Biodiversity Offsetting and Conservation: Reframing Nature to Save It

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Abstract

Biodiversity offsetting involves the balancing of biodiversity loss in one place (and at one time) by an equivalent biodiversity gain elsewhere (an outcome referred to as 'No Net Loss'). The conservation science literature has chiefly addressed the extent to which biodiversity offsets can serve as a conservation tool focusing on the technical challenges of its implementation. However, offsetting has more profound implications than this technical approach suggests. In this paper we introduce the concept of policy frames, and use it to identify four ways in which non-human nature and its conservation are reframed by offsetting. First, offsetting reframes nature in terms of isolated biodiversity 'units' that can be simply defined, measured and exchanged across time and space to achieve equivalence between ecological losses and gains. Second, it reframes biodiversity as lacking locational specificity, ignoring broader dimensions of place and deepening a nature-culture and nature-society divide. Third, it reframes conservation as an exchange of credits implying that the value of non-human nature can be set by price. Fourth, it ties conservation to land development and economic growth, foreshadowing and bypassing an oppositional position. We conclude that by presenting offsetting as a technical issue, the problem of biodiversity loss due to development is depoliticised. As a result the possibility of opposing and challenging environmental destruction is foreclosed, and a dystopian future of continued biodiversity loss is presented as the only alternative.

Introduction

Offsetting is rapidly expanding as a promising policy for allowing development and economic growth while achieving a 'No Net Loss' (NNL) of biodiversity. This expansion is international. One of its key moments was the establishment of the Business and Biodiversity Offsets Programme (BBOP) in 2004 by a partnership of companies, financial institutions, government agencies, business and non-governmental organizations (http://bbop.forest-trends.org/). By 2011, at least 72 countries had either passed or were developing laws or policies related to biodiversity offsets or NNL (Madsen et al., 2011), and the EU has held a public consultation on a NNL policy (http://ec.europa.eu/environment/consultations/nnl_en.htm). In 2014, BBOP co-organised a conference in London with the Star Trek inspired title *To No Net Loss of Biodiversity and Beyond*. This was pitched as 'the first global conference on approaches to avoid, minimise, restore, and offset biodiversity loss', and brought together various corporations, governments and non-governmental organisations (http://bbop.forest-trends.org/events/no-net-loss/).

Biodiversity offsets are defined as 'measurable conservation outcomes designed to compensate for significant residual adverse biodiversity impacts arising from project development after appropriate prevention and mitigation measures have been taken' (BBOP, 2012a, p. 13). In effect, offsetting seeks to compensate losses to biodiversity in one place (and at one time) by creating equivalent gains elsewhere. Thus forest cleared to make way for a development project might be compensated through the restoration of forest (or prevention of forest loss) somewhere else and in some cases at a later time. The appeal of offsetting to conservationists is its potential, when taken as part of the so-called 'mitigation hierarchy' (BBOP, 2009), to deliver a NNL (or net gain) conservation outcome (BBOP, 2012a) by keeping a balance between nature destroyed by development and nature for conservation. The attraction of offsetting to developers is that it provides a practical, cost-effective and

predictable process to address the environmental impacts of development while enabling the relocation of environmental compensation across space and time.

The conservation science literature has so far focused on the technical challenges of offsetting's implementation. There has been discussion of ways to equate ecological losses and gains in development and offset sites, to select appropriate biodiversity 'currencies', accounting systems and exchange rules, to address practical challenges for adequate monitoring, compliance and post-implementation evaluation and to deal with 'perverse' incentives (e.g. Bull et al., 2013; Gardner et al., 2013; Gordon et al., 2015; Pilgrim et al., 2013). Despite criticisms (e.g. Maron et al., 2012; Quétier and Lavorel, 2011) this literature tends to approach offsetting as a neutral conservation tool and take for granted offsetting's role as a solution to the problem of the environmental impacts of development or even as a means to achieve 'sustainable development' (e.g. Bayon et al., 2008; Gordon et al., 2015).

The implications of offsetting are more substantial than these essentially technical discussions suggest. The underlying promise of offsetting, namely the production of 'equivalent natures' (Apostolopoulou and Adams, under revision), has the potential to bring about a profound change both to the conception of nature and the practice of conservation. Here, we consider these changes and their implications, using the concept of policy frames (Entman, 1993). We define framing as the act of defining problems, diagnosing their causes, making moral judgments and suggesting remedies (Tuchman, 1978; Apostolopoulou & Paloniemi, 2012). Focusing on policy frames can shed light on the implicit politics of presenting (and chiefly analysing) offsetting as neutral and free of ideology. The latter is important since framing is a critical and unavoidable element of policy-making and thus an understanding of the way a policy issue is framed is essential if the consequent policy options and underlying value struggles (Sullivan & Harris, 2015) are to be unravelled and properly

assessed. The way nature is discussed in debates about development (as when it is set within a 'frame' of thinking about offsetting) affects the chances that it will survive or be destroyed.

As Monbiot (2014) observes, offsetting reframes the issue of conservation: 'those who believe they can protect nature by adopting this frame are stepping into a trap their opponents have set' (see also Lakoff, 2010). In this paper, we identify four ways in which offsetting achieves such a reframing of biodiversity and its conservation and we explore the ways it changes the options for conservation by bringing in and disallowing certain kinds of arguments.

Reframing Biodiversity Conservation

(1) Offsetting reframes non-human nature as a score of isolated biodiversity 'units'

In offsetting, biodiversity and ecosystems are defined, valued and characterized in terms of quantitative 'units' or 'credits' that are used to represent selected ecosystem attributes and are considered exchangeable across space and time (see e.g. Defra, 2013; DEC, 2006). The selection of units of measurement, currencies and rules for exchanges between different sites has proven inherently challenging (Tucker et al., 2013). The attempt to design simple and practical offset metrics has often made them highly reductionist (e.g. the simple habitat area ratio based metrics widely used in Germany and the US and even more sophisticated metrics such as the Australian Habitat Hectares offsetting scheme initially developed in Victoria, Tucker et al., 2013; IEEP, 2014). In the UK concerns have been raised that the offsetting process will resemble a fast 'box-ticking exercise' that is inadequate to assess a site's year-round biodiversity (see Kinver, 2013).

The creation of offset metrics to represent ecological losses and gains through numerical scores (see http://www.environmentbank.com/impact-calculator.php) involves a narrowing of focus to isolated parts of an ecosystem. This narrowing is fundamental to

offsetting calculations and reproduces the reductionist myth of simplicity (see Levins and Lewontin, 1980). This is inherently unsatisfactory and impoverishes the advance of theory, because it traps ecology in reductionist strategies involving a continuous retreat from the study of intrinsically complex systems (Levins and Lewontin, 1980). Ecosystems are dialectically composed, dynamic, multi-layered systems that do not form simple mappable units (Boitani et al., 2014), and biodiversity is non-interchangeable in terms of type, space and time (Walker et al., 2009). No single surrogate (or even a series of them) can entirely capture 'biodiversity', since not all biodiversity attributes are measurable, and therefore it is impossible to guarantee that no biodiversity is lost (and thus that NNL is actually achieved) (BBOP, 2012b; Bull et al., 2013; Gardner et al., 2013).

The use of reductionist metrics is common in conservation but the way they are used in offsetting is distinctive in several critical ways. First, offsetting metrics incorporate assumptions about future states of nature, both in terms of future rates of loss (which conservation action can be predicted to slow, see Seagle 2012), and in terms of the potential of ecological restoration. In reframing biodiversity as fully replaceable and re-creatable by human action, offsetting deliberately confuses the state of ecological restoration science and practice with its aspiration. Restoration ecology has advanced greatly in sophistication, but it is 'not a magic bullet that provides instant ecosystems of the desired type' (Menz et al., 2013). Techniques such as the relocation of soils from Ancient Woodland on the route of the HS2 high-speed train in the UK, are at best experimental (HS2, 2013) and many studies have proven that the majority of offsets do not deliver what they promise (e.g. Kettlewell et al., 2008). Second, as a standard procedure, offsetting conflates the state of nature with other factors, for example applying crude 'multipliers' to address issues such as time lags between biodiversity loss and future gain in an offset site (Eftec, IEEP et al., 2010; HS2, 2013), or the distance between the development and offset sites (IEEP, 2014). Such calculations raise

fundamental problems of incommensurability since such issues cannot possibly be adequately addressed by simply increasing the number of credits required to offset the damage caused in a development site.

Third, the crude reductionism of offsetting metrics is not a 'technical' issue that more scientific data can resolve. On the contrary, they are defining characteristics of the offsetting logic itself. The use of offsetting to frame the battle between conservation and development as a 'win-win' scenario depends completely on the reductionism of its metrics. Offsetting is useful precisely because the efficiency and cost-effectiveness of its methodologies make the quantification of losses and gains in planning more straightforward, less costly and less time-consuming than alternative approaches (e.g. Defra, 2013). Offsetting's purpose is not conservation as such, but to 'give greater certainty for businesses' in their development planning (Commonwealth of Australia, 2012, p. 4). Current international 'best practice' in offsetting (Gordon et al., 2015) is represented by the Business and Biodiversity Offsets Programme (BBOP), launched by Forest Trends, an organisation created to promote market-based approaches to conservation and bridge 'traditional divides' between industry, donors and environmental groups (http://www.forest-trends.org/page.php?id=153). Ecosystems are sliced into biodiversity units precisely to simplify the measurement of development impacts and these units are purposefully separated from their ecological context through functional and spatial abstraction (see Robertson, 2004; Sullivan, 2013a; see also Bumpus and Liverman, 2008 about carbon offsets) to become 'equivalent' and thus to allow their exchange across space and time. Offsetting champions mechanistic reductionism to quantify

biodiversity in a way that makes it possible to speak about it 'in business terms' (e.g. Baker, 2014) and make non-human nature something 'that capital can see' (Robertson, 2006)[1].

(2) Offsetting removes the place specificity of nature

In its representation of non-human nature as biodiversity 'units' (discussed in the previous section), offsetting explicitly reframes the links between biodiversity, conservation and place at the most fundamental level by reworking nature's specific relation to place. Location is critical to biodiversity both in biogeographic terms (biodiversity reflects the geophysical context, Comer et al., 2015), and in cultural terms (biodiversity *in situ* reflects historical human management or impact, and is reflected in extant cultural values). Estimations of conservation value have long recognized the importance of history, culture and place in conservation sites (e.g. criteria of typicality, recorded history, position in an ecological or geographical unit, and intrinsic appeal, Ratcliffe, 1977). In offsetting, the biological and social characteristics of places are treated only as representative of a 'standard category' that can be replicated in the offset site (for example the Australian government argues that offsets can in some circumstances also compensate for adverse impacts to heritage values, Commonwealth of Australia, 2012). Thus although the need to consider the cultural or social values of biodiversity is often recognized by the advocates of offsetting (e.g. BBOP, 2012a; DEC, 2006), such factors are typically absent in technical debates. The abstracted biodiversity units used in offset metrics (e.g. Tucker et al., 2013) take no account of the cultural or historical importance of place and the social ties between communities and particular habitats and ecosystems.

[1] Interestingly, Robertson (2006, p. 384) notes that the 'rapid assessment methods' (RAMs) that are currently used in wetland mitigation banking are the descendants of much more complex RAMs developed in the early 1980s when wetland banking was performed only noncommercially.

This is not, however, just a technical limitation of the metrics in use, but rather a consequence of the way offsetting's core logic reframes nature's place. By denying social history to landscapes, offsetting promotes a 'techno-managerial' vision for conservation (Adams, 2015; c.f. http://www.ecomodernism.org/manifesto/) and frames the latter within a 'flat world' (see Friedman, 2005), where exchanges of ecological losses and gains can be separated from their ecological, cultural, socio-economic and political context. Offsetting often involves a notional trade with offset sites far from the development sites (e.g. Robertson, 2000; see also the EU discussion on 'offset trades' across national borders, European Commission, 2013). In the process, cultural engagements with place are disrupted or lost, and public access to conservation sites, biodiversity and more generally to green spaces may be changed (lost in one place, gained somewhere else) or restricted (e.g. if an accessible habitat is replaced with one under strict protection, see Seagle, 2012). Under the surface of an apparently technical process to calculate equivalence, offsetting in fact establishes a new policy frame that has the potential to create outcomes that are socially and spatially uneven (since there are always specific winners and losers to such exchanges of environmental 'goods' and 'bads', see e.g. Ruhl & Salzman, 2006; Sullivan, 2013a). Even though offset metrics may calculate the importance of the places lost only in terms of ecological units, they do so by portraying nature as external to society and by ignoring any links between people and nature, the result is a total remaking of places (both in the development and the offset sites) in a way that reflects an increasing social reproduction of non-human nature driven by specific corporative interests and not by concerns over socio-environmental and spatial justice.

(3) Offsetting reframes conservation as an exchange of credits

Biodiversity offsetting is a part of the fundamental shift in the way we think about non-human nature towards the economic valuation of ecosystem 'services' and 'natural capital' (Sukhdev et al., 2014; c.f. http://www.naturalcapitalforum.com/about). In the language of offsetting, pre-existing conservation sites are reframed as territories providing ecosystem services (ten Kate et al., 2004) and ecological credits are framed as 'products' owned by 'prospecting sellers' who are in turn advised how to know better 'the value' of their product when selling it to 'prospecting buyers' (Roberts & Waage, 2007). Conservation activities are thus becoming part of confidential commercial transactions over land for the creation of offset sites (see "Conservation Bank Agreements", http://www.ecosystemmarketplace.com).

While the translation of nature from the scientific language of ecosystems into the financial language of capital is generic, reflecting the wider shift towards neoliberal approaches to conservation (Apostolopoulou & Adams, 2015; Büscher et al., 2012), offsetting is quite specific in its dependence on a market-based frame for conservation. Offsetting reframes conservation action as an exchange of ecological 'credits', where numerical scores that are considered equivalent in both ecological and monetary terms represent nature lost, saved or recreated. This creation of ecologically equivalent credits is the defining characteristic of offsetting. The exchange between ecological gains and losses across space and time occurs in all the common approaches for delivering offsets, namely bespoke, project-specific offsets and conservation (or habitat) banking, but its potential to transform ecological credits into assets becomes most evident in the latter (Madsen et al., 2011). Conservation banking allows developers to buy credits (representing species or habitats) in order to either use them for internal mitigation (purchasing their right to degrade nature) or sell them to others (or both). This establishes a market for developers' compensation liabilities (eftec, IEEP et al., 2010; Apostolopoulou and Adams, under revision), and allows credit purchasers to be involved in a for-profit version of conservation (Sullivan, 2013b).

Environmental offsetting is further advanced in the context of carbon than biodiversity. Unlike carbon, biodiversity is always tied to place, making trade more problematic in technical terms, and more questionable in its principles than it already is for carbon (e.g. Bumpus and Liverman, 2008). To overcome this and make biodiversity more 'accountable, marketable and tradable' (see: http://v-c-a.org/registry), there are attempts to create global units for biodiversity exchange, such as the 'Verified Conservation Areas' registry, which will list areas where biodiversity and ecosystem services are certified to be protected or restored 'much as houses are listed on a real estate board' (Hamrick, 2014).

Offsetting therefore reframes conservation practice around environmental markets, with monetary payments for biodiversity credits after the model of carbon trading. The resulting arrangements owe little to ecology. Ecosystems can be said to deliver 'bundles' of services, and these can be 'stacked' (or paid together to the landowners) or disaggregated. Robertson (2012) points out that an interlocking set of ecological relations in a freshwater ecosystem might be defined as 'salmonid habitat credits' and 'temperature credits' and sold separately to interested 'buyers' in other areas to compensate for their environmental impacts. Such a deal makes no ecological sense.

In theory, the price of conservation credits should reflect the marginal cost of securing an offset (Conway et al., 2013), rather than the 'economic value' of the nature lost. However, the opinions of the governments promoting offsetting show that such distinctions are quite feigned: according to the Australian Government the 'use of market-based mechanisms for delivering offsets is supported as a means of determining the *conservation value* of both the proposed action site and the proposed offset' (Commonwealth of Australia, 2012, p. 26, our emphasis), while the UK's Government Green Paper on offsetting, framed biodiversity as a 'commodity' that could 'be bought "off-the-shelf" from a market' (Defra, 2013). In fact, the act of putting a price on nature does indeed end up determining the cost to the developer of

destroying it. A simplistic market logic, largely based on neoclassical economics, might suggest that such prices will increase recognition of nature's value and hence reduce destruction. However, subjecting nature to the vagaries of the market means that prices can be highly variable (ranging from €30,000 up to €1.2 million per hectare, see Conway et al., 2013), and reflect restoration costs, land prices, supply and demand, speculative action by landowners (Madsen et al., 2011) and even financial crises (Muradian & Rival, 2012). It further means that the same credit system that supposedly protects a particular species or habitat can lead to its destruction when it collapses (Smith, 2006).

Offsetting therefore transforms conservation into an exchange of priced ecological assets. This reframes a genuine concern for the value of nature (whether intrinsic or use value), for example halting the degradation of ecosystems, into a matter of market price: 'a question of economic value that is entirely inimical to the original concern' (Smith, 2010, p. 249).

(4) Offsetting ties conservation to land development and economic growth

The last way in which offsetting reframes conservation is that it dissolves the conventional contradiction between development (e.g. for mining, construction, house-building) and conservation, the latter becoming an extension of a development and growth agenda. Thus, the UK Government presents offsetting as a key element in succeeding in the 'global race' by 'creating growth and delivering lasting prosperity' while being 'the first which leaves the natural environment of England in a better state than it inherited' (Defra, 2013, p. 5; see also Kinver, 2013). The allure of offsetting lies in its promise to make conservation (in the form of NNL) possible without limiting economic growth, but in the process it makes both offsetting and conservation an integral element of development (BBOP, 2012b). Thus

offsetting allows ecosystem degradation caused by development to be presented as a conservation opportunity, as for example where quarries can provide ‘an exciting opportunity for wildlife habitat creation’ (Birdlife International, 2011), or where an offset site is considered as of such high ecological value that the destruction of a development site (that is considered of lower conservation value) can actually be portrayed as beneficial for nature conservation (Lean, 2013).

Specific interests are benefited by such a choice. Offsetting is attractive to industry in fields such as mining, oil and gas, housing and infrastructure because it has the potential to enable the conversion of undeveloped land in valuable locations, in exchange for land managed for conservation elsewhere. Moreover, many corporations wish to be seen to respond to shareholder concerns about the environmental impacts of their operations, and offsetting allows them to do this: almost three quarters of active mines and exploration sites overlap with areas of high conservation value (World Resources Institute, 2003). Other benefits for corporations include the possibility of ‘regulatory goodwill’ which could lead to faster permitting, easier access to finance, capital and associated competitive advantages, product branding, and the possibility of influencing emerging environmental regulation and policy (Environment Bank, 2013; ICMM, 2005; ten Kate, 2005).

In parallel, the ‘win-win’ rhetorical framing of offsetting as a means to ensure simultaneously more development and more biodiversity conservation, brings together otherwise opposing actors from governments, industries and NGOs. Thus Bayon et al. (2008, p. 38) argue that the goal of biodiversity markets is to prove that profit and environmental preservation are not mutually exclusive but ‘mutually beneficial’, and that biodiversity markets can create ‘a space where both can expand together’. The latter obviously also involves the creation of new business opportunities for consultants, brokers and conservation banking companies (Duke et al., 2012). Such opportunities extend to conservation

organisations: as Bayon et al. (2008, p. 38) note, 'the more experienced banking companies are looking to agencies for advice to focus their land acquisition efforts or review species recovery plans to find the most ecologically important lands to purchase and establish banks'. Offsetting can thus provide a valued revenue stream for conservation organisations, particularly where they become involved in technical assessments, or the acquisition or management of offset sites.

Offsetting ties conservation to an agenda of land development and economic growth as the last element in a 'mitigation hierarchy'. At each successive step down the hierarchy the degree of environmental protection is diminished moving in turn through avoidance, minimisation, rehabilitation or restoration of degraded ecosystems to offsetting (BBOP, 2009). Crucially, the existence of offsetting as a final option changes the way progression down the hierarchy is framed (e.g. McGrath, 2013): experience with US wetland mitigation has shown that the existence of offsetting as a possibility in planning has led to an under-use of the earlier stages of the mitigation hierarchy (Robertson, 2000). In conservation terms this could lower the threshold for approving projects and facilitate permanent land use change, with negative net impacts on biodiversity. Moreover, offsetting mostly refers to conservation activities occurring outside the geographical boundaries of a development site (offsite compensation) to compensate for unavoidable impacts onsite allowing developers to increase their 'net developable area' (see: http://www.environmentbank.com/docs/FAQs_Offsetting.pdf).

The role of offsetting therefore is not neutral since it can facilitate planning permissions that might otherwise have been refused (e.g. see the UK NPPF, 2012). If conservationists focus efforts on proving that ecological equivalence or NNL are possible in the hope of winning better compensation for the environmental impacts of development, they should also be aware of the adverse effects of this choice, namely the weakening of

longstanding critiques of the environmentally destructive activities of many corporations and industries. Focusing on how to deal with the impacts of a development project rather than on preventing projects with detrimental impacts on nature is based on the fundamental acceptance that 'development impacts on biodiversity are unlikely to cease or even abate in the near future' (Gordon et al., 2015) foreclosing any ecological critique of political and economic change. This is obvious in the following quote from Gordon et al. (2015, p. 536): *'in this context,* offsetting remains one of the few options for delivering truly 'sustainable' development' (our emphasis).

Biodiversity Offsetting: the issue is not just technical

Offsetting already faces serious challenges. These are reflected in the acceptance of the 'controversial' character of the policy (e.g. Gordon et al., 2015), in the admission that standard approaches for the systematic calculation of its conservation benefits are still relatively rare or unavailable (Maron et al., 2013) and in attempts to re-brand the terminology in the face of increasing criticism from activists and scholars (e.g. biodiversity 'accounting' rather than offsetting, see http://www.environmentbank.com).

The issues at stake with offsetting are more than technical, and the decision to frame biodiversity offseting as a 'conservation tool' is not neutral. Such a strategy leaves unchallenged offsetting's core logic. Indeed, a focus on how to improve its implementation, ostensibly de-politicises the problem of the environmental impacts of development, implying that it is is as an inevitable problem, rather than the result of particular political choices. But not talking about politics does not mean that politics disappear. It simply means that the debates regarding offsetting metrics or principles take place without reference to the social, political and economic questions they raise.

Acceptance of the framing of conservation and development provided by offsetting implies acceptance of the inevitability of biodiversity loss. It a priori reframes conservation as a pragmatic search for the least worst outcome in the face of development demands and as an attempt to promote conservation only in areas that do not interest developers. This in turn separates the practice of conservation from struggles by environmental and social movements to prevent the further degradation of ecosystems (Apostolopoulou et al., 2014).

By reframing nature as a set of tradable units, offsetting turns conservation into a system of exchange, in an attempt to optimise biodiversity protection while allowing the achievement of development goals. As such it seeks to streamline policy debate about the value of nature. In the process, nature is essentially treated as a 'commodity', divorced from its social, ecological and geographical context. Only in the reductionist technical calculations of offsetting methodologies can offset sites be seen as equivalent to ecosystems and places destroyed by development. The protection of such sites may be better than nothing, but in almost all cases they are less good than the original.

It is not surprising that proponents of biodiversity offsetting (BBOP, 2012b; Madsen et al., 2011; ten Kate et al., 2004) frame it as a groundbreaking strategy. Its radical potential is indeed profound, but it does not favour conservation outcomes. Offsetting forecloses discussion of the nature of the social and economic forces behind the environmental impacts of development. Within the frame of ofsetting, conservation is prevented from addressing key issues concerning the socio-economic and political context that determines society's destructive relationship with non-human nature, the way the costs and benefits of development may unevenly affect different social groups or classes, or the identity of winners and losers of uneven growth and development. Offsetting is one outcome of private sector investment in conservation and market-based approaches to addressing biodiversity loss. It coincides in time with cuts in conservation funding, the further commodification of non-

human nature and the increasing deregulation of environmental legislation (Buscher et al. 2012; Apostolopoulou and Adams, 2015) which reflect a paradigm shift away from conservation strategies based on enforceable environmental legislation (Benabou, 2014) towards those based on financial incentives and profit.

If conservationists accept offsetting as a strategy (and simply try to improve the methods used), they are essentially accepting a dystopian future where biodiversity loss is continuous, and chiefly directed by the financial interests of developers. Conservation is restricted to simply directing, or redirecting, where developments destructive footprint will fall, without any guarantee that what is protected today will not be developed in further cycles of offsetting tomorrow. Offsetting therefore substantially forecloses the possibility of a conservation challenge to the drivers of environmental destruction. Offsetting can be the response to biodiversity loss only if we accept a society where all ecosystems and places are open for trading, and nature will be restricted only to what is left over after every other demand has been satisfied (Baltz, 1080, p.45).

Conservation has been criticized for approaching protected areas as ‘places without people’ (Rangarajan & Shahabuddin, 2006). Offsetting further deepens and exacerbates this conceptual and material separation between society and non-human nature. Failing to recognize the way it reframes non-human nature and its conservation makes its effects impossible to challenge. This has crucial consequences. In the offsetting case, it is not the protection of ecosystems that is not based on a dialectical understanding of nature-society relationship but their destruction. A dystopian vision for the future suggests that our only choices are between the two. It is vital for conservation to challenge the ideological potency of this rhetorical framing and allow direct political engagement not only to oppose environmental destruction and secure access to nature but also to re-imagine a different production of nature based on societal needs. Conservation is profoundly a cultural and

political practice and offsetting highlights the importance of connections to wider debates about the environment and social justice in future provisions for the protection of biodiversity.

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