# INTRODUCTION: FRONTIER MAKING THROUGH TERRITORIAL PROCESSES. QUALITIES AND POSSIBILITIES OF LIFE

In recent years, the concept of 'frontier' has **⊥** become an important analytical device in the social sciences to discuss resourcemaking in connection with state formation, procurement of labour, environmental destruction, transformation of landscapes, and climate change (see Geiger 2008; Gregory 1982; Tsing 2005; Kelly and Peluso 2014; Li 2014; McCarthy 2013; Cons and Eilenberg 2019). In fact, the frontier has become such a popular theoretical concept that it threatens to become blurred with different meanings. In the early discussion frontiers were mainly understood as areas open to expansion and exploitation or colonialization, nonstate spaces (Scott 1998), while the current discussion has specified different types of frontiers (Geiger 2008; Kröger and Nygren 2020) and frontier making processes (Acciaioli and Shabrawal 2017). The rapidly shifting frontier situations in the current world suggest that the frontier becomes a useful concept in connection with territorialization, since the frontiers as open areas give rise to efforts to map, regulate, expand, and extract in these remote areas. Rasmussen and Lund (2018: 388) proposed that 'frontier dynamics dissolve existing social orders—property systems, political jurisdictions, rights, and social contracts—whereas territorialization is shorthand for all dynamics that establish them and reorder space anew.' We propose that frontiers are spatial, temporal, and relational situations that involve territorial processes that qualify landscapes and relations between

humans and other beings, such as plants, animals, and so forth. Territory making refers here to attempts to maintain or create access to land through boundary making by humans and other-than-humans.

In this special issue, we focus especially on the processes of the commodification of nature under frontier conditions. We ask how environments and other-than-human and human lives are in different ways made into commodities that are to varying degrees alienated from their previous social and environmental contexts, producers, and even environments (e.g. West 2006: 183-183). In so doing, we foreground the connections that the commodification and creation of territories and frontiers have with their concrete effects. As we explore how environments and lives are turned into, or re-valued as, commodities, we want to emphasize that they are 'fictitious commodities' (Polanyi 1944: 76). This means that while they are treated—in certain historical contexts—as commodities, they have not been produced for the market, and they have important material properties, meanings, and indeed lives of their own irrespective of their commodification (Tsing 2013). These meanings, lives, and effects depend always on the wider socio-ecological context and on the relations in which they are embedded (Chao 2018: 637; Peluso 2012: 79, 82). It is these particular historical and ecological webs of relations that we explore.

These webs of relations emerge out of frontier and territory making. Shifting

frontierization and territorialization processes that produce webs of relations and overlapping socio-natural orders point to messy power relations that become indexed in the frontier landscapes. For example, oil palm plantations or large soya fields replacing forests or gardens manifest new socionatural and hierarchical human relations, and thus values.

McCarthy (2013: 184) notes that frontiers are about struggles over how local environments and practices are valued. This echoes David Graeber's (2001: 88) observation that the greatest political struggles are not only about appropriating value, but over defining what value is and what is valued (see also Lounela 2021; Moore 2015: 14, 54; Tammisto 2018: 19, 21–23). In this issue, the authors explore how 'nature' or components of the environment, including both human and other-than-human lives, are re-valued as resources and especially as commodities, namely things that can be exchanged for money and other commodities on the market between reciprocally independent partners (Gregory 1982: 12, 19).

Frontiers are also sites of invention of new commodities. For instance, carbon has become a new form of commodity through climate change mitigation projects in which emission permits are sold on the market (Dalsgaard 2013; Lounela 2015). In this issue Lounela examines how environmental projects entangle with the plantation industry introduced by the state and corporate actors to reforest the drained swampland to rewet the land and at the same time feed the plywood factory. Paradoxically, the Dayaks and the industrial actors adopt the same tree species to draw boundaries in the space that the state wishes to mark as state land. Shifting territorialization is characteristic of the frontier situation, in which multiple projects dissolve or stabilize relations and different valuations of the environment.

In the cases examined by Itkonen and Tammisto local people turn to small-scale commodity production in order to protect their territorial conceptions and the relations attached to them in the context of large-scale natural resource extraction. By doing so, people may be protecting the values that inform local relations and conceptions of the environment, values that may significantly differ from commodity logic. Wiping out previous species, livelihood systems, and—human and otherthan-human—populations, and replacing them with new ones raises profound questions about existence: Kröger calls us to examine what lives are allowed to exist on frontier areas. He asks how different kinds of lives are valued. and according to what value systems. In all these cases, the processes of revaluing 'work', components of the environment, and landscapes create shifting frontier situations.

In this issue, the authors examine everyday practices and scales of different forms of territorialization in regions that have frontier characteristics: rapid natural resource extraction and commodification, contested boundary making processes, colonialization, and overlapping territorialization processes in an effort to stabilize rule over people and resources, in the South and North, namely the Finnish Lapland, Kalimantan in Indonesia, rural areas of Papua New Guinea, and the Brazilian Amazon. Large-scale resource extraction and struggle over different tenure regimes are in progress in all these areas. In their respective texts, the authors focus on different aspects and qualities of frontier making, namely questions about territorialization, the spatio-temporal dynamics of frontiers, and the possibilities of life under frontier conditions.

## TERRITORIALIZATION AS AN EFFORT TO STABILIZE RELATIONSHIPS

The classic definition of 'territorialization' refers to human expansion in geographical space. For instance, Vandergeest and Peluso (1995: 388) famously proposed that territorialization is 'about excluding or including people within particular geographic boundaries, and about controlling what people do and their access to natural resources within those boundaries'. In this special issue, we emphasize that territorialization is a fragmented and uneven process, and control and rule are always contested and ambiguous, producing overlapping zones (Hansen and Stepputat 2006) illegibility of the state, and networks of power (Das 2004: 234) that involve other-than-humans as important markers of the territorial boundaries.

Territories include many kinds of boundaries, inclusions and exclusions, and new entities. Michael Sheridan (2016: 33) has argued that boundaries in England and 'the boundary' as a concept often mean exclusion but in another context the boundary may create and unify, raising the question of what meanings boundaries have. He suggests that, for instance, boundary plants can transform the boundary concept. Recently, scholars looking at boundarymaking have begun to take seriously the role of the plants in these processes (Brighenti 2010: 60).

In this issue, authors propose that territory should not be understood only as 'human territory' but that territories involve other-than-human actors that participate in the making of territories or in territorializing processes (Besky and Padve 2016). In anthropology, plants have for a long time been the object of study in terms of their symbolic meanings in connection with human institutions and territorial practices,

but in the current discussions, plants are also understood to be social and have agency as selves (Kohn 2013: 92; Hartigan 2019: 1). How different plant species and their commodification entangle with the lives of local populations has been less studied (see Chao 2018), but in this issue, authors explore the socio-material relations that commodity species give rise to.

'Territory' is a concept loaded with multiple understandings, definitions, and usages in the social sciences. In the 1960s, anthropologists discussed mainly 'human territory' and stressed human adaptation to the environment in the footsteps of Julian Steward's ecological anthropology in discussing human territoriality mainly as resource use, control, and distribution in territorial terms (Dyson-Hudson and Smith 1978).

Political ecology, a theoretical orientation closely related to environmental anthropology, adopted the notion of territory mainly from geographers. Robert Sack (1983: 55) defined territory as 'an attempt by an individual or group to affect, influence or control people, phenomena, and relationships by delimiting and asserting control over a geographic area'. This definition inspired political ecologists to further develop the concept of 'territorialization'. In this special issue, the authors suggest that we need to understand why and what territorial acts people choose in frontier situations, and what kinds of limits there are to their choices. We stress the importance of plant species and animals as companions to humans in their effort to maintain, expand, and mark territories. Local territorial acts are strategies and responses to territorialization by the state or other actors.

Itkonen explores long-term processes of territorialization by the Finnish state and global corporations in the Finnish Lapland. In response, the local Sámi territorial acts aim to maintain, create, and contest territories of reindeer herding in Lapland. The changes in reindeer herding patterns and Sámi livelihoods reflect the territorialization processes in the Finnish frontier situations, showing also that frontiers are not necessarily located only in the Global South (Geiger 2008: 95-96). Itkonen's article focuses importantly on human-animal relations: the human-animal territories are formed through reindeer herding, which creates flexible boundaries because wandering reindeer also are boundary 'markers'. This explains why reindeer herding remains important to the Sámi and incorporates new technologies and increasing commodification as a response to increasing regulation and impact by the state and the European Union.

In a very different context in Indonesian Kalimantan, plants play an important part in territorialization processes, generating new inclusions and exclusions since the tree plantations for industrial purposes demand land and create new social forms and boundaries within the swampy landscapes inhabited by Ngaju Dayaks. Lounela explores how local people make territories through planting commodity trees in an effort to anticipate the external territorialization projects expanding onto the land they have considered endless, just to realize that there is an end to that land (Li 2014).

Tammisto explores agricultural practices that allow the Mengen in Papua New Guinea to maintain their autonomy through cocoa cultivation, showing that these semi-commodified territories contribute to state formation as people seek contact with those state institutions they see as beneficial and seek to make their territorial arrangements recognizable to the state (see also Timmer 2010 and Trouillot 2001). The Mengen, just like the Ngaju Dayaks and the Sámi people, adopt commodity species when they have to settle their boundaries in response

to state and corporate or other territorialization projects. In the frontier situation with rapid environmental changes (Tsing 2005; Cons and Eilenberg 2019) people adopt commodity species to guarantee their access and control to land that is now 'ending' (Li 2014).

Territorialization through the commodification of nature turns some landscapes into monoculture plantations, and some species and beings might not survive the changes. Kröger explores soybean plantations, which turn rainforests into territories under private property arrangements and wipe out subsistence livelihood possibilities of local indigenous communities. These ways of life, value regimes, and webs of relations are replaced by monocultures and institutions valuing money. Thus, territory making processes transform whole landscapes and the everyday life of the indigenous groups and of other beings. In such a frontier situation, as Kröger suggests, territorialization defines what, who, and how beings may live within the landscapes.

## QUALIFYING OTHER-THAN-Human relations On shifting frontiers

Nature elements are 'unruly' companions (Tsing 2012) in the territorialization projects, as Lounela shows in her article. They have qualities that contribute to the ways humans relate to nature elements, beings, the surrounding environment, and their human companions. Looking at how territorialization qualifies relations between humans and other-than-humans, and thus socio-natural landscapes, is ever more important. Currently, large-scale agricultural, industrial, and environmental projects continue to revalue nature elements as commodities in attempts to fix or create solutions to environmental degradation, food

security, and climate change, often with new plant species. Anthropologists in the field increasingly find out that transformed and 'weedy landscapes' (Tsing 2019: 33) are remade with new species (Lounela, Berglund and Kallinen [eds] 2019).

We propose that important contributions could be made to the frontier discussion through studies of the qualities of the other-than-human relations in frontier situations. Deleuze and Guattari (1987 [1980]) have suggested that qualitative marks make the territory and become its expressive quality—in other words—the elements such as sounds, temporalities. and rhythms qualify territories (Deleuze and Guattari 1987: 315). It is these qualities that define socio-natural relations (Lounela) and thus whose and which ways of life are possible (Kröger).

This special issue acknowledges the need to explore the characteristics of different commodity species and how they qualify social relations between people and other-than-human species in connection with the large-scale processes of transformation that bring along these qualitative changes in sociomaterial landscapes. Thus, in addition to qualities, the scales of territorialization are important, as Kröger's case shows; when one plant occupies large areas, it wipes out others. Such quantitative changes radically change also the qualities of relations and landscapes.

Sophie Chao (2018) has shown how the oil palm-human interaction and the territorial relations it involves may turn nightmarish. Similarly, the Ngaju Dayaks have uneasy relations with the newly introduced industrial tree species that do not adapt well to the peat landscape that is vulnerable to fires. On the other hand, Tammisto describes how the oil palm plantation is related to the local cocoa cultivation of the Mengen, as people travel

between these two territories and their different social institutions and relations accordingly: cocoa cultivation allows the autonomy to practice subsistence ways of life and control over one's labor and time, while the palm oil plantation demands people to submit to the disciplinary labor work, but brings cash. Thus, rather than discussing in general 'resources', that is 'cash crops', 'plantations', or 'forests' in frontier spaces, we suggest that a focus on concrete qualities of the relations between humans and other-than-human actors in the making of frontier situations offer important views to future research on the possibilities of human and other-than-human life on the frontiers.

# RECONFIGURING RELATIONS ON SHIFTING FRONTIERS

Frontiers are commonly understood as liminal spaces or sites between different orders (Geiger 2008: 88; Korf and Rayemaekers 2013: 10; West 2016: 23). Due to this 'openness', frontiers are for some actors places of imagination that seem to hold the promise for expansion or enrichment (Li 2014: 13; Tsing 2005), but often end up being sites of great inequalities (Jacka 2015: 46). As noted above, this openness of the situation means the frontier is a spatio-temporal process—with a beginning and an end—during which relationships are made, unmade, and reconfigured.

This reconfiguration ties in with state formation, as frontiers are sites under the influence of the state, but often in situations where state territorialization is also incomplete or where state regulation is—deliberately or not—weak. This is closely tied to the question of different actors trying to affirm their view of how and by whom resources should be controlled and how on the frontier old authorities and sovereignties are challenged, for example, when

state institutions seek to ascertain state control, when outside actors challenge local tenure practices in the absence of secure tenure rights (Hall 2011: 839), or when state institutions and actors are formed or reconfigured.

The discursive aspect whereby certain actors frame an area as 'wild' and 'unused', and indeed imagine it as a 'frontier', is central in making the resources available, because it often glosses over prior forms of use, ownership, and knowledge (Davidov 2014: 41-43; Kuokkanen 2020: 512-514; Stella 2007: 49, 51-52; Tsing 2005: 27, 32; West 2016: 4-5). In this sense resource frontiers are spaces, and also periods of time, where it is not clear whose valuations and definitions prevail. On them, old authorities and sovereignties are challenged (Peluso and Lund 2011: 668) and relationships are made and unmade (Bell 2015: 131). Frontiers are thus processes in which actors not only compete over the control and definition of resources, but in which the actors themselves are made, unmade, or reproduced (Tammisto 2018: 23).

In his article, Panu Itkonen examines the inter-relationship between state-led and state-supported industrialization and territorialization in parts of Lapland belonging now to the Finnish state. From the point of view of the Finnish state, and its predecessors, Lapland has appeared as a resource frontier, a sparsely populated area with seemingly unused resources. As Itkonen shows, these territorializing practices have at times ignored and displaced tenure practices and rights of the Skolt Sámi living on and gaining their livelihood from the land. This shows how the frontier, as a meeting site between different orders (Korf and Rayemaekers 2013: 11), is a matter of perspective: what for a certain actor looks like a frontier, a site of expansion and 'unused resources', is for those inhabiting it a lived environment and a center of their world (Geiger 2008: 86).

Another aspect of the frontier is its temporality and dynamic character. When frontiers are understood as spatio-temporal processes, we can identify when the process begins, ends, or changes. For example, the frontier 'closes' when one actor manages to secure their tenure, when the resources are depleted because of resource exhaustion or political regulation (Kröger and Nygren 2020: 369) Tania Li (2014: 2, 176, 180) describes the dynamic of the closing of the frontier in the context of Sulawesi smallholders: as long as there is land that can be cleared for cultivation, the land frontier is open, and when further clearance is not possible anymore, for example, when the forests are conserved or owned by the state, the land frontier closes. Likewise, when frontier conditions emerge or are created in a new area, the frontier may 'shift', for example, when logging companies deplete forests in one area and move to the next, where resources are made available for them under lax regulation. Finally, frontiers may 're-open' when the conditions that closed them are reversed.

In his article Tammisto explores these spatio-temporal dynamics of shifting resource frontiers by examining the longer historical processes under which the land, labour, and resources of the North Mengen were made available for extraction and how and under what conditions the frontiers closed, shifted, and re-opened. In the case of Central Kalimantan, Lounela explores the histories of commodification of nature that involve colonial and local acts of territorialization. In the 1960s and 1990s, the state logging and food estate projects brought along canalization of the swamp forests and regularly erupting fire disasters, which opened the land to new interventions. The timber industry together with the state actors introduced rapidly growing commodity tree species and new corporate

social forms, which have drawn new boundaries within the landscape and social relations, and paradoxically strengthened the state control over land, confusing the local and state territorial boundaries.

The final aspect of frontiers we want to examine here is what possibilities of life exist on frontiers and under what conditions. In his text, Markus Kröger points out the fact that the political economic and ecological discussions of resource extraction and industrial agriculture under frontier conditions have paid relatively little explicit attention to what kinds of life exist, what is allowed to exist, and for how long. When forests are logged for timber and replaced with monocultures, such as soybean or oil palm plantations or cattle ranches, the possibilities of life of certain species are extinguished, while certain kinds of life, such as farm animals, are fostered, but only for a specific period of time. Kröger calls us to foreground the question of existence and to remember that the politicaleconomic dynamics of frontiers affect the actual lives and possibilities of living of both humans and other-than-humans in different, and often negative, ways.

## CONCLUSIONS

In this special issue, we bring together four case studies that reflect the current paradoxes of frontier making. We bring together the cases from Papua New Guinea, Indonesia, Brazil, and Finland because they reflect the urgency to understand how profound environmental changes, overlapping and messy governance systems, state formation processes, global structures and capitalist projects, and local territorial acts produce new relations and qualities materialized in the local landscapes. Frontier studies, we propose, should put more focus on the qualities and possibilities of life

in the crossroads of scales of state making and global policies and actors.

We build on earlier work on frontiers, examining them foremost as processes and situations. Earlier discussions of frontier and territorializing dynamics have been valuable but regionally focused. In this special issue we examine the commonalities and differences of frontier and territory making in the Global South and the North, from Lapland to Kalimantan and Brazil to Papua New Guinea. We begin the issue with Anu Lounela's article on boundary-making with plants among the Ngaju Dayaks of Kalimantan. It is followed by Tuomas Tammisto's article on a local cocoa project and frontier dynamics in East Pomio, Papua New Guinea, and Panu Itkonen's article on state territorialization through industrialization on Skolt Sámi lands in Finnish Lapland. In the final research article, Markus Kröger examines frontier dynamics as questions of life and existence in the Brazilian Amazon. The issue is concluded by the afterword of Timo Kaartinen, who discusses the concept of frontier from different perspectives by drawing on his research in West Kalimantan and reflecting on the articles of this special issue.

All these articles emphasize the need to focus on the concrete qualities of other-than-human beings in their interactions with humans in frontier and territory making processes. The various cases show that natural resources are not generic, but specific natural elements that are revalued as commodities and resources that can be extracted. More so, in the cases discussed here, the natural elements are living beings—plants, animals, and humans. As discussed in detail in each of the articles, the specific qualities of these beings and lives bear a great significance on how and in what different ways frontier dynamics and territorializing processes unfold in specific locations.

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