

Living in the forest as a pluriverse: Nature conservation and indigeneity in India's Western Ghats

Miho Ishii¹

Kyoto University, Japan

Abstract

This study examines the multi-tiered manifestation of the natural environment and social-ecological milieu of people living in a tiger reserve, located in the Uttara Kannada district in the Indian state of Karnataka. The Kali Tiger Reserve is in the northwestern part of the Western Ghats, which is a designated biodiversity hotspot and home to wildlife such as the Bengal tiger and the Indian elephant. After the forest was designated as a tiger reserve, the Kunbi people living in this area were excluded from the laws and policies designed to promote nature conservation. Their traditional hunter-gatherer activities and agricultural practices became severely restricted and were subjected to management and surveillance by the Forest Department. This demonstrates the operation of biopower acting in line with the distinction between rare animal species deemed worthy of being kept alive and human beings who are not, and are thus left destitute. In this situation, the Kunbi attempt to recover their legal rights to land and forest resources by invoking the Forest Rights Act and petitioning the state government to designate them as a scheduled tribe. Moreover, they struggle to maintain their emotional ties to the forest by creatively modifying their ritualistic hunting groups. The Kunbi's attempt to deal with their plight by participating in the modern political arena, while placing themselves within the realm of nature, shows that modernity and indigeneity exist in an inseparable duality. This study examines the experiences of people living in this duality by focusing on their emotions regarding the forest and efforts to deal with conflicts over the tiger reserve, which is simultaneously considered to be the natural environment as well as their intimate *Umwelt*.

Keywords: conservation, tiger reserve, Western Ghats, India, *Umwelt*

Résumé

Cette étude examine la relation entre l'environnement naturel et le milieu socio-écologique des personnes vivant dans une réserve de tigres, située dans le district de Uttara Kannada dans l'état indien de Karnataka. La réserve de tigres de Kali se trouve dans la partie nord-ouest des Ghâts occidentaux, qui constituent un haut lieu de la biodiversité et abritent des animaux sauvages tels que le tigre du Bengale et l'éléphant indien. Après la désignation de la forêt comme réserve de tigres, le peuple Kunbi vivant dans cette zone a été exclu des politiques et des cadres juridiques conçus pour promouvoir la conservation de la nature. Leurs activités traditionnelles de chasseur-cueilleur et leurs pratiques agricoles ont été sévèrement restreintes et ont été soumises à la gestion et à la surveillance du département des forêts. Cela démontre le fonctionnement du biopouvoir, qui fait la distinction entre les espèces animales rares jugées dignes d'être maintenues en vie et les êtres humains qui ne le sont pas, et qui sont donc laissés sans ressources. Dans cette situation, les Kunbi tentent de recouvrer leurs droits légaux sur les terres et les ressources forestières en invoquant la loi sur les droits forestiers et en demandant au gouvernement de l'État de les désigner comme une "scheduled tribe." En outre, ils luttent pour maintenir leurs liens émotionnels avec la forêt en modifiant de manière créative leurs groupes de chasse rituels. Les Kunbi tentent de faire face à leur situation critique en participant à l'arène politique moderne, tout en se plaçant dans le domaine de la nature. Cela montre que la modernité et l'indigénéité existent dans une dualité inséparable. Cette étude examine les expériences des personnes vivant dans cette dualité en se concentrant sur leurs émotions à l'égard de la forêt et sur leurs efforts pour gérer les conflits concernant la réserve de tigres. La réserve est simultanément considérée comme un environnement naturel et comme leur *Umwelt* intime.

Mots clés: conservation, réserve de tigres, Ghâts occidentaux, Inde, *Umwelt*

¹ Dr. Miho Ishii, Associate Professor, Institute for Research in Humanities, Kyoto University, Japan. Email: ishii.miho.6v@kyoto-u.ac.jp. This work was supported by Japan Society for the Promotion of Science [grant number 18K01170]. Thankyou to the referees.

Resumen

Este estudio examina el entorno socioecológico de los habitantes de una reserva de tigres situada en el distrito de Uttara Kannada, en el estado indio de Karnataka. La Reserva del Tigre de Kali se encuentra en la parte noroccidental de los Ghats occidentales, una zona declarada de gran biodiversidad y hogar de animales salvajes como el tigre de Bengala y el elefante indio. Tras la designación del bosque como reserva de tigres, los Kunbi que viven en esta zona quedaron excluidos del territorio y de la elaboración de políticas de conservación de la naturaleza. Sus actividades tradicionales de caza-recolección y sus prácticas agrícolas quedaron severamente restringidas y sometidas a la gestión y vigilancia del Departamento Forestal. Esto demuestra el funcionamiento del biopoder: existía una distinción entre las especies animales raras consideradas dignas de ser mantenidas vivas y los seres humanos a los que se dejaba en la miseria. Los Kunbi intentan recuperar sus derechos legales sobre la tierra y los recursos forestales invocando la Ley de Derechos Forestales y solicitando al gobierno estatal que los designe como "scheduled tribe." Luchan por mantener sus vínculos emocionales con el bosque modificando creativamente sus grupos rituales de caza. El intento de los Kunbi de hacer frente a su difícil situación participando en la arena política moderna, al tiempo que se sitúan dentro de la naturaleza, demuestra que modernidad e indigenismo existen en una dualidad inseparable. Este estudio examina las experiencias de las personas que viven en esta dualidad centrándose en sus emociones en relación con el bosque y en los esfuerzos por hacer frente a los conflictos en torno a la reserva de tigres. La tierra de la reserva se considera simultáneamente un entorno natural y su *Umwelt* íntimo.

Palabras clave: conservación, reserva de tigres, Ghats occidentales, India, *Umwelt*

1. Protected areas and marginalized people

This study examines the multitiered manifestation of the *Umwelt* and the natural environment for individuals residing in a natural wildlife sanctuary located in Uttara Kannada district, Karnataka State, South India. Uttara Kannada is located on the western coast of India and overlooks the Arabian Sea at the foot of the Western Ghats mountain range. The Kali Tiger Reserve, where this research was conducted, is in the northwestern region of the Western Ghats, which is home to rare wildlife species and is a designated biodiversity hotspot. Before discussing the history of this reserve, I will review the literature on conservation and national parks.

Protected areas such as national parks and wildlife sanctuaries have been the focus of considerable anthropological research since the 1970s. Most researchers have focused on how people are affected when their homeland is designated as a "protected area." West *et al.* (2006) reviewed the anthropological research on national parks and noted that a worldview espousing the Western "nature–culture" dichotomy of protected areas was imposed on several areas and people. The lives and activities of the indigenous inhabitants of such areas were restricted under the pretext of protecting these wilderness areas and keeping them "untouched by human hands", and the inhabitants were driven out or permanently relocated to other areas (West *et al.*, 2006, pp. 252–256).² Recent studies report that laws enacted to protect wildlife have led to tightened government surveillance. This reflects a nature–culture dichotomy under the pretext of environmentalism, as well as the embodiment of governance and control over the people residing in the protected area (e.g., Smadya, 2018). Human activities thought to infringe on "nature" must be prevented as far as possible to maintain the separation between "nature" as a wild animal sanctuary and "culture" as a human realm. Consequently, indigenous inhabitants' activities are strictly limited or criminalized within the protected area, and they are subjected to surveillance and punishment by authorities.

Here, individuals' right to life is neglected because they are perceived as hindering wildlife sustainability and are consequently left destitute. This is an example of biopower selectively functioning for wildlife, requiring protection, and working against populations who are not considered worthy of protection.³ Foucault reported

² At the same time, in discourses regarding environmental conservation, the indigenous inhabitants of these areas have often been considered "noble savages", whose cultures are somewhat closer to nature; therefore, they have been confined within this idealized concept.

³ For discussions on biopower and biopolitics, refer to Foucault (1976, 1997, 2004). Regarding the characteristics of the biopower that replaced the power of life and death executed by the sovereign, Foucault stated that the old power to "take life or let live" was replaced by the new power to "let live or let die" (Foucault, 1976).

that the sovereign's ancient right to "take life or let live" was gradually transformed into society's power to manage life, both by caring for the lives of individuals and by limiting them, even to the point of terminating them. Today, biopower values and categorizes humans and non-humans alike, and is often observed to manage life under the guise of nature protection.⁴

Prior studies have addressed the relationship between protected areas and their inhabitants by describing the dilemmas experienced by people who are marginalized by environmentalist ideologies and nature conservation programs or are forced to change their lifestyle when engulfed by modern systems.⁵ As we will see in this article, the Kunbi people living in and around the tiger reserve in Uttara Kannada have also been severely affected by environmentalist ideologies and legal systems. After the forest in which they reside was designated a tiger reserve, their hunter-gatherer activities and traditional agricultural practices became severely restricted, and they were subjected to management and surveillance by the Forest Department.⁶ I will describe how they attempt to maintain their relationship with the forest as their *Lebenswelt* ("life-world") by focusing on the forest as a *multilayered space* and on the roles of actors who mediate the layers, rather than assuming a binary opposition and conflict between modern environmentalist ideologies and indigenous logic.

2. The *Umwelt* and the environment

West *et al.* (2006) advocated the use of the term "surroundings" to describe the natural environment as a physical and social construct to which humans have material, intellectual, and symbolic access and can alter and comprehend through their daily activities (p. 252). In this article, I use the term "*Umwelt*" to describe the dynamic socioecological milieu that overlaps with the concept of "surroundings" but functions as more than just an object of human perception and action, and is fundamentally intertwined with human life and physical experience and is capable of transforming through mutual interaction.⁷ Conversely, I use the term "natural environment" to describe the natural sphere, whose creation is attempted by modern legal systems for nature conservation, from which, as a rule, the effects of human activity are excluded.

Indeed, a wide range of human interventions, such as legal restrictions and patrols by administrative authorities, are required to realize this ideal natural environment. The forced realization and expansion of such natural environments have had grave effects on the lives of inhabitants residing in forests. In this regard, the devices, wardens, and other actors employed to preserve the natural environment could also be considered, in a broad sense, part of the forest dwellers' *Umwelt*. However, to elucidate the experiences of those residing in this multilayered environment with conflicting forces and rationales, I will define the *Umwelt* as the familiar, intimate "surrounding world" that forms, is formed by, and is inseparably entangled with an indigenous way of life, as distinct from the natural environment that is supported and created by modern principles, devices, and

⁴ In recent years, additional reports have emerged that analyze issues surrounding environmentalism and nature conservation based on the concepts of "biopower" and "biopolitics" as suggested by Foucault. Examples include Biermann and Anderson (2017), Biermann and Mansfield (2014), Bluwstein (2018), Braverman (2014), Büscher (2018), Cavanagh and Benjaminsen (2015), and Nel (2015). These studies critically assess how biopower assigns a value to and governs, manages, and supervises the lives of humans as well as other species. For a review of the concept of biopower in political ecology, see Cavanagh (2018).

⁵ Environmentalism dictates not only that individuals should be excluded from natural environments but also that indigenous inhabitants should be closed inside natural environments as static components. A study conducted by Shah (2010) in Jharkhand State, India, suggested that indigenous inhabitants are being further marginalized by green activists' portrayals of them as individuals living traditional lives in harmony with the forest and wild animals. Shah referred to such portrayals that bind indigenous inhabitants to the natural environment as "eco-incarceration", criticizing this as a growing problem in environmentalism. For more information regarding problems in environmentalism in India, see Agrawal (2005) and Baviskar (2003).

⁶ According to the Indian Forest Act, enacted in 1927 and still in effect, all forests are owned by the state. The Forest Conservation Act was passed in 1980. While the forestry sector is under the jurisdiction of the Ministry of Environment, Forest, and Climate Change (MoEFCC) of the central government, forests are managed by the Forest Department of each state (Ota, 2018, pp. 27–29).

⁷ See Ishii (2019) for a detailed exposition of the idea of a dynamic *Umwelt*, as based on the *Gestaltkreis* theory of Victor von Weizsäcker (1997 [1950]) with a focus on the exchange and mutual transformation that occurs between an organism and its *Umwelt*.

legislation. The ways in which the physiognomically contrasting *Umwelt* and the natural environment relate and interact with each other through the discourses and practices of various actors should be considered when the concepts of the *Umwelt* and the natural environment are used to analyze situations in a protected area.

In this regard, an interesting case was reported by De la Cadena after research conducted in the Peruvian Andes (De la Cadena, 2010, 2015). De la Cadena described conflict and negotiation between a modern government and an existing tradition over a mining development on Ausangate, a mountain believed to be an "earth being" by the indigenous inhabitants. De la Cadena describes how indigenous ritual specialist activists are advocating for mountains and other earth beings in political systems, where an ontological distinction between "humanity" and "nature" is generally maintained. According to De la Cadena, the appearance of these other-than-human beings embodying indigeneity in the Andes is "transforming the concept from one that conceives politics as power disputes within a singular world to another one that includes the possibility of adversarial relations among worlds", thus opening the door to the possibility of pluriversal politics (De la Cadena, 2010, p. 360).⁸

A study I conducted on the relationship between spirit worship and large-scale developments in the Dakshina Kannada district, Karnataka State, described a rivalry and parley between modern rationalist logic and indigenous power and logic. In the study, I argued that, although the deities that were believed to have divine power (*śakti*) in the wild were marginalized through forest destruction and the construction of a special economic zone, they exercised their agency via oracles and rites concerning disasters in the zone. They held a unique indigenous logic, different from that of modern rationality, thereby facilitating interactions between residents of the industrial zone and the realm of the wild (Ishii, 2017, 2019).

Both studies focused on the entanglement between modern rationalist logic and indigenous logic, that cannot be reduced to a simple dichotomy despite their rivalry and conflict. Simultaneously, these studies argued that nature—the natural environment that should be protected along with the familiar *Umwelt* of the inhabitants—is at variance with modern development. It can be said that the existence of this variance is what enables cooperation between the indigeneity-embodying Earth beings and the inhabitants who defend them on one side and the green activists protesting for environmental conservation on the other, which has been observed in the anti-mining activism in the Andes and the anti-development movement in Dakshina Kannada.

In the case of the Kali Tiger Reserve, a forest that formed an *Umwelt* inseparable from the lives of its inhabitants was designated a natural environment and placed under strict management that prevented the inhabitants from accessing forest resources. In the "nature versus modern development" paradigm mentioned above, individuals who depend on their indigenous logic and power can participate in the modern political stage by advocating for the agency of pluralistic nature. However, when environmentalism is implemented in protected areas, such as the Kali Tiger Reserve, by restricting contact between humans and nature, the indigenous connections between humans and the forest are excluded as mere noise, and the forest is gradually refashioned as a natural environment that is to be scientifically managed. In such situations, nature is not counterposed against modernity but rather becomes a product that is continuously created by it.

Consider this notion from the perspective of biopower. When discussing the anti-development movement in the Andes and the oppressed state of the indigenous inhabitants advocating it, De la Cadena describes biopower as acting consistently with the ontological distinction between "humanity" and "nature", as follows:

...because, although included in the concept of "humanity", they do not count—at all, for they are too close to "nature." ... Sustaining the notion of the politics that eventually became hegemonic was the ontological distinction between "humanity" and "nature", the creation of the "natural man", his sentence toward inevitable extinction along with his other-than-human beings, and the occlusion of this antagonism through the notion of an adamantly inclusive and

⁸ In a 2015 article, De la Cadena mentions that, during the activism and negotiation surrounding the mining development, the translation of "earth beings" as "environment" de-emphasized the heterogeneity that would have challenged the assumptions of modern politics (De la Cadena, 2015, pp. 275, 279).

hierarchically organized "humanity." Only the "fully humans" engaged in antagonisms, and only they could ... engage in politics. (De la Cadena, 2010, pp. 343–344)

As De la Cadena reports, when a line is drawn between humans and nature, indigenous inhabitants are not grouped with the former as "fully humans" deserving of life but instead are relegated to the latter category, as "other-than-humans" to "be allowed to die." In this article, we will see that, although rare animal species in natural environments are deemed worthy of being kept alive and carefully protected, the humans residing in the same environment are not and are thus left destitute (Biermann & Anderson, 2017, p. 7; Büscher, 2018, p. 159; Cavanagh, 2014, p. 273). Green activists are allowed to participate as "fully humans" in the arena of politics to protect the natural environment. This indicates a situation that is more complex than a simple conflict between nature and modern development: a division rooted in the plurality of nature, renders difficult any collaboration between the various actors involved. Instead, we see a selective exclusion of indigeneity that is justified by the national and global morality of environmental conservation—institutionalized violence that wrecks the unique and delicate interactions between forest inhabitants and their *Umwelt*.

As we will see, while being excluded by the laws and policies promoting nature conservation, the Kunbi people in the Kali Tiger Reserve attempt to deal with their plight and recover their relationship with the forest by participating in the modern political arena. At the same time, they place themselves in the realm of nature to gain the rights granted by modern laws. Their attempts show that, to the Kunbi people, modernity and indigeneity appear to be inseparable dualities. I will describe the experiences of individuals living in this duality by focusing on their emotions regarding the forest and their efforts to deal with conflicts over the tiger reserve, embodying the natural environment and their intimate *Umwelt* simultaneously.

3. A prehistory of the Kali Tiger Reserve

The Kali Tiger Reserve stretches across the forest of the Western Ghats and is home to rare animals, such as the Bengal tiger, Indian elephant, and black panther. On the access road to the reserve, visitors are greeted at the boundary by an office and closed gate, from where permission must be received to enter the reserve (see Map 1, Figure 1). The road is lined with tall rustling trees. Wild animals, including birds and monkeys, are sometimes spotted in the vicinity. The general public is prohibited from entering the reserve, but this does not apply to Kunbi inhabitants, who have been granted permission to live there.⁹

Although the government designated the area as a tiger reserve only in 2008, the history of the area's protection can be traced back to the 1950s. In 1956, an original area of 127 km² around Dandeli in Uttara Kannada was declared a game sanctuary. In 1972, the Wildlife Protection Act was enacted; in 1975, the area was expanded to 5,729 km² (including the original game sanctuary), and the Dandeli Wildlife Sanctuary was established. In 1987, the sanctuary was made smaller and divided into two parts: the Dandeli Wildlife Sanctuary and the Anshi National Park. The Indian government initiated Project Tiger in 2007. In 2008, an area of 875 km² encompassing the Dandeli Wildlife Sanctuary and Anshi National Park was officially declared the Dandeli–Anshi Tiger Reserve. In 2015, the name of the reserve was changed to Kali Tiger Reserve, after the river that flows through the region (Department of Forest, 2009; Triguero-Mas & Oolomi-Solà, 2008).

⁹ According to Jayanand Derekar, a Kunbi social activist and staff member of the Wildlife Protection Society of India, the Kunbi inhabitants were forcibly evicted when the area was first designated as a national park. However, due to protests by social activists and the Kunbi inhabitants, the residential and tax areas of individuals who originally lived in the forest were excluded from the new restrictions (Jayanand Derekar, August 23, 2018).



Map1: Kali Tiger Reserve. Source: <https://ntca.gov.in/assets/uploads/briefnote/kali.pdf>



Figure 1: A noticeboard in the Kali Tiger Reserve. (Photo by author)

Thus, the area now known as the Kali Tiger Reserve has been established as a key wildlife protection area since the late 1950s. It has had strict laws and regulations established to protect the natural environment. However, the Kunbi people who have lived in the area have suffered from this protected designation. The Kunbi people who dwell in Uttara Kannada are believed to have migrated from the neighboring state of Goa, and their mother tongue is Konkani. In Goa, individuals belonging to the Kunbi community are recognized as "scheduled

tribes"; in Karnataka, however, they are classified under "other backward classes."¹⁰ This has had an impact on the legal rights of the Kunbi people over the forest, as discussed later in this article.

4. Life of the Kunbi people in the forest: shifting cultivation, hunting, and spirits

Kunbi settlements, surrounded by small fields and terraced rice paddies, can be observed throughout the forest that forms the Kali Tiger Reserve and its buffer zone (Figure 2). Unpaved roads between the settlements wind through the forest, passing across streams and up and down rocky hills; thus, visiting them is challenging. Most villages have no amenities, such as electricity, water supply, or sewage systems. The inhabitants visit a nearby town to shop or access hospital services either on foot or by motorcycle. In this section, I will report on the lives of the Kunbi and their interactions with the forest before their activities became heavily restricted by new laws, enacted to protect nature and establish the Kali Tiger Reserve.¹¹

The Kunbi people residing in the forest formed villages comprising patriarchal families. The boundaries of each village were marked by natural landmarks such as rocks or streams. Anything that grew within the boundary of a village belonged to the village inhabitants, and any outsiders seeking something from that village required permission from the village chief (*buduant*). If the Kunbi inhabitants discovered that someone had procured produce from their territory without permission, the priest of the village (*mirashi*) would pray to the guardian spirit (*payak*) and request that it punish the thief.



Figure 2: The landscape around a Kunbi hamlet in the Kali Tiger Reserve. Photo by author

¹⁰ For historical context about how the concept of "tribes" was established in India, see Konishi (2018). After gaining independence, India recognized Scheduled Tribes as peoples who were culturally, socially, and geographically distant from Hinduism and the caste system, which was the dominant social structure at that time, making them the subject of the protective discrimination policy. In 1993, a reservation system was established for Backward Classes, including Scheduled Castes, Scheduled Tribes, and Other Backward Classes (Konishi, 2018, pp. 197, 211).

¹¹ The following section is based on interviews conducted on August 23, 2018, and between March 23 and March 26, 2019, with 22 Kunbi people residing in 12 villages in the Kali Tiger Reserve and its buffer zone. During this period, I conducted participant observation of rituals in Deliye village in the forest.

Until the mid-1980s, the Kunbi people possessed communal areas of land in the hillsides surrounding their villages, where they practiced slash-and-burn agriculture. Although the amount of land varied by village, the inhabitants grew millet (*Panicum miliaceum*) after burning the undergrowth in a 5–10 acre (2–4 ha) patch of forest. They would move the patch every few years and return to the original patch after 10–15 years. This method of shifting agriculture, called *kumri*, was an important activity that provided the inhabitants with a stable diet, and it was essential to perform a ritual before starting cultivation. According to Mr. Shava Mirashi, the priest of Mayale Village, before cultivation on a new patch began, the chiefs of the nearby villages would all assemble and burn the branch of a specific tree; thereafter, they would offer some millet called *vorio* as an offering to the gods. After performing the same ritual in each village, the priest would then gather the inhabitants together and decide on the location of the new patch and the day on which they would begin cultivation.¹²

In addition to shifting cultivation, the Kunbi people had a strong relationship with the forest wildlife. They hunted three species of deer, sambars (*Rusa unicolor*), muntjacs (*Muntiacus muntjac*) and chevrotains (*Tragulid*), boars, and porcupines; collected honey from giant honeybees; and harvested useful plants. Among the wildlife in the forest, the sambar and Indian bison held special significance during the rituals performed by the Kunbi people, and they considered tigers and snakes to be forest spirits and worshipped them. Among the Kunbi rituals, group hunting (*bhondi*) was performed by adult males before the millet harvest and festival; it was particularly significant because it determined the future prosperity of the village. According to the Kunbi informants, several places in the forest, particularly water sources, were endowed with the power of the spirits, and hunting rituals provided opportunities for individuals to interact with the spirits who governed their respective domains (Figure 3).



Figure 3: A spirit shrine worshipped by the Kunbi in the forest. Photo by author

Although the details of the rituals varied among the villages, the sambar was a particularly important game animal in the group-hunting ritual. In Kundal village, a new chief was selected through a group hunt; he who caught the first sambar became the new chief. In Deliye village, if the first catch of the group hunt was a boar instead of a sambar, it was considered a bad omen, and the hunt would have to be performed again to catch a sambar. However, if the first catch was a sambar, it was considered a good omen, and it was taken back to the village with great joy and relief. The Kunbi had numerous hunting rules. In Mayale village, a hunter was not allowed to shoot an animal from behind; he had to make his presence known before shooting the target.

¹² Shava Mirashi in Mayare (March 26, 2019).

The Kunbi have formal rules and procedures for processing and dividing meat from the catch of the group hunt. In Pottori village, if a large animal such as a sambar or boar was caught, the head was dedicated to the ancestors and spirits who were worshiped in the main household of the village. The hunter who killed the animal would receive a portion of the thigh and backbone meat, and the rest of the animal would be distributed among the village inhabitants. In Deliye village, after an animal was caught, the priest would cut the throat to bleed it, and the tips of the tongue and tail were taken and mixed with herbs. The priest then walked around the animal thrice. Thereafter, other inhabitants would skin the animal and place the right thigh bone, head, and backbone in the ancestral room (*kula*) of the main household. They would roast a portion of the liver and thigh, offer it to guests from nearby villages, and distribute the rest of the meat among the families in the village.

The group hunt and its accompanying rituals are not merely exercises intended to obtain meat for the Kunbi individuals; they also represent important interactions with the spirits who are the guardians of the forest. The result of the hunt was accepted as the will of the spirits, and a portion of the meat, which embodied the power of the forest, was offered to them as an expression of gratitude and respect, while the remaining meat was shared among the inhabitants. Through these practices, the Kunbi people created a sense of community that is inseparable from the forest, and fostered relationships with neighboring villages.

These relationships between the Kunbi people and the forests are not unique to the region but are examples of the mutual and reciprocal relationships between individuals and their *Umwelt*. For example, Gell (1998) analyzed the interactions among the priest, hunters, and fertility of the forest, known as the *hau*, in ancient Tahiti based on a study by Babadzan (1993). The priest prayed to the *hau* of the forest with an offering, the forest responded by allowing the hunters to catch animals, and the hunters returned a part of the catch to the priest (Gell, 1998, pp. 106–109). Similar to the circulation of *hau*, for the Kunbi, the *bhondi* assisted in the flow of life that circulated between the community and its *Umwelt*; they received the power of the forest in the form of a catch, offered a portion to the spirits, and shared the rest among themselves.

When the *bhondi* became the topic of the interview, words started pouring out of the mouths of Kunbi males, as if they were hiding in the depths of the forest, trying to determine the next move of their quarry. Mr. Jayanand Derekar from Deliye village, which is located deep within the forest, expressed what hunting meant to the Kunbi people:

Before the area was declared a tiger reserve, any ritual we performed had an element of *bhondi*. Hunting and group hunting were a major part of the Kunbi life. (March 24, 2019)

However, after the area was declared a tiger reserve, the relationship between the inhabitants and the forest changed considerably.

5. Changes in the human–forest relationship after tiger reserve designation

Until 2007, a blind eye was turned to the Kunbi's ritualistic *bhondi* despite the 1972 enactment of the Wildlife Protection Act. However, when the Dandeli Wildlife Sanctuary and Anshi National Park were established as tiger reserves in 2008, severe restrictions were placed on human activities inside the conservation areas, including group hunting. Since shifting cultivation had been effectively prohibited in the forest since the mid 1980s, the Kunbi people had to abandon millet cultivation in communal areas and start rice farming in small designated agricultural plots.¹³ I discuss below how the Kunbi's lifestyle was affected by stricter laws and the measures they undertook to maintain their relationship with the forest.

As mentioned, forest wildlife was important to the Kunbi people as a source of protein and as an intermediary between humans and forest spirits, enabling the inhabitants to maintain their community and links with other villages. Furthermore, the *bhondi* and its ritual practice of sacrificing and distributing the catch from

¹³ Mr. Derekar stated that, although the National Park land where the Kunbi dwelt and practiced shifting cultivation was not subject to usage restrictions, taxes on this land were increased by a colossal amount in the mid-1980s, rendering it difficult for many of the villages to continue their shifting cultivation (interview with Muhabal Kudalkar in Kundal, March 25, 2019).

the hunt embodied the closeness between the forest and humans. Therefore, even after group hunting became impossible because of the area's designation as a tiger reserve, the Kunbi devised ways to maintain their relationship with the forest. In Deliye village, located within the reserve, after inhabitants lost the freedom to hunt with guns, they conceived the idea of pretending to hunt to ensure that they would not forget the ritualistic meaning of group hunting. On the day that the *bhondi* was held, the men of the village would each pick up a long pole in place of a gun and go into the forest in accordance with ritual procedures, as instructed by the priest. They would stay in the forest for a while, eat a special lunch that had been packed and prepared for the occasion by the village women, and then return home. Because no actual hunt had occurred, the future of the village could not be foretold by the spirits; however, the practice of going into the forest as a group and listening to the sounds of wildlife, as well as, part of the accompanying ritual are still being performed.

The virtual ban on group hunting has changed the content of the offerings made to spirits. The inhabitants engaged in a dynamic exchange of power between them and the forest by offering the game caught to their ancestors and the spirits of the forest before sharing it. Because they are unable to obtain wild animals, Kunbi communities in Mainor and Kundal villages have started to use roosters as spiritual offerings. They explained that this offering is made to prevent disasters from befalling their villages due to the wrath of the spirits, which they said often manifests in the form of livestock illness or death. Interestingly, Kunbi communities have a rule whereby they must not breed livestock other than cattle or water buffaloes, and it is taboo to consume their livestock. Therefore, the rooster, to be sacrificed, is acquired from a specific family line belonging to Devali, a different community that also performs the ritual of throat cutting. Mr. Ganapatti Gavada, the chief of Digghi village, stated the following about the current need to perform rituals using alternative means:

What we do now is not as powerful as the traditional rituals. The traditional method is far more powerful, and our children should follow that. Once we lose our tradition, we lose everything. Hence, we must protect them. (March 26, 2019)

Although the Kunbi people are prohibited from practicing shifting cultivation and hunting, they have a conditional permit to grow rice in a small exclusion zone and harvest plants for personal consumption from within the reserve. However, they cannot make a living under such restrictions, and many young individuals leave the villages to work in other areas to earn cash-based income. The enactment of laws and establishment of the tiger reserve in the name of nature conservation have had a major impact on the Kunbi's way of life and rituals. Despite their best efforts to maintain their traditional connection with the forest, this governance has changed the nature of that relationship.

Among these changes, the Forest Department's surveillance and strict crackdown on illegal activities are the most threatening for inhabitants residing in the forest. Since 2018, the Forest Department has set up surveillance cameras in forest areas designated as tiger reserves to monitor logging, poaching, and unauthorized collection activities. The department has formed surveillance teams that patrol the forest and question and arrest individuals whom they find prowling. Although the Kunbi people who originally lived in the area are permitted to perform collection activities within the protected zone, the fact that their activities are under constant surveillance and that they may be subjected to questioning and punishment by the Forest Department has brought unprecedented levels of threat and stress to their lives. Mr. Uruhas Gavada, chief of Mynor Village, described the situation they face:

We never faced any issues before [the forest was declared a protected area]. But now, we face so many problems. They (the Forest Department) do not allow us to enter the forest. The troops they send often come into our villages. They have turned our area into a fearful place. They brought fear into our hearts. ... The cultivated land, forest, and produce from the forest all belonged to us before. But since the declaration [that they will make the area into a tiger reserve], the Forest Department insists that everything except the crop fields belong to them, and they do not allow us to enter. They try to keep us away from the forest. We are the ones who have protected the forest for hundreds of years. (March 24, 2019)

As is evident from their stories, although the Kunbi retain their affection for the forest, they are afraid of the law enforced by the Forest Department through regular patrolling and questioning. The forest that was once their intimate *Lebenswelt*, where they had a sense of awe for the wildlife and spirits, is now emerging as a space that presents danger and other negative elements, such as arrest or penalties by the Forest Department, which the Kunbi have never experienced before. It is a modern governed space predicated on the ideology of conservationism, such as Project Tiger, and seeks to integrate with, support, and maintain the target natural environment to exclude all human activities. Such surveillance and governance wrecks the intricate relationships between the Kunbi people and the forest that have been established through their daily activities and rituals, and invalidates the indigenous borders that use natural objects and the links between groups. In this natural environment, which has been newly declared as a habitat for rare wild species, the lives of Kunbi inhabitants will be marginalized, regardless of their will.

6. Seeking a continuous relationship with the forest

Amid this situation, while maintaining their relationship with the forest and the spirits by partially altering their rituals, the Kunbi people have ventured into the arena of modern politics and have started a movement to obtain "rights" to the land and resources of the forest. To support their position, they have invoked the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act (Act No. 2 of 2007; hereafter referred to as the "Forest Rights Act"), which was enacted in 2006.

According to Ota (2018), this law grants forest rights and exclusive use of the forest to scheduled tribes and others who traditionally resided there. In the past, the Indian Forest Policy placed importance on forestry as an industry managed by the Indian Forest Service. The system was based on the pretext that forest and wildlife conservation is possible only after the exclusion of individuals from the forest. The 2006 Forest Rights Act was a response to the "injustice" committed by the Indian government since the colonial period, which deprived the scheduled tribes and other indigenous forest dwellers of their proper rights to the forest. This Act was meaningful because it introduced measures to address issues related to the welfare and livelihoods of forest dwellers (Ota, 2018, pp. 27–28).

As the name of the law indicates, the main parties involved in the rights outlined in the Forest Rights Act are the "Scheduled Tribes" and "Other Traditional Forest Dwellers", who are defined in the law as follows:

"Forest-dwelling Scheduled Tribes", refers to the members or community of the scheduled tribes who primarily reside in and who depend on the forests or forest lands for *bona fide* livelihood needs and includes the scheduled tribe pastoralist communities.

"Other Traditional Forest Dweller", refers to any member or community who has for at least three generations prior to the 13th day of December, 2005, primarily resided in and who depended on the forest or forests land for bona fide livelihood needs. For this clause, "generation" means a period comprising of 25 years. (Act No. 2 of 2007; see also Ota, 2018, p. 29)

For the Kunbi people, the classifications "Scheduled Tribes" and "Other Traditional Forest Dwellers" have significant meanings. According to these legal definitions, forest dwellers who are not scheduled to claim forest rights must provide credible documentation to prove that they have lived in the forest over the past 75 years as of December 13, 2005. This is not easy for Kunbi inhabitants, who have been living a self-sufficient lifestyle in the forest. However, once approved as a scheduled tribe, they can claim forest rights using simple procedures. As previously explained, the Kunbi people are approved as scheduled tribes in Goa, but are classified "Other Backward Classes" in Karnataka. Therefore, when seeking forest rights, the Kunbi people first sought to gain scheduled tribe status. I have considered how the Kunbi people live in the context of an *Umwelt*–natural environment duality by focusing on Jayanand Derekar, a Kunbi man who played a major role in the mediation involved in this movement.

7. Mediating between *Umwelt* and natural environment

Jayanand Derekar was born in 1975 in Deliye village, which is now part of the Kali Tiger Reserve. His grandfather is a famous hunter in this area. At his parents' home, a black-and-white photo of his young grandfather and great uncle decorates the wall. The two men stand with shouldered guns, flanking a tiger and a leopard sprawled on the ground. Jayanand chose an uncommon path for a Kunbi villager, receiving tertiary education and graduating from the University of Mysore in 2018 with a PhD. He now works as a staff member at the Wildlife Protection Society of India.

Although his work focused on wildlife conservation, Jayanand has been involved in efforts to improve the lives of the Kunbi people living in the Kali Tiger Reserve and its buffer zone. These efforts include installing solar panels on village houses in cooperation with local social activists and urging authorities to develop essential infrastructure for inhabitants. Furthermore, he endeavored to convince the government to grant the Kunbi people scheduled tribe status, which would enable them to demand forest rights. Jayanand maintains that the Kunbi people are politically marginalized in Karnataka State, largely because of their low literacy rate, distinct spoken language, and distance from the state capital. He stated the following about this situation:

The main problem is the language barrier. The Kunbi inhabitants only speak Konkani, so they cannot communicate with government officials about their problems. The application form is written in the official language of the state, so they must ask someone to fill it (out). That is the problem. (March 24, 2019)

Jayanand helped his community by interpreting from Konkani, which is their mother tongue, to Kannada, the official language of the state, thereby enabling the Kunbi people to voice their concerns to the government and teach the Kunbi about the state's policies and legal system. The most intriguing among Jayanand's efforts is his protest about the establishment of an Eco-Sensitive Zone (ESZ), a type of buffer zone that extends 10 km beyond the boundary of a reserve such as a national park. When the Ministry of Environment, Forest, and Climate Change (MoEFCC) announced that it would establish an ESZ surrounding the Kali Tiger Reserve, Jayanand roused many local Kunbi individuals to protest the plan. Most protesters already resided within the reserve or buffer zone; therefore, the creation of the ESZ would not have affected them. The question arises as to why Jayanand urged so many individuals to protest, and why they responded to his call:

The ESZ would not have had a real impact on the individuals living in the reserve because the law for the reserve was already much stricter than the regulatory policies for the ESZ. However, at that time, support of many individuals was required. They (the Kunbi people) are victims of the national park, wildlife sanctuary, and tiger reserve. They know that something is going on and that it is going to hurt the people. Hence, they joined the protest movement. When something is about to happen—even if it is in the future—the inhabitants should be warned. If we did not join forces and raise our voices, if we had protested without the cooperation of the inhabitants of this area, then our protest would have had little effect. (Jayanand Derekar, March 25, 2019)

The ESZ protests provided an opportunity for the local Kunbi people to consider the issues caused by protected areas and helped them realize that protesting against the government was a viable option. It is interesting to note that Jayanand called the Kunbi "victims" of the tiger reserve. Working in wildlife conservation and being a Kunbi himself, he understood the issues and contradictions associated with nature reserves. One could state that Jayanand's perspective and experiences manifest the pluralistic *Umwelt*—natural environment that exists on multiple levels in the region demarcated as a tiger reserve. It is thus useful to consider Jayanand's experience from the viewpoints of indigeneity, law, academia, and social activism.

Regarding indigeneity, it can be observed that, for Jayanand and the other Kunbi inhabitants, the forest is their home as well as an *Umwelt*, inseparable from their existence. As observed above, this forest has been

the object of their daily labor (e.g., shifting cultivation, hunting, and rituals), as well as, a partner whose force they harnessed via the distribution of the game and to which they returned the force via sacrifice. This indigenous *Umwelt*-forest was formed by a network of relationships and the pervading circulation of energy that encompasses the connections between plants, animals, and humans, as well as the ties that bind individuals to their ancestors, families, and communities. For Jayanand, this indigeneity is a relationship with the familiar forest where he grew up; acquired a language, knowledge, and skills; and learned the techniques by which links with the forest were forged. To him, the hunting activities of his grandfather and great-uncle were neither hostile against animals nor illegal; instead, they were a way of maintaining a connection with the forest.

However, the forest in this area is considered a natural environment that shelters rare species of plants and animals that need to be appropriately managed and preserved. The regulations that categorize forests as wildlife sanctuaries and biodiversity hotspots are supported by a national and global ideology of environmental conservation, scientific data on forests and wildlife, and central and regional government policies.

As mentioned, cameras and patrols have been used to increase the surveillance of indigenous inhabitants in the Kali Tiger Reserve in the same manner as they have been used in other protected areas to create a natural environment based on the ideology of environmentalism. Meanwhile, in accordance with participatory forest management, that began to be promoted globally in the 1990s, Karnataka State implemented its Joint Forest Planning Management (JFPM) program in 1993, which allowed forest committees at the village level to participate in forest management and conservation.¹⁴ While Jayanand's job at the Wildlife Protection Society of India involves protecting wildlife in tiger reserves, he also makes efforts to promote participatory forest management. His doctoral thesis, completed at the University of Mysore in 2018, focusing on the JFPM program, investigated joint forestry management and local forest committees inside and outside the Kali Tiger Reserve, and suggested various ways to improve the current system (Derekar, 2018).

Jayanand's thesis shows that for him, the forest is a place to research as a social scientist and to campaign for as a social activist who mediates between his familiar *Umwelt*-forest and the natural environment created as an administrative region. By investigating the JFPM program, Jayanand gained a clear understanding of the political and economic predicament of the Kunbi people and their relationship with the forest, and he attempted to use that knowledge and understanding to change their current situation.

Jayanand's activities, such as working to improve the lives of the Kunbi people, aiming to acquire forest rights, and organizing the protest movement against the ESZ, appear to enlighten individuals and encourage them to be protagonists with independent rights, whereas his efforts to have the Kunbi people approved as a scheduled tribe seem to strategically place them in the realm of "nature." However, the factor that drives Jayanand is his affection for the complicated yet fragile relationship with the *Umwelt* and the sense of crisis, is that such relationships may be marginalized and allowed to disappear under present laws and policies. On this topic, he stated the following:

I'm a conservationist, and conservation is my job, but we still have (the custom of) group hunting, although now we just go into the forest with a long pole and come back a little while later with the same pole. (Jayanand Derekar, March 23, 2018)

By mediating between two realms that appear in the same geographical space and translating the languages of each realm—the Kunbi's forest *Lebenswelt* and the natural environment produced by laws, ideologies, management, and surveillance—Jayanand seeks to maintain his *Umwelt*, for himself and his community. The factor that drives Jayanand to fulfill his dual missions—to protect the environment in the Kali Tiger Reserve and campaign to have Kunbi's plight addressed—is a notion that goes beyond words; it is the

¹⁴ India's revised 1988 National Forest Policy highlighted the importance of local residential participation in forest management and conservation. In 1990, the Joint Forest Management (JFM) program started, when the Ministry of Environment and Forestry issued a notice to each state. However, the JFM was heavily criticized, mainly for its heavy-handed top-down management approach in dealing with the Indian Forest Department in each state (Derekar, 2018, pp. 8–11; Ota, 2018, pp. 27, 2020).

intimate relationship that inseparably binds people to the forest, the spirits, their ancestors, and all other non-human agencies.

8. Living in the pluralistic forest

Focusing on the Kali Tiger Reserve in India's Western Ghats, this article has explored the pluralistic nature of the forest, which is simultaneously a familiar *Umwelt* for its inhabitants and a natural environment managed under modern ideologies and legal systems, to investigate the forest dwellers' ways of life. I have shown that, together with environmentalist legal systems, management, and monitoring, modern environmentalist ideologies, that prioritize the conservation of natural environments and the rare animals within them, exert a pronounced effect on the lives of inhabitants dwelling in forest regions designated as tiger reserves. As West *et al.* (2006) emphasized, protected areas apply the Western dichotomy of "nature versus culture" and attempt to realize a natural environment, free from human activity. In the Kali Tiger Reserve, the activities of forest dwellers were restricted and monitored to maintain the natural environment. During this process, Kunbi inhabitants were forbidden from practicing shifting cultivation and group hunting, activities that formed the core of their way of life. Consequently, Kunbi inhabitants began to fear the monitoring network that stretched throughout the forest.

Indeed, the Kunbi are now trapped in an administrative region that distinguishes between "natural environments to protect" and "humans unworthy of protection", and that has attempted to manage them accordingly. However, despite these circumstances, the Kunbi people strive to maintain their intimate relationship with the forest deities and retain the links to their ancestors and the wider community by partially adapting their rituals and group hunting techniques. These new practices demonstrate their efforts within their *Lebenswelt* to maintain their relationship with the forest, which has been so inseparably bound with their way of life.

Simultaneously, the Kunbi people began to explore other ways of surviving in the geographical area, which is now a natural environment under external management and control. One of their efforts was to obtain government designation as a scheduled tribe to ensure that they could claim forest rights. The other is direct protest against environmental policies, as observed in their campaign against the ESZ. An interesting implication of the former effort is that, by attempting to obtain forest rights as a forest-dwelling scheduled tribe, the Kunbi people attempted to place themselves on the side of "nature to conserve" while simultaneously relying on modern principles about "righting historical injustice."

In this manner, the Kunbi people seek to obtain "rights" using language accepted in the modern political arena while attempting to maintain their relationship with the forest by positioning themselves as part of the "nature" requiring protection. To achieve these goals, intermediaries such as Jayanand are essential. The role Jayanand plays in translating the inhabitants' *Lebenswelt* logic into modern, legal, and political logic and vice versa is like that played by the Andean priest-activists described by De la Cadena (2010, 2017). For the Kunbi people, however, unlike in De la Cadena's example, the ontological demarcation is drawn not between those who are "fully human", and are thus to be kept alive, and "nature", which is to be left to die but, rather, between "nature", which is to be kept alive, and "incomplete humans", who are to be left to die. Therefore, Jayanand and the Kunbi people have emulated being "fully human" as necessary while deliberately positioning themselves as part of "nature." This is a sincere attempt on their part to continue living in and off the forest without accepting the designation of "incomplete humans" within their demarcated administrative area or becoming estranged from the forest by becoming "fully human."

As mentioned, the Kunbi's way of life is centered on the circular exchange of life energy between humans and the forest: the inhabitants live off the forest and return part of their life energy to the forest spirits through their rituals. Participating in this circle of life—whether by risking life and limb hunting dangerous beasts or by making sacrifices to the formidable spirits—reminds the Kunbi inhabitants that they are sustained by the forest, which is at once their exchange partner and their familiar *Umwelt*, and that they might one day be the one that is sacrificed. This relationship differs completely from a perceived one in which "fully human" individuals

manage a forest and use its resources. It also differs fundamentally from the idea of earning a living after being serendipitously designated as people "permitted to live" under the administration of others. Through various efforts, the Kunbi inhabitants have sought corporeal and emotional connections with their *Umwelt*-forest and a mutually beneficial relationship in which they are sustained by the forest while simultaneously nurturing it through their way of living.

It cannot be completely denied that the Kunbi's activism and negotiation in the sphere of politics, even amid their quest to maintain their bidirectional exchanges with their *Umwelt*, might change their attitudes toward their lifestyle and the forest. From the discussion above, one can observe the plurality of the forest, where modernity, indigeneity, the natural environment, and the *Umwelt* overlap—sometimes in opposition, sometimes in concord—and notice the endless conflicts and attempts at conciliation of the inhabitants residing in these pluriverses.

References

- Agrawal, A. (2005). *Environmentality: Technologies of government and the making of subjects*. Duke University Press.
- Babadzan, A. (1993). *Les dépouilles des dieux: Essai sur la religion tahitienne à l'époque de la découverte*. Maison des Sciences de l'Homme.
- Baviskar, A. (2003). Tribal politics and discourses of Indian environmentalism. In Greenough, P. & Tsing, A. L. (Eds.), *Nature in the Global South: Environmental projects in South and Southeast Asia*. (pp. 289-318). Duke University Press. <https://doi.org/10.1177/006996697031002002>
- Biermann, C., & Mansfield, B. (2014). Biodiversity, purity, and death: Conservation biology as biopolitics. *Environment and Planning D: Society and Space*, 32(2), 257-273. <https://doi.org/10.1068/d13047p>
- Biermann, C., & Anderson, R. M. (2017). Conservation, biopolitics, and the governance of life and death. *Geography Compass*, 11, e12329. <https://doi.org/10.1111/gec3.12329>
- Bluwstein, J. (2018). From colonial fortresses to neoliberal landscapes in Northern Tanzania: A biopolitical ecology of wildlife conservation. *Journal of Political Ecology*, 25(1), 144-168. <https://doi.org/10.2458/v25i1.22865>
- Braverman, I. (2014). Governing the wild: Databases, algorithms, and population models as biopolitics. *Surveillance and Society*, 12(1), 15-37. <https://doi.org/10.24908/ss.v12i1.4579>
- Büscher, B. (2018). From biopower to ontopower? Violent responses to wildlife crime and the new geographies of conservation. *Conservation and Society*, 16(2), 157-169. http://doi.org/10.4103/cs.cs_16_159
- Cavanagh, C. J. (2014). Biopolitics, environmental change, and development studies. *Forum for Development Studies*, 41(2), 273-294. <https://doi.org/10.1080/08039410.2014.901243>
- Cavanagh, C. J. (2018). Political ecologies of biopower: Diversity, debates, and new frontiers of inquiry. *Journal of Political Ecology*, 25(1), 402-425. <https://doi.org/10.2458/v25i1.23047>
- Cavanagh, C. J., & Benjaminsen, T. A. (2015). Guerrilla agriculture? A biopolitical guide to illicit cultivation within an IUCN Category II protected area. *Journal of Peasant Studies*, 42(3-4), 725-745. <https://doi.org/10.1080/03066150.2014.993623>
- De la Cadena, M. (2010). Indigenous cosmopolitics in the Andes: Conceptual reflections beyond politics. *Cultural Anthropology*, 25(2), 334-370. <https://doi.org/10.1111/j.1548-1360.2010.01061.x>
- De la Cadena, M. (2015). *Earth beings: Ecologies of practice across Andean worlds*. Duke University Press.
- Department of Forest, Government of Karnataka and Energy and Wetlands Research Group, Center for Ecological Sciences, Indian Institute of Science. (2009). *Workshop on "ecological status of Dandeli Anshi Tiger Reserve"*. <http://wgbis.ces.iisc.ernet.in/biodiversity/pubs/ETR/ETR43/content.htm>
- Derekar, J. H. (2018). *Sociological insights into people's participation in forestry programmes: A study in Uttara Kannada district*. Doctoral dissertation, University of Mysore.
- Foucault, M. (1976). *Histoire de la sexualité 1: La volonté de savoir*. Gallimard.

- Foucault, M. (1997). *Il faut défendre la société: Cours au Collège de France 1975-1976*. Gallimard/Seuil.
- Foucault, M. (2004). *Sécurité, territoire, population: Cours au Collège de France, 1977-1978*. Gallimard/Seuil.
- Gell, A. (1998). *Art and agency: An anthropological theory*. Clarendon Press.
- Ishii, M. (2017). Caring for divine infrastructures: Nature and spirits in a special economic zone in India. *Ethnos: Journal of Anthropology*, 82(4), 690-710. <https://doi.org/10.1080/00141844.2015.1107609>
- Ishii, M. (2019). *Modernity and spirit worship in India: An anthropology of the Umwelt*. Routledge.
- Ota, M. (2018). *Indo 2006 Shinrinkenho no seiritsu to jissi ni okeru seijikatei* [The political processes of the formulation and implementation of India's Forest Rights Act of 2006]. *Journal of Contemporary India Studies: Space and Society*. Hiroshima University 8, 27-40. <http://doi.org/10.15027/45578>
- Shah, A. (2010). *In the shadows of the state: Indigenous politics, environmentalism, and insurgency in Jharkhand, India*. Duke University Press.
- Smadja, J. (2018). A chronicle of law implementation in environmental conflicts: The case of Kaziranga national park in Assam (North-East India). *South Asia Multidisciplinary Academic Journal*, 17. <http://journals.openedition.org/samaj/4422>
- Nel, A. (2015). The choreography of sacrifice: Market environmentalism, biopolitics and environmental damage. *Geoforum*, 65, 246-254. <https://doi.org/10.1016/j.geoforum.2015.08.011>
- Triguero-Mas, M., & Oloomí-Solà, M. (2008). *Local perception in Dandeli Wildlife Sanctuary, Karnataka, India*. Universitat Autònoma de Barcelona.
- von Weizsäcker, V. (1997 [1950]). *Der Gestaltkreis: Theorie der Einheit von Wahrnehmen und Bewegen*, Gesammelte Schriften 4, Janz, D., Rimpau, W. & Schindler, W. (Eds.). Suhrkamp Verlag.
- West, P., J. Igoe, & Brockington, D. (2006). Parks and peoples: The social impact of protected areas. *Annual Review of Anthropology*, 35, 251-277. <https://doi.org/10.1146/annurev.anthro.35.081705.123308>