2011

Tourism, persistence, and change: Sherpa spirituality and place in Sagarmatha (Mount Everest) National Park and Buffer Zone, Nepal

Jeremy Spoon
Portland State University

Citation Details

Spoon, Jeremy. (2011). Tourism, persistence, and change: Sherpa spirituality and place in Sagarmatha (Mount Everest) National Park and Buffer Zone, Nepal. Journal of Ecological Anthropology. 15(1): 41-57

Tourism, Persistence, and Change: Sherpa Spirituality and Place in Sagarmatha (Mount Everest) National Park and Buffer Zone, Nepal

Jeremy Spoon

ABSTRACT

Ecotourism and cultural tourism are emerging as vehicles for many of the world's indigenous peoples to integrate into the global market economy. The ecological knowledge and understanding of these societies may in turn be affected by these nascent industries. As part of shifting human-environment relationships, tourism can influence place-based spirituality. In this manuscript, I describe research on how tourism affected Khumbu Sherpa place-based spiritual values in Sagarmatha (Mt. Everest) National Park and Buffer Zone, Nepal. As Tibetan Buddhists, the Sherpa embodied dual overlapping conceptions of sacred landscape that connected people to place in some environmentally sustainable ways. Since the 1960s, tourism had been consistently increasing in their homeland, totaling more than 25,000 visitors in 2008. The Sherpa maintained a degree of control over the tourism economy through locally run lodges, teashops, and providing trekking and mountaineering services. Tourism as a vector of integration into the global market economy may consequently influence these spiritual values in concert with other social and ecological forces. I chose a stratified random sample of 100 individuals and 12 monks and used quantitative and qualitative ethnographic methods to assess fundamental place-based spiritual values across select demographics at the time of study. The values chosen by key Sherpa consultants to represent their spiritual connection to place included: sacred valleys, mountain protector deities, principles of kindness and compassion towards animals, sentient trees and groves, and water spirits. Results showed that indeed tourism and other related drivers appeared to influence ecological knowledge and understanding exemplified by less knowledge of spiritual values among the more market-integrated individuals and younger generations. Principles of kindness and compassion towards animals were stable and knowledge of mountain protector deities was reinforced and remade by tourism.

INTRODUCTION

Across the globe, nature and culture-based tourism are common avenues by which many of the world's indigenous peoples integrate into a global economy (McLaren 2003). Additionally, tourism affords a contact zone where disparate cultures interface (Pratt 1992). In these contexts, tourism and associated market forces can influence ways of knowing and understanding the environment (Gossling 2002), especially when land is the object of the tourist's interest (Urry 2002).

The benefits and impacts of tourism for local and indigenous populations are contested by some of these populations as well as by various scholars. Butler and Hinch (2007) question whether tourism is an opportunity for indigenous people to gain economic independence and cultural revitalization, or whether it is a major threat of hegemonic subjugation and cultural degradation. This contact zone offers unique exchanges including examples of the host population bending tourists' desires for their own economic gain

(e.g., Bruner 2005; Ortner 1999). Tourism industries can be quite competitive, relying on the surplus funds of tourists. Indeed, these global flows of capital are capable of bringing about or perpetuating economic inequality within and between indigenous and other societies. To examine the influence of tourism on Sherpa place-based spiritual values,[4] I hypothesized that certain political and economic drivers were causing shifts in place-based spiritual values, especially due to the degree of tourism interaction (market integration), the level of western-style education, and the decrease of participation in agropastoralism.

The relationships of the host cultures to the environment in these tourism contexts can reflect ecological knowledge and understanding expressing thousands of years of lived experience as well as shorter-term learning related to the local ecological, political, and economic context. Berkes and Turner (2006) explain that ecological knowledge and understanding develops from long-term social and ecological understanding and lessons learned from crisis and mistakes. This knowledge thus adapts according to need. A way of knowing may be judged beneficial to environmental health at one time and detrimental at another. People-nature relationships in these contact zones reflect heterogeneity depending on a myriad of factors, particularly whether the land is perceived as a market commodity.

Various studies found that increased participation in the global market economy, often dubbed market integration, caused a change (usually erosion) of plant and mammal knowledge (e.g., Godoy et al. 1998; Reyes-García et al. 2005). Most of this research assumed that proximity to a vector of the market, such as a developed village or road, was an indicator of increased market integration. Alternatively, Guest (2002) found that Ecuadorian shrimp farming knowledge is being transmitted expediently potentially because it had a market value, and Zarger and Stepp (2004) illustrate that Tzeltal Maya children's knowledge of plant names remained stable despite political and economic driven change seemingly because youth are helping their families with farming after school. Indeed, there is no singular trend in how the market influences ecological knowledge and understanding. These ways of knowing persist or adapt depending on what people need to know in a particular time and place.

PLACE-BASED SPIRITUAL VALUES AS ECOLOGICAL KNOWLEDGE AND UNDERSTANDING

Place-based spiritual values are spiritual principles that ontologically connect people to place in a specific environmental context, challenging the nature/culture dichotomy. For example, a spiritual value may be the belief in a deity that lives on a local mountain who affords protection over the people if certain behaviors are followed. Another example is the offering of a forest grove to a specific deity for spiritual merit. In both cases, the place-based traditions may engender more environmentally beneficial decisions without conservation being the overt motivation.

For this research, it is useful to consider place-based spiritual values as elements of ecological knowledge and understanding. Berkes (2008:7) defines traditional ecological knowledge (TEK) as "a cumulative body of knowledge, practice and belief, evolving by adaptive processes and handed down through generations by cultural transmission, about the relationships of living beings (including humans) with one another and with their environments." According to Berkes (2008), traditional ecological knowledge encompasses four overlapping levels. The first level is local knowledge of the environment; the second is resource management practices based on local knowledge of the environment; the third is social institutions that guide management practices; and the fourth is worldviews, defined as perspectives that shape the way people perceive of, understand, and act on their environments. Place-based spiritual values fall under the third and fourth overlapping levels. From this point forward, I will drop the term 'traditional' to avoid the trap of only focusing on indigenous peoples and the problematic dichotomy of traditional and modern (Kalland 2001).

Turner and Berkes (2006) found that key to situating ecological knowledge in the appropriate cultural contexts is the conceptualization of ecological understanding. According to the authors, ecological understanding includes long-term incremental learning of individuals from lived experience and the development of concomitant beliefs that avert major resource depletion and promote conservation approaches. Further, these understandings include ways of creating and perpetuating means of encoding, communicating, and disseminating the practical aspects of incremental learning as well as the adaptive responses, ideologies, and belief systems associated with it. Finally, ecological understandings encompass the development of institutions that consolidate environmental knowledge and practice. Ecological understanding includes spiritual values connected to place, created and adapted over time depending on ecological as well as political and economic factors.

Heterogeneous in this paper refers to the unequal distribution of certain place-based knowledge of spiritual values as transmitted by the monastic and secular populations from generation to generation. This knowledge is heterogeneous in terms of specialization (e.g., monks know more about certain values than non-monks) and how certain drivers influence changes in the way some see and interact with place (e.g., uneducated elders having different information than educated youth). For example, Ghimire et al. (2004) found that subsistence and commercial medicinal plant harvesters in Shey-Phoksundo National Park and Buffer Zone, Nepal, expressed heterogeneity in ecological knowledge and practices according to specialization, socio-cultural and institutional contexts, and extra-local factors. Consequently, heterogeneity reflects the distribution of ecological knowledge and understandings at a particular time and how outside forces may be shaping it.

Focusing on heterogeneity helps to avoid the trap of generalizing a spiritual tradition across entire peoples without taking into account knowledge distribution and the dynamics that inhibit transmission and/or change a spiritual principle to accommodate new circumstances. It also avoids the bias of following the viewpoints of religious clerics and not what the general population actually knows and follows. When engaging the question of how different spiritual traditions understand a place and what factors influence change—not to mention the relevance of these dynamics to environmental health—heterogeneity offers a practical viewpoint that sees knowledge of spiritual values as dynamic and adaptive (see Spoon 2011).

The following case brings forward the complex negotiation between economic benefit and environmental relationships in a global tourist destination. To understand how the contact zone of tourism influenced place-based spiritual values, it is important to chronicle Sherpa settlement in the region and how their way of life changed over time from strict agropastoralism and trade to trekking and mountaineering tourism. I also describe Sherpa Nyingma Buddhism at the time of study and how this way of knowing and understanding the world generally has connected people to their place and how it has influenced environmental decision making. I then assess the state of select core place-based spiritual values in relation to degree of tourism involvement and other associated variables.

KHUMBU AND THE SHERPA

Khumbu is situated along the border between Nepal and the Tibetan Autonomous Region of China in the Solu Khumbu District of Nepal. The landscape adorns mountains, glaciers, and rivers, embodying a dramatic elevation range from 2,800 to 8,850 meters (FIGURE 1). Among the peaks are three of the ten highest in the world, including Mount Everest (8,850 m), called Jomolangma by the local Sherpa people and their Tibetan neighbors and called Sagarmatha by the Nepalese government. Khumbu is now a demarcated protected area, Sagarmatha National Park and Buffer Zone (SNPBZ), created in 1976 and selected as a United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Site in 1979. In 2002, the Pharak region directly south of the Park was added as Buffer Zone territory. Inside the protected area, the Sherpa

retain certain land titles and participate in some co-management of the National Park (Stevens 1993). These co-management opportunities increased with the establishment of the Buffer Zone system in 2002, a governance model based on the Nepalese community forestry movement initiated in the 1970s (Campbell 2005).

Contested oral history suggests that the original Khumbu Sherpa homeland was a region in eastern Tibet in the province of Kham, approximately 2,090 km away from their present home. The Sherpa[1] (pronounced Sherwa), or people of the east, migrated to Khumbu around the 1530s. Prior to Sherpa settlement, Khumbu was considered as vacant land without human settlement and was later used by monastics as a place for meditation (Ortner 1989).

FIGURE 1. Map of Sagarmatha National Park and buffer zone (Khumbu and Pharak). Tourist route to Mount Everest Base Camp is in the Imja Khola Valley. (Map courtesy of the International Center for Integrated Mountain Development, first published in Spoon 2011.)

My population census in 2006 revealed that there were approximately 3,000-4,000 Sherpa household members spread across 576 households. Approximately 2,800 of these residents lived in the area for more than three months annually.[3] Most spent between 9 and 12 months in Khumbu and Kathmandu served as a retreat during the winters for more affluent households. It was also becoming more common for the wealthier to send their children to boarding schools in Kathmandu for 10 to 12 months a year. Khumbu Sherpa monasticism centered around two monasteries or **gompa**, Tengboche and Thame, with a total of 80 monks spread across them (Spoon 2010).[2]

At the time of this study, Sherpa agropastoralism was specialized to high altitude varieties of crops and livestock and the harvest of forest resources. Locals supplemented these activities by obtaining agricultural and pastoral products from regions below 3000 meters through trade and, more recently, the weekly market, Tibetan vendors, and trips to Kathmandu and elsewhere. Herding strategies for various types of yaks, cows, and yak/cow hybrids (as well as sheep and goats in the past) all required seasonal transhumance between lower and higher common pastures across valleys (Stevens 1993; Brower 1991). Herding was on the decline and most households continued to own cultivated fields, although many outsourced

agricultural labor to individuals from throughout the region and nation. The influx of laborers caused Khumbu demographics to shift, which will no doubt continue into the future.

TOURISM

The Sherpa began trickling into the tourism market economy in Darjeeling, India, as mountaineering guides and porters in the early 20th century (Ornter 1999). Tourism is a relatively recent phenomenon in Nepal, as the nation-state did not open up its borders until 1951. Starting in the late 1960s, significant trekking and sightseeing activities began in Khumbu. This nature and culture based-tourism industry offered hiking tourists multi-day camping trips in the mountains (Stevens 1993). Fürer-Haimendorf (1975) explains that tourism became a viable and essential economic option because of political shifts in Tibet causing the Sherpa to reorient the trade economy and seek new sources of income. Indeed, tourism has been in the lives of some Sherpa for 50 years or more. To understand their relationships with place, tourism and its impacts require consideration. Indeed, Adams (1996) argues that Sherpa identity and it is authorship need to be examined in relation to tourism, mountaineering, anthropology, and other culture making industries.

By and large, the number of visitors continues to increase—totaling more than 25,000 in 2008 (Spoon 2011). Most people tour during the spring and fall, and they trek along the main routes towards Tengboche Monastery, Mount Everest Base Camp, and Kala Patar in the Imja Khola Valley. Significantly fewer visitors frequent the other valleys. These visitors mostly originated from Europe, North America, Japan, and Australia/New Zealand. Importantly, the Khumbu region was not as affected as other tourist destinations during the People's War (1996-2006) because of its geography and the resources the monarchy put into defending it (Spoon 2010).

Local schools were built starting in the 1960s, a hospital was erected in the 1970s that was staffed until recently by doctors from Canada and New Zealand, and native plant nurseries were established starting in the 1980s. The curriculum in schools was mostly from Kathmandu in the non-local Nepali language, and the teachers were by and large non-Sherpa. My research on educational attainment found that most Sherpa under 40 received some type of western-style education, and there was a significant male bias in the past. Today nearly all individuals under 29, both male and female, attended at least five years of school (Spoon 2011).

Significantly, the local Sherpa retained a considerable amount of control over the Khumbu tourism industry. There are few cases where an indigenous population inside of a protected area is able to control their own economic destiny—and many cases where establishing protected areas marginalized indigenous peoples (Dowie 2009). For example, the establishment of Pu Luong Nature Reserve and Cuc Phuong National Park in Vietnam impacted the livelihoods of hundreds of families in the name of nature conservation (McElwee 2002).

Survey research in 2006-2007 found that tourism was the cornerstone of the local and regional economy, not to mention a large generator of foreign capital for one of the poorest countries in the world. Although

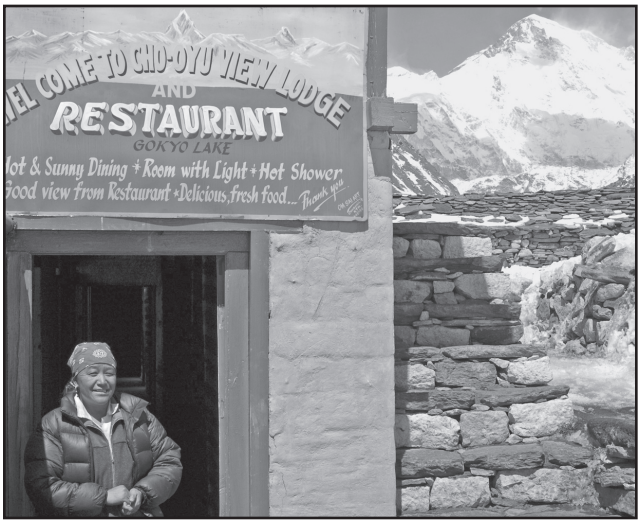

FIGURE 2. A lodge owner at Gokyo Tse (Lake). Cho Oyo (8,188 m) in background. March 2007. Photo: Jeremy Spoon

the Khumbu Sherpa as a whole received significant benefit from tourism, distribution of profits varied. The households who lived on the tourist route profited more from their increased market integration in the form of lodges, teashops, shops, tourism services, trekking agencies, and so on. The households living off the tourist route were also integrated into the tourism economy but generally less strongly; these Sherpa instead served as seasonal porters and guides and in a few cases were lodge or teashop owners (FIGURE 2). During the remainder of the year, they engaged more actively in agropastoral activities (Spoon 2010, 2011).

In general, most households were moving away from the on-the-ground tourism positions (e.g., trekking staff) towards either asset-holding and management (owning or renting lodges, teashops and shops) or outside employment. Specialization in the higher-level tourism positions, such as mountaineering staff and trekking guides, was more common for individuals from off the tourist route.[3]

As of 2008, there was a proliferation of other ethnic groups from throughout Nepal working in Khumbu tourism. Rising inflation in Khumbu and changes in the standard of living caused the local Sherpa to strive to make more money, and adding to the pressure, tourism service providers could hire non-Sherpa for less money. Khumbu Sherpa also stigmatized lower-level tourism positions, especially portering, as the work of poorer Sherpa and other Nepalis (Spoon 2010). Inequality was thus created and/or perpetuated within the Sherpa population as well as between the Sherpa and other indigenous Nepalis who migrate to Khumbu for work. Ortner (1989) explains that social inequality existed among the Sherpa since their migration from Kham; however tourism has no doubt exacerbated these inequalities as well as created new ones.

PLACE-BASED SPIRITUAL VALUES

Sherpa Buddhism: Core Spiritual Values

The following description illustrates core spiritual values as remembered and shared by elders and monks and reinforced by the literature. A variety of key consultants selected them in one-on-one and focus group interviews during pilot studies between 2004 and 2005. According to these male and female multigenerational collaborators, they serve as a representation of fundamental spiritual principles that govern the Sherpa relationship with their Khumbu homeland. These spiritual values and their interpretations were examples utilized as a 'baseline' to understand Sherpa place-based spirituality as it functioned at the time of this research. Heterogeneity existed in the knowledge, interpretation, and practice of these values within the pilot study interview sample. The information below is thus a generalization of the core spiritual values shared by the focus group participants and supported by the literature.

Further, Ortner (1995) observed that Sherpa Buddhism was moving away from local shamanism to a more formalized practice dictated by Buddhist clerics. This trend no doubt influenced the content and perceived importance of the core principles shared by the key Sherpa consultants. For example, the **beyül** spiritual value (i.e., sacred valley as a refuge), which can be traced to various Tibetan Buddhist groups, may have been valued as more important by some than other more locally specific traditions practiced by shamans.

Khumbu Sherpa followed the Nyingma Tibetan Buddhist tradition, a syncretic combination of folk, Bon, and Buddhist tenets (Tucci 1988). Guru Rinpoche or Padmasambhava was considered as the teacher of Buddhism and placed at a status second to the Buddha. Generally, the Sherpa assumed the basic principles of sin and merit and of the reincarnation of various states of being, both positive and negative. The amount of sin or merit accumulated in a lifetime reflected the reincarnated state. Thus ample good deeds and accumulation of merit improved ones chances of better rebirth. The ultimate goal was to

cease the cyclic existence over a series of reincarnations. The Sherpa also generally believed in various deities and spirits who offer protection. Worship of these entities in the gompa (monastery), in homes, or in the outdoors (Ortner 1989).

Sacred Landscapes: Valleys (Beyül) *and Mountains* (Yül-Lha)

The Sherpa had dual and overlapping conceptions of scared landscape in the form of sacred valleys and sacred mountains. It appeared that the belief in mountain deities predated the arrival of Buddhism in Tibet, whereas the notion of sacred valleys seems to be imported from India (Studley 2010). Sherpa Buddhist clerics taught that Guru Rinpoche prophesized in the 8th century that there are many hidden valleys in the Himalaya, called beyül, set aside for his followers as places of refuge. Khumbu is one such beyül as are a number of nearby valleys (L.N. Sherpa 2005). Aspects of the geography of these locales are generally described in various texts that chronicle the life and teachings of Guru Rinpoche, such as the Pema Kathang. The beyül spiritual value was connected by the clerics to many of the Sherpa's other place-based spiritual values, such as mountain protector deities and sentient trees. Whether or not these other place-based spiritual values existed prior to the advent of Buddhism in Tibet, and were connected to the beyül concept in the process of Buddha-ization, requires further investigation.

The beyül code of conduct guided followers to refrain from harming or killing any living things (from humans to animals to flora), avoid violence, desist from stealing or cheating, and please the local deities and spirits. Human actions that were inconsistent with these principles may upset the deities and lead to unforeseen negative consequences. Clerics taught that various mountain deities, called **yül lha**, had the responsibility to make sure that Buddhism was protected within a beyül. The observation of this code of conduct was what made beyül powerful. The concepts of **chaam** and **nyingje** (kindness and compassion) to all living things were an important feature of Sherpa spiritual values. They are separated here to focus specifically on the taboos related to the hunting and killing of living things—encompassing humans, animals, and vegetation. The strongest taboo seemed to exist in relation to the hunting and killing of mammals, birds, and, to a lesser extent, livestock.

Yül lha were deities that resided on mountains and hills that afforded protection to the Sherpa and the land. Buddhist clerics taught that Guru Rinpoche subdued the fierce demons that existed in pre-Buddhist Tibet and bound them by oath to re-emerge as protectors of Buddhism. It is possible that these were not demons at all, but rather mountain deities in pre-Buddhist Tibet that were incorporated into Nyimgma dogma (Studley 2010). Similar to beyül, belief in these deities may have been imported to Khumbu upon the Sherpa migration and thus originated prior to Sherpa settlement and were adapted to the Khumbu landscape. These deities must be pleased for the residents to be protected from avalanches, landslides, floods, war, plane crashes, and so on. The protector deities also had their own **khor** or associates in the form of wildlife, livestock, and other mythical creatures. People are thus expected to respect the khor and not harm them.

An important local protector deity was Khumbu Yül-Lha, or Khumbu country god (shortened to Khumbila), who was appointed by Guru Rinpoche. Khumbila lived on the mountain directly above the Khunde and Khumjung settlements. The khor of Khumbila were yak, tahr, and sheep, with some considering the yeti or abominable snowman to be one of them. Worship encompassed burning aromatic incense from multiple sub-alpine and alpine plants, placing white flags over the house three times a year, and the annual ceremony of Dumji, in which an entire dance was dedicated to the deity (FIGURE 3). An additional deity, the goddess Jomo Miyo Lang Sangma, resided on Jomolangma or Mount Everest, providing **norbu** or wealth, which included tourism and mountaineering success. Numerous other mountains also embodied protector deities important to different clans and settlements.

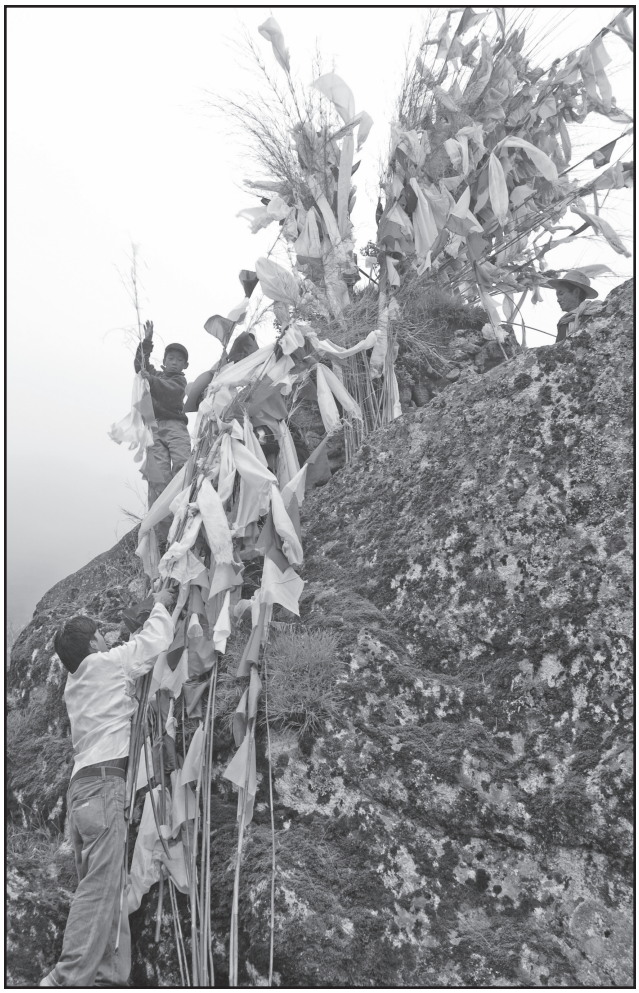

FIGURE 3. Sherpa youth placing flags on the slopes of Khumbila during the annual Dumji ceremony. June 2006. Photo: Jeremy Spoon.

Climbing a mountain that was home to a protector deity was generally prohibited, although there was a tradition of circumambulation. Some pious individuals made a pilgrimage around Pokalde (5,794 m), which is a historic hermitage site where a spiritual leader meditated. Mountain climbing became more common with the advent of tourism, enticing the Sherpa to climb some peaks for income and reputation, although Khumbila and other homes to mountain deities remained off-limits. To ensure safety when climbing other mountains, some climbers and their families made offerings to the mountain deities beforehand.

Spiritually Endowed Trees, Groves, Rocks, and Water Sources

Some Sherpa also believed that felling and pruning live trees was a way to lose merit, which was linked to the practice of collecting mostly dead and dying branches for fuel wood. Certain forests around settlements were also designated as off-limits to tree felling and harvesting in order to keep villages safe from divine wrath and bad fortune, and to ensure ample forest resources. Inside these forests, felling trees was considered inappropriate; however, gathering non-timber forest products and grazing was allowed. In forests protected for non-spiritual reasons, the same general rules applied regarding the harvest of live wood, but exceptions for building may be allowed under certain circumstances.

There were two types of sacred groves; the first were forests that grow in areas considered sacred because certain spirits reside there, and the second included two types of protected groves, **lama** and **gompa**. Lama protected forests originated when a certain powerful lama sanctified or cursed a forest patch. Trees therefore must not be used or felled by cutting implements. These forests were the earliest sacred groves and were some of the best preserved. Gompa forests were typically groves in the vicinity of a village gompa. It appeared that these trees gained their holiness through the gompa and were not considered sacred before construction. The oldest gompa forest existed near the Pangbuche Gompa—a representation of a spiritual leader's scattered hair (Stevens 1993).

Lu spirits resided under trees and at water sources and rocks, and were believed to impart both positive and negative outcomes to the local residents that house them. The spirits mirrored human characteristics, described as good or bad, smart or dumb, and so on. Lu provided wealth and long-life to a family but also caused hardship, often in the form of physical ailments only treatable by the shaman. Some lived near homes under adjacent trees or in rocks and water sources, while others resided inside the home in a constructed shrine. Women took care of lu through

offerings, a tradition passed down from female to female. Pollution upset them, as did cutting trees, breaking boulders, and digging in the soil.

METHODOLOGY

I conducted field research over 19 months between October 2004 and July 2007 and returned/discussed results in the summers of 2008 and 2011. Participant observation and focus groups were conducted with key Sherpa male and female consultants across a broad spectrum of ages before the sample was chosen in order to refine the methodology. I selected a stratified random sample of 100 households and 12 monks using electricity records and a local census. I demographically profiled each household, and one available individual from each household was chosen to participate in the research on place-based spirituality. These individuals were all over the age of 18, an age chosen to ensure that they either had attended school or conducted some agropastoralism, tourism, or both. Indeed, various studies illustrate that most local ecological knowledge is learned before this age (e.g., Hunn 2002; Zarger 2002). Each consultant also needed to live in the Khumbu area for at least three months per year.

I showed participants page-size photos of deities, natural features, and locations that had local spiritual values associated with them. I asked a series of semi-structured interview questions identified through key consultant interviews, focus groups, and literature. I also conducted topical life histories and future projections with 24 participants (two from each of six age groups between 18-29 and 70 or older) to elicit details about the nuances of people's lives and spirituality that were not available in the quantitative techniques. Topical life histories included questions about an individual's life experiences with Buddhist practice, agropastoralism, tourism, and western-style education, as well as perceptions of change. Future projections asked consultants to predict the state of the Sherpa social and ecological world in the next twenty years.

I scored the semi-structured interviews based on a point system and transferred these scores and the household demographic data to SPSS statistical software (version 16.0). The scoring of the interviews generated a numerical value, which could be used as a dependent variable in the analysis. The scores were derived by comparison with information from key male and female Sherpa consultants documented during the two pilot studies in 2004 and 2005. Each spiritual value contained multiple semi-structured questions developed collaboratively with Sherpa consultants during the pilot phases. The point total for each question reflected a number of 0-2 or 'no knowledge,' 'some knowledge,' or 'detailed knowledge,' respectively.

I then conducted a multiple regression analysis using a base model of independent variables supported by the relevant hypotheses. In this case, a base model is a set of demographics that I predicted drawing from my hypotheses to show how place-based spiritual values were distributed across the population and how and why they changed. Base models were used in the multiple regression analysis to elicit which demographics (independent variables) predicted knowledge for a particular place-based spiritual value (dependent variables). The multivariate technique allowed the testing of multiple independent variables at one time as compared to the univariate linear regression analysis where only one dependent variable can be tested. The base model demographics were degree of market integration (assessed by proximity to the tourist route), gender, age, education-level, agropastoral participation (farming, herding, and fuel wood collection), and tourism work.[5] Since some of the independent variables were multi-dimensional (e.g., six age groups and six locations of settlement), I created eight models to guarantee the testing of all possible combinations.

I grouped dependent variables together (referred to as Spiritual Value Indicator) and broke them down into seven categories (beyül, yül lha, chaam and nyingje, monastery forests, other protected forests, lu spirits, and **Gokyo Tse** or Lake). Significant predictors of place-based spiritual value knowledge

required $P<0.001$ to $P<0.05$ in at least five models and non-significant tendencies were listed for results of $P<0.10$ in at least five models. Thus, this analysis considered significant results to have a confidence interval of 95.0 percent to 99.9 percent and also discusses non-significant results with a confidence interval between 90.0 percent and 94.9 percent, called tendencies (see Spoon 2008).

I also utilized a type of content analysis known as deductive coding to analyze the life histories and future projections. Using this method, I was able to identify emergent themes related to the research questions across the demographics. Interviews were fully transcribed and themes were searched for across the following topics: Buddhist practice, agropastoralism, tourism, western-style education, and perceptions of change. Once identified, the themes were rechecked across the transcripts for frequency and detail. This information was then used to interpret and supplement the results of the quantitative methods. Content was also supported by considerable participant observation and survey research (see Spoon 2008).

TABLE 1. Results of multiple regression analysis

Spiritual Value/ Variable	R^2	Market Integration (*n*=6)		Gender (*n*=2)	
		On the Route	Off the Route	M	F
Spiritual Value Indicator (7 Spiritual Values)	0.54-0.57	-----	*P*<0.001 to *P*<0.05	*P*<0.05	---
-Beyül (Sacred Valleys)	0.47-0.52	-----	*P*<0.05	*P*<0.05 to *P*<0.10	---
-Yül Lha (Sacred Mountains)	0.31-0.33	-----	*P*<0.05	*P*<0.05	---
-Chaam and Nyingje (Animal Taboo)	0.16-0.28	-----	-----	-----	---
-Monastery Forests	0.32-0.36	-----	*P*<0.001 to *P*<0.05	-----	---
-Other Protected Forests	0.42-0.48	-----	*P*<0.001 to *P*<0.05	-----	---
-Lu Spirits	0.21-0.29	-----	*P*<0.05	*P*<0.05	---
-Gokyo Tse (Lake)	0.25-0.28	-----	-----	-----	---

n=100
Note: Sample period between June 1, 2006 and April 30, 2007.

RESULTS AND DISCUSSION

This case study suggests that tourism caused Khumbu Sherpa place-based spiritual values to be heterogeneously distributed across the population and to experience some change (TABLE 1). The results showed that tourism (degree of market integration) was the most pervasive driver and that men knew more about these fundamental values than women. For all variables, older cohorts knew more than younger ones and this finding

for Khumbu Sherpa place-based spiritual values knowledge.

Age Group (*n*=6)		**Education Level (*n*=3)**		**Farming (*n*=2)**	**Livestock Herding (*n*=2)**	**Fuelwood Collection (*n*=2)**	**Tourism Work (*n*=3)**	
Older Cohorts	Younger Cohorts	More	Less	Y/N	Y/N	Y/N	Past	Present
P<0.001 to *P*<0.05	-----	-----	-----	-----	-----	-----	*P*<0.05	-----
P<0.001 to *P*<0.05	-----	-----	-----	-----	-----	-----	*P*<0.10	-----
P<0.05	-----	-----	-----	-----	-----	-----	-----	*P*<0.10
P<0.05	-----	*P*<0.05	-----	-----	-----	-----	*P*<0.10	-----
P<0.05	-----	-----	-----	-----	-----	-----	*P*<0.05	-----
P<0.05	-----	-----	*P*<0.10	-----	-----	-----	-----	
P<0.05	-----	-----	-----	-----	-----	-----	-----	-----
P<0.05	-----	-----	*P*<0.05	-----	-----	-----	-----	-----

Independent variables farming, livestock herding, and fuelwood collection had no significant results or tendencies for any of the dependent variables.

was more pervasive on the tourist route compared to off. Certain traditions also remained more stable, such as knowledge of yül lha and the taboo against hunting and killing animals. Others were remade, such as the case with the goddess on Mount Everest Jomo Miyo Lang Samba. The beyül spiritual value that ontologically connected people to place appeared to be experiencing the greatest decline and knowledge about lu spirits and protected forests eroded as well (for full results including slope coefficients see Spoon 2008).

Tourism appeared to affect Sherpa perceptions of their homeland. Market integration was a significant result for most of the spiritual values, evident in individuals from off the tourist route having more knowledge than their contemporaries. The least knowledge was found among the population in the tourist center of Namche (pronounced Nauje). Although research is sparse on how tourism influences place-based spirituality, research on local ecological knowledge in general offers some insight.

Select case studies find that populations living further away from developed areas or that participate less in the market economy demonstrated more plant and animal ecological knowledge (Godoy et al. 1998 ; Reyes-García et al. 2005). In other cases, the direction of change was reversed or not occurring, such as the case of Ecuadorian shrimp farming knowledge (Guest 2002) and Tzeltal Maya plant names (Zarger and Stepp 2004). The literature suggests that the market is indeed a powerful driver of change; however, the direction of change is context specific. In some case, knowledge may no longer be needed and in others it may be crucial for generating income. Nonetheless, I recognize that care must be taken not to over-functionalize the nature of spiritual values—maintenance and changes need not be driven by economics.

Tourism reconfigured gender roles, which in turn appeared to influence spiritual value knowledge. Males had more knowledge than females for most of the values. It could be that men needed to rely on the protector deities more than women because of the precarious nature of mountaineering, and to a lesser extent their agropastoral roles. Tourism also impacted women's lives, making them more sedentary compared to men's lives, especially among lodge and teashop owners. These changes may thus contribute to a gender difference in knowledge. Indeed, Fisher (1991) mentioned some increases in domestic tasks and decreases in agropastoral activity for women along the tourist route more than twenty years earlier. Select studies find that men know more about plants and animals than women (e.g., Reyes-García et al. 2005) and others find the converse (e.g., Rasmussen 1998). Ohmagari and Berkes (1997) argue that female Omushkego Cree ecological knowledge and associated skills are eroding because women's lives are becoming more sedentary. Tourism, for the female Sherpa, may be leading them down a similar path, eroding their spiritual connection with the land in the process, perhaps due to a more sedentary lifestyle.

Younger Sherpa experienced most if not all of their lives so far inside a tourist destination engaged in the host-guest drama. For these individuals, tourism may be causing the land to be seen more as a tourism commodity and less spiritually endowed.

In this study, the older generations knew more than the younger ones for all place-based spiritual values. This trend may be even stronger for individuals under the age of 18. Indeed, the results suggested that these younger cohorts started to ontologically view themselves and the Khumbu landscape as non-relational or disconnected, compared to older cohorts who connect them. In the life histories and future projections the spiritual perspectives of older and younger individuals were markedly different. Frequently, grandparents explained connections among humans, plants, mammals, and birds; whereas their grandchildren divided themselves from these living things apparently expressing a nature/culture divide. Nearly all of the 39 years and under sample was unaware of the beyül spiritual value and many were uninformed about protected forests and lu spirits. Ross (2002) found a similar result among the Lacandon Maya whose younger cohorts view people and place as non-relational compared to elder cohorts. When asked about justifications for the taboo on harming or killing wildlife, it was not uncommon for older individual to say that their protection was part of the beyül code of conduct while younger participants commented that this taboo was important for the conservation of species or for tourists to visit the area.

An additional driver of change may have been the governing National Park authorities' lack of understanding of Sherpa spirituality—evident in qualitative interviews with National Park staff (Spoon 2008, 2011). The lack of knowledge among the younger

generations could be a product of local political actors not using these traditions for the past 30-40 years and instead incorporating western perspectives that divide humans from nature, as communicated through National Park policy and school curriculum. Further, tourism, especially mountaineering, was a significant economic generator for Nepali protected areas and the state thus creating monetary incentive for nature conservation utilizing the western discourse. Campbell (2005) points out shifts in perspectives toward land around three additional Nepal protected areas with participatory conservation programs. He suggests that when material incentives were provided for villagers to forego traditional environmental entitlements, environmental perspectives shifted to viewing land as an object for protection external to interactive practice.

While many studies found a result of western-style education and non-local languages influencing a loss in ecological knowledge (e.g., Zent 2009; Heckler 2002), it was not a significant factor in this study. Causation may be complex entwined factors, such as changes in standard of living, a population-wide increase in education, cross-cultural exchange with tourists, and the general importance of knowledge connected to making money, such as English and mathematics. Indeed, ecological knowledge seemingly fell away because youth were not speaking Sherpa in the home because most of the younger Sherpa had at least a five-year education, and some reached the ten-year class level. Some youth from more affluent families were also sent to boarding schools outside the area. Asking older cohorts if education was important often yielded responses that placed an increased weight on learning Nepali and English to make money in tourism and other endeavors.

The monastic sample findings suggested that knowledge transmission was decreasing more slowly than the household sample, perhaps due to level of Buddhist education. Ghimire et al. (2004) found a complementary result in Nepal protected areas where Buddhist educated Tibetan **amchi** or spiritual and physical healers had more knowledge of medicinal plants than non-local commercial harvesters. Among Khumbu monks, older cohorts had more knowledge than younger ones; however this may illustrate that spiritual value knowledge was gained through lifelong Buddhist education. Between the two sampled monasteries, Tengboche on the tourist route embodied higher knowledge and less variation than Thame off the route, which could represent that Tengboche had more resources from tourism enterprises to provide education to its monks. Further, Tengboche monks did not need to leave for periods of the year to work in tourism—a necessity for some poorer Thame monks (see Spoon 2008). In this way, tourism may have influenced the character of both Tengboche and Thame monks' spiritual value knowledge, but in different directions.

Significantly, the result that highly educated Sherpa had more knowledge of the hunting and killing taboo may show evidence that the spiritual value intermixed with desired tourism-centric environmental outcomes (e.g., more animals for the tourist to see) and the natural science content that most children learned in school. Tourism was considered as a lucrative endeavor, which may reinforce the spiritual value of not killing animals. Additionally, much of the current environmental education curriculum focused on endangered mammals and birds. Since the desired environmental outcome and the curriculum coincided with the Sherpa tradition, youth may thus be more inclined to learn about this spiritual value. Students may have also reinforced this knowledge among one another, a process evident among the Tzeltal Maya (Zarger and Stepp 2004). Sherpa knowledge of different mushroom species also increased with more education (Spoon 2011), further suggesting that people continued to transmit knowledge in certain domains, while not in others.

Tourism also appeared to reinforce and remake knowledge depending on how pragmatic or lucrative the knowledge was. Tourism service providers expressed higher knowledge of yül lha; many of these individuals worshiped the mountain protector deities for safety and some taught the tourists about them as an informal form of interpretation. Adams (1996) shows how the Sherpa were creative at shaping their

identity in relation to their foreign interlocutors' expectations and Ortner (1999) states that the Sherpa were artful at bending tourists' desires for their own gain. In this case, protection from yül lha was sought for dangerous mountaineering and yül lha knowledge shared with trekkers and mountaineers was indeed good business. In both instances, tourism influenced the knowledge. Along these lines, Hayden (2003) found that an economic value for medicinal plants in Mexican markets stimulated increased ecological knowledge transmission. For the Sherpa, the market was tourism and the commodity was nature and themselves.

Tourism also remade select spiritual values, such as the goddess Jomo Miyo Lang Sangma who provided norbu (wealth) to sustain the Sherpa people. She used to provide food and other necessities but now brings tourists. Some even commented that she 'raised herself up' to be the highest mountain as a way to support the local people. Khumbila was also said to shield the Sherpa from declines in the number of tourists and other inauspicious events. Bruner (2005) states that in Balinese tourism ceremonial forms and material culture were reworked for tourists and certain new cultural forms entered back into Balinese ritual and representation. With Jomo Miyo Lang Sangma and Khumbila, tourism remade their powers to reflect contemporary circumstances.

CONCLUSION

This case shares a complex story in a tourism contact zone. The Khumbu Sherpa are an example of an indigenous people having more control over their circumstances than others in similar contexts; however the influence of tourism caused changes in how they saw and interacted with their homeland spiritually and practically—a process that may affect environmental decision-making. Although this study showed that tourism eroded knowledge of spiritual values at the time of this research, it also illustrated that other traditions were reinforced and remade. Knowledge of certain protector deities and the taboo against hunting and killing animals both appeared to persist. Tourism seemingly caused spiritual perspectives to increase, as in the case of Khumbila, whose worship had become more popular. For the goddess Jomo Miyo Lang Samba, tourism remade spiritual values, influenced by Mount Everest as a source of economic gain. Tourism will no doubt continue to guide how the Sherpa view place. It remains to be seen which spiritual values will persist in the longer term and how effective they will be at encouraging environmental stewardship of the Sherpa homeland.

Jeremy Spoon, *Department of Anthropology, Portland State University,* jspoon@pdx.edu

ACKNOWLEDGEMENTS

This article was funded by a U.S. National Science Foundation Graduate Research Fellowship at the University of Hawai'i Manoa, and is dedicated to the memory of my late mentor Nina L. Etkin. I wish to thank the entire Khumbu Sherpa community, the Khumbu Bijuli Company, The Mountain Institute, Sagarmatha National Park and Buffer Zone, and the Department of National Parks and Wildlife Conservation, Nepal. I am especially indebted to Dr. Lhakpa Norbu Sherpa who opened Beyul Khumbu to me and to my research assistants Pemba Tshering Sherpa and Ngima Nuru Sherpa. Thanks to Ismael Vaccaro, Eugene Anderson, Barbara Brower, and Sarah Jovan, as well as three anonymous reviewers, for discussion and comments. I am solely responsible for any errors.

NOTES

1. Solu, Pharak, and Khumbu Sherpa had the same migration history to Nepal. Solu and Pharak were areas south of Khumbu and included settlers of both Sherpa and non-Sherpa decent. Khumbu was almost entirely populated by Sherpa, with the exception of some families of Tibetan refugees and other Nepali ethnic groups. The ethnic boundary between Sherpa and Tibetans was generally drawn based on whether the

individual migrated before the Chinese occupation of Tibet in 1959. Thus, some Sherpa migrated from Tibet more recently compared to other Sherpa.

2. There were additional monasteries and nunneries in Khumbu; however, the monks were Tibetan refugees that came over the Himalaya from the Tibetan Autonomous Region of China after 1959.

3. Pangbuche and Dingbuche settlements are an exception to this trend since there is a proliferation of mountaineering staff originating from these areas (see Stevens 1993).

4. The research question was part of a broader doctoral research project that engaged Sherpa ecological knowledge at multiple overlapping levels encompassing species, place-based spiritual values, and landscape (see Spoon 2008, 2011).

5. All independent variables were tested for multicolinearity and interactions; none were found.

REFERENCES CITED

Adams, V.
1996 *Tigers of the snow and other virtual Sherpas*. Princeton: Princeton University Press.

Berkes, F.
2008 *Sacred ecology: Traditional ecological knowledge and resource management*. New York: Routledge.

Berkes, F., and N. Turner.
2006 Knowledge, learning, and the evolution of conservation practice or social-ecological system resilience. *Human Ecology* 34(4):479-494.

Butler, R., and T. Hinch, Eds.
2007 *Tourism and indigenous peoples: Issues and implications.* Oxford: Butterworth-Heinemann.

Brower, B.
1991 *Sherpa of Khumbu: People, livestock, and landscape.* Delhi: Oxford University Press.

Bruner, E.M.
2005 *Culture on tour: Ethnographies of travel.* Chicago: University of Chicago Press.

Campbell, B.
2005 Nature's discontents in Nepal. *Conservation and Society* 3(2):323-353.

Dowie, M.
2009 *Conservation refugees: The hundred-year conflict between global conservation and native peoples.* Boston: Massachusetts Institute of Technology Press.

Fisher, J. F.
1991 *Sherpas: Reflections on change in Himalayan Nepal*. Berkeley: University of California Press.

Fürer-Haimendorf, C.V.
1975 *Himalayan traders: Life in highland Nepal.* London: John Murray.

Ghimire, S., D. McKey, and Y. Aumeeruddy-Thomas.
2004 Heterogeneity in ethnoecological knowledge and management of medicinal plants in the Himalayas of Nepal: Implications for conservation. *Ecology and Society* 9(3). [online] URL http://www.ecologyandsociety.org/vol9/iss3/art6/.

Godoy, R., N. Brokaw, D. Wilkie, D. Colon, A. Palermo, S. Lye, and S. Wei.
1998 Of trade and cognition: Markets and the loss of folk knowledge among the Tawahka Indians of the Honduran Rain Forest. *Journal of Anthropological Research* 54:219-233.

Gossling, S.
2002 Global environmental consequences of tourism. *Global Environmental Change* 12:283-302.

Guest, G.
2002 Market integration and the distribution of ecological knowledge within an Ecuadorian fishing community. *Journal of Ecological Anthropology* 6:38-49.

Hayden, C.
2003 *When nature goes public*. Princeton: Princeton University Press.

Heckler, S.
2002 "Traditional ethnobiological knowledge loss and gender among the Piaroa," in *Ethnobiology and biocultural diversity*. Edited by J.R. Stepp, F.S. Wyndham, and R.K. Zarger, pp. 532-548. Athens: University of Georgia Press.

Hunn, E.S.
2002 "Evidence for the precocious acquisition of plant knowledge by Zapotec children," in *Ethnobiology and biocultural diversity.* Edited by J.R. Stepp, F.S. Wyndham, and R.K. Zarger, pp. 604-613. Athens: University of Georgia Press.

Kalland, A.
2001 "Indigenous knowledge: Prospects and limitations," in *Indigenous environmental knowledge and its transformations: Critical anthropological perspectives.* Edited by R. Ellen, P. Parkes, and A. Bicker, pp. 319-334. Sydney: Harwood Academic Publishers.

McLaren, D.
2003 *Rethinking tourism and ecotravel*. New York: Kuamrian Press.

Ohmagari, K., and F. Berkes.
1997 Transmission of indigenous knowledge and bush skills among the Western James Bay Cree women of Subarctic Canada. *Human Ecology* 25:197-222.

Ortner, S.B.
1989 *High religion: A cultural and political history of Sherpa Buddhism*. Princeton: Princeton University Press.

Ortner, S.B.
1995 The case of the disappearing shamans, or no individualism, no relationalism. *Ethos* 23(3):355-390.

Ortner, S.B.
1999 *Life and death on Mt. Everest: Sherpas and Himalayan mountaineering*. New Delhi: Oxford University Press.

Pratt, M.L.
1992 *Imperial eyes: Travel writing and transculturation.* London: Routledge.

Rasmussen S.J.
1998 Only women know trees: Medicine women and the role of herbal healing in Tuareg culture. *Journal of Anthropological Research* 54:147-71.

Reyes-García , V., V. Valdez, E. Byron, L. Apaza, W.R. Leonard, E. Perez, and D. Wilkie.
2005 Market economy and the loss of folk knowledge of plant uses: Estimates from the Tsimane' of the Bolivian Amazon. *Current Anthropology* 46:651-656.

Ross, N.
2002 Cognitive aspects of intergenerational change: Mental models, cultural change, and environmental behavior among the Lacandon Maya of Southern Mexico. *Human Organization* 61:125-138.

Sherpa, L.N.
2005 "Sacred hidden valley and ecosystem conservation in the Himalayas." Paper presented at the International Symposium on Conserving Cultural and Biological Diversity: The Role of Sacred Natural Sites and Cultural Landscapes. Tokyo, Japan.

Spoon, J.
2011 The heterogeneity of Khumbu Sherpa ecological knowledge and understanding in Sagarmatha (Mount Everest) National Park and Buffer Zone, Nepal. *Human Ecology* 39(5):657-672.

Spoon, J.
2010 "Tourism meets the sacred: Khumbu Sherpa place-based spiritual values in Sagarmatha (Mount Everest) National Park and Buffer Zone, Nepal," in *Sacred natural sites: Preserving nature and culture*. Edited by B. Verschuuren, R. Wild, J.A. McNeely, and G. Oviedo, pp. 87-97. London: Earthscan.

Spoon, J.
2008 Tourism in a sacred landscape: Political economy and Sherpa ecological knowledge in Beyul Khumbu/Sagarmatha National Park, Nepal. Ph.D. diss., University of Hawai'i at Manoa.

Stevens, S.
1993 *Claiming the high ground*. Berkeley: University of California Press.

Studley, J.
2010 "Uncovering the intangible values of earth care: Using cognition to reveal ecospiritual domains and sacred values of the peoples of Eastern Kham," in *Sacred natural sites: Preserving nature and culture*. Edited by B. Verschuuren, R. Wild, J.A. McNeely, and G. Oviedo, pp. 107-118. London: Earthscan.

Tucci, G.
1988 *The religions of Tibet*. London: Routledge and Kegan Paul.

Turner, N., and F. Berkes.
2006 Coming to understanding: Developing conservation through incremental learning in the Pacific Northwest. *Human Ecology* 34:495-513.

Urry, J.
2002 *The tourist gaze.* Thousand Oaks, CA: Sage Publications Ltd.

Zarger, R.K.
2002 "Acquisition and transmission of subsistence knowledge by Q'eqchi' Maya in Belize," in *Ethnobiology and biocultural diversity.* Edited by J.R. Stepp, F.S. Wyndham, and R.K. Zarger, pp. 593-603. Athens: University of Georgia Press.

Zarger, R.K., and J.R. Stepp.
2004 Persistence of botanical knowledge among Tzeltal Maya children. *Current Anthropology* 45:413-418.

Zent, S.
2009 "Traditional ecological knowledge (TEK) and biocultural diversity: A close-up look at linkages, delearning trends, and changing patterns of transmission," in *Learning and knowing in indigenous societies today.* Edited by P. Bates, M. Chiba, S. Kube, and D. Nakashima, pp. 39-59. Paris: UNESCO.