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PART 4

COMMODIFYING WILDLIFE

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Producing Elephant Commodities for 'Conservation Hunting' in Namibian Communal-area Conservancies

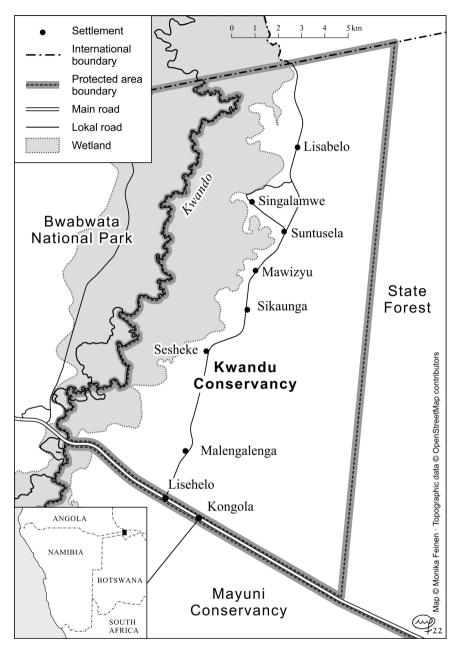
LEE HEWITSON AND SIAN SULLIVAN

It is plain that commodities cannot go to market and make exchanges of their own account. (Karl Marx, *Capital*)

Introduction: Community-based natural resource management, hunting, and commodifying 'wild' nature

Trophy hunting of wild animals is central to the conservation and development objectives of many African countries, including Namibia. Despite increasing opposition to the industry, fuelled by the ongoing poaching crisis and recent killing of high-profile animals including 'Cecil' the lion and one of Africa's biggest bull elephants in Zimbabwe (BBC News 2015), trophy hunting remains big business. Over US\$200 million is generated annually from trophy hunting in Africa and, in Namibia alone, this figure amounts to over \$25 million (MacLaren *et al.* 2019). The hunting of big-game species such as elephants (*Loxodonta africana*) is particularly lucrative, especially in the country's communal-area conservancies (see below). In Kwandu Conservancy, in Namibia's remote north-eastern Zambezi Region (Map 11.1), anyone wishing to hunt a trophy elephant must pay upwards of \$50,000 to do so. As the Conservancy's treasurer put it: 'The most valuable animal is the elephant, because they give a lot of income to the Conservancy.'

These revenue streams are facilitated through Namibia's internationally acclaimed programme of community-based natural resource management (CBNRM), which combines a harnessing of market mechanisms and decentralisation with arguments for rural development (Sullivan 2006). The programme can be traced to the early 1980s, prior to Namibia's independence from South Africa, and against a backdrop of drought, civil war, and illegal hunting of especially elephant and rhino in the north-west of the country. Forming the Namibia Wildlife Trust (NWT), concerned conservationists worked alongside



Map 11.1 Kwandu Conservancy, indicating location in Namibia's Zambezi Region (Source: Open StreetMap contributors; Cartography: M. Feinen).

government officials and traditional leaders to appoint 'community game guards' (CGGs) from the local area, charged with monitoring wildlife, conducting antipoaching patrols and carrying out conservation extension work within their communities in return for food rations (IRDNC 2015). A small pilot ecotourism project was also implemented with primarily ovaHimba pastoralists in Purros on the Hoarusib River (Jacobsohn 1995), requiring tourists to pay a fee to the local community as caretakers of their natural resources, including land and wildlife (Jacobsohn, 1998[1990]). The project proved successful in helping to recover wildlife numbers in the region, its community-led approach defying the political climate of the time, with active participation of local people in conservation activities beginning to nurture a vision of wildlife as a valuable social and economic resource (Owen-Smith 2002). In 1990 these initiatives formed the kernel of a new NGO called Integrated Rural Development and Nature Conservation (IRDNC) that soon began a similar programme of community-based conservation work in what was then Caprivi Region, now 'Zambezi' Region,¹ in the north-east (IUCN et al. 2015; IRDNC 2015).

Soon after independence the Namibian government moved to formalise this initiative, enacting the Nature Conservation Amendment Act in 1996 which extended rights to legal and regulated wildlife use beyond freehold rangelands to communal-area residents that formed management units called 'conservancies'. These rights include the 'consumptive and non-consumptive use and sustainable management of game ... in order to enable the members to derive benefits' (Government of the Republic of Namibia, hereafter GRN 1996: 24A (4)) and mitigate the impacts of living alongside elephants with a tendency to raid the crops of conservancy residents (Drake et al. 2021). Historically marginalised communities have seized the opportunity to gain rights over natural resources (Sullivan 2002; Bollig 2016), and there are now eighty-six communal conservancies covering over 20% of Namibia's land area, encompassing around 233,000 people (MEFT & NACSO 2021). International donors including United States Agency for International Development (USAID), UK Department for International Development (DfID), World Bank, German Development Bank (KfW) and World Wide Fund for Nature (WWF) have contributed millions of US dollars to programme development and maintenance.

The CBNRM programme has been a key contributor to economic development and environmental conservation in Namibia's rural communal areas.

¹ In August 2013, in an attempt to eliminate the names of former colonial administrators from Namibia's maps, the Caprivi Region (with its administrative border from the Kavango River eastwards) was reduced and re-named 'Zambezi Region', and its administrative border moved eastwards to the settlement of Chetto. The programme is now central to the country's conservation and development goals and is generally recognised as having contributed to a strong recovery in wildlife numbers (IUCN *et al.* 2015; Naidoo *et al.* 2016). In particular, Namibia's elephant population is thought to have increased from around 7,500 at CBNRM's formal inception in 1995 to over 23,000 today (MEFT & NACSO 2021), although we note that time series data from elephant surveys for Zambezi Region from 1989 to 2013 reportedly observed no trend in elephant population size (Robson *et al.* 2017). In Namibia's long-term development framework, CBNRM is an explicit rural development strategy, 'Vision 2030' (GRN 2004), and the Ministry of Environment, Forestry and Tourism (MEFT), previously the Ministry of Environment and Tourism (MET)), state that sustainable environmental use shall be a key driver of poverty alleviation and equitable economic growth, particularly in rural areas (GRN 2014; MEFT & NACSO 2021). The COVID-19 pandemic, however, has severely affected these aspirations (Lendelvo *et al.* 2020), and its full effects are as yet unknown.

Namibia is thus committed to capitalising on its wildlife through private sector enterprise in both ecotourism and consumptive use, notably trophy hunting² (Naidoo *et al.* 2016). In response to international criticism of the latter from animal welfare groups and others, trophy hunting has recently been rebranded 'conservation hunting'³ by the Namibian government and CBNRM stakeholders eager to distance the practice from 'sport hunting' concerned solely with the collection of exotic trophies. They also make the link between sustainable 'offtake' and positive outcomes at species level, with conservation hunting described as producing 'clear, measurable conservation and human development outcomes' (NACSO 2015: 16), although recent research raises concerns over the sustainability of elephant offtake rates in conservancies (Drake *et al.* 2021).

The hunting of big-game animals including elephants is central to the conservancy model (Naidoo *et al.* 2016; Drake *et al.* 2021). At the national level economic returns from hunting and non-consumptive use of wildlife in conservancies increased incrementally since the programme's inception, generating around US\$9 million in 2018 (see also Kalvelage this volume). In recent years tourism enterprises provided the greatest cash income at household level, whilst conservation hunting returned cash directly to conservancies and

² There are six types of consumptive wildlife use permitted in Namibia under varying conditions: (1) shoot-and-sell, (2) trophy hunting, (3) biltong hunting, (4) management hunting, (5) shooting for own use, (6) live capture and sale (Maclaren *et al.* 2019). This study focuses on trophy hunting, now framed as 'conservation hunting', because of its high economic value and importance to communal conservancies.

³ This rebranding follows an international movement to frame trophy hunting in this way, see www.conservationhunting.com.

provided in-kind benefits such as meat (MEFT & NACSO 2021). Recent research in Zambezi Region, however, suggests that only 20% of value generated by the tourism and hunting sectors is captured at conservancy community level, largely in the form of staff salaries or investments in local infrastructure projects (Kalvelage *et al.* 2020). Much of this income derives from the hunting of elephants, said to contribute over 50% of all conservancy hunting revenue on a national scale, and almost 70% in Zambezi's conservancies (IRDNC 2015; Naidoo *et al.* 2016).

Namibian CBNRM has played a part in the consolidation of an increasingly 'neoliberal' global policy framework and contributed an important example of its application to biodiversity conservation. By 'neoliberalism' we refer to a theory of political economic practices centred on individualism, privatisation of state enterprises and assets, international trade liberalisation, and the reduction of regulations that reduce market growth and efficiency (Sullivan 2006: Bakker 2015). Neoliberalism has permeated the arena of conservation and natural resource governance, with global environmental problems such as biodiversity loss and climate breakdown said to derive largely from market failure and a lack of societal recognition of nature's economic value. The logic of neoclassical economics is thus increasingly applied to diverse aspects of nature including forests and wild animals, to make this 'wild nature' visible economically as, for example, monetised 'ecosystem services' and 'natural capital' (TEEB 2010; Natural Capital Coalition 2016). In these processes the state becomes a market facilitator for trade in alienated nature conservation commodities, providing regulatory and supportive structures for the transfer of public goods to private sector actors (Fletcher 2010; Büscher et al. 2012).

With its market-based approach to resource governance and conservation, CBNRM has faced criticism around some of its social/environmental effects (Dressler et al. 2010). At times this critique can appear strongly focused on global power structures rather than the situated practices of local actors involved (although for Namibian CBNRM specifically see Silva & Motzer 2015; Koot 2019). There remains a lack of detailed research regarding how these programmes and their inherent value frames are operationalised in practice. In response to this knowledge gap, this chapter offers an empirical exploration of practices undertaken by (local) actors working to produce and extract value from 'wild' natures (cf. Fredrikson et al. 2014; Bracking et al. 2019) by investigating the production of trophy-elephant commodities for conservation hunting in Kwandu Conservancy, Zambezi Region. In doing so, the chapter responds to Kay & Kenney-Lazar's (2017) call to consider more-than-human actors in processes of capitalist value production. It builds on recent work seeking to 'ecologise' political ecology (Collard & Dempsey 2017; Barua 2019) by considering the (de)stabilising role of agentic elephants in the relational assembling of economic value.

The chapter's main argument is that commodified trophy elephants are produced for 'conservation hunting' in Namibia through a combination of the spontaneous activities of elephants, human labour, and socio-technical practices. The latter include the calculative technologies deployed by humans to count elephants and codify knowledge, which are dependent on utilitarian constructions that pacify elephant vitalities. The chapter elucidates how elephant behaviours such as crop raiding are co-opted into technocratic governance practices in the process of commodifying elephants.

The next section situates this study in an existing body of critical naturesociety scholarship. It further discusses the conceptual approach adopted, one which attempts to sustain a productive tension between political ecology and more-than-human geographies. The third section provides a critical analysis of elephant commodity production processes in Kwandu Conservancy, north-east Namibia, before concluding in the final section with a summary of our argument and some directions for future research.

The nature of value and commodities

The production of value and nature

We build on a vast body of work in critical nature-society scholarship exploring relations between value, nature, and labour. As such, we take a political ecology approach in analysing the (capitalist) social relations of production and exchange that produce and transform natures, through the making of economically valued commodities (Smith 2008). The environmental-social dialectic central to political ecology is representative of its Marxian theoretical underpinning. In Marx's critique of classical political economy he argued that value is produced via social relations, encapsulated in his 'labour theory of value' (LToV) which holds that a commodity's objective value is the embodiment of the average socially necessary labour time taken to produce it (Marx 1974). Commodities produced by human labour in combination with 'the spontaneous produce of nature' (Marx 1974: 50) may have 'use value' as well as 'exchange value', the latter most often expressed in price/monetary form and permitting trade with other commodities. Although a commodity's 'price' varies due to changes in supply and demand, its 'value' remains constant, representative of a quantity of human labour utilised to produce it. Marx argues these value relations are obscured in the 'fetishised' commodity form under capitalism. which transforms subjective relations between people and the rest of nature into apparently objective relations between money and things (see also Greiner & Bollig this volume).

Nature-society geographers have drawn upon Marx's historical materialist approach in their studies of environmental change, degradation, and (in)justice (Harvey 1996). Critical social science engagement with 'neoliberal conservation' has explored how natures are used, transformed, and 'saved' in and through the expansion of 'green capitalism' (Sullivan 2006, 2017a; Büscher *et al.* 2012). Drawing on Latour, Sullivan (2013) argues that nature framed and calculated as 'natural capital' becomes a fetishised object charged with objective power via institutionalised expert agreement and technical practices. This labour works to create abstract(ed) exchangeable commodities from conserved material natures, transforming use values into exchange values and units for sale in varied ecosystem services markets. Yet the process is beset with contradictions, and political ecologists argue that market prices are unable either to fully represent or incorporate the complex ecologies and (non)human labour involved in this commodity production (Huber 2018).

Namibian CBNRM's reliance on market mechanisms exemplifies the transformation of human labour and beyond-human natures into marketable commodities. The programme is dependent on abstraction and measurement of charismatic species such as lions and elephants able to generate monetary value in international markets, often demoting socio-natural and non-economic use values of importance to local livelihoods (Hewitson 2018). Utilising global production network (GPN) approaches, others in this volume (Revilla Diez and Hulke; Kalvelage) highlight the diverse, multi-scalar actors involved in producing 'wild' commodities such as trophy animals, whilst warning of unequal power relations and negative livelihood impacts at local levels. Studies also point to elite capture and dominance and the inability of participants to use acquired financial capital to significantly improve their economic position (Silva & Motzer 2015; Bollig 2016). Financial value accruing to tourism and trophy hunting businesses is reliant on the provision of 'wild nature' by communal-area conservancies, whose portion of received income goes primarily towards conservancy operating costs with somewhat meagre disbursements at household level (Suich 2013; Hewitson 2018; Kalvelage et al. 2020: Drake et al. 2021). A conservation model dependent on income from wealthy international tourists and trophy hunters is also vulnerable to international circumstances, as illustrated by the recent coronavirus health pandemic and associated travel restrictions (Lendelvo et al. 2020).

Applying a combined Marxist and critical political ecology analytical lens to human-environment relations in CBNRM spaces assists with understanding how huntable elephant commodities are (co)produced with and extracted from the biophysical world (Kay & Kenney-Lazar 2017). It can also shed light on the contested nature of this commodification and its consequences for local livelihoods. The processes which render complex ecologies into tradeable commodities are not only economic relations and social activities; they are also contingent upon beyond-human 'labour' and lifecycles. In this respect, Marx's somewhat rigid conceptualisation of labour and value might hinder a more detailed understanding of the 'work' of non-humans in producing (and subverting) nature's commodification. For that reason, we now turn to more-than-human and relational approaches that emphasise the lively nature of these 'wild commodities'.

Assembling economic value with/from natures

Posthumanistic approaches exploring the materiality of nature and redistributing agency to 'other-than-human' actors are criticised for their lack of political engagement with the social relations of capitalism. In response, an emerging body of work seeking to 'ecologise' political ecology explores the incorporation of lively other-than-human entities in the production and circulation of economic value, emphasising the co-constitution of the economic and ecological whilst focusing on the inequalities generated by capital accumulation (Collard & Dempsey 2017). Barua (2019) conceptualises the activities of beyond-human entities as 'metabolic', 'affective' and 'ecological' 'labour' categories, each dependent to varying degrees upon an organism's biological and ecological capacities.⁴ Like the unwaged (re)productive labour of humans (especially of women), this animal 'work' is hidden behind the fetishised and often intangible commodity – for example, a 'wilderness experience' or a 'carbon credit' – only coming to light when actual practices of value creation are explored (Haraway 2008; Barua 2019).

The generative capacities of animals are fundamental to capitalism's valorisation processes, and to their identity as 'officially valued' commodities (Collard & Dempsey 2017). Relational 'encounter value', for example, derives from contingent relationships between humans and other-than-human entities (Haraway 2008), the lifeworlds of individual animals affecting the possibility of capitalist capture of their activities. Barua (2014: 560) thus argues that elephants are social and spatial 'conduit[s] for connectivity',

⁴ We write 'labour' here in inverted commas to signal that we are ambivalent about extending concepts of work to natures-beyond-the-human, as in references to 'the work that nature does'. As one of us has suggested elsewhere (Sullivan 2017b), we think that at some level a category error is creeping in here. Or, at least, that a false question is being posed – that is, does nature labour? Natures beyond-the-human are immanently (re)generative, but it seems to us that beyond-human natures labour only to the extent that they are conceptualised, calculated and alienated as such. The work that goes into creating the symbolic layering that abstracts dimensions of nature-beyond-the-human into commodified units of value is all (too) human, as are the buyers and sellers of the units that thereby arise. their material and affective agency knitting far-flung epistemic communities together in conservation assemblages.

Against this background, this study's methodology incorporates material and perceptive 'following' of elephants through a specific conservation hunting assemblage, in order to understand empirically how valued 'trophy' commodities are produced. Taken from Deleuze & Guattari's (1987) notion of agencement, 'assemblage' refers to the relational coming together and spatial ordering of disparate entities through which actions occur (DeLanda 2006; Anderson & McFarlane 2011). Assembled relations are contingently obligatory rather than logically necessary amongst actants that are always involved in (de)territorialising processes. Actants may engage in arborescent practices that stabilise the assemblage, reinforcing its borders or homogenising its composition. Conversely, an assemblage may become deterritorialised and its internal coherence undermined as components follow their own 'lines of flight', engaging in rhizomic practices in connection with elements from 'outside' the assemblage (Deleuze & Guattari 1987; DeLanda 2006). Rather than reify entities such as society or capitalism, then, 'assemblage-thinking' focuses on spatial and conceptual processes that produce contingent 'things' (Li 2014).

As such, the methodology maintains an epistemological commitment to revealing the processual, laborious, and contingent relations that together produce 'wild commodities'. Kwandu Conservancy serves as a specific case study site in which to 'enter' the assemblage, providing the location for twelve months of ethnographic fieldwork by the first author largely spent camped at local community homesteads or at the Conservancy office. Permission for the fieldwork was obtained from MEFT and each of Kwandu's six area indunas.5 The primary method utilised involved physically 'following the thing' (Cook 2004), in this case the elephant, including tracking its ethologies alongside hunters and game guards, as well as tracing the movement of the animal's constituent parts (e.g. its ivory) post hunt (Hewitson 2018). As these pachyderm tracks intertwined with those of humans, interviews were conducted with people that had witnessed or experienced these creatures. These activities were combined with perceptual/retrospective following, including tracing human-elephant encounters and stories contained in secondary data and conducting interviews with farmers identified from human-wildlife conflict (HWC) claim forms. Obtained from the Namibian national archives, government and (inter)national NGOs, these secondary data included policy documents, institutional reports and media articles on CBNRM. Using a local translator where necessary, sixty-four semi-structured interviews were carried

⁵ An *Induna* is a headman with authority over a particular village.

out with CBNRM stakeholders in Namibia, including conservancy members and 'key informants' such as MEFT and NGO staff. Decentring human control and attempting to engage 'across, through, with and as, more-than-humans' (Dowling *et al.* 2017: 824), 'following' allowed for an empirical exploration of the elephant's relational interactions with other (non)human entities in the co-production of value.

The present study thus contributes to a nascent body of work interrogating value not as a separate entity or as something that pre-exists measurement or articulation, but as something that is produced and performed through relational practices between more-than-human subjects (Bracking *et al.* 2019). Building on Marx's understanding of value as a social relation, our approach is cognisant of LToV's constraints, favouring an assemblage approach aligned with the performative economics tradition, so as to conceptualise economic value as produced through actions, knowledges, institutions, technologies, and structuring discourses that can be studied empirically, as we now elucidate for elephant hunting commodities in Namibia.

Producing elephant commodities for 'conservation hunting'

This section analyses the (non)human relations that combine to produce elephant commodities for 'conservation hunting'. It begins with two 'vignettes' derived from following elephants in the field, which provide some background context for the detailed discussion of processes through which elephant commodities are 'made' in Namibia. The subsequent subsection critically analyses these practices through an assemblage framing emphasising the co-constitution of the economic and ecological, exploring the relational interactions and (non) human 'labour' that together produce valued 'wild commodities'.

Commodifying the elephant in Namibia's CBNRM programme

Fieldnotes 1: 'When it's hot we have to start early; now we start', said Victor⁶, as we left his village and headed east into the bush. It was 7am on a crisp August morning in Kwandu Conservancy, in the middle of the dry season. I was undertaking the monthly 'fixed-route patrol' in the northern reaches of the conservancy alongside three of its community game guards. In addition to their daily patrols they walk this 10km route every month, each carrying a yellow 'event book' in which they record tracks and sightings of wildlife. Tracing discernible paths through the bush, the men pointed out various plant species – sand-veld acacia,

⁶ Victor is not the game guard's real name: pseudonyms are used for all participants throughout the chapter.

Zambezi teak, wild syringa, sour plum and sickle bush - and recorded the spoor of leopard, hvena, kudu, and bushpig. Yet, it was not until we reached the conservancy's border with the Caprivi State Forest - one hour and a half into the patrol - that we came across evidence of elephant presence. '*Niovu*!' called Victor from up ahead, as we walked north along the 'cut-line' firebreak. 'It must be from two days ago', he said, looking down at the pachyderm's footprint. Another pointed to the location of these tracks on his map, clear evidence, the men believed, that elephants were moving between the state forest and conservancy, or even using the cut-line as a path north into Zambia. However, being old tracks, they would not be recorded in the monitoring book on this occasion, as Victor explained: 'On a fixed patrol we only record the fresh tracks from last night, this morning, or a sighting.' Another two hours elapsed before we came across more elephant spoor, close to some camel-thorn trees a few kilometres further north along the state forest boundary. 'These acacia trees are where the elephants are feeding', said Victor. 'They were here almost two days ago', his colleague deduced, inspecting the tracks. 'But these are the breeding ones - the females and the juveniles', he continued, an air of disappointment in his voice. Tracks from a big bull would have been better news to take to the conservancy's professional hunter. 'Now the elephants are just few', Victor told me, 'but you will see after September, October, November there will be a lot of elephants because they are just chasing the water.'

Fieldnotes 2: One night in mid-April Dorothy lost her entire sorghum crop to elephants. Like many other farmers in Kwandu Conservancy she had fenced her field using local timber, which had acted as a barrier to bush pigs and impalas, but not elephants. 'Last year I used chilli bombs and the elephants did not attack the field', she says. 'The Conservancy should keep on distributing those chilli bombs to farmers, but this year they were not there.' The day after Dorothy's sorghum harvest had been eaten by elephants, she reported it to a local game guard named George, who turned up the same day in order to investigate the incident. Accompanying Dorothy to the site, George measures the extent of crop loss as one-quarter hectare of the large field. He also identifies large, round footprints at the site, as well as dung and urine, the unmistakeable signs of elephants. 'I didn't see the elephants, I just saw the footprints', admits Dorothy, before stating that 'they were many.' George believes the elephants had come from Bwabwata National Park, crossing the Kwando River and entering the conservancy. He has heard reports from other farmers in the area who also had their fields raided that night. Perhaps they were the same elephants; perhaps not. For now, George takes the claim form and writes: 'Nine elephants entered the crop field on 14th April during the night and one quarter hectare of damaged sorghum was observed. The field is subject to be compensated.'

Monitoring processes such as those illustrated in the passages above are central to producing elephants for hunting (see also Kalvelage, this volume). Community game guards in Kwandu Conservancy conduct daily patrols and annual game counts alongside government and NGO staff. On a monthly basis game guards collate daily event-book data, described by CBNRM practitioners as 'the first step in the conservancy information cycle' (NACSO 2014: 37). With assistance from Namibian Association of CBNRM Support Organisations (NACSO)⁷ including WWF-Namibia and IRDNC these sightings are transferred to the Conservancy's long-term monitoring event book, presented in bar charts illustrating trends in wildlife abundance. These data are also analysed and presented digitally by NACSO partners, stored within a national monitoring and evaluation database belonging to the government's MEFT and presented in publications such as NACSO's annual 'State of Community Conservation' report. These reports are important management tools for conservancies and serve to illustrate wildlife recoveries in Kwandu and the Zambezi Region more broadly. Stakeholders agree that annual fluctuations in elephant sightings are caused by environmental factors and transboundary movements from neighbouring countries, especially Botswana (Chase et al. 2016). Given the methodological difficulties of counting highly mobile animals across extensive ranges CBNRM partners are also reluctant to estimate elephant numbers at conservancy-level. Nevertheless, at a regional scale NACSO is able to produce graphs illustrating a steady increase in elephant numbers per 100 square kilometres over the past decade, strengthening the case for continued 'sustainable utilisation' of elephants.

This utilisation is subject to conditions imposed under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Having demonstrated healthy elephant numbers Namibia's elephant population was transferred from CITES Appendix I⁸ to Appendix II⁹ in 1997. This means the country's elephants are not considered at risk of extinction, the state being

⁷ NACSO is an umbrella membership association of organisations supporting the country's CBNRM programme. It consists of eight 'full member' NGOs and the University of Namibia, seven 'associate member' organisations, as well as individual members. NACSO members such as WWF-Namibia and IRDNC play a significant role in providing technical support to conservancies in the fields of natural resource management, business and enterprise development, and institutional development.

⁸ CITES Appendix I includes 'all species threatened with extinction which are or may be affected by trade. Trade in specimens of these species must be subject to particularly strict regulation in order not to endanger further their survival and must only be authorised in exceptional circumstances.' (CITES 1973, Art II: 1).

⁹ CITES Appendix II includes 'all species which although not necessarily now threatened with extinction may become so unless trade in specimens of such species

permitted to trade limited amounts of ivory and elephant products, including the sale of elephants as trophies to commercial hunters. At CITES meetings countries opposed to hunting argue for the relisting of African elephants in Appendix I, thus banning all trade in their products. These persistent debates pose a severe threat to Namibia's CBNRM programme, evidenced during NACSO meetings where participants warned of outside forces working against sustainable use and lobbying for hunting bans which, if enacted, would bankrupt most conservancies. The Ministry and other CBNRM stakeholders thus point to localised 'overpopulation' of elephants and the importance of 'sustainable offtake' in minimising habitat destruction caused by these ecosystem 'engineers' (Roever *et al.* 2013).

Before it can begin trading elephant trophies, however, Namibia must first establish annual export quotas for elephant ivory, deemed by CITES to be 'important tools ... in regulating and monitoring wildlife trade to ensure that the use of natural resources remains sustainable' (CITES 2007: 1). Monitoring data from annual game counts and the event-book system (as mentioned in the first set of fieldnotes above) is crucial here, with CITES (2016b: 8) commending Namibia on its in-depth monitoring of conservancies as part of 'the largest road count monitoring system in the world'. Namibia's MEFT calculates that 0.5% of an area's total elephant population can be hunted for trophies (usually males over 30 years old) without negatively affecting overall numbers (Selier et al. 2014), and Namibia has set a trophy quota of 180 tusks (90 elephants) each year since 2011. The CITES Secretariat reviews these data alongside information from the IUCN's African Elephant Specialist Group, which estimates a population of 250,000 elephants in southern Africa around 64% of Africa's total elephant population (CITES 2016a). By basing these export quotas upon elephant numbers from actual sightings on game counts - considered underestimates - the Namibian government effectively meets CITES' 'non-detriment finding' requirement, paving the way for trade in elephant sport-hunted trophies. Most of Namibia's elephant quota is sold to hunting tourists from the USA, a country that considers the African elephant to be 'threatened' yet allows the importation of elephant trophies subject to conditions including hunters obtaining domestic import permits and exporting countries setting annual ivory quotas (United States Federal Register 2016). This quota-setting process is thus crucial for Namibia's trade with US hunters, providing a vital income stream supporting the country's CBNRM programme.

Namibia's national quota must then be distributed amongst the country's hunting concessions. This is a process led by MEFT, who undertake annual

is subject to strict regulation in order to avoid utilisation incompatible with their survival.' (CITES 1973, Art II: 2).

quota review meetings with conservancies alongside NGOs and local traditional authorities that sit on a conservancy's management committee. NGOs identify the need to develop quota-setting systems to ensure natural resource utilisation is sustainable and maximises socio-economic returns to communities. For this reason, NACSO partners conduct quota-setting training programmes aimed at helping conservancy committees understand the factors MEFT consider when negotiating elephant hunting quotas with conservancies, including the prevalence of 'human–elephant conflict' incidents.

Stakeholders of CBNRM acknowledge the inevitability of crop raiding by elephants residing close to agricultural communities and are eager to frame these interactions in particular ways, focusing their efforts on mitigating this 'conflict' either through practical prevention or financial measures. Under the government's 'Human-Wildlife Self-Reliance Scheme' (HWSRS), farmers can claim monetary recompense for crops lost to 'uncontrollable' elephants, subject to various rules such as game guards investigating incidents and recording evidence within twenty-four hours (MET 2009). These claims are assessed by HWC Committees, consisting of representatives from MEFT, NGOs, the relevant traditional authority and conservancy committee. In Kwandu there are regularly over one hundred human-elephant conflict incidents annually, often the highest figure in the country and justifying the conservancy's label as a human-elephant conflict 'hotspot area' (NACSO 2018). Despite being difficult to measure, CBNRM practitioners calculate the economic cost of these incidents vis-à-vis economic returns from wildlife enterprises, and NACSO reported human-wildlife conflict costs amounting to around US\$8,500 in Kwandu in 2017, offset by conservancy income totalling almost \$75,000 the same year (NACSO 2018). Interestingly, the costs of crop losses in Kwandu were significantly lower than those calculated for Mashi Conservancy in the same year, Drake et al. (2021) putting crop depredation losses caused by elephants alone at \$157,000, only 30% of which was offset by trophy hunting revenues. Nevertheless, in Kwandu, institutional reports demonstrate both the financial burden of living alongside elephants, and the importance of hunting revenues in paying for these costs.

At an international level these representations help combat resistance from opponents of consumptive use. Yet they are also vital at the local level, 'helping communities to convince government that there are some problems', as one NGO employee put it. Human–elephant conflict data feeds into the quota-setting process alongside game count estimates and event-book data, emphasised at Kwandu's annual feedback meeting with NGOs during which a WWF-Namibia employee warned 'if you are not recording elephants and you want six elephants on your quota from the government, then it will be difficult for them to know what to give you.' Information contained in the Conservancy's Wildlife Management and Utilisation Plan is also significant, with MEFT's latest 'Standard Operating Procedures' for conservancies stating quotas must form part of, and be compatible with, these plans (MET 2013). Despite the highly mobile nature of elephants and their vast home ranges, Kwandu's wildlife management plan stipulates keeping its 250 'resident' elephants at current levels. These anomalies aside, Kwandu's effective implementation of monitoring systems and participation in quota-setting activities are commended by government and CBNRM NGOs, MEFT having reduced quotas for those conservancies not engaging fully with the process.

As such, in recent years Kwandu has received two or three 'trophy' and two 'own-use' elephants on its annual offtake quota (NACSO 2017, 2018, 2020b). In order to ensure the optimal value for these 'capital assets' the Conservancy puts its quota out to tender, with safari operators submitting proposals to Kwandu from which the Conservancy's management committee chooses its preferred company. In effect, the Conservancy's elephants go to the highest bidder. Since 2011 Jamy Traut Hunting Safaris (JTHS)¹⁰ has held the rights to hunt in Kwandu's concession, renegotiating its contract every couple of years. The outfit pays Kwandu US\$12,376 for each trophy elephant hunted carrying a tusk weight above 40lbs, or \$8,415 for those with tusks weighing less than that. For comparison, neighbouring Mashi Conservancy receives a slightly higher fee of US\$13,100 from its safari operator for each elephant hunted (Drake *et al.* 2021). Given the difficulty of finding and killing 'trophy' elephants in Kwandu, JTHS also guarantees payment for two trophy bulls each year, irrespective of whether the animals are actually 'utilised'.

These elephant hunts are marketed by JTHS at industry auctions held by organisations such as Dallas Safari Club.¹¹ Photos of previous elephant hunts in Kwandu adorn the company's website alongside iconic images of the 'big five', JTHS offering clients an unequalled opportunity to hunt dangerous game in a 'wild landscape of mighty rivers and extraordinary herds of big game' (JTHS 2020). The experience does not come cheap, clients paying JTHS a US\$24,000 trophy fee as well as a minimum of US\$25,900 for fourteen days spent on the elephant trail in Kwandu (JTHS 2020). Altogether, clients pay upwards of \$50,000 to hunt a trophy elephant in the Conservancy. Whereas the daily rates largely cover JTHS's operational costs including accommodation upkeep and staff salaries, the trophy fee is shared with the Conservancy. Accordingly, Kwandu receives just over 50% of the trophy fee paid by the client to JTHS, assuming the tusk weight is above 40lbs,

- ¹⁰ See https://jamyhunts.com.
- ¹¹ See www.biggame.org/.

supporting claims that conservancies typically receive anywhere from 30–75% of the trophy price (Naidoo *et al.* 2016).

Co-producing the trophy-elephant commodity

The commodified 'trophy' elephant is produced through social practices of counting elephants and codifying knowledge. This human labour is undertaken by diverse (inter)national stakeholders, beginning with the physical work of community game guards recording evidence of the pachyderm's presence in 'event books' and HWSRS claim forms. These arborescent practices of counting and codifying elephants are part of a 'logistical epistemology' (Cresswell 2014) seeking to 'make' them present in the Conservancy. These material knowledge representations move through institutional networks of NGOs who undertake 'extraordinary feats of assembly work' (Li 2014: 593) to produce reports and plans demonstrating 'surplus' elephants. Interestingly, whereas the pricing mechanism often depends on creating the notion of scarcity (Bracking et al. 2019), here it is contingent upon demonstrating relative abundance, although high prices are assured by the few elephants that can be identified as trophies overall. In any case, these representations are both an effect of practice and have effects in practice, playing a performative role in the formation of (inter) national policy and supporting the 'sustainable consumptive use' of Namibia's elephants through trade quotas.

Crucially, this neoliberal assembling of value operates through a 'utilitarian construction of a passive nature' (Büscher et al. 2012: 24) that de facto subdues the elephant's vitality. Individual elephant bodies are made measurable and commensurable under capitalist socio-ecological relations through representations that attempt to substitute for lively materialities. Surplus elephants are inserted onto quotas and ascribed economic value on price lists, abstracted for circulation in markets for conservation hunting commodities (Bracking et al. 2019). Fetishised images of elephants and wild, idyllic landscapes are used to sell these commodities, integral to the 'spectacular accumulation' of the elephant's economic value (Igoe 2013) but alienated from the (non)human labour and complex ecologies that produce them. This decontextualisation of individual elephants may have problematic socio-ecological effects, research suggesting that elephant societal cohesion is negatively affected by the hunting of old bulls, leading to increased aggression and human-elephant conflict amongst groups of young males (Selier et al. 2014). The connections integral to ecosystem resilience may also become increasingly fragmented as a result of the commodification of their constituent elements.

The calculative technologies – such as quota setting and wildlife monitoring – that work to produce elephant commodities can be understood as practices of power and authority, even as they depoliticise and 'render technical' (Li 2007)

questions of value. Drawing on Foucault, this conceptual territorialisation depends on institutional networks of conservation NGOs, agencies and governments working to 'fix the conduct of conduct' in a manner conducive to the creation and accumulation of monetary value (Murdoch 2006). In Namibia, CBNRM stakeholders provide expert assistance in the formulation of 'properly crafted rules' (Li 2007: 267), delivering technical support and training to conservancies on issues such as human–elephant conflict mitigation, quota setting and implementation of the event-book monitoring system. In each of these aspects conservancies are subject to biannual audits and performance ratings that influence their future chances of benefiting from commodification processes (MEFT & NACSO 2021).

Kwandu's rights to hunt elephants are thus not pre-given, but contingent upon government and NGO satisfaction with the Conservancy's monitoring performance and institutional governance. Increasingly, these governmentalities are geared towards fostering a business-oriented approach to conservancy management, developing the 'corporate identity' of conservancies and increasing private sector investment in wildlife enterprises (MEFT & NACSO 2021). This deepening synergy between capitalism and conservation means current and future livelihoods appear increasingly susceptible to erratic commodity markets for wildlife trophies, rights to local fauna such as elephants becoming ever more dependent on conditions of use and access defined by external actors (Drake *et al.* 2021). In selling its hunting quota to JTHS, the Conservancy effectively implements decisions that were made by government, acting as the 'middleman' in a transaction between MEFT and the private hunting operator.

However, there is another important alignment between poor subsistence farmers and elephants that raid their crops. In this valuation assemblage elephants deemed unsuitable as 'trophies' or 'own-use' animals drop out of the reference frame and are excluded from market calculations (Bracking et al. 2019). Yet these 'externalities' - including young male and female elephants - retain their capacity to affect things, often destroying harvests and sometimes killing people. Such interactions clearly impact economic relations, and actors within the CBNRM assemblage must work to absorb the destabilising effects of these 'overflows'. In Kwandu this absorption is exemplified in the government's HWSRS which uses hunting revenue to partially offset economic losses caused by elephants. Farmers are paid a fixed rate of US\$73 per ha of crop damage, which is significantly less than the estimated US\$545 that can be generated from a hectare of maize (Drake et al. 2021). Dorothy and others argued these offset payments are not enough, one conservancy member describing living alongside elephants as like being 'locked in prison'. These economic, psychological, and hidden opportunity costs are generally borne by the most vulnerable in society, such as female-headed households, and often cannot be financially compensated for under HWSRS (Khumalo & Yung 2015). The 'trophy' elephant's commodity value emerges as other values and lives are abandoned (Gibbs *et al.* 2015), and households suffering the greatest economic and emotional burden of living alongside elephants are not necessarily those who benefit from CBNRM's economic opportunities. This (re)territorialisation is a product of unequal power relations amongst the assemblage's multiple actants, reinforcing social relations in which subsistence farmers must suffer the costs so that (inter)national elites can continue to exploit their unpaid labours and accumulate surplus value from commodified elephants (see also Revilla Diez and Hulke, this volume).

Yet elephants and other non-humans are also agentic in the assembling and (de)stabilisation of these conservation spaces. Human practices of technological measurement and inscriptive symbolism are co-productive of elephant commodities alongside the activities and affective capacities of non-humans. Lorimer's (2007) notion of 'corporeal charisma' is exercised by elephants that trigger particular emotions in humans. The fetishised images of elephants displayed in professional hunting brochures emphasise the animal's majesty and identity as 'dangerous game', amplifying their charisma and making them desirable for the voyeuristic gaze (Cresswell 2014; Barua 2016). These romantic 'wilderness' notions are used to sell trophy elephants, appealing to (foreign) hunters seeking encounters with dangerous animals (see Bollig et al. and Kalvelage, this volume). This appeal is reflected in prices for trophy animals in communal-area conservancies, estimated to be worth four times that of animals hunted on freehold land (Maclaren et al. 2019). As Kwandu's professional hunter stated, 'people who have hunted on commercial farms now realise that they've done step 'A'; now step 'B' would be the larger free-roaming game, the tougher hunt, the old Africa'. The irony here is that it is precisely Namibia's colonial and apartheid history of land appropriation that has produced this distinction between (mostly) fenced freehold land and (mostly) unfenced communal land, the latter now fetishised as 'wild, old Africa'. Indeed, the local livelihood struggles of farmers living alongside elephants on marginal land sit uncomfortably alongside the fetishised wilderness values central to 'dangerous game' hunting in Kwandu.

There is perhaps no animal 'tougher' or representative of 'old Africa' than the elephant, its resilience embodied in its ethology and ecological capacities, as well as its viability as a hunting commodity. The elephant can survive in remote, degraded areas that lack appeal to tourists in search of wildlife-rich, people-free landscapes for photo safaris. As Kwandu's safari operator made clear, 'tourists do not want to go to those areas outside of the Okavango Delta because all you see are elephants and mopane [balsam tree]; it is miles and miles of monotony.' Yet elephants will frequent these places and trophy hunters will follow, meaning hunting economies can be more reliable than agricultural incomes in these areas. As one farmer in Kwandu put it: 'even if there is drought the elephant cannot die due to hunger because the rain has not fallen. But the millet, if there is no rain, we cannot produce. That is how it is.'

Alongside spectacular images and human affordances, the elephant's ethology is crucial for productive economic relations. The largest land mammal on earth, it is unmistakeable, having a significant material impact on its environment including uprooting trees, breaking fences and raiding crops. Together these behaviours comprise the elephant's 'ecological charisma' (Lorimer 2007), signifying an organism's unique combination of properties that allows its ready identification and differentiation from others. These physical properties allow humans to tune into their behaviour, lending themselves to calculative technologies of governance. Equally important is the elephant's 'unwelt': those activities it experiences as meaningful or value-forming (Barua 2016), perhaps none more so than crop raiding. Sexually mature male elephants in particular eat farmers' crops, seeking to benefit from the increased nutritive value of plants including maize and millet at the end of the rainy season (Selier et al. 2014). Compared to the dry season when they remain largely in adjacent protected areas with more reliable water sources, elephants are generally more visible (and therefore huntable) in the Conservancy during the cropping season. Temporal patterns of elephant presence and crop damage are widely recognised in the literature (Roever et al. 2013; Von Gerhardt et al. 2014), with cultivation cycles and rainfall patterns said to define a 'window of vulnerability to crop raiding by elephants' (Graham et al. 2010: 436). As one farmer put it, 'we cultivate our fields, that is why the elephants come'.

Despite appearing somewhat chaotic on the surface, then, this is an assemblage composed of elephants and other 'things' encountering each other in more or less organised circulations (Thrift 2003). In Kwandu money derived from trophy elephants is ploughed back into the earth, farmers using HWSRS payments to buy more seeds. Crops grow, attracting into the Conservancy elephant's place in assemblage is thus contingent upon both the capacity of humans to grow crops and their inability (or negligence) to protect them due to factors such as alternative livelihood strategies or 'knowing they will get a coin in the end' through HWSRS offset payments, as one NGO employee put it. Although elephants diminish the individual capacities of farmers to produce food, they increase the Conservancy's capacity to generate income. Through this cycle of destruction and benefit, elephants and vegetal life contribute to the material constitution of each other (Gibbs *et al.* 2015). Practitioners of CBNRM tune into these patterns of repetition, labouring to record tracks, dung,

and damaged crops. These technocratic practices work to produce discreet, alienable elephants that capital can 'see' (Robertson 2006), whilst concealing both the human and beyond-human 'labours' involved in their production (Collard & Dempsey 2017).

'Following' the elephant's lively biogeographies illustrates its role as 'co-producer' in these practices, its dynamic capacities being fundamental to capitalism's valorisation processes. This study demonstrates the centrality of these inter-species relations in constructing the elephant's economic value. It is reasonable to assume that practices such as crop raiding and forest degradation are a threat to capital accumulation in conservancies, and Barua (2016) argues that these 'undesirable encounters' constrain capture by market logics. However, in this assemblage, pachyderm-plant encounters are not unwelcome to all actors, particularly those in positions of relative power. As one Kwandu employee admitted, 'we are not happy if crops are not damaged because it means we have no wild animals here, and that is not good for the Conservancy'. Such sentiments seem absurd from the perspective of a subsistence farmer. but they speak to the unequal power relations that compose this valuation assemblage. These 'undesirable' encounters are central to producing elephants for consumptive use, allowing stakeholders to construct the elephant's identity as a livelihood threat and legitimise the 'conservation hunting' discourse, essential tasks for those seeking to capitalise on trophy-elephant commodities.

Arguably, elephants are made to be tools of these neoliberal governmental alliances, labouring to striate space and contributing to the assemblage's robust internal character, stabilising value relations so as in some sense to become agentic in its own commodity production. At the same time, elephants are also vulnerable to other (non)human agencies such as rainfall, and the presence of trees and nutritious plants grown by subsistence farmers with few other options. In the dry season elephants move through the Conservancy to access the Kwandu River and feeding areas in Bwabwata National Park and the State Forest (see Map 11.1) (Von Gerhardt et al. 2014), but largely undertake these journeys at night, making hunting during the day extremely difficult for Kwandu's safari operator. The task is easier during the cropping season when elephants are more visible. Yet poor rainfall levels often cause drought and crop failures in Zambezi, affecting elephant movement patterns and presence in Kwandu. Having received poor rains that year, farmers related that 'there are fewer elephants this year because the maize is not ok', and 'when there are no crops the elephants cannot be seen'. In recent years game counts in Zambezi indicate a downward trend in elephant sightings, and there have been years when no elephant trophies were killed in Kwandu (NACSO 2018, 2020a). Although the elephant's elusive nature can, in fact, increase its value as 'worthy quarry' to trophy hunters: in the absence of tangible animals to

hunt JTHS guarantees payment for two trophy elephants. In combination with other actants, then, elephants may undermine economic production, resisting human practices that seek to capitalise on their megafaunal capacities. Kwandu's professional hunter can compensate for this through 'guaranteed payments' that restore order to value relations, but maintaining this stability is hard work, the conditions for deterritorialisation ever present amongst agentic (non)humans.

What this case research demonstrates is that value relations are produced through encounters between more-than-human entities. In Kwandu, humans, elephants and other beings act alongside each other to produce valued commodities, dependent on patterns of repetition and encounters specific to the Conservancy's socio-ecological composition. Power is dispersed unequally in these relations, through which space is ordered and value frames are territorialised. Despite often *appearing* hegemonic, as though dictated by some universal code behind practices (Büscher *et al.* 2012), this study demonstrates the contingent and fractious nature of neoliberal governmentalities on the ground. Recalcitrant elephants and other ecologies unknowingly resist control and disrupt the neoliberal project's dominant value relations. In doing so, they open up spaces in which alternative socio-natures might be formed.

Conclusions and future research directions

This chapter sought to provide an in-depth understanding of neoliberal environmental governance and value making in practice. It showed how economic value is created and extracted from 'wild' natures (Fredrikson *et al.* 2014; Bracking *et al.* 2019), through empirical investigation of processes that produce commodified elephants for 'conservation hunting' in Namibian conservancies. Adopting a Marxist and critical political ecology lens, the conceptual approach acknowledges a diverse assemblage of more-thanhuman actors in the production and circulation of capitalised natures. These valued natures derive not only from human affordances, but also the varied ethologies of beyond-human entities. In this emphasis on the co-constitution of the economic and ecological, the activities of the elephant are *in a sense* transformed and co-opted as 'labour' in the production of fetishised 'trophy' commodities.

The assembled socio-ecological relations that produce nature's value in Kwandu are relational and somewhat circulatory, (non)human things encountering each other in ways that both stabilise and undermine these value relations. Elephants move through the Conservancy and work to uproot trees, break fences, and raid crop fields. These ecological capacities are exploited by those seeking to produce 'officially valued' elephants amenable to capital accumulation. Humans labour alongside elephants, undertaking technocratic practices attuned to but necessarily pacifying the pachyderm's liveliness, rendering it a discreet unit for exchange in trophy hunting markets. Their labours are concealed in the fetishised commodity form, elephant ethologies being accordant with governance practices and romantic representations of 'old Africa' that territorialise particular neoliberal value frames, trophy-elephant commodities being born out of and reinforcing structural power relations. These relations are contingent and contested, subsistence farmers suffering from elephant encounters that are not undesired by all actors. (Inter)national elites combine to absorb these destabilising interactions and elephant absences through partial offset payments to farmers and 'guaranteed' payments from hunting safari operators to the Conservancy, mobilising utilisation discourses and reterritorialising social relations so that capital accumulation may continue.

In this respect, the chapter underlines the contingent and radically open nature of value. Valued entities including trophy elephants do not pre-exist measurement or articulation, but are produced through encounters between multiple kinds of beyond-human actants. These relations are unique to particular spatial and temporal assemblages and the socio-ecological rhythms of their components. Valuation assemblages in Kwandu depend upon patterns of repetition between humans, elephants and other lively things that in combination continually (re)enact value. Tracking the ongoing composition of assembled value relations, the chapter demonstrates the fractious nature of neoliberal governmentalities 'on the ground'. Techno-scientific practices creating and governing value tend to shore up structural capital-labour relationships, maintaining and reinforcing dominant neoliberal nature values and their subsequent unequal and detrimental socio-ecological effects (Bracking et al. 2019). Yet recalcitrant elephants and other ecologies unknowingly resist control and may disrupt the neoliberal project's dominant value relations. Attending to the combined agencies of humans and beyond-human components in the production of commodities brings to the fore subversive rationalities and practices of contestation through which entities such as 'trophy elephants' might also be unmade. These 'possibility spaces' (DeLanda 2006) are inherent to practices of value production, and tracing their continued assembling is a vital step towards (re)creating novel and more equitable socio-natural futures. Rather than attempting to render visible nature's value through the production of abstract commodities, we might reassemble relations in ways attentive to the values embedded in social relations between humans and other living beings, in the process creating more ecologically vibrant futures for all (Büscher & Fletcher 2019).

This chapter has drawn attention to the more-than-human encounters that enact value, and future studies could explore how these relational values might fortify social movements challenging capitalist social relations. These assembled socio-natures are formed in multiple combinations and spaces from urban rooftop gardens to the African plains - and political ecologists can fruitfully explore their creative composition and effects. This study illustrated the situated workings and practices of market-based conservation on the ground, and future research would add to political ecology understandings of neoliberal governmentalities by exploring these embedded practices in other places and contexts. In this endeavour - and building upon the more-than-representational approach adopted here - there is scope for further constructive engagement between critical work on capitalist ecologies and non-representational geographies. Given the propensity for neoliberal conservation approaches to abstract and render different aspects of nature commensurable, there is also a need to broaden understandings of the specific agencies of varied non-human entities. This chapter has taken steps towards releasing elephants from the black box of 'nature', attending to their individual ecological and affective capacities. Future research could continue along this new track for 'thing following'. exploring the role of other life forms – including plants and less charismatic species (see Ndwandwe, Lavelle, this volume) - in the relational production of valued natures.

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