told that the donor mindset was clouding the decision-making of GrazingWorks, too, as management realized that they were "paying well over the market rate" for cattle, a financially unsustainable scenario, especially considering all the additional costs: "If you put the 2000 bob [Ksh] [paid to the conservancy] plus the trekking, plus all the injections ... and all the anti-foot and mouth … and renting of land to graze them on, and all these other things, your costs are massive" (GW).

Furthermore, the cattle they were buying were too small to sell competitively into the beef market, so they were often forced to sell at a loss. This problem of cattle size lingers over the entire business: "Our first job since we've looked at the 6000-and-something head is we've established that 20 percent of that … are complete no-hopers. So it doesn't matter what we do—they have the frame of a pygmy" (GW). Since the business model involves fattening the cattle at private ranches, another major cost is the fee paid to these landowners. These ranchers, an interviewee said, "put our cattle onto the poorest possible grass that they could find".

After overpaying for cattle, which then had access to only low-quality grass, GrazingWorks "would then try and join the scrum that is the sales of cattle in Nairobi, and try and make a profit. It was losing its shirt" (GW). Making *NGO economicus* requires aligning return-oriented discipline with a pre-existing set of relationships and organizational cultures that are staunchly *non-return* oriented. Indeed, management reported receiving mixed messages from board members about what he was supposed to do, about whether the GrazingWorks was a "social impact program … that brings huge conservation leverage to communities" where you "don't have to worry about making a profit" or it was "a commercial operation, [where] if you don't make profit, you're fired". The former was a message being delivered by NRT; the latter was being delivered by the board of GrazingWorks. What emerges is a complex dance – intimate mediations - between communities, NGO, and investor goals. Upstream investors become dependent on honing "the disciplinary hand" (Roy 2010, 55) of downstream NGO or quasi-NGO-social enterprise managers to meet targets and produce impact: financial, social, and environmental.

Fostering homo economicus plus and bos Taurus economicus

Generating return through GrazingWorks also relies on transforming the conduct of individuals and communities, particularly changing the behavior of the men who typically care for and manage the cattle. The idealized man envisioned by GrazingWorks is one who owns fewer cattle and wisely manages his assets to care for himself and his family, a resilient pastoralist able to cope with periodic drought, climate change, and the longer durée of colonial-capitalist arrangements in the region (while leaving more grass for wildlife). We describe this ideal type as *homo economicus plus*, with the "plus" signaling a subject who behaves rationally in economic and environmental terms as delimited by NRT and TNC.

Reducing cattle numbers is a difficult proposition when, as our interviewee explained to us, cattle can be a sign of wealth, tied up with masculinity and marriage prospects: "We've got to change that … But it's not a one-day effort. This is going to take several years … The younger people are … much more flexible in the way they think. Because the old[er] people still feel that their cattle are everything. Their sons, who are maybe 40 years old, are learning there's more to life than having cattle that die in a drought" (GW). These attempts to improve a so-called degraded asset (the grasslands that the NGOs say are overgrazed) center on re-making the herder-cattle relation. But it is critical to note that the goal is not to eliminate pastoralism or dispossess pastoralists (as has been the case and continues to be elsewhere), but rather to modify it, to make a "more modern, and more, much more, self-dependent … resilient" pastoralism (GW). Intimate mediations, indeed!

Toward *bos Taurus economicus:* Remediating perceived wasteful conduct through intimate mediations involves two key moves. The first is to transform pastoralists' relationship with *bos Taurus* into one of quality, not only quantity. At GrazingWorks, inciting this change involves demonstrating to pastoralists that quality (bigger) cattle fetch more money, and being consistent in this approach; trust is crucial, we were told many times. When we were in Kenya, GrazingWorks was beginning to lower prices and purchase selectively. Unsurprisingly, this shift led to push-back from the community and NRT. We observed the director of GW caught between trying to make a go of this business and the concerns of NRT staff, who worried that price reductions would affect community compliance. That is, the elimination of waste in one register might lead to further wasteful conduct in another. Purchase price was a point of debate within the NRT-T board. Should they should pay pastoralists the lowest price they would accept for the cows in order to extract maximum profit, which could then be re-invested in buying more cattle? Or should they pay as much as they could, to ensure the pastoralists benefit as much as possible? The debate demonstrates struggles in aligning conservation and finance, but also the power relations at play in what is framed as community based conservation: who is deciding what conduct is in need of transformation and what is considered waste in need of remediation?

GrazingWorks is undertaking agricultural extension activities, bringing information to communities about illnesses in cattle and how to improve cattle quality. Facilitating the production of *bos Taurus economicus* involves education on cattle nutrition but also on genetic improvement: "These cattle, because of the years of truly harsh conditions, and inbreeding and everything else, are rats - very small. The same type of cattle in Kitali in the west are 100 kilos bigger, because of much better genetics, proper nourishment, and education on disease …. So, it is possible to get these to get like that. But these [cattle] have learned to be able to eat rocks instead of grass as sometimes that's all there is" (GW). This same interviewee expressed caution about these efforts: "We've got to be very careful how we play with genetics, because there's no point in putting in exotic breeds genetics into these animals and in the first drought they all die" (GW).

<u>More Money, More Resilience:</u> The second move in remaking the pastoralist-cattle relation involves encouraging community members to store wealth in the form of money, not only cattle. If pastoralists could be convinced to "reduce the size of their herd from 1000 to 500", then the proceeds could be invested into member owned cooperatives, which would give the pastoralist more options—"to pay for school fees, medical issues, material goods, and so on" (GW). This store of money, we were told, could also allow pastoralists to become resilient. During droughts they could purchase food needed to maintain cattle or potentially even capitalize from the dry conditions: "Because as the drought is getting bad and cattle are dying, you can pick them up for just a few dollars, and use the money to buy food and keep them alive" (GW), and then re-sell the cattle at a higher price when the rains return. The aim is to encourage herders to diligently manage their own assets in order to support their families in coping with an insecure, drought-filled future *within the parameters of the conservation scheme*. Hence: *homo economicus* plus. Money is a crucial ingredient of resilience, entering into the picture as the "general substance of

survival for all, and at the same time the social product of all" (Marx, quoted in Goldstein 2013:369).

These attempts to turn pastoralists away from wasteful conduct and toward behaviors that are more amenable to both market society and conservation are power laden and certainly not new. Pastoralists have long been identified as the source of various inefficiencies and deficiencies, especially in their nomadism, while also being a target of state and NGO narratives of "irrational and environmentally destructive" land use (Upton 2014: 211)—narratives that often lack evidence (e.g. Oxfam et al. 2016; Benjaminsen and Bryceson 2012; Benjaminsen et al. 2013). There is more research needed to explicate the knowledge politics that consistently places the burden of conservation issues on the pastoralist and his herd, an understanding now being linked to return-oriented capital in the shape of GrazingWorks. There is also work to be done examining community impacts of GrazingWorks. But staying with the notion of intimate mediations, and based on the insights of managers trying to wrestle value out of the project, we do know that communities are not passive recipients of these projects. The NGOs and the enterprises hoping to shape behavior in the region must relentlessly re-negotiate their legitimacy with the communities. In these ways, the communities clearly shape the project at the same time as the project attempts to shape them – intimate mediations abound.

Producing return through difference?

In a recent paper Kelly Kay (2018) asks, "If finance is not productive in and of itself, from where does conservation finance derive its profits?" (168). Answers to this question have tended to emphasize the processes of privatization, marketization, and making component parts of nature more "sliceable-diceable-sellable" (Lohman 2010:227). "To further bring conservation into capitalism, then," write Büscher et al. (2012:8) "is to lay bare the various ecosystemic threads and linkages so that they can be further subjected to separation, marketization, and alienation, albeit in the service of conservation rhetoric". Büscher et al. are referring to the extensive practices of making non-marketized entities exchangeable, perhaps through the making of ecosystem services units to sell or trade or attempts to offset biodiversity damaged here with biodiversity conserved over there. For her part, Kay's (2018) study of the US conservation finance world found profits generated in ways similar to the hostile take-overs of the 1980s, by buying up degraded assets, improving them, and selling component parts, including proceeds from ecological restoration.

But GrazingWorks does not seek a new biodiversity unit that can bear capitalist value. Nor does it rely on creating or selling private property relations, old or new (from land to ecosystem services). The act of making conservation investable here is not about "separating liquid forms of conserved nature from the material and social conditions that produced them" (Büscher 2014:30). Indeed, it is more about *solidifying* a particular mode of "green" pastoral production and reproduction on the landscape. Conservationists cannot put up the fences and kick out the pastoralists: they not only need to avoid the negative attention that comes with conservation dispossessions, but they also view pastoralism as compatible with wildlife, with some modifications. That is, there is more going on here than these processes of commodification, measurement, and fungibility.

Writing about financialized conservation, Sullivan (2013) argues that the insertion of return-oriented logics and capital might facilitate the production of market-oriented subjects and bodies (see also Fletcher 2010). Our work provides evidence to her argument; FPCF requires capacity building "all the way down", including intimate but also tenuous, conflictual efforts to remake bodies, social relations and territories. Sullivan further argues that such financialized processes "constitute a massive rendering mute… of both nonhuman nature and of the nature knowledges and value practices associated with non-capitalist ways of living" (212). But as we note above, in this case the attempted production of green capitalist value is not a project of extinguishing other-than-capitalist social relations nor wholesale dispossession. It rather aims, much more precisely, to modify and harness existing NGO and pastoral relations. And in the case of GrazingWorks, all these efforts must not disrupt or transform the pastoral way of life *too much* (we suggest this is also the case for NGO *economicus*, which cannot turn towards profit-seeking too much either). By emphasizing this point, again, we are not saying that FPCF is outside of capitalism. Rather, returning to Gidwani, we are saying that return-oriented conservation can exist through or alongside cultural, economic, epistemological and/or ontological difference: "Within its heterogeneous fractions enabled by variegated circuits of human and nonhuman joinings, capital has always led a parasitic existence. It has always contained multiple histories. And each of these histories, *even when life is structured-in-dominance to capitalist value*, has remained an interlacing of multiple value-productions that are non-capital" (229). And such differences – including so-called "non-capitalist" energies, spaces, ontologies, as Anna Tsing (2009) writes, can both make "supply chain capitalism work, and upon occasion, get… in its way" (171). Following from this, we suggest that understanding FPCF and the broader terrain of neoliberal conservation requires not a simple accounting of non-capitalist to capitalist transition, but rather more nuanced, complex tracing of evolving relationships and *struggles* between capital, "non-capital", and difference.

Such relationships are not proximate in space or time. In the final section of the paper we telescope out to think about the challenges facing GrazingWorks and return-oriented conservation capital; it is crucial to situate the everyday practices of biodiversity asset-making in longer histories of colonial relationships and capital flows.

Why are the dollar bills so sticky?

Making biodiversity investable is a tenuous affair. The Credit Suisse executive had it right: it's damn hard to pick up the dollar bills. As an upstream actor in our case study describes, GrazingWorks "is definitely struggling to execute and scale at the pace that we had hoped". She went on, "It's fascinating, the challenges that they are facing, and really shows that anything other than a zero percent loan from TNC—which is ultimately how it's structured—would be very hard for them to manage. So, I think the highly charitable structure of the investment is important" (NV). This quote and our research findings suggest that the challenges facing GrazingWorks, and the broader project of FPCF are structural, encompassing spatio-temporal problems that are not easily overcome.

Arrhythmias of conservation finance

In many ways, conservation and accumulation seem to operate on different rhythms; return-oriented conservation has trouble adhering to the temporalities of contemporary capitalism. Bringing bankable projects to market takes time—too much time by modern investment standards. David Chen, one of the key players in this field, made this point repeatedly at the 2016 Conservation Finance conference: "We need to speed opportunities to the market, we need to move from 10 to 15 years to maturity to 5 years. Time is crucial". Even when one does finally broker a deal, the capital can be hard to turn over. In some cases, this is because there is hardly a market for the commodity produced, such as for forest carbon (Asiyanbi, 2018), but this difficulty arises even with commodities like cattle. Indeed, capital turnover time was a key problem for GrazingWorks. One informant told us that the organization had 6000 cows, "sitting up … fattening still"; all the cash "is in the commodity. It's all in the live cow". The business is struggling to move cows through "much faster", "to be able to free up that cash" (GW). We were told that this difficulty is due to the quality of the cattle and the challenges of finding butchers in Nairobi, but also because the market is saturated in part due to Kenyans' growing concerns with the health impacts of red meat.

To speed up time to market, GrazingWorks must speed up the making of *bos Taurus economicus.* But this involves a longer project of genetic and rangeland improvement, one that is tied to changing pastoralist notions of wealth away from quantity of cattle and toward "quality"—and also toward wealth as money. Such transformations of conduct are not quick projects, as we were told repeatedly, leading us to wonder how or if this project would ever perform as a market-rate investment.

But we must not underestimate the creativity of capitalist actors in rendering capitalist nature. To deal with its problem of slow capital turnover, GrazingWorks was beginning to tie payments for cattle grazing on private land to cattle weight gain (rather than flat monthly payments). As a result, one ranch had increased monthly cattle weight gain from 7 to 15 kilograms, an increase achieved by grazing the cattle on better grass and feeding them cattle supplements.

Settler colonial hauntings of conservation finance

When we were in Kenya in the summer of 2016, the spectre of drought was on the GrazingWorks CEO's mind: "[T]he thing that concerns me more than anything, that I can't sleep about at the moment, is drought. Drought is guaranteed in Kenya". The challenge, the CEO explained, is the lack of access to land and stores of feed for cattle during a drought: "And we have absolutely no land. And everybody who has signed contracts with me … [to graze] cattle will say ... if there's a drought, take your cattle and go. Now what am I going to do?" (GW). Here the CEO is referring to the contracts with private landholders in the Laikipia region (where GrazingWorks is headquartered) needed to fatten cattle.

Sure enough, 2017 brought drought and the results were explosive: approximately 10,000 herders drove 135,000 cattle and over 200,000 sheep and goats onto ranches and conservancies into Laikipia. Under the duress of drought, long-standing land inequities became a live-wire—especially the more fertile land held by white and elite land owners. A third of Laikipia is held in large-scale ranches or conservancies—or in properties with a mix of cattle and high-end tourism—with many of these lands owned by whites (Burke 2017).[6] A controversial MP representing the region, Mathew Lempurkel, stated: "In my constituency there are a million hectares owned by 36 settlers. It's very clear, it is white and black, and there's historical injustices" (McIntyre 2017). This anger, voiced by prominent local politicians with some link to the then-upcoming elections, gave way to violence and arson on private ranches. One estimate put the number killed at 25 to 50 people (Burke 2017). The so-called "land invasions" are not entirely on black and white lines; black Kenyans also had to abandon farms in the region (*Economist* 2017). Further, there were reports of wildlife deaths. One ranch claimed a 70 percent loss in wildlife in a single year (Kahumbu 2017).

In June 2017, a mysterious report surfaced (evidently written by a British anthropologist), which blamed the conflict in Laikipia not on drought but on political grandstanding and power grabs arising from the devolution of power in Kenya following the introduction of the new constitution in 2013 (*The Star* 2017, unattributed report 2017). Others insist that the situation arises from unaddressed colonial injustices. Christine Mungai (2017) writes that it "was violence—guns, coercion and deceit—that pushed these people [Maasai and Samburu pastoralists] out and created the 'emptiness' so beloved of white settlers" in Laikipia. As Paula Kahumbu, a prominent Kenyan environmentalist suggests: "The problem of land distribution will not go away. Even after the election it will continue to fester and erupt. As long as people think there has been an injustice, there will be a problem" (quoted in Burke 2017). A definitive conclusion about the source of the conflict is beyond our research, but we can say that the events of 2017 added complications and challenges to GrazingWork's business and conservation goals.

For us, this situation exemplifies that attempts to make "green" financial assets are in constant negotiation with previous or other regimes of accumulation—colonial and extractive regimes that conservation finance is trying to separate itself from. How? We suggest that the

[6] A full history of the region's land politics is beyond the scope of the paper. But in brief, the current land regime in Laikipia stems back to the arrival of the British. In 1911, Northern Maasai were largely dispossessed from their land in Laikipia, and Europeans settled in the region into large private ranches known as the "White Highlands". When colonialism officially ended, land transfer schemes were created to facilitate movement of title from settlers to Kenyans. This story is complex, but some settlers stayed—with large tracts of land—and over time, much of the fertile land went to elites and politically connected Kenyans (Bond and Mkutu 2017; Rutten 1997).

GrazingWorks accumulation and environmental effort simultaneously relies on and is challenged by long-standing colonial-capitalist arrangements in the region: *relies on* because GrazingWORKS depends on the private ranches with good grasses and often long colonial roots for its cattle fattening[7]; *is challenged* because the same colonial-capitalist legacies are making return generation difficult for GrazingWorks, as the mass movement of cattle into the private ranches demonstrates. In these ways, GrazingWorks is at once reliant on, and haunted by, colonialism; previous regimes of accumulation both support and confound attempts to pick up those hundred thousand dollar bills.

We suggest a similar tension exists throughout for-profit conservation finance, and philanthro-capitalism and millennial philanthropy more broadly (Holmes 2013), as attempts to make conservation return are made possible by the existence of investors willing and able to take less-than-market returns: people whose wealth are themselves a product of decades (sometimes centuries) of extractive finance. The challenges facing biodiversity conservation asset making stem, in part, from the difficulty of aligning their multiple value-seeking goals with the rhythms of mainstream capitalism. If we look deeper, we see that these investments may also be confronting capitalism's long-standing reliance on superexploited "colonized others" (Mies 1986). So are those hundred thousand dollar bills really stuck to the sidewalk, just waiting to be picked up through diligent, efficient entrepreneurs? Or do those bills comprise the pavement itself, the bedrock that must be present but never included in the accumulative economy that rests upon it?

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[7] One of Kenya's most influential British settlers, Lord Delamere, began ranching on Ol Pejeta in the 1940s. During the colonial era, it was a successful beef ranch; then in the 1980s, the ranch established a game reserve on part of the property, expanding this reserve over time. Flora and Fauna International—an NGO based in London—purchased the ranch in 2003.

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Figure 1 – Map

Figure 2 – Diagram of financing relations