On the human and more-than-human agency in shaping *Dovrefjell* as place

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Dovrefjell describes a Norwegian mountain area that is populated by humans since agriculture arrived 9000 years ago.[1] Throughout history, it became a cultural symbol of national and local identity but also economically important. This generated conflicting interests that shaped the landscape(s), infrastructures and life forms constituting Dovrefjell. In this essay, I will take this place as the basis for elaborating on the interaction of systems of human agency with environments using the concept of *environing*. I will argue that even though the concept is suitable for revealing the culture-nature dichotomy, making sense of Dovrefjell needs to expand agency to the more-than-human world through acknowledging the sympoietic structure of the whole. Here, cosmologies as the underlying narratives play a significant role in writing cultural history beyond the dichotomy.

Following Sörlin and Wormbs,[2] environing describes the process in which the world is formed by human agency to become governable within an envisioned way of life as well as its consequences. Thus, an "environment" is not something perceived out there but always an enacted formation and conceptualisation by humans arising from their interests and ideas – it becomes a social construction growing from human actions in historical and cultural processes[3] and in this sense, lies beyond the culture-nature dualism. In the following, I will therefore present the cultural history of Dovrefjell not just in terms of material but also conceptual and experiential changes that are actively mediated by competing communities using environing technologies like physical shaping, quantifying and politicising.[4]

As materialised landscape, Dovrefjell is mostly known as a national park. Officially, national parks demarcate an area with a unique material basis which makes it worth protecting. In this case, this amounts to a specific mountain flora but also the protection of the pastureland for the local population of wild reindeer.[5] At the same time, national parks are demanded to offer unique experiences,[6] which not only attracts tourists but also links them tightly to cultural ideas about how this particular landscape and "landscape" as abstract concept are viewed. Here, the resulting tension between protection and increased tourism

1. Flemsæter et al., *Dovrefjells moralske landskap*, 6.
2. Sörlin and Wormbs, "Environing technologies," 105.
3. Sörlin and Wormbs, 104.
4. Sörlin and Wormbs, 115.
5. Flemsæter et al., *Dovrefjells moralske landskap*, 28.
6. Flemsæter et al., 65.

frames this a socio-political question whose answer reflects power relations: Flemsæter et al.[7] argue that Norway tends here towards prioritising "traditional" recreation connected to actors like the national Norwegian tourist association (DNT) and activities like hunting and farming, whereas "urban" recreation focusing on adventure and scenery are restricted. Thus, the national ideal of a "traditional landscape" overwrites modernist interests. Consequently, the rules for the national park are a conceptual environing technology[8] that has physical implications for how Dovrefjell is shaped[9].

This link between the material shape of Dovrefjell and the understanding of "nature tradition" is itself subject to cultural-historical changes: the origin of the focus on "nature" can be linked to the 19th century where scientists of the Enlightenment explored nature as what is external to civilisation but also artists sought poetic inspiration in nature.[10] Witoszek[11] argues that Norwegians especially followed the Enlightenment concept of a rational and simple nature within an "ecohumanist" thinking based on humanistic ideals supported by symbols derived from nature imagery and connections to particular places. For the local community, I would argue that Dovrefjell became therefore a "local nature" where the forms of life and topography interweave with local traditions to create a distinctive place that emanates the "familiarity of home".[12] Here, traditions provide both, the descriptive representation as well as the normative essence of the place. Thereby, the tight connection to the place opens up the possibility for change and adaption over time. In contrast, abstract nature as the home of humankind guided the understanding of nature tradition nationally:[13] "Norwegian nature" became a universal[14] – the shared ground of all life and the place to rediscover the connection to the own aliveness[15]. It is thereby no necessary contradiction that nature is both, external and universal.[16] Rather, I take this to be the manifestation of culture-nature dualistic thinking where people tend towards living in cities while also placing cultural value on immersing themselves "out into nature"; with

7. Flemsæter et al., *Dovrefjells moralske landskap*, 34.
8. Sörlin and Wormbs, "Environing technologies," 108.
9. For example, the trails are shaped by hikers and sheep but not by the tires of bicycles and cars that are forbidden.
10. Smith, *Uneven development*, 21.
11. Witoszek, *The origins of the "regime of goodness"*, 51, 53.
12. Daston, *Against nature*, 15.
13. Witoszek, *The origins of the "regime of goodness"*, 127.
14. Compare Smith (2008, 23).
15. Witoszek (2011, 229-30) formulates this beautifully as: "hunting and trapping are equally good expressions of the relationship with nature as Grieg's music and Wergeland's poems".
16. Smith, *Uneven development*, 27.

the traditional *hytte* as the utopian place where it is often played out.[17]

Together, the adaptive idea of nature tradition in local communities and the national interests arising from a more rigid understanding diverge and cause social tensions that are fought out in Dovrefjell's materiality. This can be made visible when considering infrastructures as an environing technology that serves the interests of different parties to influence the "truth" in their favour[18]. A vivid example in Dovrefjell is the local road *Snøheimvegen* that connects the highway with a DNT cabin close to the highest mountain in the area. Until recently, this road was part of a closed military area, but after the demilitarisation in 2005, national politicians decided with environmentalists to restore the "wildness" of this area by removing all human infrastructure. However, the route has been used for hunting and farming ever since these activities were intensified in the 18th century, for which reason local people wanted to preserve it.[19] Thus, the given materiality of Dovrefjell is sensed by the local community in a way that evokes normative claims about how this landscape can be used – a reference back to their concept of this place as "local nature". The involved adaptiveness also explains why their argumentation ignores the fact that the road's usability for cars is mainly connected to the recent military activity. Irrespectively, the current solution is nationally inspired: the road is open for buses only, though not for local interests or to save the ecosystem but because DNT considered people-driving-cars-into-nature as "non-native".[20]

As a final aspect, I want to investigate the administration plans concerning the muskox population in Dovrefjell from 1996 and 2017 as environing technologies that relate conceptual to physical environing most clearly. Once extinct before the last ice age, muskoxen were reintroduced to Dovrefjell between 1932 and 1953.[21] Despite being officially handled as non-native species, they are still considered as "wild" which amounts to what Asdal[22] coins a co-modification of biology and market for economical reasons: the value of the muskox is culturally enacted through the marketing as pre-historical part of Dovrefjell's "wilderness", which can also be seen on the title page of the plan from 1996 showing petroglyphs of human beings hunting animals and the remaining pages being illustrated with drawings of Dovrefjell with muskoxen. At the same time, the location of the herd is fixed to a certain area to increase visibility and decrease potential conflicts with humans and

17. Witoszek, *The origins of the "regime of goodness"*, 143.
18. This definition for infrastructure is taken from Carse (2014, 7).
19. Flemsæter et al., *Dovrefjells moralske landskap*, 33.
20. Flemsæter et al., 48.
21. Persen, *Forvaltningsplan for moskus på Dovre*, 6.
22. Asdal, "Enacting values from the sea," 8–9.

human infrastructure like the highway and railroad crossing Dovrefjell.[23]

This administratively designed area is circumscribed by the typical winter pastureland of the muskoxen and conceptualised in a map[24] so that Dovrefjell can be "read" and supervised within centralised political institutions[25]. Here, the muskoxen are not equipped with an agency that expresses their needs but made a single, human-governable entity based on collected location data. Similarly, the population control was first oriented at experiences of local communities[26] but later superseded by a unified number of animals per area based on scientific evidence from other populations.[27] Again, the muskoxen became governable in terms of a single number expressing a universally "sustainable" population size.

Thus, the administration plans ultimately point towards the consequences of environing technologies: the sensual data, like locating and counting the muskoxen, manifested in written form do not only determine how decision makers act upon this environment but also initiate a conceptual change. In particular, they convey assumptions about what is essential to and valuable about Dovrefjell, and who decides on this. As pointed out above, this conceptual environing subsequently implies physical changes again like the rules in the national park and the discussion on *Snøheimvegen* revealed.

So far, I showed how tracking environing technologies can be utilised to understand the history of Dovrefjell as cultural-natural-technological. However, it does so necessarily by allowing for a limited range of agents and relations only: thus, it approaches the overcoming of the culture-nature dichotomy by showing how human agents interact with the world while ignoring non-human agency, so that human-nature relations are considered from an anthropocentric standpoint only[28]. At the same time, the framework assumes, in the spirit of social contracting, individuals interacting with each other instead of considering the underlying dynamic entanglement as a source for change. As such, I would argue that the framework enables highlighting certain limited forms of knowledge and control at the expense of having a too narrow vision that is blind to the far more complex reality[29] – one without clear parties. An example of this relates to the 2017 administration plan which reports concerns about the muskoxen attracting too many tourists that in turn distract the reindeer. They express this by playing out the national park regulations protecting reindeer

23. Persen, *Forvaltningsplan for moskus på Dovre*, 7.
24. Persen, 9.
25. Compare Scott (1998, 15).
26. Persen, 10.
27. Rangbru and Seljevoll, *Forvaltningsplan for moskusbestanden på Dovrefjell*, 18.
28. I would argue that Sörlin and Wormbs implicitly acknowledge this (2018, 114).
29. Compare Scott (1998, 11).

against the economical value of muskox[30] which both can be analysed within the concept of environing technologies. However, it thereby cannot take into account the needs of the animals, their interaction with the place or possible interspecies creative relationships. Thus, environing technologies can only make visible how the socio-political system imposes (un)intentionally a structure on the environment, but they cannot account for the complex interspecies system that might be overwritten in this process.

As an alternative, Sutter[31] proposes to conceptualise environments as culture-nature fields of power in which human and more-than-human agencies intertwine and together enact spatio-temporal changes. These agencies become especially visible when empirical observations clash with ideological predispositions. I would however argue that this appeal to the language of empiricism, as it can be observed in the administration plans, tends towards the abstract, quantifiable and universal, so that cultural expressions become insensitive to anything beyond the coarsest expressions of agencies – that is individual groups interacting with each other.

To avoid this fallacy, I would argue that it becomes significant to start from the insight that all life forms necessarily attach meaning to their surrounding to make sense of it and utilise it for continuing their existence.[32] Thus, it is appropriate to see culture as the human-specific way to create meaning but does so only within an intersubjective whole, the living cosmos, that consists of all meaning-creating sources:[33] as sympoiesis, the parts become with everything else as part of a whole – through creating new ways of meaningful entanglements in the material world but also opposing this created reality to create new meaning as self-relating individuals and communities.[34] Thus, instead of rationalising Dovrefjell as a historical place of interacting culture and nature, seeing it as sympoiesis means accepting the own embeddedness in a collectively-producing system. This system lacks self- or human-defined spatio-temporal boundaries but presents an open system with distributed control among components which are not necessarily coinciding with our idea of individuality.[35] Writing history beyond the culture-nature dichotomy means therefore not just thinking about but with the cosmos in meaningful encounters.

This cannot be willed externally or defined by theory but requires an inner cosmological stance that opens up for encountering agency in the more-than-human world – a cosmology as the fundamental tone of our narrative melody that guides our orientation within the

30. Rangbru and Seljevoll, *Forvaltningsplan for moskusbestanden på Dovrefjell*, 24.
31. Sutter, "Nature's Agents or Agents of Empire?," 729.
32. Weber, *Biopoetics*, 4.
33. Weber, 4.
34. Weber, 84.
35. Haraway, *Staying with the trouble*, 33.

world – because "it matters what stories make worlds, what worlds make stories".[36] It is the "cosmological leftover" of Descartes' scientific proof of human superiority[37] and the Christian Genesis declaring nature as inferior to humanity[38] that makes overcoming the dichotomy of culture and nature so difficult in Western thought. Going forward requires a new cosmology, one that is inspired by stories like the one told by Kimmerer:[39] Skywoman fell from the sky, without orientation or home, but was saved by geese and placed on the back of a large turtle who offered her land to live on. The human being understands this gift of the animals and gives back in gratitude in the form of plants as food for all. Here, the cosmology informed by this narrative clearly implies reciprocal becoming in a sympoiesis of all forms of life but also the possibility of understanding the more-than-human world in direct encounters.

In conclusion, I showed the applicability of the concept of environing for understanding enacted places like Dovrefjell. I argued that the concept can reveal the dichotomy of culture and nature by showing how Dovrefjell is constructed culturally, socially and historically: its landscape bears the imprints of national and local ideas of nature, but it is also a specific fauna and set of infrastructures that interact in a complex setting of socio-political and economical power relations. Here, different environing technologies following from its infrastructures, the national park rules and administration plans were identified and utilised to make sense of the cultural history of Dovrefjell to a large degree. However, I showed that thereby, the more-than-human world is stripped of its agency and underlying dynamics. Writing history beyond the dualism requires therefore finding alternative cosmologies, like the Indigenous narrative of Kimmerer or the biology-inspired work of Haraway, that open up the possibility to make visible the infinite amount of sources and stories a place like Dovrefjell consists of. It becomes then the work of cultural historians of nature to inform their own writing by these to account for the complexity and agency of the more-than-human world in history.

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37. Thomas, *Man and the natural world*, 33.
38. Thomas, 17–8.
39. Kimmerer, *Braiding sweetgrass*, 1–3.

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