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## **‘Communicative Orders in Collision and Collusion with Natural Resource Management Regimes in Nepal’**

### **Abstract**

Successive policy agendas in Nepal have mobilised the notion of the natural environment through crisis scenarios of deforestation and soil erosion, biodiversity loss, and latterly climate change. This article discusses ethnographic work on struggles over livelihoods and national park regulations, and examines collisions and collusions of indigenous shamanic ontologies, moral ecologies, and a hierarchical state symbolism of hunting, to tell very different storylines about languages of nature slipping into affinity with communicative orders of hierarchical purity and power distinctions. Protected areas for nature and wildlife are established in ethnically marked territories, perceived by elites as places of *jangal*, lacking in culture. Ethnographic research in the Langtang National Park reveals that no singular hegemonic order or ontology dominates but dialogues of power, knowledge, and relational possibility come into play. The aftermath of 2015’s earthquakes notably occasioned appeals for social justice to bend the singularly proprietorial resource language of nature protection authorities.

Keywords: moral ecology, indigenous knowledge, protected areas, sustainability

### **Introduction**

Three national parks (Everest, Chitwan and Langtang) were created in Nepal in the 1970s in the face of internationally voiced concerns about the natural environment, especially deforestation, population growth and soil erosion. These parks were designed to regulate economic activities and protect iconic habitats and their wildlife. Nature was to be prioritized over livelihoods in these places, within a very poor country.<sup>1</sup> The least well studied of these park areas is Langtang, which straddles parts of two districts in north central Nepal. The majority ethnic language group in these areas is Tamang. Tamang-speaking communities in Nepal have understandings of their environment as a homeland, as a crafted landscape of work and life, and as a place of sentient ecology with animate powers. Their mountain environments are relational, communicative, power-laden, and alive with human and non-human diversity. Their interactions with species, habitats and life processes are poorly translated in the idiom of natural resources, which flattens into a calculus of utility the relational embeddedness of environmental practices.

This article argues that nature is not a neutral term, and demonstrates how the scientific-cum-policy ideas of nature and resources collide and collude consciously and unconsciously with social orders and projects of change in the developing world. 'Natural resources' is a term of deceptively self-evident common sense. This comes from a dominant post-enlightenment cosmology of 'naturalism' (Descola 1996, 2013) whereby a human observer perceives a mute non-human environment that can be known scientifically, and transformed productively for use or exchange, or indeed for protection. One line of nature's genealogy is a place out there where humans don't belong, that is not of human creation, in other words what came to be known as the 'Yellowstone' model of

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<sup>1</sup> Critical reviews of national park and protected area policy in Nepal can be found in Blaikie and Sadeque 2000, Brower 1993, Campbell 2003, Müller-Böker 2000, and Stevens 1997.

‘minimal human interference’ (Stevens 1997). I discuss collisions with this concept of nature. Multiple perspectives on the non-human environment co-exist ethnographically in Northern Nepal. These perspectives have distinct contexts of enactment, and capacities for dialogue with others. Ecologically, politically, and culturally, this area is characterized by a diversity, and yet the appreciation of that diversity, and local people’s possibilities to communicate about it with outsiders presents existential problems, given the lack of understanding for local environmental *relationships*. The outsiders consist of state representatives (including national park officials), Nepali and foreign scientists, development consultants, and tourists. These people tend to perceive an area of poverty and lack; an environment that needs protecting from local users of resources; and local communities seen as either deficiently Nepali (in language, diet, familiarity with state practices), or as deficiently Tibetan (less exotic or monastic in comparison to their Sherpa neighbours further east).

Of all Nepal’s indigenous ethnic groups (*Janajati*) the Tamang, who number over 1.5 million, have most tenaciously retained their language, and a culturally distanced relation to the state. This expresses itself in the form of adherence to a Buddhist-shamanic religious complex, or more recently Christian conversion (Campbell 2016), a social world composed of patrilineal clans allied through cross-cousin marriage, and the consumption of beef by a majority of clans. They were historically marginalised from the centre of the Gorkha regime following insurgencies in the late 18<sup>th</sup> century (Höfer 1997). They mostly live on ridges and mountainsides with unirrigated fields and historically practised transhumant agro-pastoralism, which included taking herds and flocks across the Tibetan border for summer pastures.

The perspective of the Tamang-speaking communities who live in this northern corridor between the central Asian and south Asian worlds, is one of pivoting both ways, in a verticalised polarity of up and down. Coping mechanisms consist of getting by with access to as many kinds of livelihood opportunity as are available through regular negotiation with neighbours, while taking advantage periodically of outsiders moving through with goods or livestock. Till a generation ago, this was a classic zone of barter: of rice for salt, of bamboo for grains, of potatoes for a day's labour, of mountain medicines for cotton cloth. Exchanging produce from highland/lowland sources was the basis for on-going mutuality between very diverse communities, who did not share much else in common (Fürer-Haimendorf 1975, Humphrey 1985). In the days before road traffic, the regular greeting to a stranger arriving on foot would be bluntly expressed: "what are you carrying [to trade]?"

Given the distance from state centres of power and far removed from contexts of anonymous commodity exchange, the argument I follow is that it is deeply problematic to assume 'natural resources' to be a neutral category for organizing the stuff of human-environmental interactions. The category of 'natural resources' already prefigures a world of disembedded generalised exchange value. It both enables commoditization of the environment, and conditions its refusal, which is regulated nature conservation. In the Himalayan region, regulation of access to ecologies for livelihood purposes has been historically negotiated by barter, tributary ritual, participation in clan-based alliances, and gifts and services for recognising relationships between distinct categories of people occupying or moving through the lands of village headmen and sovereign territorial deities. The process of translating environments from relational home-worlds into natural resources needs ethnographically informed theoretical elaboration.

The vertical complementarity of exchanging produce from different ecological zones was systemically characterized by Furer-Haimendorf (1975), but his contrast of Buddhist trader and Hindu cultivator overlooked the ethnic groups in the middle. Tamang villagers collected upland forest produce that they exchanged for lowland grain in Hindu villages, connecting communities marked by considerable cultural difference through respect for their different environmental dispositions. Therefore what we might describe as the barter or sale of 'natural resources' did more than benefit their immediate users. Immediate dyadic satisfaction of the terms of a trade was involved, but people would mobilise enabling social narratives of group relevance that would always in practice be part and parcel of embedding these interactions. These products were constitutive of periodic and seasonal interactions between social groups who negotiated advantage across their differences. It was not a generalized circulation of commodities. Tamang villagers taking sheep and goats for pasture across the Tibetan border, would pay for access with donation of kid goats. In these exchanges people could displace hierarchical features of status within the logic of the caste-ordered state, and emphasise a more symmetrical coming together of culturally different kinds of people.<sup>2</sup>

## **Two Modes of Environmental Relationships : A Tributary Order and Animist**

### **Perspectivism**

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<sup>2</sup> During my first fieldwork, which was before regular traffic passed along the road to Dhunche, many lowlander Bahun-Chetri would come seeking seed potatoes, or looking to put their ploughing oxen in the care of Tamang-speaking villagers, as these higher places had much better pasture access. Some Bahun traders of cotton would regularly come before the festival period, and so fill a timely need in advance of the peripatetic tailors who would stay in the house and work for a week or so before moving on. Payments for the goods these visitors brought were frequently renegotiated to accommodate irregular access to cash.

Beyond these exchanges of complementary advantage, prior to the 1970s officials of the Nepali state arrived to conduct hunts for the provisioning of royal households, and to bring dairy livestock (Holmberg et al 1999), obliging villagers to give labour service (*rakam*). I use the term 'tributary' for these state-imprinted environmental interactions, which were co-ordinated by the village headman (*mukhiya*). Local households had to provide one member each for collective corvées, within a tributary relation to village headmen as official tax collector. Whether for path building, carrying dairy equipment, portering of state goods from one village to the next, net-hunting, or working for free - as tribute - on the personal fields of the headman, the context for the work was an asymmetrical service relation. These activities were formally embedded in roles of unequal power and rights. Indeed at the national feast of *dasain*, the authority of the state vested in the village headman would be signified by his keeping the head of the sacrificed water buffalo in his house. In the 1970s came the Langtang National Park and with it, an entirely new political regime of natural resources arrived. Let us look more closely into the two kinds of 'pre-natural resources' modes of environmental relations; the tributary and the animist.

'Animist' ontologies configure all life as interactive, and dialogically plausible (Bird-David 1999, De Castro 1998, Descola 2013). Other beings as much as humans are motivated to create homes, nurture families and be alert to predators, illnesses, and misfortunes. All species are intrinsically subject to the same forces. It is bodily forms and qualities that generate difference. Understanding the world from the position of another being, and being able to communicate or negotiate desires and predatory intentions, and to substitute alternative prey instead of human victims, is the particular multi-species communicative order the Tamang shaman engages with (empowered by the horn of the Tibetan antelope,

the quill of the porcupine, the feathers of raptors, the scent of burning juniper and many more biodiverse vital matter props). The state does not figure in this animist ontology.

‘Tributary’ ontologies by contrast are state-performative. They are premised on relations of inequality between actors, and the symbolism of tribute is a model of power and service relations that acts to legitimize the formal separation of status and being between givers and receivers of tribute. A moral economy connects the actors’ asymmetry to a paternalistic recognition of rights and responsibilities, which involve calling on this relation for multiple reasons of protection by a lord, and the rendering of mundane and ritual services. I was witness to a dramatic performance of the tributary mode of socio-environmental contract in Nepal.

During my original period of fieldwork, in the middle of the monsoon, when wild boar roam at night, rooting up potatoes, a pair of professional hunters had been sent from the national park headquarters, at the request of local leaders from many villages. These men stayed a week and scouted round the locality, listening to reports of sightings, inspecting places and fields where potatoes had been grubbed up by boars. After several days, a local man with a position in the Nepal army (who happened to be the oldest son of the oldest son of the former village headman), helped the hunters locate a boar trail that delivered them to a successful killing.

Word was sent to the park headquarters about the kill, and before long the army top brass turned up. Two villagers, barefoot (symbolic of respect to the territorial deity), carried the boar tied by its legs to a pole into the assembly of military officials. In what followed, a tributary regard of gratitude was shown by villagers jovially coming to participate in the

event. They lent a hand in activities of building a fire, boiling a huge pan of water, scalding the animal's coat, scraping off the fur and bristles with sharp blades, then singeing the remnant stubble, smearing the skin with turmeric mixed with ashes, before dismembering the beast for allocation of its prized portions to men in prominent positions of status. The army general received the head, the park warden was to be sent a shoulder and leg, and the chief district officer received one of the other hind quarters. Other significant prized parts were assigned to further officials of the army and park.

The rest of the body was then cut into strips and divided out into equal portions for distribution to each and every household in the village. This equal distribution to village households is a template also used to share the meat of a goat sacrificed to the blood-eating territorial deity killed on the full moon day of the month of Beisakh, presaging the move of livestock into higher pastures. The allocation of portions for ritual consumption to each household is again the model for both Buddhist and shamanic rituals when *tormo* (conical figures made of boiled rice), which absorb the blessing-power of these communicative interactions with the gods, are specifically given out for each household, constituting a citizenry of obligations and rights.

The hunting event enacted a series of relationships, roles, and responsibilities signifying respect to the warrior caste hierarchy that ran Nepal after Gorkha unification (Stiller 1975, Whelpton 2005). The hunt and the subsequent performance of the symbolic distribution of meat made visible a relational template of hierarchy, obligations, protection and stakeholding. The quantity and kind of the parts of the wild boar signaled degrees of distinction with the images of social hierarchy given shape in the recognition of state-citizenry roles. A communicative order translated across differences of caste and status,

conjoining relationships of unequal power to the marked-up partitioning of the flesh of the forest.

Michael Carrithers (2000) develops his concept of 'polytropy' to highlight very similar relational aspects in a communicative order of ritual sequences:

central to puja is a constitutively social act, an obeisance to a superior person, 'an act of respectful honouring' (Fuller 1992:68). Puja expresses a relationship, not a concept (Carrithers 2000:835)

For the vegetarian Buddhists and Jains Carrithers describes, it is coconuts and fruit, for the Nepalese warrior caste it is apportioning the flesh of the boar that makes an occasion for dignifying the idea of a hierarchical assembly in which adherents of different local persuasions of belief and practice can align themselves in a vertical display of authority and service. The wild boar is a creature that brazenly disrespects the modern ring-fencing of nature, and prefers to consume agricultural products rather than wild foods. The national park's general problems with finding moments of participatory communication with villagers was momentarily overcome, to enjoy an episode of togetherness recalling old pacts of tributary cooperation between state actors and villagers in the joint responsibility of the hunt. In this event's collusion of the tributary mode of state interaction with the work of nature protection, the translation enables the park's environmental function to be re-shaped as if a reciprocal enterprise dealing with a very real menace to subsistence farmers.

The service of boar culling is part of the national park's response to villagers' complaints about unjust predation inflicted on their meagre agricultural production, and the denial to villagers of the right to hunt crop raiders themselves. The ban on hunting is just one of several severe rules imposed by the national park. Chief among others are bans on fire, and

on the movement of produce for exchange. The area of the park is not to be treated as a place of natural resource extraction for realising exchange value – **except by license**.

Timber, firewood, bamboo, paper-making *daphne* bark, fungi, and many other forest products can be extracted on payment of fees, and thus made into legitimate resources.

### **Resource Evolution**

We can see a shift from a heterogeneous set of communicative orders whereby diverse socio-cultural groups interacted through a set of plausible registers for claims and exchange to be made in relation to others. In its place, a flattened, authoritarian prescription of what constitutes legitimate and illicit natural resource use took over, premised on a scientifically valorized defence of nature as a threatened environment.

Conservation policy has not remained static in Nepal, and has softened from the more authoritarian forms of earlier decades. At least in policy language, it is the paradigm of community forestry and participatory conservation (Stevens 1997, Fisher 2000), which Nepal is now seen as exporting as a successful model for sustainable resource management in other countries. However, the point is the national parks and forest department set the terms of permissibility for anything to be a resource, sustainably managed or otherwise. Community forestry user groups have to submit constitutions, membership lists and annual accounts to these authorities, which as Nightingale (2005) describes, enables elite capture, and privileges expert forest knowledge. This fundamentally collides with the knowledge and skilled practice of subsistence householders, and herders, who follow the life rhythms and seasons of growth in widely distributed sites, intimately attending to cosmic-facilitating relationships with female fertility spirits (*kaliama*), and non-human territorial sovereigns (*shyibda-neda*).

Taking flocks of goats to browse in scrubland, bringing leaf mold from the forest floor to prepare potato fields before planting, gathering a flush of fungi beside a forest path, and some medicinal herbs for a relative's sick calf may be 'resources' in an outsider's mind, but these are components of an interactional and personal world that the category of resources expropriates to a language of property management and control congruent with a 'naturalist' ontology and calculative logic of seeing like a state (Descola 1996, Scott 1998). This is effectively the world order of marketized resource values as analysed by Moore (2016) that laid the foundations for a global circulation of 'cheap nature'. It is substantially at odds with both 'animist' and 'tributary' modes of relation between people and non-humans. The naturalist ontology projects an objective world where knowable laws of nature and competition for resources singularly dominate. Animist ontologies recognise that other non-humans share personhood and relational culture, in which it is physical bodies that provide criteria of difference. In tributary ontologies there are correspondences signified between differences in human and non-human domains referencing unequal capacities for agency, and internal distinctions to the category of human that resonate across the natural and social orders of things.<sup>3</sup>

Having presented the core conceptual background, this article now asks how villagers' concerns over critical environmental events such as Nepal's earthquake of 2015, and the impacts of anthropogenic climate change can or do articulate with current processes and debates over democratic participation in agendas of sustainability.<sup>4</sup> Unprecedented environmental events have taken place over the last decade, so this issue is not simply an

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<sup>3</sup> Rather than 'tributary' Descola uses the term 'analogical', which I debate in Campbell 2013 chapter 9 'Translating Sustainability'.

<sup>4</sup>There is insufficient space in this article both to articulate the rationale for concerns over universalizing the category of natural resources, and to underpin each step of the argument with detailed ethnography, for which I refer curious readers to Campbell 2013.

academic one. At all levels of society in Nepal, people are having to deal with and find registers for the impact of climate change on this society and economy which is still roughly 70% dependent on small-holder farming and biomass energy.

In what registers can villagers claim the attention of powerful outsiders, to speak across priorities of both ecological conservation and those of social justice? The Sustainable Development Goals, which give strong visibility to climate change issues, but it is notable in this prominence of climate change policies (and development funding) how there appears to be a move towards a singular carbon-based arithmetic for translating contemporary scenarios of ecological urgency.

### **Headlining Environmental Risk**

There is a long history of looking at the Himalayas to see processes of human-environmental change with associated risks unfolding in alarming scenarios. The Theory of Himalayan Environmental Degradation, which asserted that soil erosion and flooding was primarily being caused by population increase among poor peasant farmers reducing forest cover to extend cultivable spaces was the subject of celebrated debate from the 1980s (Ives and Messerli 1989). The major lesson from this debate was that the biggest risk of all is to expect hard quantitative facts to reveal truth about what is happening 'out there' (Thompson et al 1986), and to generalize about environmental problems and their causes across such diverse geographic and political-economic conditions. Environmental crisis narratives about the Himalaya from the 1970s encouraged policies of creating protected areas, to manage the perceived behaviours of ignorant and overly fecund peasants (Ives and Messerli 1989, Guthman 1997). These alleged ecological vandals supposedly had no understanding of appropriate soil management techniques or capacity

to observe and respond to unsustainable rates of forest resource consumption. Nature and natural limits were deemed in the elite discourse of environmental policy to be beyond the comprehension of poor peasants whose driving self-interest make it impossible to observe and respond to the tragic consequences of their behaviours on the condition of the commons (Satyal et al. 2017). The narratives of expert and peasant life worlds did not translate across the social divide in neutral terms. Indigenous environmental knowledge and practice translated to the scientifically trained elite as non-rational, unthinking superstition, compounded by destruction of resources. While the introduction of conservation measures translated to villagers as unreasonable restrictions to livelihood strategies imposed by a corrupt and uncivil outsider elite.

The Langtang National Park was established as part of the wave of 1970s concern for environmental risk by a state that knew these communities as historically rebellious (Holmberg et al 1999). It saw them as extremely poor and uneducated and in need of punitive measures to curtail traditional practices of resource use, deploying the new gaze and regulations of the environmentalist state (Campbell 2003). Local people are not deemed by park authorities to have knowledge or interest in conservation. Even to talk about local knowledge of biodiversity carries little weight as this knowledge is mostly oral and on this count is inferiorised by the literate bureaucratic elite (the standard line being that oral knowledge can simply be made up, and does not carry the weight of texts)<sup>5</sup>. Local knowledge does not translate into a category of value to park officials who predominantly come from the ruling classes and ethnic groups of other districts. Conservation is fundamentally a state-making project (McBrien (2016) contrasts conservation to

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<sup>5</sup> Mumford's *Himalayan Dialogue* is the classic analysis for the structural inequality of oral and literate knowledge in the region. Ortner (1995) follows a similar argument for knowledge hierarchy while also explaining the ongoing appeal for oral inspiration.

preservationist aesthetics) and is widely recognized as such within Nepal by resident populations of protected areas, and by urban intellectuals (Ghale 2015).

To argue local knowledge and practice is a 'cultural model' of nature misses the point that the imported idea of nature already invalidates as 'customary belief' the communicative order of Tamang sentient ecology. The park officials and defenders of emblematic national wildlife and state forest property enact a policy ideology that is founded on natural science and is brought by them into places that they perceive as territories of illiteracy and ecologically destructive ignorance. This is a nature that cannot translate into the places of intentionality and communicative agency that the Tamang perceive. Other kinds of plausible social connectivity with non-human worlds need pulling out of the shadows if pathways towards collaborative sustainability are to be found between different kinds of people and their environments.

### **Protected Areas**

Nature arrived in force in Nepal: literally so, the military takes around 75% of the central national parks budget, for protection units (IUCN 1993:318, Stevens 1997:308). The conservation paradigm for the Yellowstone model of 'minimal human intervention' was born in the first wave of state environmental protection, and was picked up by various colonial administrations, consisting of creating enclaves of nature that prevent commercial or subsistence activity within them (Grove 1995). Stevens (1997) explains permutations of this paradigm and counter examples showing how engaging with local communities can deliver effective conservation outcomes. Adams and Jean-Renaud (2008) situate the Yellowstone model as in the first of three generations of environmentalism, in which the

third phase consists in moving beyond protected areas to address conservation with social justice in the Anthropocene.

During the Panchayat era (1959-1990) a priority of national integration, and the assertion of the dominant Nepali culture, applied a civilizing mission to educate the illiterate and discipline resource poachers. It was Yellowstone 101 in the service of mono-cultural nationalism. Nature conservation in fact provided a more profitable income for the state with these peripheral areas of the country than their marginal agrarian base could offer. The national park made everything in the park state property, and stopped all unlicensed use of resources. It effectively operated as a regime for value extraction from territories in which local Tamang-speaking communities lived off a meager subsistence base. They had for centuries worked as the human energy supply for transport across the Himalayas under conditions of *corvée* labour (Campbell 1997). 'Nature' functioned as a geographically expanded state revenue regime, operating a territorial monopoly where trekking tourism income could bring considerable profits, and local people could be fined through a host of new regulations on traditional subsistence activities. 'Nature' and wildlife tourism from the 1960s onwards gave the state and ruling classes novel forms of value extraction from territories that had only delivered surplus to the state in the form of hunted meat, forest products and pastoral economy goods, before opening up to the outside world after 1950. Importing the idea and institutions of nature in the form of protected areas, as a territorial infrastructure of modernization (countering undesirable forms of destructive modernity), permitted new kinds of state making, centre-periphery domination, and a more effective form of surplus extraction than royal hunts, butter-making and *corvée* labour could ever achieve. Wildlife was protected property of the state, and the roaming, crop-plundering creatures of the forest expropriated value from subsistence production of peasant labour

more naturally than any agrarian fiscal regime could achieve (Campbell 2000). These conditions generated conflict between people and parks, and appeals were made to address the inaudibility of villagers' complaints in the face of nature protection.

Some moves to address sustainability tensions came in the multi-party era (post 1990) when national park regulations were adjusted (following global IUCN policy in the build-up to the Rio Earth Summit of 1992) after years of conflict and corruption, to present a people-friendly guise for the conservation of nature, with buffer zone projects set up to share proceeds from national park income with local communities. This was accompanied by attempts to persuade local people of the value of protected areas, making available 30-50% of locally raised park revenues (from licenses, fines, tourism receipts etc) for local development projects (which is different from the central budget that goes mostly to the army, mentioned above). After two decades of the Yellowstone paradigm, the buffer zone program from 1996 instituted principles of forest user groups managing their own resource regulation in return for access to park income. The development projects funded were for income generation, tree nurseries, constructing toilets to civilize villagers' practices of hygiene, and for finding alternative livelihood resources to substitute for forest produce. The effect was to detach livelihoods from dependence on biomass, and increase the Tamang people's move into the cash economy. By 1998, reduced access and the civil war (1996-2006) exacerbated these processes and pushed many of the young to escape the conflict by going abroad (Campbell 2014).

Two primary senses of indigenous territorial legitimacy had been erased by the park regime; secular and sacred. Two elements of the headman's role (prior to 1976, but still much discussed during my first fieldwork from 1989) can be highlighted. One was the

coordination of seasonal movements of people and livestock between periods of field crop activity and forest pasture. This was a vital function for agro-ecological sustainability regulating bio-energy transfer between forests and fields. Cattle especially would range widely during the day and leave manure at night on the soil of the *godì* shelter site in patches of terraced fields. Even during my fieldwork of 1989-91, these *godì* for agro-pastoralism would be moved at least twelve times a year, keeping up different phases of cropping rotations and shifting herd residence at different locations (predominantly wheat, finger millet, maize, but potatoes and barley at higher elevations). Secondly, the headman mediated interactions between outsiders and people making land use claims (including disputes with neighbouring villages over disputed pasture areas). The headman gave cultivation rights to landless incomers (such as from poorer villages settling and marrying locally), and the headman let the poor take what they needed from the forest when in dire circumstances of need. Households held rights to subsistence as village citizens (*namsaba*) in a whole complex of rights and responsibilities of secular and ritual kinds.

An unspoken right to livelihood underwrote a moral ecology of forest access. Villagers performed corvée labour for the headman in return for which they would occasionally resort to taking bamboo or other forest produce for barter or sale if in dire straits. When villagers' food stocks ran out in exceptional circumstances "the headman said nothing", turning a blind eye in recognition of exceptional need. It could be argued that here is a notion of 'resource', taken from the commons, seen as a measure to fill a specific gap caused by misfortune, and embedded in a right of village citizenship that simply did not require to be verbalised. The right came from participation in collective rituals recognizing the non-human sovereigns of territory and ecological renewal (*bru-i hong* – the abundance of crops, *dindu-i yang* – the fertility of livestock), and in the reciprocal obligation to heed

the headman's calls to work. However, it is clear people stressed this unspoken right to take forest materials was a matter of exception, and categorically not a generalized practice.

The second kind of territorial legitimacy denied a presence in the language of modern secular 'nature' focuses on the sovereigns known as 'Lords of Soil and Lords of Place' (*shyibda neda*). All life processes, birth, illness and death are related to these sovereigns. Hailstorms, landslides, winds and abnormal livestock behaviour would be explained by disrespecting their power-places and infringements of the sacredness of these sovereigns' dwelling sites on ridge-top groves and in water sources. In less fearsome mode are the fertility spirit mothers, enabling growth and abundance to happen. They are less formally involved in protective contracts for human wellbeing as their male counterparts, and by contrast the spirit mothers (*kaliama*) generously impart vital beneficence as gifts to humans.

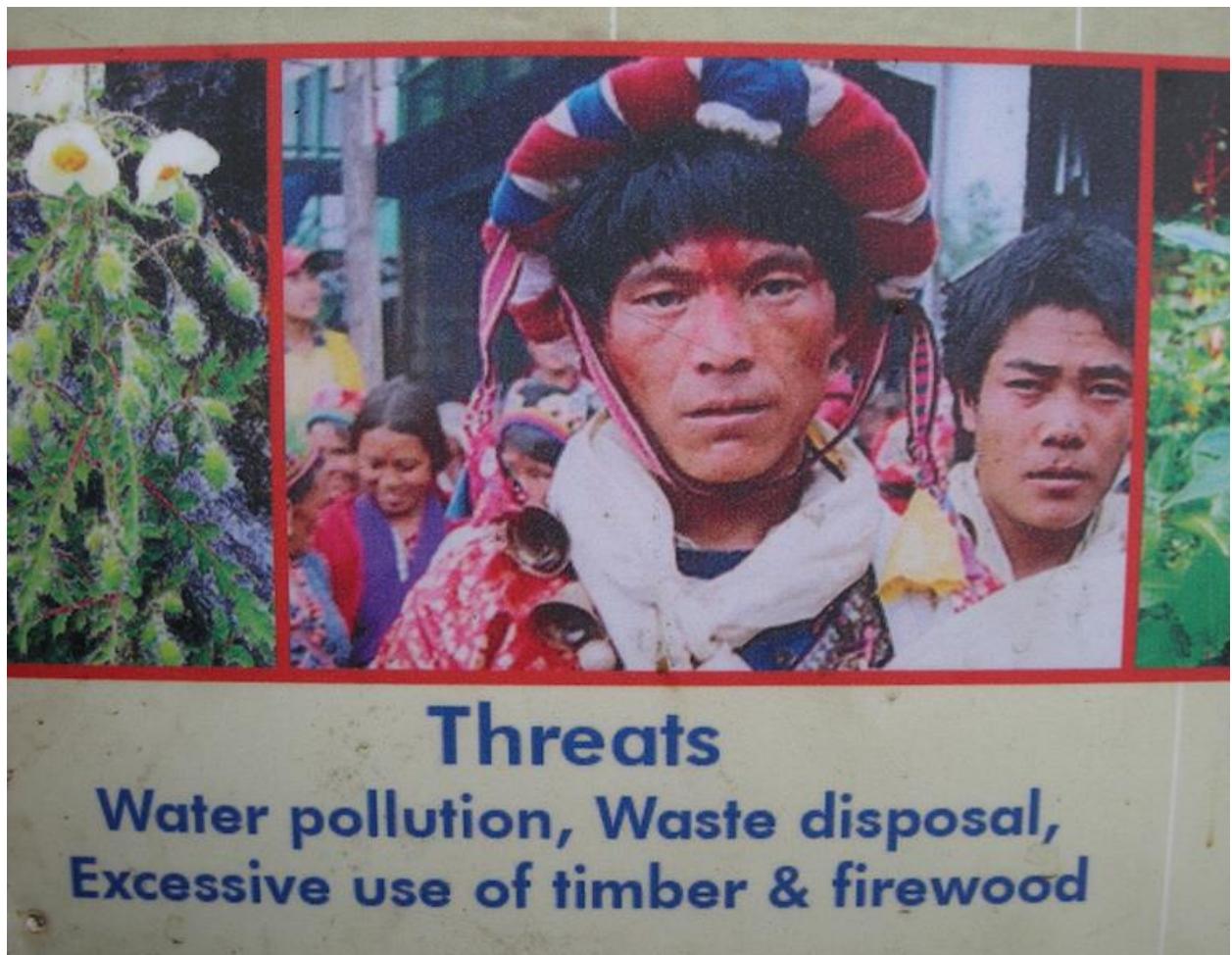
Villagers' perspectives on 'resources' of domestic provisioning were thus enfolded in seasonal renewals of rights to reside in the domains of the local sovereigns. Full moon day bans on ploughing are unfailingly observed and the onset of warm weather growth was marked by sacrifice of a goat for the water source deity. Before the park banned hunting wildlife, hunters would need to ask permission from the deity. The professional hunters sent by the national park to cull excessive numbers of wild boar were seen by locals to be mostly unsuccessful precisely because they did not first pay respect to *shyibda*.

## **Dialogues of Power**

In the spaces left by the encroachment of **naturalist** environmental conservation into the networks of human and non-human relations in Tamang territories, old modes of environmental interaction hide away. Provisioning of many forest products has to take place out of sight from the park officials. By contrast, the shamanic acts of the *bombo* make visible the pantheon of non-humans and discover how their desires and intentions influence and conflict with human purposes and wellbeing. Much of their ritual practice consists in forcefully cajoling malicious spirits to release captured human soul-shadows. Making dialogue across species difference leads to knowledge of how to think from the perspective of other kinds of body, and to anticipate the paths of movement and encounter in the homes and refuges of other beings.

The shamanic **animist** attendance to otherness and communicative exchanges between different beings was even used by local villagers as a frame for interpreting buffer zone policy practices. It informed the ways people were suspicious of the national park's genuineness of intention concerning local people's subsistence needs and buffer zone rights to resource entitlement from the park. When I was told by a Tamang observer of one buffer zone meeting, and the manner in which benefits were disrespectfully distributed to a local user group, he described this as being like at a sacrifice before a feast. As a gesture of dialogue and token recognition to non-human presences, a shaman will throw scraps of the sacrificed meat to placate the desires of carnivorous spirits, which would otherwise cause illness and nuisance among those who partook of the meat. So it was that villagers felt themselves diminished and treated as irksome at the very moment when the buffer zone policy should be enacting 'people-friendly' state redistribution.

There is no attempt from the national park to incorporate or translate shamanic knowledge of biodiversity into a more 'inclusive' public relations dialogue. Rather, there is a constant battle going on against superstitious ignorance and human 'threats' to wildlife<sup>6</sup>. A propaganda poster from the park has the word 'threats' directly beneath an image of a young bombo in full shamanic dress, and a 'don't mess with me' look in his eyes, beneath which 'pollution' 'waste' and 'excessive use' jump out.



Caption: Photo of Langtang National Park poster taken in Chandanbari 2015.

## **Shocking Effects**

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<sup>6</sup> Similarly in the medical field there is a campaign for people to avoid these 'faith-healers' (Pigg 1996)

The effects of the earthquakes that hit central Nepal on 25<sup>th</sup> April and 14<sup>th</sup> May 2015 put relationships between poverty, place, and power into renewed public attention. The tremors raised clouds of dust into the air and sent landslides tumbling down steep mountainsides with terrible consequences, damming river beds and then causing devastating floods. The distribution of the effects of the earthquake episodes became clearer, people began to talk and write about links between the sites of worst human impact, and these affected areas' ethnicity and poverty characteristics. Some commentators began to speak of a Tamang epicenter.

Since the earthquake there has been frustration expressed due to the lateness of response, and delays in recovery assistance due to the preoccupation of the political system with putting in place a new constitution ten years after the end of the civil. International NGOs were extremely generous in handing out immediate assistance and materials. In the Tamang epicenter it did not take long for old distrust in the state to resurface. The first sums of money to help in rebuilding houses were only released to villagers in November 2016, but they only covered just a quarter of what was required. A feature of the new constitution is its federal character, which potentially provides a platform for addressing some systemic and historical aspects of indigenous people's (*janajati*) marginalization, underdevelopment and central neglect.

Shradha Ghale wrote in Wire on October 27<sup>th</sup> 2015

Federalism based on identity has been the rallying cry of Janajatis for the past decade. For centuries, the Nepali state excluded and discriminated against them on the basis of their identity, erasing their cultures, languages, religions, economic systems and ways of life. Therefore, they believe that measures to redress past injustices must necessarily address their concerns related to identity. In practice, this would mean that provinces in federal Nepal should encompass the territories to which Janajatis have deep historical ties. People in provinces would have a primary say in matters that affect them – how to use their natural resources, whom to elect to local bodies, which

language to use in offices, courts and schools, and what constitutes development and well-being.

Here we see the language of natural resources being deployed to argue for people's welfare and just treatment by the state. At state level, natural resources are valuable tokens for administering justice among diverse groups in society. Terminologies and institutions relating to natural resource access give shape to many contemporary problems. This makes thinking about 'translating environments' a useful exercise in the process of understanding why and how divides endure in Nepalese society accumulating layers of meaning. These divides take shape through naturalized livelihood expectations correlated to 'remoteness' from centrist norms of modernity. They carry caste-inflected ideologies of difference in diet, bodily hygiene, language, education and religion. Ongoing caste-particularism configures actors in Nepali society with differential access to global knowledge, and unequal capacities for engaging with 'natural environments' as an explicit discourse in conservation and other policy agendas, including that of climate change. Dominant gazes of territorializing state power translate modern ideas of nature into projects of the ruling classes, and obscure the sighting of other ontological possibilities, especially those of communities that have less state influence. Understanding the ontological range in ways people imagine and speak of themselves in relation to environments affects community resilience in response to disasters, and renewable resource sustainability more generally.

### **Post-Peasant Moral Ecologies**

In the aftermath of the 2015 earthquake, a sense of injustice was voiced that the national park did not respond with any humanitarian flexibility over people's immediate needs for emergency shelters faced with the impending monsoon. A hamlet I knew situated way down close by the course of the main Trisuli river lost five people (all women cutting

fodder) to the landslide and flood, and these half dozen motherless households relocated 1,000 metres uphill by the village on the main road. An approach was made to ask permission from the national park for cutting enough timber to construct some temporary dwellings for these destitute families, but the park office responded that it couldn't deal with small amounts of timber, and would only process applications for 100 cubic feet and more.

Here was an occasion when the park could have shown some attentiveness to the plight of villagers in extreme circumstances, and could have been reciprocated by goodwill for demonstrating a sense of compassionate fellow citizenship between local residents and the guardians of the natural resources of the park. The opportunity for humanitarian assistance by acknowledging people's awful suffering was passed up. Luckily, an Irish NGO delivered sufficient quantities of long tin sheeting to use in round-arked fashion to make dwellings for the refugee families, just in time before the monsoon arrived.

This incident recalled the estrangement between park and people before the introduction of democracy, and later attempts at amelioration through the buffer zone programme, but the political-economic configuration now is not as it was during the 1990s when my main research took place. Most villagers and local townspeople are no longer as closely dependent on subsistence livelihoods as they once were. A major socio-economic transition has been going on with labour outmigration and abandonment of subsistence cropping patterns.

In the district towns a generation has grown into middle age with the national park being a feature of their worlds. Though few locals have succeeded in finding formal employment

within the national park (a target of just 25% local recruitment would be a good start), on the fringes there are local NGOs linked with WWF, youth groups, heritage tourism and trekking entrepreneurs who interact in more compliant ways of working with the institutional presence and regulatory powers of the park. By adopting the language of conservation values people strategically move themselves away from the previous generation's struggles against an unwelcome state disruption of a traditional moral ecology, and into a post-peasant 'naturalist' subjectivity. Embracing the environmental cause and /or working abroad instead of peasant production therefore has an affinity with post-agrarian class formation.

This does not amount to the sorts of transformative ownership of sustainability that Adams and Jeanrenaud (2008) write about in their attempt to bring the constituency of the International Union for the Conservation of Nature into engagement with the politics of inequality and the constraints of protected areas as enclaves of conservation. The local community conservation youth group in the district capital joins with the Langtang National Park in exhorting villagers and enterprises in a number of environmental awareness campaigns such as to reduce people's use of fuelwood in particular, but the group does not actively encourage local initiatives and explore how to innovate for sustainability projects such as for renewable energy potential. To their credit, there was a widespread distribution of subsidised improved cook stoves within a couple of months after the earthquake, assisted by these clients of WWF.

For Adams and Jeanrenaud (2008), achieving sustainability in the Anthropocene requires a new accommodation of ecological conservation priorities with those of social justice. Following on from first generation environmentalism, which established the principle and

value of conservation, and the second generation which tackled pollution and awareness of sustainable resource consumption, they identify a next strategic step:

Third generation environmentalism recognises that current organizations, institutions and political processes are part of the sustainability problem, and seeks to mainstream the environment within the existing matrices of power (2008:84)

This provides new and challenging departures for anthropologists to think about our understandings of human-environmental relations and translate these understandings for different kinds of audiences – be they policy makers, state authorities, NGOs, or social and ecological movements. Anthropologists are generally not so fluent in speaking the language of power, and are drawn to subaltern and mute voices oblivious to regime messages. It is a matter of debate whether the language of nature and environmental protection translates into operable vocabularies of transformational action in this strategic space for airing injustice and alternatives (Martinez-Alier 2002). For local residents of the park, it is NGOs like the Red Cross, who are aligned with the interests of the poor, and the popular accountability of the chief district officer that provide contemporary institutional spaces for airing environmental justice claims.

### **Relating to Climate Change**

There can be no doubt that strategically translating subaltern and indigenous concerns, perceptions and interests into the economists' terminology of resources is the simplest way to gain the ear of government and NGOs, and this is what a few brokers who have learnt skills of translation can do, but at what cost to the differences of eco-relational

ontology this obscures? For modern environmental governance, resource discourse constitutes the terrain in which the regulation of the pressure of production on environments is made legible for management and control. This is how power inequalities with regard to differential costs and benefits for different classes and stakeholders can be made visible, and systemic processes and outcomes of different policies and directions of change can be assessed. This also applies not simply between government regulators and local people or private sector actors, but between different arms of the state too. In the Langtang National Park a number of resources have been contested between the national park and ministry of agriculture over pasturelands and grazing. Bringing new categories of resource into visibility can be an important means whereby efforts to manage environments with more equitable and sustainable outcomes can be achieved. The introduction of Non-Timber Forest Products (NTFPs) into forestry policy domains made legible the social value of many species that generations of foresters trained in scientific management of commercial timber had not recognized as professionally significant.

Now climate change enters the frame with what effects on policies, power relations and pathways for sustainability justice? The challenge of translating awareness of climate change effects into actions and measures with local relevance is an immediate area of concern. Pre-monsoon droughts are occurring with increasing frequency, and villagers' deliberations about the causes and consequences of co-occurring droughts, winds and fire, veer between cosmological attribution and blaming illicit action (Campbell 2018, Satyal et al 2017). The Langtang National Park has used climate change as a new policy tool to confront locals over their forest resource use, and to reduce fuelwood consumption. Himalayan forests are now presented as vital carbon sinks for global CO<sub>2</sub> emissions. However, alternative ways of measuring and managing carbon sequestration exist than the

model of optimal carbon sequestration in forests would suggest. Among these are approaches that see well-stewarded smallholder agro-ecology as a beneficial system for locking in carbon in the humus of rich organic soils, comparable to standing forest (just under 50 tonnes per ha<sup>2</sup>, Pandit et al 2013).

Evidence about development policy paradigms designed for local and national climate adaptation plans in Nepal, show little has changed as compared to previous patterns of development policy towards underdeveloped districts such as in food security program designs. Nagoda stresses that Climate Change Adaptation “needs to be re-defined as a political process wherein the economic, social, political, cultural and environmental causes of vulnerability are addressed” (2015:nn). In the meantime anthropologists such as Fuller have captured how the rural everyday normative safety net and support structures for a socio-ecological reproduction is unravelling. This is entirely of a piece with global economic and social change, when educated sons raised on buffalo milk in Nepal are finding careers abroad, and their mother says:

When we are in trouble whom do we call...there is no-one who can do the work...I am worried about how we can stay here. I don't worry about anything else...We have to ask others to cut grass, we even have to ask others to fetch water...That has become hard. That is all I can say about the environment (Fuller 2016:132).

Attending to climate change within a framework of gender equality and social inclusion could rescript the languages of environment and development through the participation of non-central voices. This would acknowledge deliberation about norms alongside resource accounting (Wynne 2010), and the enormously rich and multi-lingual living tradition in

Nepal about the kinds of animate sensibilities, which Kath Weston argues are vital dimensions of relational possibility for “waking up to an ecologically compromised world” (2017:32).

I resist embracing the concept of resource also because under regimes of conservation the resourcefulness of people in acts of provisioning from common lands and forests for their livelihood needs becomes criminalized as a state offense. These habitats and materials are converted into *not being resources* that can be customarily accessed without threat of punitive costs. Di Giminiani and Haines, in their introduction rightly refer to how in general resources achieve social vitality by the mobility of materials across porous boundaries in sequences of translation, but in the ethnographic case here, it is blockage to movement that is brought about through the state’s conservation regime translating the riches of the forest into the property of the state (*Hariyo ban, Nepal ko dhan* – ‘Green forest is Nepal’s wealth’), and defining customary use entitlements as illicit takings. This is one of the contexts Di Giminiani and Haines refer to where “notions of nature and resource make little sense” (this volume:nn), but are at work nonetheless. Conservation can be understood as a practice of state building, and it has a history of erasing indigenous people’s rights and ecological livelihood legitimacy on the premise of *resource depletion*. The state governs nature by disciplining people’s resourceful propensities. The state in conservation mode classifies certain species and materials as categorically off-limit (endangered species, core zones), but introduces regulated resource access by licensing and payment of fees. As the multi-faceted crises of climate change reverberate with the political-economic precarities generated by globalized labour and commodity flows, the state of Nepal is characterized by an innovative period in which new kinds of actors are taking initiatives to stand for the state and promote projects of change for public interests (Nightingale et al. 2018). Lateral

pressures from civil society, sustainability leaders and the local government of federal municipalities could redistribute power in protected areas within the next generation.

### **Conclusion:**

National development policy in Nepal has been marked by a sequence of attempts to institute 'nature' as a means of managing risks posed by modernization of various kinds. Designating territory as national parks brought Nepal in alignment with global concerns about environmental degradation and biodiversity loss in the 1970s. However, as a project of defending the non-human world from commercial and livelihood interests of an expanding and poor population, this imported notion of scientifically validated environmental state-making slipped into a convenient affinity with traditional distinctions of underdevelopment, ethnic hierarchy, Hindu purity/pollution, and questionable citizenship among marginal social groups in the places where protected areas were established.

Nepal is a landscape where no singular hegemonic type of ontology holds sway but dialogues of power, knowledge, and relational possibility confront each other and sometimes attempt mutual translation. It is an extreme terrain where different patterns of associational life are enacted from diverse sets of human interests in the non-human world. This leads to unequal capacities for engaging with 'nature' discourses among the range of actors and ethnic groups in Nepali society. Consequently there exist both privileged communicative channels, and points of impasse in the deliberative public spaces of environmental concerns. 'Participatory conservation' initiatives such as buffer zones has brought some mediating opportunities, though still hierarchically configured by the national parks. As a necessary corollary, other practical means of dialogue and relational

practice have been available to actors, which can be deployed using informal institutions (e.g. networks of kinship) and roles (e.g. tributary relations of the hunt) that draw from alternative foundations of moral ecologies for human-environmental engagement and templates of sociality that make bridges across differences of language, religion and status.

Nature has not translated well in terms of democratic outcomes for the citizens in regions where narratives of underdevelopment collide with grammars of caste inequality and backwardness concerning people who are dependent on forest livelihoods. Western models of nature protection have been pasted over societal inequalities configured in a symbolic landscape of an archaic polity, giving validation to these inequalities through modern claims of scientific authority in defence of the natural world. Seeing from its privileged center, underdevelopment is engrained at the margins of state territory, where the place and people are 'uncivilised' - *jangali*. Its modern naturalist avatar now perceives dubious national citizens over-consuming the national patrimony of natural resources, and climate change is a new empowering tool for the state to assert power over people who are already deeply affected by climate change effects. Nightingale writes: "the most challenging adaptation issues will emerge from the social politics that surround 'climate change' as a discourse and policy instrument, rather than from biophysical change itself" (2015:9)

The language of resources has been a mechanism by which power relations and conservation plans have taken shape in the neoliberal era of sustainable development programmes. The formally dispassionate language of resources makes commensurability of practices and claims possible, along with the substitution of materials and species in need of protection via provision of alternative resources. Speaking in terms of resources offers a modern rights-based dialogue between scientific and social justice concerns. Forest

policy actors could thus be persuaded of other concerns than the productive efficiency of commercial timber yields, and the small-scale and community-based harvesting of Non-Timber Forest Products gained recognition for other values in managing forest ecologies (Blaikie and Baginsky 2006).

However, when it comes to translating dire human need through the language of resource management, this has not worked for generations of residents of national parks. Paige West (2005) brings attention to dilemmas of translating across epistemic communities, and the event of the 2015 earthquake emphasised the dilemma facing villagers of the state's inability to listen to their condition of suffering. Its refusal to permit exceptional pleas for using only minimal forest materials as resources for immediate survival, put the people face to face with their abandonment by the state after the earthquake. The old indigenous moral ecology of survival and care between villagers, their leadership and the forest, is not translatable into terms that the environmentalist state can hear. The earthquake struck in communities hoping for a greater say in a federally-empowered constitution to enhance their environmental wellbeing. It is hard for occidental discourses of 'nature' to interpret adequately these circumstances and purposes of situated social justice. Better alternatives are needed that would involve collaborating for inclusive sustainability or 'transformational resilience' (Satyal et al 2017).

It is a matter of importance to the local people in their strategies for achieving civility and a *modus vivendi* between villagers and the park, that they transform the park officials from being outsider strangers into being persons who might be treated as guests. They can thereby share in a language of mutual recognition, productive exchange and familiarity with the local kinship of people and things for enabling ongoing relational worlds, rather

than be forced to speak exclusively in terms of resource regulation. This possibility for translation across different communities (polytropy is Carrither's term) was expressed in the relational connections achieved in the symbolic distribution of meat of the wild boar, which evoked the unwritten ritual constitution of Nepal's warrior caste polity, and which endures as a political-institutional reality beneath the formal language of biodiversity protection and climate change mitigation.

For Tamang speakers, the relations between people, animals, plants and things intertwine communicative orders. A position of detached, secular gaze on a mute world of material stuff is inconceivable. People become persons by participating in worlding practices that connect on a daily basis the co-production of life through domestic companionship with the familiar otherness of species and materials. They resist in daily practice the encroachment of a disenchanted world of people and resources, are reinventing environmental relationships in new agricultural crops (medicinal herbs and kiwi fruits), and ritual attention to gods of the water springs. There is a contradictory twin process of commodification in an expanding cash nexus of formal market relations on one hand, and on the other, a protective regulation of biodiversity as off-limits to exchange, which is nevertheless breached by informal means by actors at every scale inside and outside protected area administration, needing to communicate across those boundaries and categories of a nature that cannot speak.

## References

- Adams, W. M. and Jeanrenaud, S. J. (2008). *Transition to Sustainability: Towards a Humane and Diverse World*. Gland, Switzerland: IUCN. 108pp.
- Campbell, B. 1997. 'The Heavy Loads of Tamang Identity'. In D. Gellner, J. Pfaff-Czarnecka & J. Whelpton (Eds) *Nationalism and Ethnicity in a Hindu State*. Chur: Harwood Academic Publishers. pp205-235.
- Campbell, B. 2000. 'Animals behaving badly: indigenous perceptions of wildlife protection in Nepal'. In J.Knight (ed). *Natural Enemies: people-wildlife conflicts in anthropological*

*perspective*. London: Routledge. pp124-144.

Campbell, B. 2003. 'Resisting the Environmentalist State'. In D. Gellner (ed.) *Resistance and the State: Nepalese Experiences*. Delhi: Social Science Press. pp83-112.

Campbell, B., and P. Sallis. 2013 'Low-carbon yak cheese: transition to biogas in a Himalayan socio-technical niche' *Interface Focus* 3, doi: 10.1098/rsfs.2012.0052

Campbell, B. 2013 *Living Between Juniper and Palm: Nature, Culture and Power in the Himalayas*. Oxford University Press.

Campbell, B. 2014. 'Linking Local and Global in the Sustainable Development of Biodiversity Conservation' In P. Sillitoe (ed) *Sustainable Development: An introduction focusing on the Gulf region*. Oxford: Berghahn.

Campbell, B. 2016. 'Tamang Christians and the Resituating of Religious Difference' In David Gellner, Sondra L. Hausner, and Chiara Letizia. Delhi. OUP

Campbell, B. 2018. 'Encountering Climate Change'. *European Bulletin of Himalayan Research*.

Michael Carrithers 2000. 'On Polytypy: Or the Natural Condition of Spiritual Cosmopolitanism in India: The Digambar Jain Case' *Modern Asian Studies*, 34(4): 831-861

Fisher, R. and D. Gilmour 1999. 'Anthropology and Biophysical Sciences In Natural Resource Management: is symbiosis possible?' In R. B. Chhetri and O. P. Gurung (eds.) *Anthropology and Sociology of Nepal: cultures, societies, ecology and development*. Kathmandu: SASON.

Fuller, C. 1992. *The Camphor Flame: Popular Hinduism and Society in India*. Princeton University Press: Princeton.

Fuller, S. 2016. 'When Climate Change is not the Concern: realities and futures of environmental change in village Nepal.' In L. Connor and J. Marshall (eds.) *Climate Change and the World's Futures: ecologies, ontologies and mythologies*. (pp.129-144) New York Routledge.

Ghale, Shradha. 2015. 'Why Nepal's Janajatis Feel Betrayed by the New Constitution'. WIRE. <http://thewire.in/2015/10/27/why-nepals-janajatis-feel-betray...> Accessed 27/10/2015

Grove, R. 1995. *Green Imperialism: the colonial expansion, tropical island Edens and the origins of environmentalism, 1600-1860*. Delhi: Oxford University Press.

Guthman, J. 1997. 'Representing Crisis: the Theory of Himalayan Environmental Degradation and the Project of Development in Post-Rana Nepal'. *Development and Change* 28: 45-69.

Höfer, A. 1997. *Tamang Ritual Texts II: ethnographic studies in the oral tradition and folk-religion of an ethnic minority in Nepal*. Franz Steiner Verlag: Stuttgart.

Holmberg, D., K. March and S. Tamang. 1999. 'Local Production/ Local Knowledge: forced labour from below'. *Studies in Nepali History and Society* 4(1):5-64

IUCN. 1993. *Nature Reserves of the Himalaya and the Mountains of Central Asia*. Oxford: Oxford University Press/ International Union for Conservation of Nature and Natural Resources.

Ives, J. & B. Messerli. 1989. *The Himalaya Dilemma: reconciling development and conservation*. London: Routledge.

Martinez-Alier, J. 2002. *Environmentalism of the Poor*.

McBrien, J. 2016. 'Accumulating Extinctions in the Necrocene'. In Jason Moore (ed) *Anthropocene or Capitalocene: Nature, History and the Crisis of Capitalism*. Oakland: PM Press.

Moore, J. (ed). 2016. *Anthropocene or Capitalocene: Nature, History and the Crisis of Capitalism*. Oakland: PM Press.

- Müller-Böker, U. & Kollmair, M. 2000. 'Livelihood Strategies and Local Perceptions of a New Nature Conservation Project in Nepal. The Kanchenjunga Conservation Area Project'. *Mountain Research and Development* 20 (4): 324-331.
- Mumford, S.R. 1989. *Himalayan Dialogue: Tibetan Lamas and Gurung Shamans in Nepal*. Wisconsin: University of Wisconsin Press.
- Nagoda, 2015. 'New discourses but same old development approaches? Climate change adaptation policies, chronic food insecurity and development interventions in northwestern Nepal' *Global Environmental Change*. [dx.doi.org/10.1016/j.gloenvcha.2015.08.014](https://doi.org/10.1016/j.gloenvcha.2015.08.014)
- Nightingale, A. 2005. The experts taught us all we know: Professionalisation and knowledge in Nepalese community forestry. *Antipode* 34(3):581–604.
- Nightingale, A. 2015. Challenging the Romance with Resilience: communities, scale and climate change. In Harcourt, W, & L. I. Nelson (Eds.), *Practicing Feminist Political Ecologies: Moving Beyond the 'Green Economy'*. Zed Books
- Ortner, S. 1998. 'The Case of the Disappearing Shamans'. In D. Skinner, A. Pach III, & D. Holland (eds.) *Selves in Time and Place: identities, experiences and history in Nepal*. Lanham: Rowman & Littlefield.
- Pandit, B. H., R. P. Neupane, B. K. Sitaula, R. M. Bajracharya. 2013 'Contribution of Small-Scale Agroforestry Systems to Carbon Pools and Fluxes: A Case Study from Middle Hills of Nepal'. *Small Scale Forestry* 11(4) : DOI 10.1007/s11842-012-9224-0 ,
- Pigg, S. 1996. 'The Credible and the Credulous: The Question of "Villagers' Beliefs" in Nepal'. *Cultural Anthropology*, 11, (2): 160-201
- Saty, P., K. Shrestha, H. Ojha, B. Vira, J. Adhikari. 2017. 'A new Himalayan crisis? Exploring transformative resilience pathways' *Environmental Development*, <http://dx.doi.org/10.1016/j.envdev.2017.02.010>
- Scott, J. 1998. *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed*. Yale University Press, New Haven, USA.
- Stevens, S. (ed). 1997. *Conservation Through Cultural Survival: indigenous peoples and protected areas*. Washington: Island Press.
- Stiller, L. 1975. The Rise of the House of Gorkha. A Study in the Unification of Nepal. 1768-1816.
- Thompson, M., M. Warburton, and T. Hatley. 1986. *Uncertainty on a Himalayan Scale*. London: Ethnographica.
- Weston, K. 2017. *Animate Planet: Making Visceral Sense of Living in a High-Tech Ecologically Damaged World*. Durham: Duke University Press.
- Whelpton, J. 2005. *A History of Nepal*. Cambridge University Press.
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