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Relations of Blood: Hunting Taboos and Wildlife Conservation in the Idu Mishmi of Northeast India

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Abstract. Hunting is one of the leading causes of declines in tropical wildlife. Yet, for many traditional and Indigenous Peoples, hunting and associated rituals are integral to establishing and maintaining social identities and reciprocal relations with nature. Taboos that restrict hunting and forest use are widely prevalent in traditional societies and have been likened to informal culture-based conservation mechanisms. However, where taboos have been formally co-opted by conservation programs, the results have been largely ineffective. A recent study showed that taboos in the Idu Mishmi community of Northeast India significantly reduced wild meat consumption and contributed to biodiversity protection, including an endangered tiger population. In this study, we explore what motivates Idu taboos, their role in everyday Idu life, how they impact hunting, and whether they will endure with changing circumstances. We find that by conditioning social and personal prosperity on ancestrally mandated, morally correct behavior in the forest, Idu taboos ensure that people understand that human well-being is inextricably linked to restrictive hunting. Violation of taboo does not just bring misfortune to the violator but to all kin, forging interdependence and cohesion in the society. Taboos form the moral and practical basis of interaction between and among humans, spirits, and animals. Taboos are not an isolated component of the Idu culture; they make the Idu the Idu, the reason why they have endured through rapidly changing times. Conservation should pay careful attention not just to the outcomes of cultural institutions, but to their meanings and processes to co-create sustainable and ethical programs.

Keywords: Idu Mishmi, hunting, taboo, wildlife conservation, northeast India

Introduction

Hunting of wildlife is a significant source of food and cash income, particularly for the rural poor across the tropics (Coad et al. 2019; Milner-Gulland et al. 2003). It is also one of the leading causes of worldwide declines in tropical wildlife (Bennett et al. 2002), even observed in cases where hunting is subsistence only (Chacon 2012; Peres 2000). Yet, for many traditional and Indigenous peoples, hunting and associated rituals are integral to establishing and maintaining social roles, group identities, and reciprocal relations with nature (Hill 2011; Lewis 2008).

A host of win-win community-based conservation initiatives aiming to deliver both social and environmental benefits have been proposed to control and regulate hunting (van Vliet 2011). While systematic evaluations of such programs are rare, where they have been evaluated, such as in West-Central Africa, they have largely failed to achieve either social or conservation outcomes (Wicander and Coad 2018). Global experience with community-based conservation, more broadly, has shown that enforcement of externally conceived rules, incompatible with local norms and socio-cultural realities, has led to a collapse of existing traditional institutions of effective natural resources management (Homewood 2010; Li 2000). Such efforts have often engendered new conflicts, ultimately undermining the goal of conservation (Fletcher 2012). Consequently, there

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have been rising calls for conservation to pay careful attention to local context, cultural norms, social institutions, and relations of power (Peterson et al. 2010; Sterling et al. 2017).

Taboos and cultural proscriptions that impose restraint on hunting and wild meat consumption are widely prevalent in traditional communities and have been likened to social institutions (Berkes and Folke 1998). Like rules of conservation, taboo prescriptions prohibit individuals from engaging in certain actions (Colding and Folke 2001; Jones et al. 2008). However, unlike formal conservation initiatives, taboos are typically based in ideas of cosmological retribution or "automatic sanction," relying on individual self-monitoring and self-enforcement to produce conservation outcomes (Colding and Folke 1999; Lingard et al. 2003).

Outside of Madagascar, where scholars have studied a range of synergies between conservation and taboos (Golden and Comaroff 2015; Jones et al. 2008; Sodikoff 2012), there have been few empirical studies to assess taboo's role in regulating hunting, particularly given their omnipresence across traditional cultures. Most research from elsewhere on taboo in conservation has been largely classificatory and descriptive (e.g., Colding and Folke 2001; Quiroz and van Andel 2015), focusing on observed outcomes and often neglecting its processes and motivations (e.g., Barre et al. 2009; Lingard et al. 2003; Pezzuti et al. 2010). In select cases, where taboos have been co-opted to create formal conservation programs, the results have been mixed. Scholars have shown that when motivations and socio-political-historical aspects of taboos were ignored to create top-down taboo-based conservation programs, the outcomes were largely ineffective (Jones et al. 2008; Osterhoudt 2018; Sodikoff 2012; but see Johannes 1998).

In this study, we unpack the phenomenon of taboo in the Idu Mishmi community of Dibang Valley of the northeast Indian state of Arunachal Pradesh. While the Idu Mishmi have an expansive system of behavioral prohibitions that permeate all aspects of life, in this article, we focus on ritual restrictions, called *iyu-ena* (*ena* hereafter), observed during hunting, wild meat consumption, and many other important socio-cultural activities, including childbirth, wedding, funeral, and shamanic ceremonies. Previous research by the first author (Nijhawan 2018) showed that wild meat consumption reduced by as much as 88% during *ena* restrictions across all socio-economic categories. Nijhawan (2018) concluded that *ena* contributed significantly towards maintaining high levels of wildlife abundance and diversity in Dibang Valley. Here, we explore the cosmological underpinnings of *ena*, what motivates it, its role in everyday life, how it impacts hunting, and its changing relevance in the society. Since the Idu Mishmi often refer to themselves simply as "Idu," we too use "Idu Mishmi" and "Idu" interchangeably throughout the article.

Through a series of ethnographic vignettes, we explore different aspects of *ena* in everyday Idu life. We argue that a key motivation of Idu *ena* is the creation and maintenance of vital distinctions between humans and animals, men and women, and living and dead. However, the process through which *ena* operates in everyday life, that is, by restricting the use of forest and wildlife during all important life events, ensures that people understand that human prosperity is contingent upon morally appropriate interactions with the animal world. *Ena* connects hunting to all other aspects of life. This makes Idu hunting taboos not just an isolated component of the culture, but rather a fundamental embodied practice that creates and maintains the Idu society. Finally, we draw upon case studies from other traditional contexts to discuss the importance of understanding cultures as interconnected systems, as opposed to picking and choosing components that appear to be beneficial for conservation. As the biodiversity in the Idu

homeland and the cultural institutions that have contributed to its maintenance gather attention from conservation groups, it is vital to understand what these traditional institutions of natural resource governance mean for local people; how, when, and why they function; and how conservation can meaningfully and ethically engage with them in changing times.

Methods

Study Area

The ancestral homeland of the Idu Mishmi community is the mountainous catchment of River Dibang in the Northeast Indian state of Arunachal Pradesh (Figure 1). The Idu Mishmi are one of the state's 26 recognized Indigenous groups (the

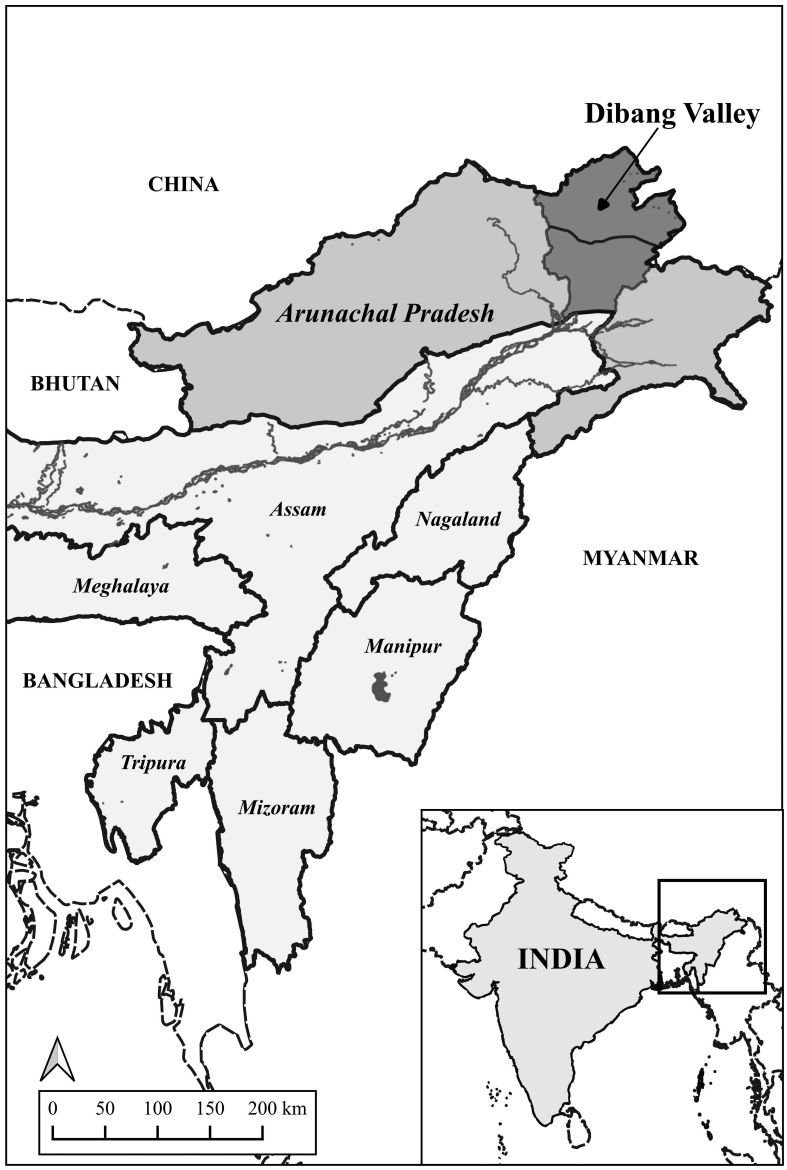

Figure 1. The study area, Dibang Valley District of Arunachal Pradesh (India), is the ancestral homeland of the Idu Mishmi people.

Indian Constitution refers to the Indigenous Peoples of India as "Scheduled Tribes"). Arunachal Pradesh comes under the Inner Line Permit system of the Indian Constitution, which restricts outsider entry and settlement in the state. Rough estimates pin the Idu population at around 13,000. This study focused on the Idu people of the northern three-quarters of Dibang's basin, now a separate administrative district called Dibang Valley (9129 km^2; Figure 1). Slightly above 70% of Dibang Valley District's population of 8,004 is Idu, with the remainder consisting of migrants from other parts of India (Census of India 2011). A third of the population of the Dibang Valley lives in the headquarters of Anini, the only semi-urban center in the district. While village livelihoods are predominately nature-dependent, most town residents are either employed by the state or run businesses. Located at the juncture of Indo-Chinese and Malayan biogeographic realms, Dibang Valley forms part of the Eastern Himalayan biodiversity hotspot (Myers et al. 2000). Its outstandingly rich and abundant biodiversity has increasingly attracted the attention of nature enthusiasts and conservation groups.

Idus are traditional animists who believe that human dispositions of consciousness, intentionality, and mortality belong to all beings, including animals and spirits. Idu animism, common to other groups in upland Southeast Asia, is characterized by a hierarchical grading of subjectivity or personhood between and within spirit, human, and animal worlds, an aspiration for accumulation of "ritual wealth" in the form of livestock, abundant crops, and materials, and ostentatious public rituals and feasts of merit, called *Rẽ* (see Supplement A for writing convention), to increase one's subjective power (Arjem 2016). Shamans (*igu*) hold a key place in the Idu society (Mihu et al. 2018). They communicate with malevolent and benevolent spirits, particularly the powerful spirit master of all wild animals, for the benefit of the community, intervening to protect those who transgress on ancestral rules, knowingly or unknowingly. The shaman leads rituals around childbirth, marriage, house construction, hunting, curing the sick and the cursed, funerals, and *Rẽ* (Bhattacharjee 1983). Christianity and Hinduism are slowly taking hold in the Idu community, particularly in the lower hills.

Idu villages are tight-knit, typically composed of related families belonging to the same clan and descending from a common ancestor. Shamanic rituals and associated taboos at any village household are typically attended, assisted, and observed by all villagers.

Fieldwork and Data Collection

We conducted ethnographic fieldwork in Dibang Valley over 22 months in 2013–2015. A large majority of the data presented here were gathered through a combination of participant observation and unstructured interviews with local shamans. Participant observation was undertaken by Nijhawan to understand cultural concepts through people's lived experience (Bernard 2006:342). Nijhawan learned the Idu language, lived with local families observing food taboos and behavioral prohibitions, and participated in household, farm, and forest chores, festivals, funerals, and other social and political events. Participation in local people's everyday life allowed Nijhawan to build rapport and trust in order to explore nuanced ways in which people think and feel about their lives. Detailed fieldnotes documenting everyday observations were maintained throughout fieldwork. In addition, both Nijhawan and the second author, Mihu (an Idu Mishmi), spent weeks with local shamans documenting, translating, and interpreting shamanic stories and ceremonial chants through unstructured interviews. Idu shamans have "specialist" knowledge of Idu mythology and cosmic composition, unavailable to most common Idus, which is embedded in stories chanted

during special ceremonies. Shaman's knowledge provided essential context to understand Idu cosmology.

To supplement the rich and abundant ethnographic data that emerged from participatory observation and unstructured interviews, we conducted additional semi-structured interviews (SSIs) (Bernard 2006:212) with 51 participants on a range of topics from kinship, taboos, and wildlife conservation to local development. The SSIs allowed us to gather wider perspectives from a participant pool that represented the local Idu population of Dibang Valley District in terms of education, wealth, age, political status, and gender. In order to create this locally representative pool, we first conducted an exhaustive census survey in the study area with 600 households. The households were segregated into categories of ethnicity, wealth (determined by a focus group using a combination of traditional and modern indicators), education, and religion (see Nijhawan 2018 for further methodological details). We randomly selected households from each of these categories such that the final interview sample was a close representation of the study population. The socio-economic attributes of the participants as a proportion of the entire pool are as follows: gender (male: 82%; female: 8%; mixed groups of both men and women: 10%); age in years (18–35: 45%; 36–54: 43%; 55 and above: 12%); formal education (no formal education [grade II and under]: 14%; middle school diploma [grades III to IX]: 35%; high school diploma: 21%; university and above: 29%); and wealth index (from least to most wealthy: I: 29%; II: 14%; III: 10%; IV: 33%; V: 14%). The interviews were conducted in the participant's language of choice in informal settings, typically at their home or out in the field.

We followed University College London's ethics protocols to obtain free prior and informed consent. Since a large majority of respondents could not read or write, we obtained consent orally prior to conducting and recording interviews. We shared copies of final reports at the conclusion of the research and manuscript drafts prior to publication with members of the local community for feedback.

Coding, Thematic Analysis, and Interpretation

All the interviews were transcribed and translated into Hindi by Mihu, then verified by Nijhawan and a third person to confirm the equivalence of meaning. We used a grounded-theory approach (Bernard 2006:492) to thematically code all fieldnotes and transcribed interviews in NVivo (QSR International 2018). Since no published ethnographic accounts of Idu taboos exist, we referred to the vast social anthropological literature on taboo for a framework to interpret and theorize thematic patterns in our data, focusing in particular on theoretical contributions by Douglas (1966), Lambek (1992), Lewis (2008), and Valeri (2000). In the brief account below, we summarize key theoretical strands most salient to our analysis of the motivations of *ena*.

Social anthropologists have used "taboo" variously to mean ritual prohibition, avoidance, sign of danger, impurity, even obligation (to the society), a minimal sacrifice, or a form of morality (Douglas 1966; Durkheim 1963; Fortes 1966; Radcliffe-Brown 1965). Generally, when a taboo is violated, the violator is prone to misfortune and, in severe cases, retribution. Douglas (1966) and others have suggested that the most remarkable role of taboo appears to be to preserve a culture's cosmic order and to make essential categorical differences, that is, human-animal-spirit, man-woman, and living-dead, on which any human society's vitality rests. The object of the strictest taboo is often what is most identical to self, such as incest (siblings as like oneself) or consumption of human-like animals, i.e., pets (Leach 1964). Food taboos are the most numerous taboos in any society (Meyer-Rochow 2009) and

are of special interest to this study. Taboos prevent or limit the consumption of large, human-like animals that are endowed with strong subjective agencies (Meyer-Rochow 2009). To eat them or to eat them without neutralizing their subjective power, which Valeri (2000:112) suggests is the key role of taboo, would mean risking not just one's health but also who one is. In sum, food taboos ensure that moral, cosmological, and logical compatibility between the eater and other eaters and between the eater and the things being eaten are maintained, and their subjective identities are preserved.

Results

We have organized the results to reflect the chronological order in which the process of Idu *ena* revealed itself to Nijhawan, the non-Idu first author, beginning from its normative aspects that quickly become evident during events, such as hunting and funerals, to a gradual embodied experience that makes *ena* an everyday lived practice. But, to contextualize our discussion of *ena*, we first briefly describe the composition of the Idu world, or cosmos. We begin the Discussion section by placing our analysis of Idu *ena* within the context of anthropological theories of the role of taboo. We then use case studies from Madagascar to underscore the importance of understanding the motivations and processes of complex cultural phenomena when integrating them into formal conservation programs.

Idu Cosmos and Animism

The Idu cosmos is broadly composed of three vertical levels: the outer cosmos, the forest, and the village. The outer cosmos includes the sky where the sun, the moon, and the spirits who created the world live. Idu ancestors originally descended from here. The outer cosmos also includes the afterworld, where the souls of the departed go. The forest includes the high mountains and the deep jungle inhabited by many spirits, *khinyu*, the most powerful, among which is *Gõlõ,* the spirit master of all forest animals. Big rivers are ruled by *bweká*, the serpent-like spirit master for all aquatic beings. Most large predators, such as tiger (*Panthera tigris*), clouded leopard (*Neofelis nebulous*), Himalayan black bear (*Ursus thibetanus*), Asiatic wild dog (*Cuon alpinus*), and large herbivores, such as Mishmi takin (*Budorcas taxicolor*), red goral (*Naemorhedus baileyi*), and alpine musk deer (*Moschus chrysogaster*), live here. Finally, the village includes the homesteads, swidden plots, and forests around the village, which were once farmed. This is where people, domestic animals, and lower spirits live. Some of *Gõlõ's* wild animals, such as Indian muntjac (*Muntiacus vaginalis*), wild pig (*Sus scrofa*), and mainland serow (*Capricornis sumatranensis*) inhabit the forests around villages. Broadly, a stark distinction is made between lower elevations, where people, smaller animals, and lower spirits dwell, and higher elevations, the home of *Gõlõ* and his herds of mountain wildlife. Much of Idu life is predicated on maintaining this cosmic structure through ritual and taboo.

This structure also reflects hierarchies in personhood. On the top are the spirits, followed by large animals that they own. People come next and, at the very bottom, are domestic animals—pigs, chickens, dogs—most notable of which is the mithun (*Bos frontalis*), a semi-domesticated descendent of the wild gaur. Mithun are an indicator of wealth and social status and are primarily sacrificed in rituals.

Within each of these spheres of life, some persons are "bigger" than others: the spirits of the high mountains are more powerful than the spirits that live closer to the village, bigger animals have stronger subjective powers than smaller animals, and within the human world, certain categories of people—shamans (*igu*), ritually wealthy men (*eho*), ritually wealthy women (*embweya*), and righteous hunters (*amrõ*)—are ranked higher and thus have stronger subjective capacities; others, particularly women, children, and pets are the weakest.

In numerous Idu myths, wild animals are shamans, wives, and husbands, roles quintessentially assumed by human persons. They speak to one another and to people. Just like humans, both the spirits and animals live in their own societies. However, mithun and other domestic animals do not speak (though dogs are treated differently) or seem to have agency or social lives. They exist to serve humans. Although a man owns his mithun, he does not control the fate and prosperity of his herds. To ensure that his herds prosper, he must follow taboos and rituals meant to appease the spirit carers. Bhattacharjee (1983) similarly noted in his account of the Idu that humans are forever subordinate to spirits and must constantly engage in negotiations with them in order to survive and prosper.

Nature of Idu *Ena*

"Our society is very strict, there are rules about everything. We cannot just do whatever we like," complains every Idu person we have ever met. When trying to explain these rules to non-Idus, such as the first author, Idus would resort to the Hindi word "*niyam*" which translates to "law, ordinance, rules, regulations, norms" (Shabdkosh 2020), or the anthropological construct of taboo. There are *niyam* that pertain to marriage, marriageability, birth and death, building of a new house, opening of new swidden plots, hunting and consumption of meat of large-bleeding wild animals (all terrestrial wild animals larger than a muntjac, except carnivorous predators), war, and slavery (the latter two are no longer practiced). Some of these *niyam* constitute *iyu-ena* (*ena*)—the restrictions observed in a ritual period, *angɔ*, that follows the occurrence of an event of physical and spiritual import. The duration of *angɔ* and the type of *ena* restrictions observed by an individual depend on the nature of the event and on their social relationship with the person or object that is the focus of *angɔ*. For instance, in case of stillbirth or death of a newborn, the entire village is in *angɔ* for five nights; the parents, however, are in *angɔ* for ten months with more severe restrictions. Table 1 lists a core set of *ena* restrictions most commonly observed in *angɔ*. Table 2 details all the events that initiate *angɔ* thereby necessitating the observance of restrictions listed in Table 1, duration of *angɔ*, and any additional, or different, restrictions after specific events. Table 3 contains specific restrictions observed by those who hunt or consume meat of large-bleeding animals.

People can acquire impurity, symbolic dirt, misfortune, and danger by engaging in any events that are transitionary, disrupt normal orderly life (e.g., hunting, death, disease, war, shamanic ceremonies), or signal basic incompatibilities (e.g., war or hunting and eating food prepared by menstruating women, marriage between close kin). These transitionary events are dangerous, as they involve powerful spirits. *Angɔ* marks the period during which people are most susceptible to danger and *ena* nullifies this danger.

Table 1. Common *ena* restrictions observed by the Idu Mishmi during *angɔ*.

Eating chilies and "unclean" forest herbs, which include wild onion (*elompana*), wild garlic (*marsena*), collard greens (*tuna, akana, etona*), and mushrooms (*akupra*)
Hunting and consuming meat of large, bleeding, tabooed wild animals
Engaging in sexual contact
Weaving yarn
Working in swidden plots
Washing clothes
Firewood collected during *angɔ* must be finished whilst in *angɔ*

Table 2. *Ena* restrictions during important life events. The first column "Event" lists the events that initiate *angɔ* thereby necessitating the observance of *ena* restrictions listed in Table 1. "Additional restrictions" include any restrictions additional to or different from those mentioned in Table 1. "Duration I" is the length of time for which *ena* is observed by the affected individual/household/immediate family members, and "Duration II" is length of the *ena* observance for village-folk/extended relatives/other people who participate in the event.

Event	Additional restrictions	Duration I	Duration II
Sudden accidental death, including suicide	Crossing rivers/streams or leaving the confines of the village	10 nights if the dead is male, 9 nights if female	5 nights if the dead is male, 4 nights if female
Death due to natural causes		10 nights if the dead is male, 9 nights if female	5 nights if the dead is male, 4 nights if female. *Angɔ* period can be shorter for those attendees from outside the village who leave before the funeral ceremony formally ends.
Death of infant within 10 days of birth	Eating bananas and the meat of any type of animal, bird or fish, movement into or out of village (5 or 9 months depending upon the shaman who leads the funeral), sexual contact (10 nights)	10 months if the news of death spreads outside the family, but only 5 nights if the parents hide the news	5 nights if the news is heard, none if no one finds out
Death of spouse	Eating any type of animal, bird or fish meat (5 months), banana (1 month), drinking rice alcohol outside the house; going to neighbor's house	10 months	5 nights
Snakebite	Movement into or out of village (5 nights), sexual contact (5 nights), weaving (10 nights), woodwork, using snake-like twisted liana stems as firewood	10 months if the news spreads but only 5 nights if the victim doesn't tell anyone	5 nights if the news is heard, none if no one finds out
Wedding	Eating wild meat after eating sacrificial meat from the wedding	1 night	1 night
Childbirth	Mothers cannot visit neighbors (3 months); both parents cannot attend funerals and do hard physical labor	10 nights for male infants, 9 nights for female infants	1 night
Rẽ		Begins with a ceremony 20-30 days before *Rẽ* and ends 10 nights from the ceremony's last day	1 night
Shamanic healing ritual (*ayi*)		1 night	None
Shamanic well-being rituals (*iku-larhoma, amrase*)		5 nights	None
Abwela (mediator in social disputes)		1 night	None

Table 2. (*Continued*).

Event	Additional restrictions	Duration I	Duration II
Ordeals to prove innocence		5 nights	None
Bride's maiden trip to groom's house	Brides cannot leave the village and visit neighbors (5 nights), cannot go to the bathroom (1 night)	Bride's parents observe Table 1 restrictions for 1 night	None
Menstruation	Instead of Table 1, restrictions on the following are observed: Cooking for other people; picking vegetables; making contact with a dead body and any material related to the shaman; preparing fermented bamboo shoot; brewing rice alcohol and making yeast; sexual contact	Length of the period	

Table 3. *Ena* restrictions observed by those who hunt or consume meat of large-bleeding animals.

Mixing and eating "unclean" forest herbs with the meat
Attending and eating food from funerals, wedding, childbirth ceremonies
Engaging in sexual contact
Women of the household must stop weaving yarn
Making contact with food/water prepared/offered by menstruating women
Washing clothes for an entire lunar cycle

No one creates *ena*; it has existed since the time of the first Idus. It is a statement of fact. In shamanic ceremonies (funeral, childbirth, etc.), the shaman initiates the requirement of the observance of *ena*; he does not invent the rules. "Why do the Idu do *ena*?" we asked two elders one evening. "You do *ena* to keep your body healthy and safe, you don't do it for the shaman as people say," one responded. "Back in the day, people used to live much longer because they used to do *ena* properly," the other added. *Ena* is a prohibition predicated on protection of the self and one's relations. It is one's own responsibility to know the taboo and to observe it dutifully to protect oneself and one's kin.

Ena and Hunting

Idus hunt for various reasons: food, recreation, cash income via sale of valuable animal parts (musk deer pods, bear gall), to protect crops from raiding animals, and to increase one's subjective power. Hunting is a precarious activity, as it involves entry into the dangers of the high forest, subduing a stronger animal adversary, and finally, taking complete and safe possession of it from its powerful spirit master, *Gõlõ*. One must therefore diligently follow extensive codes of conduct and *ena* to keep oneself and one's kin back in the village safe when negotiating the forest. As one Idu elder told us, "We Idus can't eat wild meat carefree. We first do *niyam* in the forest and then again when we eat the meat." The *niyam* in the forest is called *ãphũ*, a symbolic negotiation with *Gõlõ* after its animal is killed. This includes a ritual price of a tiny portion of the slain animal's body and a small amount of metal scrapped off the used cartilage (if a gun is used), followed by a chant to express gratitude for offering up the animal, and a promise to observe *ena* correctly and to share the meat with village kin. For this ritual price in kind and in taboo, the hunter beseeches *Gõlõ* to ensure that none of the eaters of the meat are harmed and that more animals are made available to him in the future. *Angɘ*,

ãphũ, and *ena* are observed only when large-bleeding animals are hunted; killing of smaller animals is not believed to bring danger.

Angɔ begins after *ãphũ* and the hunter must follow the *ena* restrictions listed in Table 3 for five days. Once back in the village, the hunter shares the meat with all those households that have meat-eaters. All those who eat the hunter's meat must observe the same *ena* restrictions as the hunter, but for a single night only. *Angɔ* can spread from meat-eaters to non-eaters (generally adult women, but also some men abstaining from wild meat for other reasons) if proper physical separation is not maintained (*ena* acquired through failing to maintain separation is called *hagopo*). Therefore, meat is cooked only by those who eat it, in separate utensils and on the cooking stove that non-eaters do not use, typically in the men's room (the first room in an Idu longhouse). The clothes, bedding, and sleeping arrangements of all the meat-eaters are also separated from those of the non-eaters. More generally, danger and misfortune can be acquired by making any type of physical contact with those in *angɔ*. Safe contact with them can only be made after they have been ritually cleansed through proper taboo observance.

Ena restrictions (Tables 1 and 3) highlight a key incompatibility in Idu cosmology: everything to do with people (procreation, death, social ceremonies, childbirth) and everything to do with the forest (hunting and war, in the past) must not mix. This incompatibility is so fundamental to Idu worldview that reproductively active women (from the first menstrual cycle until menopause) are forbidden from making any contact with, including consumption of, the meat of large-bleeding animals. Idu women do not hunt large-bleeding animals and seldom venture into the high forest. All things that engender human life (sexual intercourse, menstrual blood) must not mix with all things forest under any condition.

Ena, Wild Animal Hierarchies, and Human-Animal Morality

The Idu roughly classify wild animals into three broad hierarchical categories depending upon their order in the cosmic taxonomy. The first category, called *misũ*, includes all felines, from the largest tiger to the smallest leopard cat (*Prionailurus bengalensis*), most species of eagles and owls, and the eastern hoolock gibbon (*Hoolock leuconedys*). Hunting of these animals is strictly forbidden, and their meat is typically not consumed. A widely-known Idu origin myth tells the tale of brothers born to the same ancestral mother—the firstborn, a tiger, the second, an Idu child from whom all Idus descended. A disagreement resulted in man conspiring to kill the tiger. The willful killing of his own brother, an act of murder that spilled the blood of one's own kin, unleashed many of the misfortunes and diseases that still haunt the Idu. The killing violated the cosmic order that maintains continuity and sanctity of bloodlines, thus exposing humans to disgraceful death through accident (fires, drowning) or dangerous diseases that attack the two hallmarks of humanity—(1) human form, through the loss of flesh and function caused by diseases, such as leprosy, epilepsy, sepsis, and paralysis; and (2) social behavior, through isolation and mental instability. Similarly, hoolock gibbon is not hunted because it is also believed to be human kin. Those who break these ancestrally mandated cosmic rules, willfully or accidentally, risk misfortune. Eagles and owls are not hunted as they are spirit accomplices of the shaman.

The second category is composed of large herbivores (large, bleeding animals, such as Mishmi takin, serow, wild pig, muntjac, goral, and Himalayan black bear, which are largely herbivorous). These large, powerful, morally conscious animals can be hunted but only with proper *ena* observance (Table 3). There is prohibition on eating some forest herbs considered

"unclean" during *angɔ* (Table 1) and, in particular, very strict restrictions on mixing them with wild meat. Additionally, once a family member hunts or eats wild meat, women of the household must stop weaving yarn made from a local plant. The high forest is believed to be *Gõlõ's* carefully curated garden where its animals live. Animals do not eat most of these herbs. If eaten during *angɔ* and mixed with meat, they are believed to start growing in *Gõlõs* high forest garden, making it unsightly and unclean. The extra precautions that humans must take, at every step, to not upset the higher spirits reinforce spirit-human-animal hierarchies.

The third category includes all smaller animals (rodents, squirrels, civets, porcupines), birds, fish, and insects, most of which are eaten by men and women alike without taboo. These animals are not considered to have strong subjectivities and are therefore not dangerous to consume, even for women. While women eat pheasants found in lower elevations without any *ena*, eating of high-altitude pheasants entails *ena* for a single night, while clothes cannot be washed for a full lunar cycle. A clear distinction is made, again, between lower and higher elevations. High-altitude pheasants straddle two taxonomic groups—they are birds, and hence, can be eaten by women, but they are found exclusively in the high forest, which makes them dangerous, necessitating the observance of *ena* to protect the eater. Bolton (1972) observed similar taboos in the Orang Asli people of West Malaysia, where spiritually "weaker" people, i.e., pregnant women and the young, must restrict themselves to snails, mice, and rats, as these small animals are thought to possess "weak" spirits that are not likely to be harmful.

There is also a group of animals whose killing is not forbidden, culturally, but Idus show an aversion to their meat and they are typically not pursued and killed. This includes yellow throated marten (*Martes flavigula*), Asiatic wild dog, golden jackal (*Canis aureus*), and most species of mongoose, moles, and snakes.

Hunters size each other up by comparing the number of heads of the big four, *ji-nikru-thi-rhi* (bull Mishmi takin, female Mishmi takin, male wild pig, and Himalayan black bear, respectively), they have taken down. The higher this count, the stronger the subjective personhood, *amrõ,* of the hunter. However, an *amrõ's* power does not simply multiply with the number of trophy heads; it accrues from the correct ritual pacification of the hunted, sharing of meat with kinsmen, and the correct and complete observance of *ena*. A greedy hunter, the one who hunts just for himself and does not share the meat, or a hunter who does not do any rituals is looked down upon regardless of the number of trophies amassed. They say even *Gõlõ* keeps an eye on such a hunter. The *amrõ* have an exalted position in Idu cosmology and spiritual hierarchy; however, too much hunting brings its own dangers. A shaman explained,

> as *amrõ's* subjective power grows, he is able to hunt more and subdue more adverse prey. However, too much hunting can anger *Gõlõ* because sometimes a hunter accidently kills certain animal individuals that *Gõlõ* loves and keeps for himself (also called *misũ)*. Hunting too often also means that the hunter and his family remains in *ena* a lot, increasing the chances of faltering, and therefore, misfortune befalling them. An *amrõ* must hunt within reason and, just like an *igu*, exercise his powers with control.

Hunting taboos link the protection of the hunter and his kin to morally appropriate levels of hunting. These practices form the basis of moral and material relations between people and wild animals.

Ena Preserves Integrity of Blood

Idu women are prohibited from coming into contact with the meat of large-bleeding

animals because of blood—the substance that all living things carry. The blood of the forest flows in its most conscious, powerful, and dangerous beings, the large animals. It is pure. The blood of humanity that creates and maintains human life flows in women's bodies. Contained, it represents identity, but when spilled, it threatens the identities it creates because it can mix with other bloods (Valeri 2000:87). Hunting spills forest blood; menstruation spills human reproductive blood. The actions that risk the mixing of the two are fundamentally incompatible, risk mutual danger, and must therefore be kept completely separate. This is why once girls experience menarche and become capable of giving birth, they must not come into contact with the blood of the forest. Men who have hunted or eaten large-bleeding animals and have thus come into contact with the forest blood, are forbidden from sexual relations with women or eating food prepared by menstruating women. They can do so only after they have been ritually cleansed by taboo, as these actions risk contact (physical and symbolic) with menstrual blood. Furthermore, dangerous spirits of the forest can sometimes follow hunters back to the village. Through sexual contact, hunters risk passing this danger onto women.

Large animals are strong and embody masculine energies similar to men. Overcoming a strong animal adversary is equivalent to war, a man's domain. Women are seen as weak and vulnerable. Consumption of something with such a strong male character threatens another basic and vital order of nature—separation of genders; taboos serve as a mark of gender. Similarly, jungle meat is not eaten with sacrificial meat from a wedding (seen as rebirth of a woman) or childbirth (reproductive blood is spilled during childbirth). During menstruation, women do not walk by the side of the house where animal trophies are hung, *amunyi,* instead taking a detour around the room. No one, not even extended kin, from the husband's family can eat wild meat killed by anyone from the wife's family.

Menstrual blood's core significance to the practice of *ena* is hugely memorable. Idu girls grapple with the reality of *ena* when they experience their first period, as they are suddenly told to stop eating numerous foods. For the rest of her youth until she becomes old, she will abstain from many foodstuffs, some of which she used to love eating as a child. She sees that her brothers do not follow the same restrictions as she does. When a woman menstruates, her husband and all related men in the household refrain from hunting. She observes *ena* when her husband is in the high mountains hunting musk deer. His success and safety depend on her dutiful observance of *ena*. While *ena* maintains vital gender distinctions, it also creates interdependencies between the sexes by attributing safety and the production of one gender to the activities of the other (see Lewis 2008). Through everyday lived experience, it orients Idu boys and girls towards different activities and roles in the society. Lambek (1992:248) notes about taboos widespread in Madagascar, locally called *fady*, "if taboos are the rules of society, one can say that society is embodied in the acts and experience of its members." Likewise, for the Idu, since daily lived practice is shaped by taboo to such a great degree, the perceptions of self and the world become organized around the taboo.

Ena Reinforces Identity and Reifies Society

The Idu have traditionally lacked explicit political superiors, such as a chief or traditional leader, who in other communities orient and direct the nature of communal labor. Ancestral adages, such as, "as long as I have the *enggoko* [hearth] where I can cook my food, I am my own king. No one tells me what to do," which is commonly heard from elders, exemplify the sense of individual autonomy prevalent in the Idu community, especially among men. In such an environment, *ena* is an

institution that creates group identity, social cohesion, and mutual dependencies. Close kin attend all key events in an individual's life, from childbirth to funeral, and collectively observe *ena* entailed in such events. Likewise, a hunter shares wild meat typically with his kinsmen only. All those who share meat with the hunter must also share the taboo and the danger of its violation. The misfortune resulting from violation of any type of taboo can befall anyone to whom one is related. In Dibang Valley, in almost every instance of an untimely death of someone in good health—in an accident, by drowning in rivers, or by committing suicide—the shaman pins the reason either on the killing of a tiger by a family member or the breaking of another grave forest-related taboo. In almost all such cases, a family member later confesses to have transgressed a serious taboo. The weaker (women, children, etc.) are more likely to suffer, even from violations they may not have committed themselves. Sharing of this danger is sharing of relationship. Taboo thus becomes the marker of one's social identity, that is, one's kin on whom one relies in the time of need.

Ena's emphasis on cementing kin interconnectedness through meat and taboo sharing counteracts the tendency for isolation and individualism. In this vein, an Idu elder once noted,

> there are many activities that an individual cannot do on his own, such as firewood collection for big events like *Rẽ*. In the past, it was only because of *ena* that everyone from the village would pitch in help. But I suppose these days, since we have pick-up trucks, people don't need each other so much.

By creating interdependencies between individuals and the society, *ena* promotes social cohesion.

A powerful Idu shaman told us,

> in the past, very few would go missing in the jungle or drown in rivers, but it has become very common these days. I believe it is because we don't follow *ena* properly anymore; we sell meat and pocket the cash. No one wants to do *ena*, it's difficult, but it has been our way of life since our creation…. Other people don't have this. In the Adi, men and women sit next to one another and eat wild meat together, nothing happens to them because their *niyam* are different, ours are different. We have to live by our *niyam*.

Such comparisons with the Adi, a neighboring ethnic community, are regular when Idu speak of *ena*. Most Idu proudly and virtuously declare that it is because of *ena* that Idu areas have plentiful wildlife, while Adi areas do not. Idu are different from others because they have *ena*. Tensions have been rising between recent Christian converts and traditional animistic Idus. The problem is not that Christian converts have stopped identifying as Idu but that they have stopped following *ena*. Since they engage in social relations with other Idus without observing *ena*, it endangers everyone and the collective identity. *Ena,* thus, is not an isolated component of Idu culture, it is the quintessential identifier. It creates and maintains world order, the gendered nature of production, and forms the moral and practical basis of interaction between and among humans, spirits, and animals. *Ena* binds different aspects of Idu life together. It prescribes the rules of Idu existence to ensure that people experience good health, unproblematic childbirth, successful hunting, and have access to wealth. In sum, *ena* makes the Idu, the Idu.

Ena in Changing Times

Ena's relevance and its proscriptions have changed over time, particularly in urban areas. Selling of meat to non-Idus, earlier a strict restriction, now occurs, albeit at a small scale. The *ena* period itself has been shortened. In Anini, most hunters now abstain from washing clothes for five nights instead of a lunar cycle. Those who eat wild meat which they have not hunted

themselves abstain from washing clothes for a single night only. *Ena* should not become an obstacle to development and commerce, many younger Idu argue. While weaker taboos can still be negotiated, stronger, identity-defining taboos, such as the restriction on sexual relations upon eating wild meat, continue to be followed strictly. In Anini, there is an elderly woman who lives on the street and is often seen talking to herself. She had a stable family, we were told, but began to lose mental stability after she slept with her husband while he was in *angə* from eating wild meat. She broke the most forbidden component of *ena*—mixing of human and forest blood through intimate sexual contact. Her story is recounted to children whenever she is in sight as a living reminder of the consequence of cultural transgression. Although the relevance of *ena* is gradually changing, it is through such living examples of misfortunes befalling people that taboo's causal relations are continually reinforced.

Discussion

Through the ethnographic accounts presented above, we have attempted to illustrate that Idu taboos contribute to the construction of moral personhood, distinguish selves and groups from one another, and ultimately help constitute the Idu society. Anthropologists have previously suggested that taboos reinforce important cosmic distinctions between humanity vs. animality, male vs. female, living vs. dead, which are vital to maintaining the well-being and safety of both human and non-human worlds (Douglas 1966; Valeri 2000). Equally, in the Idu, these key distinctions are constituted and maintained through the continuous performance of *ena*. In the same vein, Valeri (2000:185) argued that if people do not respect hunting taboos, they find themselves insensibly reduced to animals because the distinction between animality and humanity is not provided, *a priori*, fixed once and for all. Idu women, like the Malagasy women that Lambek (1992) studied, bear a heavier burden of taboo observance than men; this adherence serves as a mark of gender (also see Douglas 1966). Another key motivation of *ena*—to protect people in times of danger and uncertainty, particularly those who are weak, and to ritually cleanse—has been echoed by several authors (Douglas 1966:119; Meyer-Rochow 2009; Valeri 2000). Finally, Radcliffe-Brown (1965:135), Valeri (2000), and Meyer-Rochow (2009) have argued that the purpose of taboo is to create dependency of an individual on the society by making one feel that life is a series of dangers which can only be mitigated by conforming to society's traditions. Likewise, in the Idu, the daily observance of *ena* allows the society to increase its power over the individual while forging a sense of cohesion and ultimately, becoming the marker of one's social identity.

While Idu *ena* is motivated by maintaining distinctions between humans and animals, its restrictions constantly put the animal world at the center of the social world. By conditioning social and personal prosperity on ancestrally mandated, morally correct behavior in the forest, *ena* ensures that people understand that human well-being is inextricably linked to restrictive hunting. Taboos prohibit adult women (who constitute about 40% of Dibang Valley's Idu population) from the consumption of wild meat (Nijhawan 2018). For men, by directly impeding the ability to partake in personal (sexual contact) and social desires (attending shamanic ceremonies), they convert the otherwise mundane act of meat consumption into a negotiation between eating and the freedom to engage in personal, social, and livelihood-based activities. Research has shown that these interdependencies invoked by *ena*, combined with Idu landownership systems and the Inner Line Permit that restricts outsider entry and settlement, have allowed Dibang Valley to maintain wildlife abundance,

including tiger numbers, comparable to or higher than regional government-protected reserves (Nijhawan 2018).

The prohibitive nature of taboo has led some conservation organizations to co-opt it to create community-based conservation programs, particularly in Madagascar, where nature-based *fady* have been shown to have conservation outcomes (Jones et al. 2008; Lingard et al. 2003; Rahaingodrahety et al. 2008). The results of these programs have been largely ineffective and, in some cases, have created new conservation conflicts (Sodikoff 2012). Unlike conservation, the stated goal of taboo is often not to conserve wildlife, rather its goals may appear unclear, complex, and constantly evolving to its observers. This feature of taboo makes it difficult to simplify and formalize, a common practice in conservation programs seeking to incorporate culture, local knowledge, and belief systems (Brosius and Hitchner 2010; Campbell 2002).

In working with *fady*, conservation programs in Madagascar have picked only those aspects that fit their goals, created new *fady* with expected conservation outcomes, or used *fady* as substitutes for legal regulations (Osterhoudt 2018). The presumption was that if conservation rules were presented in terms of *fady*, Malagasy people were likely to buy into the conservation programs rather than resist them (Sodikoff 2012). Anthropologists have highlighted that through voluntary *fady* observance, individuals negotiate larger systems of meaning, history, personhood, power, and authority (Cole and Middleton 2001; Sodikoff 2012). Because of this simplified product-oriented approach, which reduces cultural taboos to primarily ecological actions, people were observed to deliberately not follow *fady* in protected areas, while following the same in their village—an act of resistance to the conservation projects' perceived control over wild resources and an expression of cultural self-determination (Jones et al. 2008; Sodikoff 2012).

The Malagasy experience of reduction and formalization of taboos into a strict regulatory instrument is particularly relevant to the case of Idu *ena* and wildlife conservation, given the similarities between the two cases. In both places, while national laws prohibit wildlife hunting, it is widely practiced and the state has low enforcement and monitoring capacity (Aiyadurai 2007). In such situations of weak state control, local cultural institutions may be the only effective rules governing the use of natural resources. Community-based conservation programs have drawn from locally significant practices in an attempt to create productive alliances between conservation interests and local communities. However, cultural complexities are often vastly simplified and certain cultural aspects are emphasized while others are overlooked (Dressler et al. 2010; Li 2000:153). Cultures and belief systems are not an aggregation of rules to pick and choose from at random, they are embodied experiences that create social relations, personhood, and identity. Similarly, Idu *ena* has endured and continued to maintain sustainable human-nature relations because it creates a single, interconnected whole that forms the Idu identity. Some may view the outcomes of following taboos as sufficient for building community conservation partnerships without needing to understand the motivations, origins, and meanings behind them. However, as others have previously argued (e.g., Osterhoudt 2018), and as we have attempted to show here, the processes underlying taboos matter as much as the outcomes when attempting to incorporate them into conservation frameworks. It is the process and meaning that dictates who they apply to, why, what types of power relations they constitute, and eventually, whether they will endure as conditions change. These lessons are crucial as the connections between Dibang Valley's biodiversity and

cultural practices draw increasing attention of the conservation community.

Taboos may not adequately protect endangered species in all situations. They do, however, reveal how people see themselves and their world, and may shed light on local conceptualizations of sustainability–factors on which biodiversity conservation ultimately depends. We argue that this is by far their most important contribution towards creating culture-based conservation mechanisms.

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