

Sikkim's Moving Landscapes Towards Non-Human Agency Scenarios for the Future

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Abstract Sikkim is a small state in India, bordered by China (Tibet), Nepal and Bhutan, known throughout the Himalayas as a biodiversity hotspot and a *beyul*. The history of Sikkim is the story of a vibrant and sacred territory made by multi-species relationships, of a landscape influenced by both human and non-human agencies. Within the sacred topography of Sikkim, conflicts between humans and the environment are not uncommon, and humans often do not emerge as the victors. The consequences of neglecting the relationship with the non-human communities manifest not only in the spiritual but also in the physical and everyday landscape. 'Moving landscapes' can serve as a model to encourage people to reflect on the consequences of their actions and to consider what steps need to be taken to protect the fragile balance of the landscape before it reaches a breaking point. The examples and data presented are from the last field trip to Yuksam (West Sikkim) in May 2022.

Keywords Environment. Sacred ecology. Animated landscape. Moving landscapes. Beyul. Sikkim.

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1 Introduction

In May 2022, I embarked on a research trip to Sikkim with the objective of gathering and analysing ethnographic data pertinent to my master's thesis, which was subsequently titled *A Shamanic and Buddhist Ontology. A Case Study of Environmental Ethics in Sikkim (India)*.

The circumstances that led me to become interested in Sikkim and the Himalayan environment are varied. They can be roughly summarized into three categories.

1. An interest in the themes of the ontological turn, encompassing shamanic and environmental issues.¹
2. A basic understanding of the significant themes of Buddhism, and the idea that the theoretical contradictions between Buddhism and shamanism could be set aside, as both ontologies postulate a non-anthropocentric worldview. With regard to this matter, Balikci (2008, 4) presents a compelling argument that Buddhism and shamanism coexist in village realities in a more fluid and less dichotomous form than is commonly assumed from literary sources, on the basis of a strong "shared worldview, which links the body, the territory, society and the supernatural". Mumford describes this presence as an ancient matrix, apotropaic and non-soteriological, dating back to a form of pre-Lamaistic shamanic religiosity, upon which the Buddhist ethical apparatus was subsequently superimposed (Lepcha, Torri 2016, 147; Torri 2021, 185; Mumford 1989). The result of this peculiar combination has brought to light a particular intersection of perspectives on reality, which Torri (2021, 185) does not hesitate to define as animistic.² The most significant manifestation of this is the particular relationship with the environment and the myriad non-human beings that inhabit it. In particular, the bond of Sikkim's first inhabitants, the Lepcha, with the sacred landscape and non-human entities is experienced as true kinship (Torri 2011, 154). The territory is regarded as sacred due to its animate and inhabited nature, with a multitude of non-human beings

1 The authors of the Ontological Turn, which emerged as an alternative to Geertz's interpretive anthropology, have explicitly claimed a series of breaks with Western metaphysics and its implicated dualisms: culture and nature, subject and world, humans and non-humans. Following postcolonial studies and embracing the new sensibilities of ecological thought, they aim to abandon the idea of interpretation and take native worlds seriously. This shift from epistemology to ontology, with a strong anti-representationalist intent, pivots on the so-called "Amerindian perspectivism". For further reading, it is recommended consulting the following authors and texts: Brigati, Gamberi 2019; Descola 2020; 2021; Latour 2020; Viveiros De Castro 2004; 2019.

2 Drawing on Bird-David's interpretation of animism as a relational epistemology. See Bird-David 1999, 67-91.

present and influencing daily interactions, particularly in moments of illness or misfortune (Torri 2015, 258). The landscape is not merely a passive backdrop but an active participant in these interactions, with a sense of intentionality and agency. It is a complex assemblage of presences committed to a dynamic and ongoing process of exchange and engagement (Torri 2021, 183, 195). It seems reasonable to posit that such a worldview is non-anthropocentric, given the dynamics that create a thick interdependency among the villagers and the non-human communities of Sikkim.

3. Finally, the hypothesis that the coexistence of shamanism and Buddhism could form the basis of an environmental ontology. The ontological landscape thus conceived conceives a world not dichotomised by the antithetical opposition between nature and culture (as this dualism has been understood in modern Euro-American society, starting from the developments of Cartesian philosophy).³ This results in the possibility of an animated landscape composed of a community of actors, both human and non-human, capable of mutually recognising their agency on an equal level. Such a possibility implies that the aforementioned animated landscape would not support the division between a subject of knowledge and an object of knowledge.

Following preliminary research to identify a study area relevant to my research interests, I noted that Sikkim possessed all the necessary prerequisites to conduct a case study in the desired field. However, between the end of 2021 and the beginning of 2022, some of the most restrictive travel limitations were still in place due to the regulations implemented to counter the Coronavirus pandemic. The process of travelling was considerably challenging, as commercial flights had not yet been reinstated (up until that point, travel was only permitted for essential purposes), and the acquisition of an entry visa for India was a complex endeavour. In the initial weeks of March 2022, the gradual resumption of commercial flights was initiated, extending beyond the European Union to countries still considered at risk. Additionally, another challenge emerged: until the early months of February 2022, access to Sikkim was prohibited to all non-residents, primarily tourists. When the conditions appeared

³ The influence of Cartesian-Kantian philosophy has led to a gradual complication of epistemology and a simultaneous simplification of ontology in Western society, leading to the emergence of an absolute dichotomy: *res extensa* and *res cogitans*, nature and culture (Viveiros De Castro 2019, 139-40). The result of modern ontology's reduction is the pacification and silencing of things, their deprivation of autonomy, power, and agency; thus, the relegation of matter (nature) to a role of total passivity and indifference.

to be relatively optimal for planning a research stay, given the still relatively uncertain situation, I devised a travel itinerary that would take me to Sikkim for a month, from May to June. Originally, I was scheduled to conduct the entire research period in the Restricted Area of North Sikkim known as Dzongu. However, due to the Coronavirus pandemic and low tourist flow, an unforeseen difficulty arose, making it impossible to obtain an entry permit. Consequently, it was necessary to temporarily relocate to the capital, Gangtok (East Sikkim), and identify an alternative site that would be compatible with the research. Ultimately, the decision was made to select Yuksam. Its population is currently composed mainly of Lhopo (Bhutia) and Nepali groups, although there is a significant Lepcha community both within the inner perimeter and in the more peripheral areas of Yuksam.⁴ As the administrative centre of the Khangchendzonga National Park and the base camp for trekking to Mount Khangchendzonga, Yuksam experiences a significant influx of mountaineers from across the globe. The inhabitants of the village, as stakeholders in the preservation of biodiversity in the Rathong Chu valley, have played a significant role in the development of ecotourism in the area. The village has been particularly successful in promoting ecotourism not only in the region but also in other similar areas in Sikkim. Yuksam is thus considered a model village for ecotourism.

The ethnographic data referenced below are the result of qualitative research based on the exclusive use of unstructured individual interviews. Wherever possible, triangulation of sources (both oral and documentary) was employed, comparing what emerged during one interview with what was said in other conversations. The methodology employed led to the identification of informants who, despite my initial reluctance to define them as such, were nevertheless able to provide insights that were valuable to the research. Efforts were made to diversify the types of participants in verbal exchanges as much as possible, with interviews conducted with community members from various ethnic groups, including Lhopo (Sikkim Bhutia), Lepcha, Sherpa, Nepali, and Tibet's Bhutia. The socio-economic status of the interlocutors was also considered. This included entrepreneurs in the tourism sector, teachers, local government officials, academics, employees of a national NGO with a local branch office in

⁴ Bhutia, also known as Lhopo (from *Lhopa*, 'people from the South'), or Denjongpa, meaning 'inhabitants of the fertile valley' (from *bras mo ljongs*). It is used to refer to any Buddhist community of the Himalayan plateau, from Ladakh to Arunachal Pradesh, that uses a Tibetan dialect (Balicki 2008, 6). The term 'Lepcha' is an exoethnonym created by the Nepali communities. The Lepcha prefer to refer to themselves using the endoethnonym 'mutanchi rongkup rumkup', which can be translated as 'children of the snowy peaks or the gods' (Bentley 2007, 59). They also refer to themselves as *rongkup* (children of the mountains) or *rongagit* (*Rong* tribe) (Torri 2011, 149-65).

Yuksam, taxi drivers, and journalists. Additionally, the context in which the interlocutors operated was taken into account. This included secular or spiritual contexts, such as that of lamas and shamans.

Due to the incisiveness of some of the statements made, which appeared to be consistent with one another and highly pertinent to my current research, I was compelled to consider their words and ideas and to rely on their assertions. Although the total number of interviewed individuals, who were predominantly rural low-middle class, did not reach the standards necessary for quantitative analysis, this was compensated for by repeated interviews with the same interlocutors (sometimes scheduled, other times spontaneous and casual).

Consequently, in the early days of May 2022, I reached Yuksam, the first capital of Sikkim when it was still a sovereign state ruled by a Buddhist monarchy. My objective was to conduct research for my dissertation on Lepcha shamanism and esoteric Buddhism. My research aimed to gain a deeper understanding of the interrelations between religious cosmologies and the native ecosystemic microcosms. I was driven to think that the environmental landscape had been somehow mirrored in the spiritual landscape. For this reason, it was essential to delve into further comprehension of a landscape made up of multiple parts, driven by exchanges and countless interactions (of cooperation, predation, symbiosis, parasitism). Each component of the system, or agent, exhibited a capacity to act upon the environment and to perceive the direct and indirect consequences of existing relationships. The fundamental principle underlying any interactive process being a simple yet effective mechanism based on the exchange of matter, energy, resources, and possibilities. However, this relational equilibrium has an inherent fragility that tends to cause changes in the flows of forces that permeate the environment.

Although human/non-human contacts are not new in the daily life of the Sikkimese, there are situations where one is confronted with a thinning or dissolution of the boundaries between the village - the anthropized environment and domestic life - and the world of the jungle - the wild and untamed (Beggiora 2021, 205-6; Thapar 2001, 1-16). In these cases, it is not uncommon to witness upheavals in which the two parties coming into contact - man and nature -⁵ enter into a momentary situation of conflict in which one ends up exploiting and taking from the other. In general, the areas of the Tibetan plateau are

5 On the one hand, there is the geo-anthropised environment, comprising human collectives settled in given territories. The mere presence of these collectives can impact the environment, making the dominant signs of human agency evident. Conversely, there is the animated landscape, which comprises areas where human agency constitutes only a fraction of a diverse set of agencies (primarily non-human). This results in a state of continuous and extensive interrelation where exchanges between the parts are perceived to occur within a subtle, numinous, and sacred dimension.

well known for their long history of conflict between man and the environment. The relationships that have developed over the centuries between Himalayan communities and the ecosystems they inhabit were initially characterised by conflict: human groups struggled to survive in an environment characterised by very harsh climatic conditions and a geographical terrain that was highly unsuitable for human life (Terrone 2014, 466; Gergan 2017, 494).

Soon, however, it became clear that man could not win a war against the land itself and the natural elements, and it was realised that the very conditions that made human existence very difficult were the same factors that, under more favourable conditions, could ensure the flourishing of life. The relationship between man and the Tibetan mountain environment was transformed, shifting to a softer form of relationship compared to the initial one, which had been based on brutal competition for power. Himalayan communities began to recognise the superiority of the land and the power of the elements on which their fate could easily depend, but above all they became more aware of the importance of the resources that the land offered. It was precisely with the aim of continuing to acquire the resources necessary for survival that the relationship developed (Terrone 2014, 477). Men began to pay regular homage to the mountain deities in order to obtain their favour or to appease their occasional wrath, which sometimes erupted when man committed morally unacceptable acts - that is, when he violated certain environmental taboos: i.e. polluting places considered particularly sacred; appropriating the fruits of the earth or the spoils of hunting without first performing the appropriate propitiatory rites; in general, any action that could in any way be considered a precursor of transgression, of crossing that thin and almost invisible line that marks the separation between wild and domesticated spaces.⁶

This new relationship with the deities and spirits of the landscape aimed to resolve moments of difficulty through negotiation and compromise: in order to continue to have a good harvest (or even one not destroyed by bad weather or other external factors) or a successful hunting trip (or even a hunting trip completed without unpleasant incidents), the benevolence of the mountain deity was sought through prayers, rituals and offerings; likewise, in the event of problems or potentially serious situations, prayers, rituals and libations were used as a means of quelling the anger of the entity involved and attempting to appease it.

In the case of Sikkim, the above is also true, of course. We can affirm that in Sikkim there are two traditional - and complementary - ways

⁶ Little 2007, 81-98; Balikci 2008, 27-8, 118-19, 121, 217; Scheid 2014, 72-83; Spoon 2014, 431-56; Torri 2015, 255-6; Bhutia 2019, 191-206; Torri 2020, 173, 176.

of healing the occasional disturbances in the balance between human and non-human groups. On the one hand, one can rely on faith in Padmasambhava and the protection he grants to all the inhabitants of Sikkim, even resorting to specific rituals in which the lamas invoke prayers to the deities of the Buddhist pantheon and offer libations as a sign of peace to restore cosmic harmony.⁷ On the other hand, the knowledge of Lepcha shamans (almost interchangeably called *bongthing*, *mun* or *padim*) can be used to identify the subtle causes that have led to a breach in the never quite stable boundaries between human and non-human beings. Indeed, shamans seek to connect with non-human agents in order to identify the entities responsible for the ongoing problem.

2 Non-Human Agency and Anthropogenic Disturbance in the Animated Landscape

What has interested me most in this rich discourse of multi-species relations are the so-called 'moving landscapes'. I believe that the concept is of considerable relevance – especially within the broader scope of the Anthropocene – in terms of ecology, nature and the environment, and that it can provide a very valid tool for rethinking the ways in which human groups interact with non-human entities.

First of all, what is meant by a 'moving landscapes'? The term 'moving landscapes' is seemingly employed to describe a category of short narratives belonging to the religious folklore of the Himalayas (in this case, Sikkimese) that deal with the idea of physical and spiritual contamination of a place recognised for its particularly sacred qualities, perpetrated by human beings.⁸ In response to these acts of corruption and pollution, these sites undergo drastic transformations, often resulting in unfortunate or even tragic outcomes for humans.

In the foundation of the Sikkimese cultural landscape, any action that may create a disturbance in the social and natural equilibrium – in other words, that may tend to disturb in any way the spirits and numinous entities that are at one with the land – is considered a source of what we might define as moral pollution (*drib*); a kind of corruption that exists not only on the ethical and spiritual level but, indeed, primarily on the material level (Balikci 2008, 27, 92, 121; Torri

⁷ Padmasambhava is also known as Guru Rinpoche, Lopon Rinpoché, Ugyen Rinpoché, Padma Vajra, Padmakara, Padma Thôtrenng Tsal, Senge Dragdrog, Loden Chogsey, Shakya Senge, etc. He is considered to have pioneered the spread of Tibetan Buddhism across the Himalaya, including Sikkim.

⁸ Employed by Evershed and Fish (2006, 56), with a general bibliographic reference to Mullard 2003, 13-24.

2015, 256; 2020, 178).⁹ Any human action that is detrimental to the environment, even if unintentional, is fundamentally capable of dramatically altering the flow of the never-ending exchanges between the various agencies present in the landscape; specifically, we are talking about those anthropogenic interventions where man's selfish desires (but also lack of awareness) can lead him to adopt an aggressive approach in order to extract more resources from the land than necessary (Spoon 2014). There are environmental taboos that must be respectfully observed to ensure that watercourses and glaciers are not polluted, that plant and animal populations do not experience drastic fluctuations, that the cycles of nature can continue to unfold in their eternal becoming. It is possible to gain insight into the nature of environmental taboos by examining the accounts of various authors.

Anna Balikci, for instance, recounts one episode concerning the lake near the village of Tingchim (North Sikkim). The lake's sanctity and the village's feelings towards it were well illustrated in an incident involving a team of moth collectors from Darjeeling. The villagers believed that the moths that would be found flying around the lake at night were manifestations of supernatural beings and that capturing any of them would have dire consequences for the villagers and the researchers alike (Balikci 2008, 92).

Kerry Little provides examples of environmental taboos related to hunting and fishing among the Lepcha. For example, hunters will observe such taboos, such as the taking of only one prey, with the offering of prayers and gifts for another prey to be taken in the next hunt. Additionally, there are numerous habitat taboos in Dzongu that are off-limits to hunters and fishermen. One such example is a small lake in Lower Dzongu called Tung Kyong Duo, which is the habitat for fish believed to be the ancestors of the Lepcha clan, Hee Youngmingmoo. The small, silvery fish is never eaten by Lepchas, since they view the lake as an ancestral home and refrain from harvesting the fish (Little 2007, 93-4).

Finally, Jeremy Spoon presents examples of environmental taboos among the Khumbu Sherpa of Sagarmatha National Park (Nepal). These taboos include prohibitions on climbing the mountain home of

⁹ The argument presented by Torri relies on the interpretation of the concept of *bla gnas*, citing Huber: "The association with mountains and lakes constitutes a well-known feature of Himalayan and Tibetan *weltanschauung*, and it could be linked also to the theory of the *bla*, and the related concept of *bla gnas*, the 'place of the soul'" (Torri 2015, 256). "Vernacular beliefs maintain that individual or collective human life energies can be stored, hidden, or tied to specific traits of the landscape, like trees (*bla-shing*), stones (*bla-rdo*), or even animals (*bla-sems-can*), or even mountains and lakes (Huber 1999). Any kind of contamination, damage, or pollution affecting the *bla gnas* will reverberate on its human counterpart (Torri 2020, 56)" (Torri 2020, 178).

Khumbila (Khumbu deity), cutting trees, mining boulders, and polluting riparian and other aquatic ecosystems (Spoon 2014, 439). The reverence of Khumbila has resulted in beneficial environmental outcomes, including a prohibition on climbing the deity's alpine home and restrictions on the killing of livestock, which is often extended to other wildlife (441). Furthermore, they enacted taboos against the harming or killing of animals, discouraged the pollution of water sources, protected rock formations, and restricted the climbing of Khumbila (445). In traditional times, the management of natural resources was governed by a series of taboos, including restrictions on harvesting timber and non-timber forest products, as well as prohibitions on harming or killing animals, mining boulders, and polluting water sources (450).

I was able to document several examples of environmental taboos that are still observed by the Lepcha community of Yuksam. In most areas, including the forest, there are numerous spirits. Prior to harvesting corn, the community offers the crop to the gods. This offering is made after the corn has reached the appropriate stage of ripeness. The community requests that the gods accept the offering and refrain from harming anyone who might subsequently harvest the corn. The community's actions are guided by the understanding that spirits may be present in any location. Therefore, it is important to avoid placing one's hands in any area where spirits might be present. For the very same reason, it is advisable to exercise caution when entering the fields. If one's hands are not kept close to the body and touch something, such as ginger, the result can be a burning sensation in the hands and legs, preventing one from working and moving one's hands. This phenomenon is indicative of the continued presence of spirits in Mayel Lyang.¹⁰

Should we offend them, for instance by removing the cucumber and consuming it, we may suffer from diarrhea, stomach pain and other ailments.¹¹

Violation of these environmental taboos can have very serious consequences; in the worst case, a numinous entity living in a particularly sacred area may become so angry that it decides to leave its current abode forever and move to a completely different area. The consequences of such an action would be catastrophic for all the inhabitants of the area, not only from a religious point of view, but also

10 A legendary place of Lepcha people that lies on the lap of Mount Khangchendzonga from where they are believed to be originated from.

11 An extract from an interview with Lamit Lepcha and Jampo Bongthing, Yuksam, May 2022.

on an ontological and ecological level, since the gods and spirits living in the animated sacred landscape of Sikkim are the landscape itself. In Sikkim, the very idea of a place deprived of the blessing and presence of deities and spirits is frightening, both from a Buddhist perspective and from a shamanic vision, as it corresponds to the image of a place that has lost all connection with the *dharma*, with Guru Rimpoche, with the subtle entities that have always been part of the fabric of the world.

Certainly, examples of such phenomena, known as 'moving landscapes', can be found in the cultural and folklore heritage of Sikkim. The most striking and famous example is Khecheopalri Lake. Khecheopalri is a village near Pelling in West Sikkim, where there is a lake that serves as a meeting place not only for Buddhist devotees but also for Hindus. The lake is famous throughout Sikkim because its waters are believed to have miraculous properties, being a place where great spiritual power resides. There are several versions of the myth of the lake as a 'moving landscapes', but the common thread seems to be a respect for the purity – not only moral but also physical – of the lake environment. Both Evershed and Fish (2006) and Jain (2004, 297) cite the popular legends of Khecheopalri Lake. Rahaman states that "many legends and beliefs are associated with the formation, existence, and sacredness of Khechopalri Lake" (2015, 60; 2019, 4841). While the former authors do not specify any sources, oral or written, Rahaman reports that the version of the Khecheopalri legend he documented was transmitted to him orally by a lama.

According to Jain's account, there were two sister lakes in the north-western part of the Himalayas. The elder lake is still extant, but the younger lake, which is called Labding Pokhari, has migrated to the western part of Sikkim to a place called Yuksam. The people in Yuksam did not respect Labding Pokhari and deposited waste into her waters. The goddess was dismayed and moved the lake to a place called Chhojo. However, this location was unsuitable, so the goddess relocated the lake to Khecheopalri. Apart from the marshy land with terrestrial vegetation, the dead Chhojo Lake, located at the bottom of the hill, has no open water surface (Jain et al. 2004, 297-9).

An oral history narrated by a young lama to Rahaman of the Khecheopalri monastery during fieldwork indicates the presence of two sister lakes in the northwestern part of the Himalayas. The elder lake is still present, but the younger lake migrated to the western part of Sikkim in a place called Yuksam (the first capital of Sikkim) and settled in Labding Pokhari. The people of Yuksam did not respect the Labding Pokhari and disposed of waste into the lake water, which caused the goddess to become dissatisfied and to move to the place called Chojo. However, this location was unsuitable, and the goddess was forced to move again, this time to the present location called Khechopari. The Chojo Lake is still visible at the lower

end of the area, with no open surface except for marshy land with terrestrial vegetation (Rahaman 2015, 60; 2019, 4841).

In the short version given to me by Lama Tshering, the monk claimed that in ancient times, the spiritual being that now resides in Khecheopalri used to live in another body of water, the lake that is now in Yuksam, known as Kathok Lake. Due to a series of actions by the local people that displeased the spirit, it is said to have suddenly moved overnight in search of a new sacred space suitable to become its abode. The lama wished to emphasise that the effects of morally impure actions have consequences even on the material plane. Corruption, moral and physical, is a formidable force that can spread rapidly and widely. In order for the spiritual power of Khecheopalri to have a beneficial effect on the pilgrims who flock to the holy site, it is necessary that not only the water of the lake and the surrounding forest be pure and immaculate, but on a convergent level, purity cultivated by the devotees and exhibited in heart, mind and action (Evershed, Fish 2006, 56-8).

In fact, respecting this condition can be seen as an alternative way of expressing the same rule we mentioned above: any kind of disturbance (whether the agent is human or non-human) capable of causing disruptions in the fabric of daily life constitutes a suspension of order (mundane, natural and cosmic), the result of which is a situation that is out of phase. In such a situation, the communities inhabiting the landscape found themselves in a temporary communicative incompatibility. At the root of this communicative incompatibility lies negligence (i.e. a failure or lack of due care), not only at the level of intentions, but above all at the performative and practical level. In short, there is the appearance of a possible change in the relationship between man and the environment. In this case, we are witnessing carelessness expressed in a failure to respect a certain idea of physical hygiene that also touches on the realm of spiritual purity.

Indeed, Sikkim is considered by Tibetan Buddhism to be a *beyul*, a land consecrated by the passage of Padmasambhava, or Guru Rimpoche (Dokhampa 2003). As Bhutia promptly points out, there are multiple interpretive possibilities regarding the idea of *beyul dremojong*. Some support the idea of a hidden valley, while others see the *beyul* as a 'paradise' accessible only to the pure. Still others identify it with a dimension of peace and bliss. The concept remains open to theoretical exploration (Bhutia 2022, 18). The influence of the notion of *beyul* is so ingrained that every calamity, big or small, is directly associated with it, as is almost every festival (27). The belief in the *beyul* entails the conviction that Guru Rinpoche bestowed a blessing upon the Sikkimese territory. Consequently, the necessity of renewing, year after year, the sentiment of devotion and respect for the *dharma* is perceived as a means of maintaining the protection of the guardian deities (27).

The great tantric master recognised Sikkim as a lush and fertile land, ready to offer refuge to those seeking shelter from war, famine and disease. Guru Rimpoche consecrated Sikkim to Buddhism, but what is particularly interesting for our discussion is the way in which he did so. He first addressed those places of power in the local territory, those places where emanations of the numinous and subtle world could be felt, which had been objects of worship or veneration long before his arrival. Padmasambhava thus inscribed the animated sacred landscape of Sikkim and its hosts of beings (human and non-human) within Buddhist cosmology, creating a sacred topography in which every nook and cranny fell within a map organised according to the model of a *mandala*, an esoteric projection used to represent a microcosm in the form of a diagram applied to a geographically localised space (Chiron 2020).

In this way, the tantric adept achieved two results. On the one hand, he introduced a new order into the animated landscape, redefining the pillars of relations between human communities and the environment: the seemingly disorderly and overwhelming power of natural forces could be recomposed within the moral order of Buddhism. This did not mean, however, that the non-human world was denied agency; on the contrary, it continued to exert its influence on humans and the environment. The novelty lay in the possibility of identifying the internal (spiritual and moral) order with the external order: the construction of the sacred topography creates a physically ordered territory that is constantly purified of all impurities and elements that might constitute an affront to propriety. This dichotomy between that which is pure and that which is polluted or corrupted applies in practice to the relations between human communities and non-human inhabitants, since the landscape is not perceived in an abstract sense, but it is itself the sum of multiple agencies in constant interaction with one another.

The one other element introduced by Guru Rimpoche was a consequence, probably indirect, of his initiative to spread his teachings in Sikkim. He scattered relics (known as *gter-ma*) in certain places charged with power (and thus considered sacred or numinous even before his arrival), and to facilitate the spread of the *dharma*, Padmasambhava included in the sacred texts the temporal dimension so that the message of the doctrine could be continually renewed and understood in the light of different epochs (Beggiora 2023, 88). These texts have the capacity to lend themselves to a flexibility of interpretation aimed at capturing variations in the temporal dimension, enabling those who follow his teachings to know and make the most of the characteristics of the different times in which they are destined to live. The consequence, perhaps indirectly, is that a renewed adaptability of the tantric teachings has breathed new life into the animated landscape. Thanks to the possibility of reinterpreting the sacred

texts in ever new ways as the epochs change, *mutatis mutandis*, the nature of the relationship with non-human collectives remains in a state of being protectible and protectable.

The discussions with Lama Tshering were very helpful in giving me an idea of the applications of the concept of the 'moving landscape' in relation to the current conditions of the animated Sikkimese landscape in the light of the country's increasing modernisation. Sikkim is not only an inter-Himalayan pilgrimage destination for Buddhist and Hindu devotees (precisely because, as mentioned above, it is a *beyul*), but also a tourist destination for those seeking a relatively untouched Himalayan landscape compared to the intrusions of human activities.

As I have been able to document - thanks to conversations with some of the residents of Yuksam who are particularly interested in the issue of tourism - there is a clear awareness among the locals of the economic value that the landscape can have; provided, however, that respect continues to prevail for those relational codes that have allowed for a balanced relationship between the need to extract resources from the territory for one's subsistence without succumbing to the desire for uncontrolled development (Mannarini 2022). Uncontrolled development often leads to the disruption of natural habitats, which are suddenly exposed to much more intense predation than before, but above all to the accommodation of a much larger number of people than they would normally support; this results - and here we come to the point - in the slow erosion of biodiversity hotspots, the degradation of soils in areas that are normally strategic for primary production, and a staggering increase in the production of waste, which, if not properly disposed of, creates further sources of pollution for the territory and for all the creatures that inhabit it. Indeed, there are those who have expressed concern about the potential for rapid changes in the attitudes of the Sikkimese towards the environment, given the extent of anthropogenic interventions currently being undertaken in the region. In fact, according to Bhutia, Sikkimese attitudes towards the environment have changed as the scale of environmental resource extraction has become more apparent with the installation of large-scale infrastructure projects initiated by state projects that were meant to provide the isolated Himalayan state the state with the trappings of global modernity in the late twentieth century (Bhutia 2021, 153). These processes became all the more apparent after Sikkim was absorbed into India in 1975. Road networks and electricity have been accompanied by deforestation, hydroelectric dams, and the concretization of hilly landscapes (McDuie-Ra, Chettri 2020). In addition to rapid urbanisation, infrastructural development and modernisation, Sikkim has undergone a notable transition from a sustainable agrarian economy to a service-oriented one, particularly in the capital city of Gangtok (Indira 2021, 57). This is despite

the fact that approximately 65% of the population relies on agriculture for their livelihood (Mishra et al. 2019).

In her study of ecotourism in the sacred lakes of Sikkim, Maharana (2000) notes that visitor numbers began to increase in Sikkim in 1990 as a result of a relaxation of regulations that opened a number of new areas to both resident and non-resident tourists. Prior to 1980, the state hosted a mere 15,454 visitors. However, this figure had increased five-fold by 1990, reaching 143,410 by 1998 (Maharana 2000, 272). As a consequence of this significant surge in visitors, developmental activities, including the promotion of tourism for socio-economic improvement, have led to noticeable degradation of natural ecosystems where adequate attention has not been given to environmental conservation. In recent years, the condition of lakes has deteriorated as a result of changes in land-use practices and deforestation in lake watersheds. These changes have led to the deposition of sediment, the loss of biodiversity and the removal of valuable ecosystem components (2000, 269). An expected growth in tourism may increase the consumer surplus, but this may be at the cost of the aesthetic, biodiversity and religious values of the lake. Therefore, a balance between consumer surplus and other values for conservation and preservation must be established. In discussing her findings, Maharana swiftly compares the results of her study to those of other sites in tropical India, particularly a tiger reserve in Kerala and a national park in Bharatpur. The latter sites demonstrated that the values accorded to factors such as biodiversity, aesthetics, recreation, and religion were considerably lower than the consumer surplus value (Chopra et al. 1997; Manoharan et al. 1998). Conversely, Maharana's study demonstrated that despite a low visitation rate and a lack of protection, Sikkimese sacred lakes hold the same set of values (biodiversity, aesthetic, recreation, religion) in a higher account, and were in fact higher than those recorded in the tiger reserve in Kerala and the national park in Bharatpur (2000, 276).

With regard to the state of the forests, the majority of the forests in Sikkim are still considered to maintain good diversity, but in the last few decades, there have been visible symptoms of decline in the landscape and species composition at certain locations (Sundriyal et al. 1994a). Among the most significant concerns for the foreseeable future is the composition of species, as it may lead to significant challenges for local residents who rely on the woods for resource extraction and other forms of livelihood. Forests have been meeting and satisfying the material needs of the majority of the population of the watershed, but now evidence of decline in species number and composition are emerging and it is apparent that local subsistence needs are causing much of the degeneration in the forest at all sites. Indiscriminate cutting by people, selective felling by the Forest Department, plantation of exotic species like *Cryptomeria japonica*, lack of

strict enforcement of protection/conservation laws and use of enormous amounts of wood in house construction and large-scale cardamom curing are the most common causes of forest destruction (Sundriyal, Sharma 1996, 131). It is also of interest to note that, as observed by Sundriyal, despite the increasing degradation observed throughout decades, in the past twenty years forestry was not always a priority sector of management for villagers (Sundriyal et al. 1994b). Rather, it was seen as a source of economic generation, which can be attributed to the ease of accessibility and extraction of wood from the nearby forest. Furthermore, it can be observed that community organisation is a key factor in achieving the desired results. This is evidenced by the fact that the lack of community organisation has limited the successful launching of community forestry programmes (Sundriyal, Sharma 1996, 131).

On one occasion, I found myself in conversation with the director of an NGO based near Yuksam, Tshering U. Tshering is very attentive to the issues affecting her community and was able to provide me with first-hand data relating to her direct experience.

Tourism was doing good economically to the communities [...]. If we don't care about the nature then people would not visit here, right? [...] Everybody wants to see the other places where it's peaceful and there's beautiful nature. So, we thought that if we really look for earning some money from tourism we really have to take care of nature. So, to take care of nature then we have to go with conservation and livelihood together. We're looking for the long-term sustainable options on conservation and livelihood. In '96 we worked within the community to figure out why nature it's important, why tourist are coming here. If you want to earn money from the tourism for the long term then you people have to take care of your nature. How you do it? How do you want to go forward for the tourism business?... (Mannarini and Tshering, recording)

The director's remarks about the commitment of Yuksam's community to its landscape, indicating that such a profound involvement by its members has arisen from a profound sense of responsibility, resonates with the objectives of a former project enacted in the past. The *Sikkim Biodiversity and Ecotourism* initiative was initiated in the west district of Sikkim and was supported by the Biodiversity Conservation Network (BCN) under the Biodiversity Support Program (BSP), USAID. The project was a collaborative effort of the G.B. Pant Institute of Himalayan Environment and Development, The Mountain Institute, The Travel Agent Association of Sikkim and the Green Circle. The project aimed to conserve the biodiversity of the project sites (the trekking corridor of the Khanchendzonga Biosphere Reserve in the Yuksam-Goechha La route and Khecheopalri lake) by

providing alternative economic incentives to the local community. The primary objectives of the project were to enhance community and private sector initiatives for biodiversity conservation, enhance the economic returns from community-based and TAAS ecotourism, and improve and contribute to policy-making on conservation and ecotourism (Jain 2000, 6).

From Tshering's words, one can easily infer the commitment and sense of responsibility of the human community of Yuksam towards the non-human collectives, – the set of actors and agents she refers to as nature. It is worth noting the absence of explicit references of a spiritual and religious nature on the part of the director, although I am inclined to believe that this is not a limitation or a contradiction compared to the discourse held so far. The reason I am inclined to argue that there is no contradiction lies in the fact that any social initiative and activity (such as, in this case, economic-enterprise activities based on investments in the goods and services sector) still falls within the sphere of influence of a cosmology (that of the Buddhist *beyul*, sacred topography, places of power and ever-present non-human entities) that continues to shape the matrices of relational flows between humans and the animated landscape. In other words, the animated landscape has been assimilated by the indigenous people of Sikkim and at the same time has served for centuries as a criterion and reference point to guide the choices and actions of human society. Such a relationship between humans and non-human collectives – which, for discursive convenience, we will temporarily define by the term 'nature' – in the Himalayan context is in many ways in stark and direct contrast to the relationship that modern society has historically constructed with nature. Rather than being stripped of all agency and reduced to a passive object in the hands of humans, the environment has retained its primary relevance as a collective of actors capable of performative action in the world, and as a result the human populations of Sikkim have retained the capacity to perceive any attempt at communication on the part of the non-human world.

A clear example of this attention comes from episodes related to moving landscapes, as in the case of Khecheopalri. We can also find examples of such attempts in recent years, when the concerned voices of the indigenous population have been raised in the face of events or projects that threatened to bring about profound changes in the landscape. In 1958, for example, the construction of a road linking Sikkim's capital, Gangtok (East Sikkim), to the main town of Mangan (North Sikkim) was met with deep concern, as the road's construction required invasive interventions in the landscape (i.e. the demolition of several stretches of hilly and mountainous terrain) (Balikci 2008, 92). Or again, since 2007, there have been protests and demonstrations against the construction of a series of dams in the Dzongu

region, the ancestral home of the Lepcha people and a restricted area requiring special permits (Bentley 2021).

As we approach the conclusion, after this long interlude of illustrating the ways in which the indigenous peoples of Sikkim have developed a particular attention to perceiving signals of change in the non-human landscape in relation to their daily and spiritual experience, I would like to return to the issue of pollution (both spiritual and material) to highlight the connections it may have with climate change. In this context, it seems appropriate to mention the meeting I was able to have with a Lepcha shaman (*bongthing*) called Jampo. Jampo Bongthing was very clear about the difficulties of disposing of certain types of waste and emphasised the need to urge people not to discard highly polluting items indiscriminately.¹² The shaman's concerns placed on the same level the risk of serious health hazards to humans and the risk of disturbing natural habitats, leading to subsequent disruption and unrest in non-human communities. Not too dissimilar to what Lama Tshering advocated, actions that are sources of impurity have harmful effects on everyone, without exception, and end up undermining fragile and delicate balances that are difficult to maintain. To provoke the wrath of numinous beings -who are usually benevolent, or at least not actively malevolent, under appropriate conditions - is to deprive oneself indefinitely of a support that human beings cannot do without.

Another testimony I would like to present is from one of my informants, Pema Lepcha, regarding the effects of climate change felt by those families who have a plot of land to cultivate. Pema highlighted several irregularities in the typical climate patterns observed in Sikkim, particularly in precipitation patterns, temperature fluctuations, and the impact of pests on crops. As is the case with many other locations on Earth, the Himalayas are currently experiencing rapid climate change, which is likely to have a significant impact on local ecosystems, biodiversity, agriculture, and human well-being (Chaudhary et al. 2011). The weather has become increasingly unpredictable and erratic, with snow melting rapidly and water sources drying up.¹³ As in many other parts of the world, there is a lack of spatially disaggregated meteorological records in Sikkim. Long-term, reliable data are available only for one station, Gangtok. Climate change-related studies based on the analysis of the data for this station, month-wise, season-wise, and annually from 1957 to 2005 indicate a trend towards warmer nights and cooler days, with increased rainfall except in

¹² Ferronato and Torretta (2019) argued that one of the main reasons for environmental contamination is the mismanagement of solid wastes related to open burning and dumping.

¹³ Sharma et al. 2009; Chaudhary, Bawa 2011; Chaudhary et al. 2011; Tambe et al. 2011.

winter (Seetharaman 2008; Ravindranath et al. 2006; 2011). A comparison of meteorological data from the Gangtok station, spanning 1957 to 2005, with data from the last five years (2006-10), reveals a noticeable acceleration of previously observed trends. Winters are now becoming increasingly warmer and drier, with October to February representing an exceptionally dry period (Seetharaman 2008). As documented in recent climate change studies in Sikkim (Tambe et al. 2011), perceptions held by the local community indicate that climate change has resulted in a notable reduction of rainfall variability, manifested in both a decrease in the temporal spread of rainfall and an increase in the intensity of precipitation events. This has led to a marked decline in winter rainfall, with the monsoon season exhibiting less predictable patterns (Tambe et al. 2012, 64). Furthermore, recent studies in the adjacent Darjeeling hills have indicated the perceived impact of climate change in the form of less snow in the mountains and intense but short episodes of rainfall that increase runoff, causing poor accumulation and recharge of water, thereby resulting in the drying up of water sources (Chaudhary et al. 2011). It has also been highlighted that there is a near-universal community perception that the lean period spring discharge is declining at an alarming rate (Tambe et al. 2012, 68).

It is crucial to bear in mind that Sikkim is a state with a predominantly rural and agricultural economy. Agriculture is the sector where the effects of pollution and global warming are felt most acutely: erratic rainfall patterns; unusual insect attacks on crops; climate variability with uncertain winter temperatures; sudden hailstorms (Shukla et al. 2016). The diversity of flora and fauna is influenced by a number of factors, including climate, rainfall, altitude, and soil types. Of these, climate is the primary determinant (Foster 2001). The evolving physical landscape is also influencing and shaping a novel cultural landscape as a consequence of alterations in existing agricultural and other cultural practices (Huang et al. 2022). There is a growing concern worldwide about climate variability in agriculture (Sahu et al. 2012), including the sensitive Himalayan region, which has been experiencing climate change in recent times (Gautam 2017). This is evidenced by changes in its climatic patterns, which influence ecosystem services (Rai et al. 1994), and other micro-level climatic variability (Tewari et al. 2017). It is widely acknowledged that major climatic parameters such as temperature and precipitation exert a direct influence on agricultural productivity (Asseng et al. 2015). Variations in these parameters' trends could have a profound impact on agricultural production (Malhi et al. 2021). Modifications to the water cycle result in alterations to precipitation patterns, which in turn affect river runoff and nutrient cycles within river basins, including agricultural productivity in the Sikkim Himalaya (Sharma et al. 2016a; 2016b). The second-largest contributors to climate change

are agriculture, deforestation, and land use changes. These activities have resulted in increasing temperature anomalies, global warming, and the occurrence of extreme events worldwide. The changing temperature anomalies have initiated a transformation in global climatic patterns, with a notable impact on agricultural and other ecological services. This intensified in the twenty-first century (Hayashi et al. 2020). Recent studies have demonstrated variability in climatic patterns and trends across the Himalayan region, which has had a negative impact on annual and seasonal crop yield and production.¹⁴

In 2008, the Chief Minister of Sikkim, Dr Pawan Kumar Chamling, while inaugurating a commission to study and report on all major issues related to glaciers in and around the Sikkim Himalayas, said: “Sikkim is a mini-theatre, which in a way shows how climate change, triggered by non-natural forces at the global level, can bring about catastrophic natural disasters”. This statement ultimately brings us back to the ‘moving landscape’, at the catastrophic changes that could occur if humans commit sacrilegious acts against the landscape, desecrating its fragile delicacy. Compromising the integrity of the environment means being responsible for a series of actions that ultimately affect not only humans, but all non-human collectives with whom there is a long history of co-existence.

3 Conclusions

The concept of ‘moving landscapes’ is an appropriate tool to contribute to Anthropocene studies, as it fits into broader ecological and anthropological theories concerning agency and relationships between human and non-human communities. The concept of ‘moving landscapes’ provides a tangible illustration of the complex interrelationships between human and non-human communities. These relationships cannot be reduced to a simplistic dichotomy of nature and culture, and the ‘moving landscapes’ demonstrate the intricate eco-systemic interconnections that require careful consideration of the ongoing changes.

The image of a landscape in motion is useful for rethinking the relationship that modern society has had – and continues to have – with the environment. In Sikkim, the very idea of consuming the resources of a particular area to the point of depleting the richness of the soil, destroying biodiversity, polluting water sources and creating utter desolation, only to move on to another area to plunder in the same identical way, would be met with pure horror. It is true that man is free to move to other areas, but the same ability is reserved for the

¹⁴ Sharma et al. 2009; Smadja et al. 2015; Gurung et al. 2019; Upadhyay et al. 2024.

numinous beings that live in the lakes, the land, the forests and the mountains. The model of a nature that can pack up and leave, leaving man to deal with the consequences of his actions, is extremely powerful, suggestive and also realistic; and it is in this last point that the real wonder lies. The 'moving landscape' creates the image of a nature that forces us to confront the very idea of humanity, even before we confront the violent contradictions of an economic, industrial and cultural model -that of modernisation - that is now hardly sustainable. They force us to reflect on what remains, on the non-human forces behind future changes.

This paper examines the nature of the animated Sikkimese landscape and the modes of interrelation between human and non-human agency. The model of the 'moving landscapes' has been employed to demonstrate that, despite the changes brought about by modernization and industrialization processes, there exists in Sikkim a general ontological panorama in which the distinction between 'nature' and 'culture' is not postulated in the dichotomous terms belonging to the paradigm of modernity, founded on the assumption of a mono-naturalism and multi-culturalism. Conversely, the distinction between human and non-human inhabitants in Sikkim appears to align more closely with the Amerindian scenarios described by Viveiros De Castro, wherein belonging to a single culture is expressed through a multiplicity of forms and bodies.

The hypothesis of a Sikkimese perspectivist view, resulting from a convergence of shamanic and Buddhist influences, lends plausibility to the possibility of a more conscious and engaged relationship with the territory and the material forces present there. These forces, rather than reinforcing the primacy of human agency, demonstrate the capacity to shape the environment, relationships, and bodies. The animated landscape that emerges in the 'moving landscapes' is a community of non-human agents representing characters invisible to the human eye yet active and mobile, capable of reorganising everything around them just like humans, because this is a general ability of living beings (Latour 2020, 141-2, 149).

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