Conservation and Society 14(4): 380-390, 2016

# <u>Article</u>

# The Forest of Our Lives: In and Out of Political Ecology

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## Abstract

In this article, I seek to bring together a number of environmental histories to think about the place of forest in our lives. It is partly autobiographical in the sense that it concerns forest issues that I, for various reasons, have been entangled with recently. These are the making of carbon (REDD+) forests in Northeast India, preservation of the urban forests and planting of indigenous trees in Karura forests in Nairobi, Kenya, and the transformation of Swedish forests into vast industrial plantations. I come to these issues with little knowledge about the forest ecology or the flora and fauna, as such, but rather as a scholar with earlier experience of analysis of the social and political dynamics involved in conflicts over forests, that is, how differently powered actors seek to appropriate, stake claims to or control the forest. Hence, my point of departure and analytical framework is largely that of political ecology. In a conversation about the work of the anthropologist Brian Morris, I will point to the thinness of such an approach and open up aspects that are critical to Morris' way of engaging with the interactions of people, plants, insects, and animals. This, I will argue, is a truly grounded environmental anthropology.

Keywords: Brian Morris, forest conservation, political ecology, indigenous environmental knowledge, indigenous trees, invasive species, industrial forest management, India, Kenya, Sweden

# **INTRODUCTION**

On the way back from the astounding Vashlovani National Park in eastern Georgia, we stopped beside a huge field of sunflowers in full bloom. As far as one could see, there were endless rows of sunflowers and all turned in the same direction, facing the sun. In unison, like an army, they follow the sun, rotating as the day passes. This is a well-known phenomenon called heliotropism, and according to biological wisdom it maximises photosynthesis and helps pollination. Yet, while standing there watching the beautiful sunflowers, I got a spooky sensation of being observed, that they were watching us and, if required, ready to strike.

Access this article online	
Quick Response Code:	
国教教院(国 希望)(14)(14)(14)	Website: www.conservationandsociety.org
	<b>DOI:</b> 10.4103/0972-4923.197611

I recall this episode as I read Eduardo Kohn's muchdiscussed and appreciated book How Forests Think: Toward and Anthropology beyond the Human (2013). Kohn is an extra-ordinarily bold and self-assured thinker, setting out on a mission to explore the worlds of selves 'other' than human beings. Armed with nineteenth-century philosopher Charles Peirce and ethnographic engagements with the Runa in the Ecuadorian Amazonas, Kohn discusses a variety of living beings in the rainforest; how it was that the anteater eventually got its long snout, how dogs dream, how a tick perceives its furred hosts, and how the forest itself is thinking. As Kohn says, being attentive to these other living selves that surround us allow for another, and eventually richer, understanding of the human predicament (2013: 6). I agree and feel great sympathy with Kohn's project. The attraction of anthropology for me has always been that it is concerned with people whose worlds are populated with a variety of beings with whom humans have ongoing relationship and responsibility. Yet Kohn's elevated semiotic approach as well as his over-confidence in speaking about the worlds of these other living beings is hard to digest. Kohn, for example, states with no apparent hesitation that, "[T]o the tick, mammals are equivalent, simply because

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the tick doesn't notice the differences among the beings it parasitises" (2013: 85). Well, perhaps, but how do we know? In anthropology, we have been humbled to recognise the difficulties of understanding other, fellow human beings, and while entering into the world of ticks, dogs, trees or sunflowers we are certainly up against a much more challenging task. But indeed, something worth pursuing.

In this article, I will bring along Kohn's appeal for anthropology to be attentive to other-than-human beings. I will do this in dialogue with another anthropologist, Brian Morris, whose work is a celebration of the importance of the 'natural world' that surrounds us. Over the years Morris has carried out detailed ethnographic work on animals, insects, plants, and fungi, and linking these to the social and cultural life of the people in Malawi where he has carried out the bulk of his fieldwork. The aim for him, it seems, is not an anthropology beyond the human, but one that insists on humans as an intrinsic part of nature. Morris might have been the odd bird out for some time, but during recent years, we see a sprouting interest in the animal and plant kingdom within anthropology. In one of the more fashionable avatars this re-awakened interest is cast as 'multispecies ethnography', concerned with 'how the human has been formed and transformed amid encounters with multiple species of plants, animals, fungi, and microbes' (Kirksey, Scheutze and Helmreich 2014: 1-2). Donna Haraway's work is a key reference here, most commonly evoking her notions of 'companion species' and 'becoming with'. In her recent work on mushrooms, anthropologist Anna Tsing similarly suggests that human nature itself is 'an interspecies relationship'.<sup>1</sup>

In anthropology, we can, hence, note a renewed interest in nature, emerging under various headings like post-humanism, ontology, human-animal relations and materiality, and several of these strands have a longer history in the field. In my case, to a large extent, I have been working on environmental issues relating to indigenous peoples' struggles over land and resources. The point of departure has mainly been that of political ecology. Despite the obvious strengths of such a framework or approach (see Karlsson 2015), the focus on human agents and power has paradoxically silenced or relegated other living organisms to the margin of analysis. What I seek to do here is to juxtapose political ecology with the type of environmental anthropology Morris and his newer 'multispecies' friends are pursuing. I will present three cases or manifestations of modern forests; 1) one relating to 'carbon forests', or so-called REDD+ forests, in Northeast India; 2) a case concerning 'urban forest' or forest parks in Nairobi, Kenya; and 3) a case relating to 'industrial forests' in Sweden and in particular the devastating forest fire that ravaged a huge area of forest plantations in central Sweden during August 2014. As I will describe, these three cases are in one way or another entangled with my life. My approach is, therefore, somewhat autobiographical, perhaps an auto-ethnography of forests (cf. Khosravi 2010). There are critical political aspects that stand out in all three cases, and a political ecology kind of analysis would seem a reasonable choice. But again, the risk with such an approach is that nature is reduced to a question

of human appropriation and control of resources. The present call is instead for an environmental anthropology that also is attentive to the presence and agency of other species and the way human affairs are entangled with and are an intrinsic part of what we use to think about as the natural world. This effort is part of a wider conversation about the interface between political ecology and environmental anthropology.

## **METHODOLOGY**

There is no real argument or thesis that is being pursued as such, but rather, in the spirit of Morris, what I offer is a kind of 'ramble across an ethnographic terrain' (Morris 2000: 27). As a leitmotiv, I propose Tim Ingold and Gisli Palsson's notion of 'biosocial becomings', human life as movement and growth that is 'intrinsically social and biological' (Ingold 2013: 8-9). While recognising that the social and the biological do not exist as two independent forces shaping human life, semantically and analytically it is still hard to do away with the binary of society/culture versus biology/nature. Ingold also recognises this saying that the notion of 'biosocial' is far from ideal as it, nevertheless, suggests two distinct domains (ibid: 9). At stake here is a radical rethinking of the human sciences, a "paradigm shift" where, for example, anthropologists need to be able to engage with recent findings within biology (ibid: 20-21). Bruno Latour suggests something similar, saying that, for anthropology to be relevant in the age of the Anthropocene, it has to open new conversations to breach or transcend the disciplinary divide between socio-cultural and biological-physical subfields (Latour 2014). Brian Morris' work is pointing in such direction, as is the newer strands of environmental anthropology mentioned above (cf. Smart 2014). A recent contribution that stands out here is Anna Tsing's collaborative work on the matsutake mushroom. Tsing introduces the notion of "species assemblage" to think about how different species come together and influence each other; matsutake thrives in pine forest that has been ruined by heavy logging and the key protagonists are hence mushrooms, pines, and humans (Tsing 2015: 22-23).

This is a more modest attempt. I offer little in terms of epistemological and methodological novelties. I stay largely within the safety zone of the social sciences and humanities, just making some incursions into the domain of botany. Besides autoethnography—critical self-reflection, placing my own life and experiences in a larger societal, political and cultural context—the methodology applied is a combination of multi-sited field work and archival research carried out in India over a long period, and more limited archival excavations along with everyday interactions and selected interviews in Kenya and Sweden.

#### **INTO THE FOREST**

#### **Carbon forests**

Last year a master's student in geography at Stockholm University contacted me. He was interested in carbon forestry

and had found out that one such project had recently been launched in the Khasi Hills in the state of Meghalaya in India, and he had come to know that this was an area where I had been working for some time. The project he had heard about was a so-called REDD+ project. REDD stands for Reduced Emission from Deforestation and Degradation and revolves around the function of forests as carbon sinks. The idea, in short, is to compensate people in developing countries for conserving forest areas. The compensation will be based on the estimated capacity for emission reduction gained by maintaining that particular forest. This capacity is expressed in a number of 'carbon credits' that can be traded on emerging carbon markets. A company in the global north can hence choose to invest in such credits to compensate for polluting activities like frequent air travels or road transports. The set-up is extremely complex involving several steps of measurement, monitoring, and marketing carried out by several different agents and outside consultants. The Khasi Hills REDD+ Project is apparently the first community carbon forestry project in India, and has gathered substantial international recognition. As it turned out, a Swedish broker firm, U&We, is one of the key partners trading the calculated carbon credits of the project. I was quite taken aback, how did all this happen? People in Stockholm were now suddenly involved in the management of these faraway forest tracts.

As I soon discovered, instrumental in facilitating this remarkable development was Mark Poffenberger and his American organisation, Community Forestry International (CFI). Poffenberger had earlier carried out projects in the Mawphlang sacred grove, and in this case, i.e. the REDD+ project, he was working with the same local village organisation, headed by the energetic secretary Tymbor Lyngdoh. The scale of their engagement, however, had increased substantially. It was now a matter of conserving and restoring an area of total 27,000 ha, involving 63 villages and planting as many as 100,000 indigenous trees annually, as explained in a promotion film.<sup>2</sup> I had earlier made some critical remarks about CFI's work in Mawphlang (cf. Karlsson 2011: 118-121), and as I was watching film clips and skimming through project documents on their webpage I felt a sting of remorse; who was I to question their activities? In my writings I had rattled on about the ongoing destruction of the environment in the state, but never come close to even plant a single tree myself. Here we had guys who tried to change things on the ground!

REDD+ and other market-based mechanisms to mitigate climate change are the subject of a fairly substantial literature within the social sciences. In a simplified way, one could say that much of the critique focuses on different aspects of the commodification of nature and outside control—the creation of carbon as commodity, land alienation and disempowerment of local communities and indigenous epistemologies.<sup>3</sup> In a recent article, anthropologists Melissa Leach and Ian Scoones develop such a critique in relation to carbon forestry projects in West Africa. As they convincingly argue, the complicated technical aspects of these projects—methodologies, measurements, assessments and verifications—carry problematic 'social, political-economic, and even moral implications' (2013:957). They write:

These methodologies were developed for an imagined neat world of carbon cycle models and finance, from which the difficult complexities of real-life settings could be excluded. They were also developed to treat forest carbon as a commodity, tradable on global markets; a view that contrasts sharply with how local people in West Africa value and experience their landscapes (Leach and Scoones 2013: 966).

An additional aspect that Leach and Scoones (2013: 962) point to, which seems especially poignant in the case of the Khasi Hills, is that REDD+ projects require that the project manager has control over the forest land for the entire duration of the project (normally 30 years). In Meghalaya a resurgent contention concerns land alienation, and in a key piece of legislation, the Land Transfer Act of 1972, it is stated that no non-tribal entity can own or control land in the state. The Act has, for example, been activated in the case of the cement giant Lafarge leasing land for limestone extraction (see Karlsson 2011). The Khasi Hills REDD+ Project is presented as a community-run project where a conglomeration of village bodies forms what is called the Synjuk or Federation which implements the project and assumingly holds the rights to the 'carbon credits' generated by the project. Here, however, it is not entirely clear whether it is the Synjuk or rather CFI, the latter being referred to as "project manager", who ultimately have rights to the forestland turned into carbon forests. In a recent project document it says, for example, that CFI is "systematically transferring management authority to the Federation".<sup>4</sup> This suggests that CFI does indeed have authority over the project area, but that it is in the process of handing it over to the Federation. Such an arrangement might have been a necessary initial compromise, not least considering the highly technical nature of REDD+ projects, but it nevertheless raises concerns relating loss of control, access, and rights over ancestral lands and resources. As the carbon credits are sold globally and as these buyers ultimately have a stake in the management of the forests during the stipulated project period of 30 years, it could well be argued that it de facto leads to alienation of indigenous land.

Meghalaya as a 'tribal state' has a complex legal situation with customary laws and general Indian laws being applied side by side. Land cases often drag for decades after being pushed back and forth between the district council courts based on customary laws and the state High Court. This fate is not an unlikely future of the project. A further complication is that tree plantations can function as a means of claiming land or turning communal land into private holdings. According to traditional land tenure rules if a person plants a tree or makes any other improvement to the land no one else can claim or access that piece of land. Planting coffee trees and other 'permanent' crops has earlier worked as a means for the tribal elite to gain control and eventually ownership of large swathes of land.<sup>5</sup> The point here is that even if the REDD+ project, with its community framework, might not lead to direct alienation of land, it changes access, authority, and control over the concerned areas in significant ways (for a further discussion, see Fairhead, Leach and Scoones 2012). Elsewhere in the world, carbon forestry projects have also resulted in evictions of indigenous peoples and land grabbing (cf. Cavanagh and Benjaminsen 2014).

If we for a moment bracket all this, that is, the political ecology register, other things might come to the fore, as I suggested initially. One thing that struck me while watching the mentioned REDD+ promotion film was what kind of forests one eventually will end up with when the focus is on the capacity of trees to store carbon. Forests have different meanings and functions for people and the value of forests as 'carbon sinks' is obviously a novel one. What kind of forest then is a 'carbon forest' and what kind of trees would you expect to find there? Leach and Scoones do not address this, and only in passing refer to 'carbon trees' (2013: 961, citation marks, in original). Perhaps the question of which trees to plant didn't figure in the concerned projects. But one would think it should, as it predicates the forest you eventually will get. The promotion film for the Khasi Hills REDD+ project states that only 'indigenous trees' are going to be planted. What this implies is far from self-evident, but in the Second Annual Report of the project there is a list of the different species of trees to be planted. The report says that the selection of trees has been made on a trial basis. The selected tree species are named in both the local Khasi language and Latin, followed by the different usages of the respective tree. Here it is interesting to note that the mix of trees are valued for their ritual functions, resilience against fire, for the usefulness as timber, firewood and charcoal, or for the fruits or nuts that can be harvested, or leaves and bark that have medical value. Nothing, however, is mentioned about possible properties regarding carbon storage. The following seven trees are listed: 1) Dieng Sning/ Dieng Sohot (Castonopsis indica), 2) Dieng Ngan (Shima Khasiana), 3) Dieng Doh (Ex-buchlandia pupulnea), 4) Dieng Liengiong (Alnus nepaulensis), 5) Dieng Sai (Quercus Fenestrata), 6) Dieng Sohphie (Myrica esculenta), and 7) Dieng Sohiong (Prunus nepaulensis).6

The trained naturalist might be able to visualise what a forest with these species might come to look like. And probably she or he can tell whether there is some basis for claiming these as 'indigenous trees'. My botany skills are most limited, and while thinking about the forests in Khasi Hills two trees comes to my mind; oak and Khasi Pine. Oak is the sacred tree per se of the Khasis. There are several varieties of oak, and as far as I am aware, the oak tree on the REDD+ list, i.e. Castonopsis indica, is the one you are likely to find in Khasi Hills. In the classical monograph The Khasis, P.R.T. Gurdon (1906: 7-8) says that the area between Shillong and Jowai is beautifully wooded with oak trees and further that oak and rhododendron are the principal trees of the sacred groves scattered over the hills. Many of these groves have been lost to the timber business that ravaged the hills in the 1980s and the 1990s. Planting oak seems, nevertheless the most reasonable, and this indeed is an indigenous species.

Khasi Pine (Pinus Kesiya) has had more luck and is still a most common sight travelling in the higher altitudes, not least on the Shillong plateau. Khasi pine is a fast growing species that is valued as timber for construction and as raw material for the paper industry. Khasi pine, however, is not selected by the REDD+ project.<sup>7</sup> One reason for this can be that it has earned a dubious reputation for being an invasive species, said to be colonising the space of oak and other broad leave species. I recall visiting the Mawphlang sacred grove with two geographers from the local North-Eastern Hill University. We were there to make an inventory, and my two colleagues kept mentioning and were rather disturbed by the odd pine trees we encountered in the grove. I could not really understand this obsession with the pine trees, our job was just to list the different species we found within demarcated forest plots. As I figured out eventually, this probably had to do with the idea that sacred groves represented the prime or climax vegetation of the hills and that pine was not really considered part of 'indigenous nature' that many people cherished, but rather perceived as a threat to it. The British had planted pine trees, for example, as a green belt around Shillong and it is not unlikely that this tree has come to represent the colonial era (cf. Lien and Davison 2010). It is hard to tell whether any of this is at play here, but Khasi pine would otherwise appear as a most suitable choice of tree. It is 'indigenous' and could provide timber and firewood for the local communities involved in the REDD+ project.

## **Urban Forests**

Last year we moved to Kenya and through the Swedish Embassy, my wife's employer, we were assigned a house in Spring Valley, an old residential area in the northern outskirts of Nairobi. As a pleasant surprise, we found the beautiful Karura forest situated just nearby. With its 1,000 ha, Karura is one of the largest forests in the world situated within the parameters of a city. It is the perfect place to get breathing space away from traffic and noise. During 2014, almost 20,000 people visited the forest during the peak months to take a walk, jog, to ride bicycles or horses, and have picnics and family and school outings.<sup>8</sup> During weekdays, the forest is still often peaceful, and I have several times during visits come face to face with the tiny dik-dik deer or the flocks of monkeys coming crashing through the trees. After only a few months in Nairobi, I feel I had been drawn into the life of the Karura forest.

Beside the natural beauty and the wildlife, Karura forest has a most exciting history. The forest was initially owned by a Kikuyu clan who considered it sacred; cattle were not allowed to graze there and trees could not be cut (Njeru 2013: 67). The forest was handed over to the British who turned it into a government forest reserve in 1932.<sup>9</sup> During the Mau Mau rebellion, the Karura forest reserve offered refuge to rebels who stayed in the large caves situated deep inside the forest. Today, many visitors come to see these caves, and it has also

become a place for worship. The Mau Mau legacy in Karura has been carried forward by protesters who opposed the land grabbing that has been institutionalised under the Daniel Arap Moi regime. To finance the 1997 presidential election campaign, Moi allotted more than half of the Karura forests to private companies and individuals. This was high-value real estate land adjoining some of the more posh areas of Nairobi. When the public came to know about the shady undertakings, private builders had already moved in to clear the land of trees. But this time people did not take it as fait accompli (=an accomplished fact), and the protesters acted swiftly under the skilful leadership of Nobel Peace Price laureates, late Wangari Maathai and the Green Belt Movement. As in other cases the main strategy was to plant trees. As Maathai puts it, 'we would move in and try to reclaim the land by planting trees' (2007: 263). Things turned violent and as the government was determined to pursue this, as they claimed these privatisations were legal, students from University of Nairobi and Kenyatta University took to massive street protests that paralysed the city. Maathai had a large network of international contacts which was also mobilised to put pressure on Moi and, in 1999, the Kenyan President eventually gave in and called off the plans to privatise Karura forest (Maathai 2007: 271).

Geographer Jeremia Njeru (2013) suggests an 'urban political ecology' approach to make sense of the land grab in Karura, and hence describes it as a fall-out of the neoliberal reform agenda that Western donors imposed on Kenya during the 1990s. President Moi legitimised the appropriation of public lands by claiming this to be a matter of privatisation. Njueru argues further that the donor community paradoxically remained 'complicit' about this flagrant case of corruption (2013: 73-74). Here Njueru follows a point made earlier by Jacqueline Klopp (2000) arguing that reduced aid flows forced President Moi to seek other options to finance political patronage. Stealing public land and handing it over to political supporters became the most attractive alternative for the government. In both, Njuere's and Klopp's accounts, blame for the destruction of the Karura forests ends up with the international donors in their role as advocates of a neoliberal policy agenda and as an unintended consequence of their reduced aid flows and, subsequently, for being complicit or not vocal enough in criticising the government. This seems reasonable, but there are of course also the local dynamics at work in cases of 'land grabbing'. Law scholar Ambreena Manji (2012) stresses the role of different elite groups, and besides the political class she draws attention to the role of legal professionals in facilitating the large-scale illegal appropriation of public lands in Kenya (2012: 487).

As a result of the successful struggle for the preservation of the Karura forest, a new joint forest management regime has been put in place with the Kenya Forest Service, together with the Friends of Karura Forests, and various corporate and private sponsors are managing the forest (itself a neoliberal governance arrangement). A major step to secure the forest was the building of an electric fence around it, and the appointment of guards at the gates and to patrol inside the forest. Safety has been a major issue and Karura had earlier the reputation for being a hang-out for criminals and a dumping site of dead bodies. With the new management regime in place, an entry fee was also introduced; today it is KSH 100 for adults and KSH 40 for children.<sup>10</sup> This is a lot of money for the poorer sections of Nairobi's population, who obviously do not belong to the most frequent visitors. However, schools from all over the city come to Karura regularly, and a learning centre is being established that ultimately will serve children from marginalised sections of the society who otherwise would not have a chance to experience a green space like this. There is a lot of activity in the forest and much of the planting that is going on has been facilitated with the support from various private sponsors, acknowledged on signboards with corporate logos declaring that the company or bank has planted a certain number of tree saplings. Some of the local youths from the Huruma slum have been given jobs as forest scouts, and the women are allowed to collect dry woods and are provided with daily labour when required. Klopp (2012: 363), nevertheless, argues that while the Huruma community participated in the struggle to preserve the Karura forest they have now been excluded from it.

What we have here is a contradictory case relating to the formation of urban commons. The enclosure prevents capitalist appropriation by land-developers but in the process limits access and use by the urban poor. David Harvey (2012: 70) points to this dilemma, arguing that 'some sort of enclosure is often the best way to preserve certain kinds of valued commons'. He further advances the argument, "So not all forms of enclosure can be dismissed as bad by definition. The production and enclosure of non-commodified spaces in a ruthlessly commodifying world is surely a good thing." (Harvey 2012: 70).

Whether one finds the particular governance arrangement in the Karura forest attractive is another matter, but once again let us, for a moment, set aside these critical political ecology questions of access, control and power, and instead think about the life of the forest; the living things that make a forest.

Even if there is a lot of dispute about what constitutes a forest, one thing all seem to agree on is that there ought to be some trees. Without trees there is no forest! But as we have seen in the earlier discussion, not all trees are equally appreciated. This is also the case with the Karura forest. When you enter the forest through the Limuru gate you encounter a signboard saying, 'exotic tree and shrub removal to be replaced with indigenous species'. Such signboards are also put up in a few other places. During one of my walks I encountered a forest ranger busy instructing labourers just beside one of these signboards; I pointed to the activity and asked what kind of trees they were getting rid of, and which ones they were planting. "Eucalyptus," he said straight away; that was the main exotic species to be removed and in its place they were going to plant the indigenous tree "Croton".<sup>11</sup> While the colonial Forest Department in Kenya was a rather small and cash starved institution, one of the things they prioritised, and seemed to have been fairly successful with, was the plantation of 'exotic trees'; on the basis that indigenous species were considered to be 'bad natural reproducers and slow growers' (Ofcansky 1984: 138). The situation today is the reverse, with all the efforts in Karura going into planting 'indigenous' trees.

In most of the Newsletters of the Friends of Karura, there will be some discussion about the ongoing removal of exotic trees and what is described as the 'indigenous tree reforestation'. It is explained that only 25% of Karura is 'still natural', and beside Eucalyptus, Himalayan Cyprus and Lantana are exotic species that need to be eliminated. The language used has a military ring to it, for example, that two approaches can used, '1) cleancutting; and 2) surgical clearing'. In the case of eucalyptus, the first approach is recommended, and already as many as 1,000 such trees have been felled. Yet, fresh sprouts are coming up out of the stubs and various methods to deal with this problem are being considered.<sup>12</sup> The exotic species is hence described as a threat to the indigenous flora and fauna, even referred to as 'aliens' or not 'natural'. Nina, a visitor who participates in an open forum on the Karura webpage asks, 'what kind of tree it was that she came across during a visit to Karura, saying that it had seed-heads with 'white cotton wool'. She had collected a few samples and wanted to plant them back home in England. The web-admin replied that it was probably Bombax ceiba, also known as 'Silk cotton tree', an exotic species from India, adding in a later comment that the tree is not indigenous to Karura and suggesting that she, in her next visit, could 'slip a few Croton or Vepris fruits into her pocket'.<sup>13</sup> These are of course comments in the best of spirits, but we are still left with the larger question of why the exotic-indigenous dimension of the vegetation is of such importance. Elsewhere, the issue of alien and supposedly invasive species surfaced as a matter of great concern. A rather hilarious case is the four hippos that the late drug-lord Pablo Escobar imported illegally in the 1980s to his zoo at his vast ranch Hacienda Napoles. A few decades later and years after Escobar's death, the hippos had escaped into the wild and grown into a sizeable heard of at least 50-60 adults that are thriving in the new Colombian environment. As it turned out, the hippos reproduced even faster than in their natural habitat in Africa. The authorities are clueless on how to deal with the situation, hoping to avoid having to kill off the hippos-as has been suggested by conservationists-as such a move would add to the negative press of Colombia as a violence-ridden country.<sup>14</sup>

Anthropologists Jean and John Comaroff (2001) report about another, more dramatic, case concerning 'invasive species' in South Africa. A large-scale forest fire on the Cape peninsula just after the turn of the new Millennium caused a moral panic about foreign plants claimed to be the cause of the extensive fire. Land owners were targeted for not keeping invasive species in check and timber companies were criticised for planting alien trees claimed to be more prone to fires than the native flora (Comaroff and Comaroff 2001: 630-631). As the Comaroffs (2001: 650) explain the issue, 'invasive plant species' were imbricated in wider nationalist concerns, or as they put it, the fears of alien-nature become a 'metonymic projection of more deep-seated questions concerning the postcolonial state'—like the maintenance of borders, sovereignty, citizenship and belonging. Nature out of order, hence, evoked a crisis of the state. The response, the Comaroffs (2001) argue, was to invoke 'autochthony', and hence identify which was foreign—humans and plants alike—as the problem.<sup>15</sup> Is something similar going on with the planting of indigenous trees in the carbon forest of the Khasi Hills and in the Karura forest of Nairobi?

#### **Industrial Forests**

The forest has a special place in the Swedish national imagination, and it has been the backbone of the economy for at least two centuries. Commercial tree cutting started as early as the sixteenth century and from the mid nineteenth century saw mill industry significantly developed, and during the last 50 years forestry in Sweden has become a highly mechanised and industrialised venture, based on clear cutting, soil scarification, herbicides against deciduous trees, and plantations of conifers (cf. Östlund, Zackrisson and Axelsson 1997). As a consequence, almost all forests in the country have been converted to modern production areas; only a small percentage of the forest today is free from modern forestry operations. Spruce and pine are the preferred species and vast areas of deciduous forest have been cleared in the process. A number of exotic species have been introduced, especially Lodgepole pine, popularly known in Sweden under its Latin name, Pinus Contorta. It is estimated that more than half a million hectares of forest land in Sweden is now planted with Contorta pine (Engelmark et al 2001:4).<sup>16</sup>

Contorta pine is said to grow about 30 per cent faster than the native variety of Scots pine (Pinus Sylvestris), which is why it has been introduced on such a large scale. In my late teens I worked one summer for SCA, one of the largest forest companies in Sweden, planting trees in Jokkmokk, a small town above the Polar circle. Most of my co-workers were local youth who could run up and down on the hill sides with the heavy loads of plants on their back and hanging on the sides. We planted Contorta, and this was done on huge clear-felled mountain areas. The land had been ditched after the trees had been taken out and the large machines had left marks everywhere on the ground; it was a rather depressing sight, looking more like a ravaged moon landscape than something that had once been a forest. During coffee breaks, I recall, the jokes about how the Contorta pine are invading and will eventually take over the forest were shared amongst us. This was clearly something that was resented among those living in the area. Yet, as the forest companies are the key employers, explicit critique is rarely voiced in these northern inlands. If you yourself do not work for a forest company, someone else in the family or a neighbour or a friend might be doing so, or might have a hunting lease on their forest land that they do not want to risk. Environmental organisations and locals that critique modern forest operations are usually dismissed as naïve, urban romantics without any understanding of economic realities and the harsh situation, making a living, in the northern mountains.<sup>17</sup>

It strikes me that I have never been back to see whether these plants ever came up, and neither can I recall ever having seen a mature Contorta tree out in the wild. But as I have learned, it is not an entirely happy sight. Contorta pine is obviously not fit for the polar climate and many trees end up with twisted stems due to the heavy weight of snow during the long winters. In an interview, a hunter in Jokkmokk described Contorta trees as 'ugly and useless, crawling on the ground like snakes'.18 Nature photographer, Saami activist, and my schooldays friend, Tor Lundberg Tourda, similarly laments the stupidity of planting Contorta in the Arctic region. The twisted stems make the tree useless as saw timber, but above all, it reduces the understorey flora, and the particular lichen that reindeers feed on. He points to a report about Contorta becoming invasive, and argues that with large nearby plantations there is a large risk that it will start to spread into Muddus National Park, which is part of the UNESCO world heritage site Laponia. As Tor argues, Contorta should be cleared from all the northern, polar forests, citing the example of Rans Saami village where SCA has been compelled to uproot 200,000 saplings of Contorta pine (which according to the company representative mistakenly been planted instead of the native variety of pine that was agreed on<sup>19</sup>).<sup>20</sup>

The main Saami organisation SSR demands a ban on Contorta in reindeer grazing territories, as it makes the forest too compact, and hence, difficult for reindeers to pass through or find food.<sup>21</sup> However, in its original habitat in the North American West coast, Contorta pine is highly appreciated by the Native American Indians who use the tree as poles for their tepees, hence the English name Lodgepole pine. Even more distant Native American Indians from the plains would travel to the coastal forests to get hold of Lodgepole pine trees for their tepees. The needles were earlier also used to chew on, and for other medical and ritual purposes.<sup>22</sup> Contorta in Sweden is obviously something completely different from the tree in its original habitat in Canada.

The problem here is hence not the tree itself, but that it is in the wrong place—'nature out of place'. Humans have, for various reasons, brought trees, plants, animals, and other organisms along with them during travels and conquest. The colonial expansion into the global south became, among other things, a massive biotic transfer across oceans (Crosby 1986). A tree can be a reminder of painful pasts, and can also create problems in the present as we see in the case of the forest plantations in Sweden or with the forest fires in South Africa. In such instances it is understandable that people call for eradication of that which is alien. But eradication of living beings-be it trees or hippos-seems also to evoke strong emotions. This was the case with the felling of Eucalyptus trees in the Karura forest. Visitors got upset and questioned the staff why they were felling the trees as their job was to protect and maintain this green lung in the city.<sup>23</sup> Equivalent to the Contorta in Sweden, the main exotic tree brought to South Africa was the Bluegum tree Eucalyptus globulus. It was planted all around the country during the nineteenth and the twentieth century; basically up until the new government under ANC came into power in 1994. The, the water conservation became the key priority and with it, alien eucalypts, consuming large quantities of water, as well as being prone to forest fires, was deemed a plague and had to go, as discussed earlier. Government initiatives to eliminate exotic trees were launched under the heading of 'Working for Water', and 'public opinion', writes historian Brett M. Bennett (2011: 279), 'swung in favour of these eradication programmes'. But not all supported them. The controversial journalist, writer, and singer Rian Malan has taken up the cause to defend the despised tree. His song Bloekombloom (Afrikaans for Bluegum tree), goes as follows (I quote the first half),

Bluegum tree,

down by the stream.

Hands off my bluegum tree.

It is beautiful to me,

even though its time has passed.

I want to lie in its shade and dream.

Cut down. Mown down.

They say this tree must go.

It is an alien, a nasty foreign invader.

Cut it down from Harare to Table Bay.

But I say.

Alien. Also indigenous.

It's just like me, my bluegum tree.

Doesn't belong here,

but sets down roots.

In the earth's dark arteries.<sup>24</sup>

As white and Afrikaan, Rian Malan seems to feel that his presence in South Africa is as questioned as that of the bluegum tree, a species that been around for over a century but still is marked as an unwanted outsider that does not belong in the country.

Interlude - August 2, 2014.

We had just packed up our belongings and closed the summer house to get ready to leave for Kenya the following day. The wind was strong and we could smell the forest fire that was ravaging some 30 km away. Since morning it had gotten worse with dust and black clouds gathering in the sky. Bad signs, it did not feel right to leave. When we reached the airport a neighbour had posted an update on Facebook saying that they were getting ready to evacuate our village, Norberg. Buses had been parked on the main square. This was seriously bad news. Our eighteenth-century, heritage, wooden farm house would catch fire like a box of matches. We had had the house for only a couple of years, but it had become our home. During the coming days the worst forest fire in Sweden's modern history unfolded. Many things went wrong and, contrary to the belief of most Swedes, the authorities were utterly unprepared to deal with catastrophes of this magnitude. It was only when the wind slowed and later turned around, and it started to rain that the fire was finally brought under control with the help of special water-bombing airplanes that arrived from Italy and France, and a large number of individuals and locally organised volunteer groups digging fire-ditches and providing logistic support. One man died as he tried to save his timber truck that had been caught in the flames, several houses were destroyed (none in our village), and as much as 15,000 ha. of forest—equal to 30,000 football pitches—went up in smoke.

The fire had started on a clear-felling with a machine that was making ditches for re-plantation. The work was carried out by a local entrepreneur on forestlands belonging to Stora Enso, one of the main forest companies in Sweden. It had been an especially dry summer with temperatures around 30 degrees Celsius, clearly not the right time to be out with heavy machinery in the forest as sparks (when the equipment hit stones) could easily catch fire. A fireguard was supposed to be present during this type of work, which was not the case (obviously something that routinely happened, too costly). The man that carried out the work was hence the direct cause of the fire, but did the responsibility end there? This was the line Stora Enso was pushing. For me it was obvious that it was a wider responsibility, that one has to begin with the modern industrial forestry, with clear-felling, ditching, even-aged stands of conifers, and huge piles of woody mass (branches and top parts) left to dry in the forest.

In the media reports, and later in the interviews and discussions with neighbours, friends, and other people in the area, I was struck that the role of the forest industry was more or less completely left out of the picture; it was basically a non-issue. The common line of reasoning was instead that it was a series of unfortunate circumstances that caused the fire; a very dry and hot summer, strong wind, fire fighters getting the wrong coordinates and ending up in the wrong place, and so on. The focus was not to establish guilt or responsibility, but rather the experience of the fire and how people were coping with the different traumas the fire had caused (death, loss of houses and property, escape and distrust in the state), and the heroic deeds of individual persons.<sup>25</sup> There where only a few exceptions. One was the forest researcher Hans-Örjan Nohrstedt, from the Swedish Agriculture University, who pointed to the obvious, i.e., the fire ultimately had to do with the way forestry was carried out in Sweden. As Nohrstedt put it in a matter of fact way—in a debate article in one of the major daily newspapers one month after the fire-the forest industry needs to do more to prevent forest fires. First of all, it was an issue of the species of trees selected; forest companies plant about 2/3 spruce (Picea abies) in this part of Sweden, which is the most fire-prone species. Pine (Pinus sylvestris) is slightly more resistant, but most of all, there is a need for more leaf trees like birch (Betula) in the plantations to reduce the risk for wildspreading fires. Nohrstedt followed up his argument a year later, now questioning the report of the government commission, set to investigate the fire, for not addressing the role of the forest industry.<sup>26</sup> Another voice of dissent, who in a more explicit way pointed a finger to the 'greedy' forest companies, was the internationally acclaimed author and scholar Lars Gustafsson, who hails from this area and spends part of the year in Norberg. In interviews, articles, and blogs (and a poem), Gustafsson laments the destruction of the Swedish forests, which has been going on for far too long. Responsibility for the fire, he states with passion, rests with Stora Enso and other forest companies, as well as the complicit Swedish state, that contributed to the reduction of the forest into solely a matter of price per cubic meter, dismissing all other values as 'aesthetic nonsense'.<sup>27</sup>

Another striking thing with this dramatic event was the fire itself, or rather the force and surprising behaviour of the fire, for example, that it was 'jumping' over various natural barriers. Many eye-witnesses also described how the fire generated different types of weather phenomenon like strong wind and formation of clouds.<sup>28</sup> This was also taken up in various reports, a common formulation being, 'the fire created its own weather'.<sup>29</sup> I had never heard about this earlier, but apparently it is a known phenomenon where massive fires create *pyrocumulus* clouds, which in some instances, generate rain clouds and rain, which, then helps extinguish the fire. This appears as a kind of self-generating defence mechanism or nature's own agency.

### CONCLUSION

Through a winding path, built on personal experiences and ethnographic fragments from different parts of the world, I have grappled with the relationship and co-constitution of humans and forests, looking especially at how trees are intertwined with the life of humans. These are all well-known territories for anthropology, going back all the way to Frazer's classic The Golden Bough (1894) where he begins with this special tree with its golden bough in the sacred grove of Nemi. Other anthropologists have followed the suit, often looking at how forests, and trees, are dense sites of magic, symbol, myth, and rituals (see, for example, Rival 1998). There is also the more directly political work that addresses questions concerning access and rights, environmental justice, indigenous peoples' resource use, and conflicts with forces of state and capital. Here, I include the type of work I have been involved in. Today, anthropological work on forests and trees spans a wider register, stressing the social dimension of forests as an inhabited landscape, often shaped by long-term human dwelling, and the entanglements with that of animals and other living beings. Complexity is a key word as the boundary between nature and society becomes increasingly difficult to maintain (c.f. Hecht, Morrison and Padoch 2014). Here we see an overlap with concerns voiced by scholars within the field of multispecies ethnography, who allow for other than humans to be involved in complex world-making projects.

I came to know Brian Morris' work through his first book Forest Traders: A socio-economic study of the Hill Pandaram (1982). The study deals with issues that I was pre-occupied with at the time concerning tribal or indigenous peoples' ordeals with forest department staff and the encroachment into their ancestral territories. The Hill Pandaram had less and less land to collect forest produce due to, among other things, the large-scale plantations of teak (Tectona grandis). Modern forestry was also a major impediment for the Rabha peoples in the northern West Bengal in India, with whom I have worked (Karlsson 2000). What I found attractive with Morris' approach, which also comes through in his later work

in Africa, is that he is firmly grounded in the life-world of the people he is writing about. He develops a kind of 'foraging perspective' with special attention to things in nature that can be eaten, traded, or in other ways are useful. Malawians, Morris suggests, have a rather "pragmatic attitude to the natural world", commonly stressing the practical and material value of animals and other living things. Such materialist stance is also close to Morris own thinking, also running through much of his political and philosophical writings.<sup>30</sup> Morris is wary of theoretical excesses as well as overtly abstract and obscure language. This certainly set him apart from some of the contemporary multispecies and post-humanist scholarship. Yet the commonalities seem more noteworthy. Morris would certainly go along with the opening statement in How Forests Think, where Kohn (2013: 7) says that he shares "Donna Haraway's conviction that there is something about our everyday engagements with other kinds of creatures that can open new kinds of possibilities for relating and understanding."

The main concern in this article is how forests, or rather trees, matter to people. Why the concern for 'indigenous' trees? And why the vengeance against species considered 'exotic' or 'alien'? As we have seen there can be practical reasons, for example, that certain trees prevent traditional land use based on hunting-gathering or pastoralism, that certain trees more easily catch fire, or that the exotic trees become 'invasive' and hence, exclude important native species. But there are also other things at stake, as we have seen in the South African case where the eradication of non-indigenous trees evokes anxieties about who belongs in the new, post-apartheid, rainbow nation. Trees in such cases can come to represent a colonial past, that some would prefer completely erased. Writing about a conflict about 'exotic' pine trees (Pinus radiata) in a suburb in Tasmania, Australia, anthropologists Marianne Lien and Aidan Davison (2010: 243), suggest that cutting down pine trees might serve as an 'act of purification' for some, whereas others take it as an expression of nascent 'eco-fascism'. Most Swedes, myself included, have strong emotional bonds to the forest; it carries positive connotations—a place of freedom, authenticity, recreation and remembrance.<sup>31</sup> But the forest in our minds is probably not the one you are most likely to step out into, if you randomly halt somewhere in Sweden. There have never been more forests in Sweden than todayrepresentatives from the forest industry proudly proclaim—but what is not said is that such forests mainly consist of industrial plantations with single species, even aged, pine or spruce trees. Yet, surprisingly, beside the marginal voices of Sami herders and environmentalists there are no major outcry or organised protests in defence of a more diversified and biologically rich forest.

In our village, we have an outdoor heritage museum with a few old houses, a herbal garden, a café, and a playground. In the center, there is a massive, old spruce tree. The branches are huge, reaching the ground, making it the perfect tree for children to climb. In our first visit, I was keeping watch on my son who was climbing higher and higher up in the tree. Slightly terrified, I turned to a family having coffee nearby and started talking about how fantastic it was that magnificent trees like this was still around. They did not engage in the conversation at all and looked at me with blank faces. An old tree was obviously not something to be excited about. Spruce, as mentioned earlier, is one of the most common trees in the region with the history going back thousands of years. The supposedly oldest tree in the world is a Norway spruce (Picea abies) discovered in the mountainous areas in the neighbouring province of Dalarna.<sup>32</sup> The almost ten thousand year-old tree is called Old Tjikko, after the late dog of the geologist who discovered it. Some scholars seem less convinced, arguing that Old Tjikko might not even be characterised as a proper tree.33 Such stories surface as I think of the trees that make the forests of my life. As suggested, some issues lend themselves best to be considered through a political ecology register whereas others call for more exploratory approaches that seek to transgress both disciplinary and species boundaries. Trees, of course, not only matter to us the humans, they build their own worlds where living beings of various kinds are enrolled and can thrive.

#### ACKNOWLEDGEMENTS

I am most thankful for the support and encouragement by Alex Aisher and Vinita Damodaran, without whom this essay would not have been written. Critical comments from them as well as from the two anonymous reviewers have also helped to improve the text. I would also like to thank my friend Mikael Kurkiala for useful comments, and, finally, Brian Morris for inspiration and advice at a particularly critical moment in my academic life.

# **NOTES**

- The text 'Unruly edges: mushrooms as companion species' by Anna Tsing is available online, http://tsingmushrooms.blogspot. com/2010/11/anna-tsing-anthropology-university-of.html. Accessed on January 28, 2015.
- 'Restoring India's cloud forest—Khasi Hills community REDD+'. See https://www.youtube.com/watch?v=oAptIaYIgU8. Accessed on July 22, 2015.
- 3. This is also critique that have been raised by a number of environmental and indigenous organisations around the world. Many of these organisations argue that these mechanisms are ineffective and unjust as it allows the big polluters in global north to continue emitting green house gases.
- Page 25, Project Document, 2.0, November 2015. Community forestry international on behalf of Ka Synjuk Ki Hima Arliang Wah Umiam, Mawphlang Welfare Society, available on http:// www.planvivo.org/project-network/khasi-hills-communityredd-project-india/. Accessed on August 12, 2016.
- 5. This is a common feature of highland societies traditional dependent on shifting cultivation. Tania Murray Li, for example, describes how planting of trees have more or less privatised the entire village commons in the hills of Sulawesi, Indonesia, where she has carried out long-term ethnographic research (Li 2014).
- Second Annual Report, Khasi Hills REDD+ Project, pp. 31-33, available at http://communityforestryinternational.org/

PV\_Annual\_Report\_2013\_Khasi\_Hills\_REDD\_Project.pdf. Accessed on July 28, 2015.

- In this context is worth mentioning that an earlier project document does mention Khasi pine, stating that it will be used in "assisted natural regeneration" (ARN) and hence planted along with oak, chestnut and myrica. See http://www.planvivo. org/wp-content/uploads/Tech-Specs-Khasi-Hills-for-CFI.pdf. 'REDD and ANR: Technical Specifications' (2012: 15). Last accessed on 2016 Jul 29.
- See, http://www.friendsofkarura.org/wp-content/ uploads/2015/03/Visitor\_numbers\_Dec14.jpg. Last accessed on 2016 Jul 29.
- 9. I have not been able to establish exactly how this happened.
- 10. The entry fee for residents, like myself, is KSH 200 and KSH 600 for tourists.
- As mentioned on the Friends of Karura webpage there are two varities of Eucalyptus planted in Karura; *Eucalyptus saligna* and *Eucalyptus globule/globulus*. In case of Croton, the mentioned variety in Karura is *Croton megalocarpus* See http://www. friendsofkarura.org/the-karura-forest-researve/ecology-climatesoils-plants-animals/. Accessed on July 29, 2015.
- 12. See 'Reforestation: two approaches', Friends of Karura Forest, Newsletter, Jan-Feb 2014. Available at http://www. friendsofkarura.org/. Accessed on August 12, 2015.
- This exchange took place 2 and 3 January, 2013. See http://www. friendsofkarura.org/fees-guides-contacts/. Accessed on July 30, 2015.
- See BBC News 'Pablo Escobar's hippos: a growing problem', June 25, 2014. http://www.bbc.com/news/magazine-27905743. Accessed on August 15, 2015.
- 15. As I write this in early March 2015, forest fires are again ravaging the Cape Town province.
- For a wider discussion on Contorta pine is Sweden, see the special issue of the journal *Forest Ecology and Management*, 2001. Vol 141(1-2).
- 17. Friends of mine joined the organisation FURA (Action for saving the primeval forest in mountain regions; fura is also a Swedish word for pine) who were campaigning against the forest operations in sensitive, old, upland forests in northern Sweden in the latter part of the 1980s. Despite the chairman of the organisation being a Saami and other members also belonging to local communities, they were commonly ridiculed and dismissed by 'outsiders' or urban greens in the debate. Things turned around, when FURA changed tactic and launched an international consumer boycott against Swedish companies that carried out forest operations in primeval, mountain forests (see Nordlund 1999, for a history of FURA). For a wider critical discussion on forestry in Sweden and the unholy alliance between forest companies and the state, see the article series Skogen vi ärvde (The forest we inherited) by acclaimed journalist Maciej Zaremba (Dagens Nyheter, April-May 2012). Zaremba's articles reveal among other things the culture of silence that surrounds the dealings of the forestry industry.
- In interview with Maciej Zaremba, the 5<sup>th</sup> article in the series Skogen vi ärvde, DN, May 13, 2012.
- SVT, Swedish television, http://www.svt.se/nyheter/regionalt/ vasterbotten/200-000-tallplantor-rycks-upp. Accessed on August 23, 2015.

- 20. See Tor Lundberg Tuorda's blogg 'Contortan kommer att invadera nationalparken' (The contorta will invade the nationalpark), June 23, 2015 http://kvikkjokk.nu. Accessed on September 12, 2015.
- See the policy document 'Ett renskötselanpassat skogsbruk', Svenska Samernas Riksförbund, SSR (National Union of the Sami people), http://www.sapmi.se/skogspolicy.pdf. Accessed on September 13, 2015.
- See 'Native American Uses of Utah Forest Trees Fact Sheet', http://extension.usu.edu/files/publications/publication/ NR FF 018pr.pdf. Accessed on Septmebr 13, 2015.
- 23. The reason why they were felling these trees was carefully explained on the Friends of Karura webpage as well as on its online newsletter (see http://www.friendsofkarura.org/).
- 24. The song text is translated from Afrikans to English on the you tube clip https://www.youtube.com/watch?v=xi2UXkotGm4. The song is on the album *Alien* Inboorling from 2005. I thank Xonzoi Barbora for bringing it to my attention. Accessed on July 12, 2015.
- 25. See, for example, *Västmanland i lågor* (2015) by local journalists Jan Å. Johansson and Maire Martel.
- 26. 'Skogsbruket bör göra mer för att stävja bränder', SvD, September 3, 2014, and "Skogsbrukets ansvar borde ha granskats", SvD, August 3, 2015.
- 27. 'Förödelsen började redan för decennier sedan', *Expressen*, August 27, 2014.
- See for example, MSB Observatörsrapport, 'Skogsbranden i Västmanland 2014', 2015:27. See https://www.msb.se/RibData/ Filer/pdf/27530.pdf. Accessed on September 23, 2015.
- 29. Translated from Swedish, in original 'elden skapade sitt eget väder'.
- 30. The foraging world-view or perspective resonates with anarchist thinking as Morris shows in his other body of work, for example, in the collection of articles in *Ecology & Anarchism* (1996) and the more recent one *Anthropology, Ecology and Anarchism* (2014).
- 31. For a wonderful account of the role of forests in Sweden during last centuries, see *Herrarna i Skogen* (2007), by acclaimed author Kerstin Ekman.
- See http://info.adm.umu.se/NYHETER/PressmeddelandeEng. aspx?id=3061 or http://news.nationalgeographic.com/ news/2008/04/080414-oldest-tree.html. Accessed on August 25, 2015.
- Some also dispute the claim of Old Tjikko being the oldest tree in the world on grounds that it rather is a case of "clonal tree", see https://en.wikipedia.org/wiki/Old\_Tjikko. Accessed on May 5, 2016.

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Received: November 2015; Accepted: September 2016