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Posthumanist land- and lifescapes

"I have good relations with the asp", expressed our informant, an elderly ex-professional fisherman by the Kokemäenjoki River in south-west Finland, while describing his deep attachment to his home river. He was referring to the fish known as the asp (*Aspius aspius*), a particular species of the carp family, and the remark helped to advance our study of the potential of endemic renewal in river restoration.[1] As part of the study, we learned much about the time-space knowledges and practices of professional fishing that have evolved over generations. We also learned how focal the entire river and its fish species are in the fishing community's life.

In fishery, especially in its traditional forms, activities of individuals cannot be separated from the operations of the surrounding community. Our informant's community comprised his extended family over several generations, including elderly relatives, and neighbours, including eight professional fishermen who had passed fishing knowledge to him during his youth. Most importantly were his wife and their seven children who had gradually taken, since the 1950s, the core place in the fishing community. The informant's close friend had for decades processed and sold the catch to consumers, and long-time co-operation with partners in the fishery administration and in research had made them too part of the fishery community. Finally, the whole ecosystem, especially the fish species, produced the material basis of the endemic fishing community.[2]

The opening quote, referring to the fisherman's deep awareness of and even a certain alliance with the piscine associates of the community, demonstrates the practical bonding of humans and non-humans in traditional professional fishing. For example,

1 Mustonen & Lehtinen 2021.

2 Mustonen & Lehtinen 2021, p. 813.

the fisherman mentioned in the interview that in order to secure successful spawning of mother fish you need to know how the fish move on their regular routes. This knowledge is crucial when aiming at restoring rivers threatened by extractivist and polluting utilization.

The bonding of humans and non-humans has long been a common theme in geographical studies. In human geography, this bonding has notably widened our understanding of the time-spaces of human/non-human co-being. In some cases, this widening has turned into posthumanist conceptualizations and study formulations. Geographers with posthumanist and environmental emphases have, for example, criticized humanity's anthropocentric looking down on other species and the related indifference to the well-being of non-human subjects, and even the healthiness of the planet Earth in general. In human geography, this type of ontological rethinking (i.e. gradual movement towards hybrid humanity and nature) has evolved, for example, within studies of landscape polities, social natures, politics of nature, animal geographies, rivers as actor-networks, oil and biofuel assemblages, and geopolitical minerals.[3]

However, the posthumanist extension has brought up worries about the displacing of humanity in human geography. Concerns about lessening understanding of lived experience and human responsibility due to distributed agency have, for example, been expressed.[4] These worries derive in my view from regarding humanist and posthumanist ontologies as opposing positions. Unavoidably, there is ample evidence in posthumanist literature that supports this conclusion. However, the approach I lean on and develop in this chapter is not an antagonistic one. My primary motive is to promote comprehension of human/non-human associations as part of an ongoing renewal in human geographical research. Accordingly, my aim is to contribute to human/non-human coping with the planetary emergencies caused by humanity's anthropocentric constraints. An excellent example of this type of complementary attitude and approach is Ilona Hankonen's 2022 Ph.D. thesis, *Ihmisiä metsässä* ('People in the Forest')—a book-length forest excursion inspired by human geography and posthumanist landscape studies.[5]

Hence, the posthumanist extensions in current geographical renewal are in many ways related to the human geographical curricula. In my view, there is no necessary opposition between humanist and posthumanist geographies.

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3 Olwig 1984; 1986; 2002; Vartiainen 1984; Seppänen 1986; Lehtinen 1991; 2003; 2022; Häkli 1996; Wolch & Emel 1998; Kortelainen 1999; Haila & Lähde 2003; Salonen 2004; Humalisto 2014; Haarstad & Wanvik 2017; Kotilainen 2021.

4 Simonsen 2012; Häkli 2018; Rannila 2021.

5 Hankonen 2022.

Thus, I argue, the bonding is central, both in human/non-human practices and in research dealing with them. Due to this "double bonding", or "double aspectivity",[6] I have found early concerns and later specifications of posthumanist ontology refreshing as they have guided us to look critically at the causes and consequences of planetary emergencies and helped us to utilize hybrid conceptualizations such as lived nature, interspecies justice, culture-natures—and land- and lifescapes.

The concept of land- and lifescapes is inspired by Carl Ortwin Sauer who, after having witnessed the destruction of the land in the United States under expansive colonial influence, became worried about the "suicidal qualities of our current commercial economy".[7] He was concerned about the crimes of ethnic reorganization of the land and lives of the indigenous First Nations but he also paid attention to the loss of ecological values under the progression of the settlers' frontier. This led him to conclude that "the interaction of physical and social processes illustrates that the social scientist cannot restrict himself to social data alone".[8] This formulation of double bonding was later republished in a selection of Sauer's writing under the title *Land and Life*.[9] Sauer's critical discussion of plant and animal destruction in economic history, inspired by earlier concerns regarding humans' transformative power over earthly nature[10] and expansion of the *Raubwirtschaft* (plunder economy),[11] prepared for the later posthumanist awareness of biodiversity loss and ecocide risks that are widely shared in the contemporary politics of nature research.[12]

In my reading, posthumanist rethinking warns us not to consider nature as a sole asset, that is a domain exclusively reserved for human exploitation and control. Instead, it guides us to value nature as an existential space, a realm that needs to be freed from the currently predominant bipolar contestations between economic and ecological accounting.[13]

The opening quote of this chapter signifies the central importance of the Kokemäenjoki River for the interviewed fisherman and his community. The river, as a key source of livelihoods, has through generations afforded the means of community income. In addition, it has provided assets for heavy industry, leading to modification and pollution of the river. Consequently, the polluted river then became a restoration

6 Häkli 2018, p. 173.
7 Sauer 1938, p. 773.
8 Sauer 1938.
9 Leighly 1965.
10 Marsh 1864.
11 Friedrich 1904.
12 Lehtinen 2006b.
13 Hankonen 2022.

target. The existential values of the river were to be emphasized, including its fish populations, which had survived through decades of river transformation and pollution. The rights of the river were thus notified and explicated. This emphasis, and turn, follows similar procedures of river rehabilitation elsewhere. Rivers, as many other confined entities of nature, are increasingly viewed as subjects of rights and it has also been suggested that the fish species of these rivers should in some cases have property rights to their habitats. In 2017, for example, three initiatives to create legal personhoods for rivers were launched, namely Whanganui River in New Zealand, the Ganges and Yamuna Rivers in India, and the Atrato River in Colombia.[14] Promoters of these initiatives have argued that human beings should not be seen as having an exclusive right to a subject position in planetary socio-environmental matters.[15]

In accordance with the above framing, the present chapter documents a degree of progress in the study of environmental justice, one of the themes examined by the Landscape, Law and Justice research group in Oslo in 2002–2003.[16] In the following pages, I will explicate how the question of environmental justice has, after the Oslo research phase, been further specified in some of my projects through detailed concerns for interspecies injustice and claims for strengthening non-human rights. The chapter starts with some remarks on the posthumanist approach I have relied on and thereafter continues by summarizing two related case studies that I have been involved in since 2003.

BEYOND ANTHROPOCENTRISM

The posthumanist approach is concerned about the alarming shrinking and extinction of wild nature on Earth due to human-induced climate emergency, biodiversity crisis, extractivism and pollution. Planetary exploitation of soils, minerals, energy, forests, oceans and animals has resulted in irreversible losses of wildlife habitats and species. For example, due to brutal mining of the ecosystems and systematic oppression of wildlife species, wild mammals constitute today only 4% of global mammal biomass whereas humans (34%) with their livestock and pets (62%) cover the rest. Moreover, 70% of all birds alive today are poultry.[17] Hence my posthumanist approach is motivated by humanity's fatal anthropocentrism and hubris, apparently justifying the annihilation of the bio-geosphere by means of technological modernization (*techno-*

14 Knauss 2018; Chapron *et al*. 2019; Cabanes 2023.
15 Meriläinen & Lehtinen 2022.
16 Lehtinen 2005; 2006a.
17 Dasgupta 2021; Sörlin 2023.

cene) and related extractivist economies (*capitalocene*). The apparent success of the historical alliances between people, machines and markets (*Anthropocene*) seems to have freed us from crucial earthly limits.

The brutal annihilation and following planetary emergencies are outcomes of an enormous ontological bias. In modernity, humanity has become accustomed to overlook and ignore the existential rights of non-humans and therefore to lose a sense of the terrestrial and interspecies dependencies critical to planetary constitution and health.[18]

According to posthumanist guidelines, the ontological correction begins by rearticulating the critical dependencies, vulnerabilities and risks behind the drama of deepening socio-environmental crises. This is a decisive moment for the historical alliances of the Anthropocene. Systemic volatility needs to be taken seriously, as well as the necessity of systemic transition. This reorientation can only take place by radically rethinking existential and property rights across the inter-species divides.[19]

However, posthumanist concern is not only alarmed by the ontological bias linked to anthropocentric hubris. It also worries about how the Anthropocene discourse seems to obscure the view of the planetary drama by regarding all of humanity equally responsible for the current state of systemic volatility. This type of guilt-sharing tends to mask the accumulation of wealth and overconsumption in the capitalocene. The ecological shadow of the richest of humanity is regarded in many critical studies as the prime cause of the failed socio-environmental order and, it is argued, no turn to sustainability can take place without the significant reduction of this ecological shadow.[20]

In addition, the Anthropocene discourse seems to underrate and even veil the socio-environmental injustices caused by wealth accumulation. Growth in urban centres, for example, fuels extractivist practices in their resource peripheries. Researchers of planetary urbanization also question the feasibility of urban growth visions grounded on the premises of technological (eco)modernization.[21]

Researchers with posthumanist accents have extensively studied the active role of (human-modified) nature in shaping human/non-human conditions. Nature has been regarded in these studies as an integral and central factor in socio-environmental bonding. Concepts such as more-than-human assemblages, interspecies and multispecies justice, carbonscapes, topologies of biofuels and hydrosocial riverscapes have been

18 Lehtinen 2024.

19 Brown *et al*. 2019; Lehtinen 2022; Meriläinen & Lehtinen 2022.

20 Joutsenvirta *et al*. 2015.

21 Schulz & Bailey 2014; Exner *et al*. 2015; Ala-Mantila *et al*. 2022; Berglund 2022; Sörlin 2023.

introduced and applied. As a consequence, case studies of resource curses, oil addictions and pandemic bursts have been undertaken.[22]

These studies have underlined how actors and processes of nature participate in socio-environmental change by affording prospects and setting constraints on human/non-human co-being. Moreover, nature is seen as fuelling the debate on the feasibility of this co-being by reacting to changes in the form of weakening ecological vitality, which in turn might result in increasing socio-environmental vulnerability and risk production.[23]

Informed by this type of posthumanist thinking, the present chapter discusses human/non-human bonding practices by summarizing the main results from my research projects dealing with socio-environmental causes and consequences of forced displacement and rearticulations of human/non-human rights. The shared question in these projects has been: How to advance politics of nature that are both ecologically and socially just? Specifically, in the present chapter, the question is reformulated as: How to support and amplify "good relations" in multispecies co-being linked to riverscapes and forest land- and lifescapes?

DEFENDING THE RIVER, DEFENDING THE COMMUNITY

Our research project (2008–2013) on the reindeer-herding Iz'vatas people in northwestern Russia concentrated on mapping the historical phases of displacement caused by disruption in their critical socio-environmental conditions.[24] Iz'vatas, or Komi-Izhemtsy, is a community of Komi origin living by their home river, the Izhma, a tributary of the Pechora River, as well as in settlements in a diaspora spread over the western parts of Arctic Russia (*Figure 1*).

During the project, we learned that the initial diasporic reorganization of the community in the late 1800s and early 1900s was due to the overuse of reindeer pastures and an outbreak of epidemic diseases amongst the reindeer. This period of serious setbacks resulted in several waves of migration of Komi-Izhemtsy and their reindeer herds across the White Sea to the Kola peninsula, some 1,000 km to the north-west.[25] Reindeer, as members of the diaspora community, were brought across the sea during winters; the success of re-emplacement in Kola was fully dependent on the success of sea-crossings with the herds.

22 Humalisto 2014; Haarstad & Wanvik 2017; Brown *et al*. 2019; Lehtinen 2019; Tynkkynen 2019; Kotilainen 2021; Rannikko 2022; Siltala 2022; Price & Chao 2023.

23 Blaikie *et al*. 1994; Nygren 1998; Haila & Lähde 2003; Pelling 2003; Lehtinen 2022.

24 Fryer & Lehtinen 2013.

25 Konakov 1993.

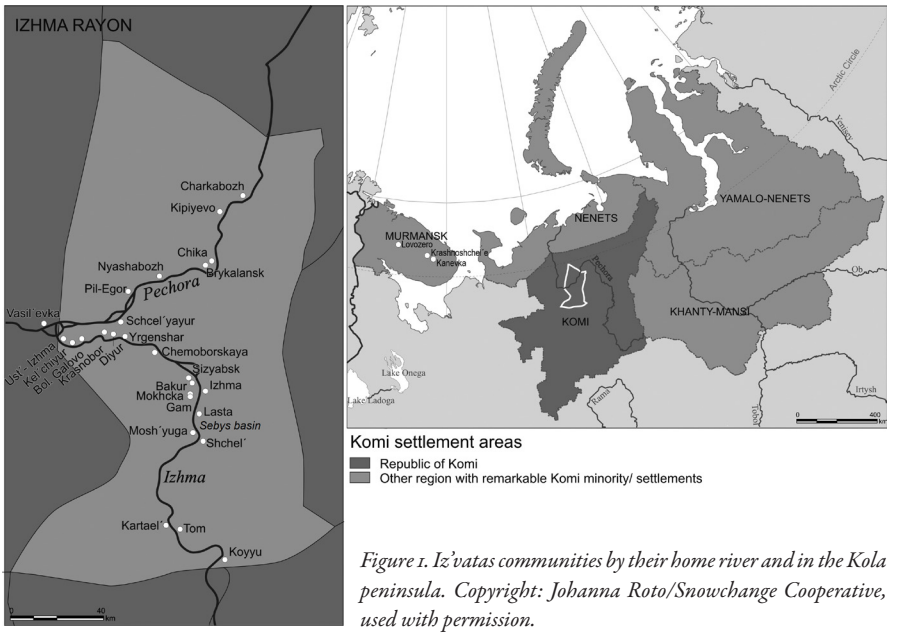

Figure 1. Iz'vatas communities by their home river and in the Kola peninsula. Copyright: Johanna Roto/Snowchange Cooperative, used with permission.

The dramatic Usinsk oil spill in 1994, releasing at least 110,000 metric tons of oil into a tributary of the Pechora River,[26] activated the Izhma community downstream of Usinsk. The oil catastrophe turned into a remobilizing episode for Iz'vatas and other ethnic groups concerned about the health of the Pechora River and its tributaries. This event taught us as researchers that forced displacement can also emerge without any migratory moves, in the form of wide-ranging changes in the daily conditions of living.[27] Moreover, we learned how the experience of oil pollution wounded the foundational bonding between the people and the river. Concretely, the deaths of fish populations, which will only recover slowly, radically limited the local fishery livelihoods.

Six years after the Usinsk oil spill, Pechoraneftegaz, a Russian–British–American company, started exploratory oil drilling in the Sebys nature conservation area close to the village of Izhma. The Sebys River basin, which discharges its waters into the Izhma River, is an important area for reindeer herding, hunting and fishing for the local people. Consequently, the locals became worried about the risks of oil extraction in their homelands and waters. The concern grew into a key issue for the Iz'vatas community and Pechora Rescue Committee. Demonstrations, public briefings and press meet-

26 Habeck 2002; Karjalainen & Habeck 2004.
27 Mustonen & Lehtinen 2020; 2021.

ings were held and petitions gathered. The conflict was finally taken to court, which resulted in cessation of the oil surveying in Sebys in 2003. The victory in the court case was achieved with the support of Memorial, the human rights organization, and Russian Greenpeace.[28]

The effectiveness of the Sebys campaign against oil exploration gathered momentum from earlier experiences of oil pollution of the main river. The victorious campaign highlighted how defending the community was synonymous with defending the home river and its surroundings. This bond functioned as the prime motive and source of action. In addition, we learned, defending the home river valley was synonymous with defending the Iz'vatas identity in general, including those from the Izhma River area living in the diaspora.

Our learning process confirmed the importance of including non-humans in displacement and diaspora studies and paying attention to critical bonds of culture–nature. The Iz'vatas research showed that this type of bonding, in principle grounded on mutual respect and reciprocal dependencies, is not free from crises and is not always characterized by *good relations*. Intense reindeer herding resulted in overgrazing and animal diseases, which together triggered the decision to migrate. In this case, the bonding involved extractivism, distressing both humans and non-humans.

Iz'vatas bonding emerged in the form of a successful civic campaign. The defence of Sebys had the effect of ending the oil exploration in the Sebys River basin, an area that was crucial for local livelihoods. Surprisingly, in the Russian context, the local land- and lifescapes of reindeer herding, hunting and fishing were in this case protected from translocal extractivism.

The diaspora community in Kola is an example of affective bonding. A sense of Iz'vatas identity has remained alongside intermarriages and close family ties with the indigenous Sámi. The Kola villages serve as the lived homeland for the descendants of the immigrants and the symbolic ties to the Izhma River basin keep alive the sense of community in the diaspora. The memories of the original home river basin and the epic migration are commemorated in the villages of Lovozero, Krasnoshchel'e and Kanevka, the main Iz'vatas settlements in the Kola peninsula. The imaginary of the Iz'vatas is constructed and maintained by shared memories and narrations of the river folk's lands and lives alongside the original home river.

The Iz'vatas research illustrates the central practical and symbolic placing of the Izhma River for the local people and their relatives in the diaspora. The river was still commemorated in Kola a century after the epic migration and almost 1,000 km northwest from the original home area. The campaign against oil drilling defended the ex-

28 Fryer & Lehtinen 2013.

istential right of the river and its people. The specific human/non-human alliance was thus viewed as a subject of rights. Iz'vatas is a river community embodying fish and fishermen, reindeer and herding families. Oil drilling threatened the *good relations* with the fish and reindeer, relations that are of utmost importance for the Iz'vatas.

RIGHTS TO FOREST, RIGHTS OF FOREST

Our forest discourses research project (2017–2023) concentrated on forest services, actors and policies in Finland. Most of Finland consists of boreal mixed forest, mainly Scots pine, Norway spruce and birch, but including some 30 other tree species. Private individuals and families own 60% of productive forest and account for 80% of the harvest. There are 344,000 forest holdings over 2 hectares in size. The majority of holdings are small, but there are some large holdings; 26% of the forest area is owned by the state and 14% by companies and other institutions. Approximately 50% of the private owners live on their holdings, while 25% live in towns of over 20,000 inhabitants.[29]

During the project, we learned that slightly over 20% of Finnish forest owners are currently worried about biodiversity loss caused by the predominant forestry methods. They claimed that forest professionals as a rule are inadequately prepared to advise on matters of ecologically sound forestry. In general, they argued, too little attention is paid to the sustenance of threatened species in Finnish forestry.[30]

In plain numbers, the ecologically concerned forest owners comprised only a minor fraction of the whole "discursive landscape" within private family forestry. In comparison, according to our research, about 75% of the forest owners favoured and promoted the predominant forestry methods. They simply denied the existence of any biodiversity problems and considered the prevailing forestry as supporting biodiversity.[31]

However, in our study, the ecologically concerned discourse was seen as a promising sign of systemic transition in Finnish forestry policies, which in any case, sooner or later, will have to adjust due to the pressures of planetary emergencies and related intergovernmental agreements. Twenty per cent of forest owners seemed to have a clear idea about the measures needed to halt the biodiversity loss. More binding regulation regarding cuttings and soil preparation was, for example, seen as necessary. In addition, compensation in the form of tax alleviation was suggested. The forestry methods proposed by them favoured decreasing clearcutting, continuous cover management, mixed forests and deadwood sustenance. Moreover, the pro-biodiversity forest owners

29 Mäntyranta 2019.
30 Takala *et al*. 2023.
31 Takala *et al*. 2021; 2022.

listed a broad array of non-timber practices worth promoting. In forestry planning, they would prioritize the biodiversity problem, instead of logging operations and income. In general, we learned, they associated biodiversity with the well-being of both humans and nature.

We also learned that ecological information reaches those forest owners who already know a lot about biodiversity. Through our earlier studies, it had already become obvious that the predominant forest policy discourse conducted in professional journals is inclined to keep the forest owners ignorant of the biodiversity crisis.[32]

Hence, our forest discourses research project concluded that the rights of those forest owners who are concerned about biodiversity loss are not fully recognized in contemporary forest policies in Finland. In addition, unfamiliarity with the biodiversity crisis was widespread among the rest of the forest owners due to informational restrictions in the main forestry journals. This then is also a matter of forest rights, namely rights to correct and up to date forest information, which in this case was largely lacking. Consequently, the rights of those citizens who utilize non-timber affordances of forests are in practice significantly limited. We also learned that the rights of forest species are not an issue in the predominant forestry planning. We thus summarized that the current silvicultural methods favoured in economic forests (covering *c*. 80% of Finnish forest land)[33] do not provide conditions for the well-being of humans and nature.

Rights to and of forests were further examined in an independent extension to the forest discourses project by exploring how rethinking forest rights can potentially challenge the predominant forestry practices in Finland.[34] This study concluded that, under contemporary forest policy conditions, the public right of access to nature has become seriously constrained. In Finland, the public right of access (Finnish *jokaisenoikeus*, Swedish *allemansrätten*) is not codified in law but is a customary right to roam freely in nature, to pick berries and mushrooms, and to camp away from buildings; it is specifically forbidden to damage trees or to cause other inconvenience for a landowner's land use.[35] However, the economic forest landscape dominated by young and even-aged stands resembles tree plantations[36] and is poor in terms of human/non-human well-being. The rights of nature discourse has as yet appeared ineffective

32 Takala *et al*. 2020.
33 Vadén & Majava 2022.
34 Meriläinen & Lehtinen 2022.
35 Ympäristöministeriö n.d.
36 Hyvärinen 2020.

in addressing the gradual degradation of intrinsic and conservational values of Finnish economic forests.[37]

A broadened forest rights framing holds a potential for challenging the predominant forest policy doctrine in Finland by highlighting the rising costs of eroding human/non-human well-being. For example, the Nordic public right of access to nature could be extended to serve as a means to ensure that people retain access to a forest that does not resemble a tree plantation. Highlighting the rights to forest could in this way also support the rights of forest. On the other hand, the promoters of the rights of nature could much more effectively clarify for the Finnish forest sector the options attached to the biodiversity strategy and nature restoration law of the European Union (EU)[38] and the Convention on Biological Diversity's Kunming–Montréal Global Biodiversity Framework under the United Nations Environment Programme.[39] Both extensions of forest rights could be introduced as potential sources of forest income due to incipient forms of pricing for carbon storage and for upholding biodiversity.[40]

CONCLUSIONS

The research projects summarized above examine various forms of bonding between rivers, forests and humans, including a range of multispecies relations attached to reindeer and herders, fish and fishery communities, forest species and non-timber affordances.

The Iz'vatas study highlights the expressions of community attachment to the home river through local routines and via translocal commemorations. The oil exploration was regarded by the local people as a threat to their livelihoods and identity. The legal status of the river and the people living alongside it appeared unclear. The Izhma River and Iz'vatas had to be defended and, moreover, broader clarification of rights was seen as necessary. The setting is not unique. Rivers and river traditions are increasingly threatened by extractivist projects throughout the world. However, recent moves toward recognizing rivers as subjects of rights can be regarded as signals of change.

These signals tell that the ecologies and traditions of rivers deserve particular attention in the implementation of the biodiversity agreements and nature restoration plans recently launched by the EU and UN. The Kokemäenjoki River project serves as a positive example of the socio-environmental potential of river restoration. We as

37 Meriläinen & Lehtinen 2022.
38 European Union 2024.
39 Convention on Biological Diversity 2022.
40 Vadén & Majava 2022.

researchers became convinced about the importance of documenting and utilizing local communities' historically accumulated knowledge about *good relations* with rivers and their multispecies milieus.

On the other hand, the forestry example indicates that human access to nature is not at all guaranteed in forests that resemble plantations. Therefore, due to this mismatch, the Finnish right of access to nature could be codified in law as a means of limiting industrial forestry practices and prioritizing non-timber values. Hence, the public right of access could be seen as a means to defend both the rights to forest and rights of forest. Biodiversity, for example, could be the foremost concern in forestry, as the ecologically aware forest owners suggested. A significant part of forest income would then be earned from maintaining carbon sinks and a rich variety of forest species.

The posthumanist approach challenges the currently predominant forestry practices. Posthumanist forestry would favour the type of forest land- and lifescapes that enrich interaction between humans and non-humans. Places of co-being and co-learning would thereby be developed and conserved. In other words, the human subject would be displaced, and partially decentred, in relation to other subjects of forests. This type of rethinking would support the updating of Finnish forestry practices according to the guidance of the EU and UN.

In general, the two research projects shared and further developed the conceptual framework of environmental and interspecies justice discussed as part of the Landscape, Law and Justice research project 20 years ago. Linkages to the broader scholarly perspectives advanced then in Oslo have become increasingly apparent and relevant. The land- and lifescapes concept commemorates the Sauerian tradition that has in many ways more or less explicitly influenced the later progression of Nordic landscape studies, especially those critical contributions that have examined both the sustaining and extractivist features of human/non-human co-being on Earth. This linking reminds us of the early roots of the alarm over the contemporary biodiversity crisis and, as I see it, represents a centennial unfolding of research profiles gradually turning toward posthumanist rethinking in human geography and neighbouring research fields.

In addition, a legal perspective is implied in discussing non-human rights and their recognition in research and politics. Forests and rivers are increasingly viewed as subjects of rights and, moreover, some non-human species are in certain cases suggested as having property rights to their habitats. This type of posthumanist rethinking of rights could potentially be highly inspirational in landscape, law and justice projects to come, especially those linked to a renewed legal geography.

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