Naxi Cosmology of Mt. Yulong Sacred Sites with Caveats for Conservation

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Cover photo: Sacred Mt Yulong is home to the powerful and frightful Naxi god Sanduo. How do Naxi religious leaders view potential collaboration between religious sacred sites and biodiversity conservation?
Abstract

Mt. Yulong is central to Naxi people of Southwest China. Through participatory mapping, free listing, and extended semi-structured interviews, we explored relations of Naxi cosmologies of sacred space with "biodiversity conservation" – a commonly espoused partnership. We found encouragement, skepticism and challenges. Naxi perspectives on sacred space and conservation ranged in scale from hyper-local, through regional, to historical and cosmological. Some participants worried about conjoining religion with government conservation initiatives. Others argued conceptually that “conservation” prioritizes people while traditional Naxi cosmology stresses equality and brotherhood between people and nature. Challenges for conservation would be to integrate this cosmological view as well as origin myths, Naxi traditions of suicide and Sanduo, the god of Mt. Yulong, who "shines like lightning [and his] mouth spits fire" – not a deity to trifle with. Naxi stressed primacy of culture and cosmology. These cosmological issues are of far greater magnitude than one culture and one mountain.

Keywords: Naxi cosmology, sacred space, Dongba, Himalaya, biocultural conservation, ritual suicide

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Introduction

“He is called the creator of the universe, the defender of peace, protector against calamities such as fires, floods, plagues and wars. He is eulogized by saying that his power is as high as heaven, his light shines like lightning, his mouth spits fire, and his appearance is as white as snow. . . .” about Sanduo, Naxi god of Mt. Yulong (Figure 1). Joseph Rock (1947-8).

Numerous studies around the world have shown that sacred sites conserve biodiversity and native habitats (see reviews in Anderson et al. 2005; Salick et al. 2007; Wild and McLeod 2008). Other studies include ethnographic information (Verschuuren et al. 2010; Pungetti et al. 2012). To local people, religious meaning may supersede conservation of sacred sites (Allendorf et al. 2014, Woodhouse et al. 2015). Some anthropological studies explore cosmology of sacred sites (Huber 1999; Reichel 2012). Thus, diverse perspectives would need to be compatible if sacred sites were to be integrated conscientiously with biodiversity conservation. Cultural sovereignty would need to be assured. Cultural and religious significances of sacred sites may protect them from destruction including deforestation, land use conversion, development and tourism. It would be important to understand and protect the cultural and religious underpinnings of these sites for just and equitable biocultural conservation. We explore the cosmologies and cultural contexts of Naxi sacred sites on and surrounding Mt Yulong, in the Yulong Naxi Autonomous County of northwest Yunnan, China. We seek local perspectives on integrating biodiversity conservation with natural sacred areas. We also seriously consider the possibility that biological and cultural conservation might not be compatible in some circumstances.

Introduction to the Naxi culture can be found in numerous ethnographic works (Rock 1947, 1952, 1963, 1972; Goullart 1957; Oppitz and Hsu 1998; Mathieu 2003; Yang 2004; Arcones 2012). The Naxi are bordered by and overlap with many cultures: Chinese to the east, diverse Tibetan ethnicities to the north, Bai to the south, and Yi and Lisu found within (and beyond) Naxi territories. With long contact histories, Naxi religion and culture share elements with Tibetan beliefs and customs, with Chinese influences, and yet the Naxi remain distinct. Dongba ritual specialists, scholars and Naxi traditional medicine doctors are revered. The Naxi maintain a unique ideographic script, Dongbawen, with pictographic elements presented alone, in
Figure 1. Sacred Mt. Yulong (a) in northwestern Yunnan Province (b), southwestern China (c), is home of the Naxi god Sanduo. We circumnavigated the mountain to interview Naxi experts (1: Longpan Village, 2: Wenhai Village, 3: Fuguo Temple, 4: Yufeng Temple, 5: Jade Water Village, 6: Sanduo Temple, 7: Yulong Village, 8: Yuhu Village, 9: Dongba Valley, 10: Baisha Village, 11: Lijiang, 12: Mingyin Village, 13: Yingpan Village, arrows indicate sites off of the map), who were recognized for their knowledge of sacred sites (circles indicate sites within the map bounds, see supplementary Figure S1 for an interactive map of all sacred sites.) Base image via Google Earth Pro, imagery from Landsat and CNES/Astrium (© 2016).
combination, or with phonetic elements to form words and concepts (Figure 2). Results bring to light more, relevant Naxi cosmology and culture.

**Methods**

**Site:**

In Yulong Naxi Autonomous County, northwest Yunnan, China, Jade Dragon Snow Mountain or Mt. Yulong (Figure 1; 27°N, 100.2°E) is a sacred mountain for the Naxi people. It is a holy place and a gateway to the third kingdom, a paradise. It is also a god, Sanduo, protector of the Naxi people. There are temples and a multitude of sacred sites embedded on and surrounding Mt. Yulong. Mt. Yulong is an ideal place to query local and religious people as to Naxi beliefs, concepts and delineations of sacred sites and the congruence of biodiversity conservation with sanctity. Ecologically, the mountain ranges in elevation from savanna grasslands at its base (~2600 masl), through oak and pine woodland, through *Rhododendron* forests and shrublands, to alpine meadows, and to bare rock, permanent snows and a number of small glaciers near the highest summits (5596 masl; Hart 2015; Kong et al. 2009). We circumnavigated Mt Yulong, considered a spiritual pilgrimage in itself, along which we encountered religious disciples. However, we accomplished our journey by means of mundane transport: car, mini-bus, taxi, hitch-hiking and walking.

![Figure 2](image_url)

*Figure 2.* Dongbawen, sacred Naxi script, contains pictograms for geographic features that were used in participatory mapping, such as a) ‘Cloudy Snow Mountain’, a specific peak of Mt. Yulong, b) high mountain without permanent snows, c) alpine meadow, d) valley, e) river, f) flooded valley. The abundant geographic elements in Dongbawen, both specific and categorical, demonstrate a strong sense of place characteristic of Naxi cosmology.
**Participants:**

We visited 12 villages and monasteries (Table 1, Figure 1 and Supplementary figure S-1) and intensely interacted for many hours each with 20 local elders, experts, scholars and religious practitioners (Dongba and Buddhist Lamas). These particular individuals were identified by local villagers and religious communities for their expert knowledge of Mt Yulong and of sacred traditions, as well as for their own personal sanctity. Prior informed consent was verbally received from all participants. We conducted three activities: participatory mapping, free listing and extended semi-structured interviews of sacred sites and beliefs. Our goals were to explore Naxi cosmology of Mt Yulong sacred sites and to appreciate participants’ views on collaboration with biodiversity conservationists interested in protecting sacred sites.

**Free list and semi-structured interview topics (henceforth referenced by #):**

1. List the most sacred sites for you [free list]; where are these?
2. Is Mt. Yulong sacred? Why?
3. Are there smaller sacred sites on Mt. Yulong? Why are they sacred?
4. How is the sanctity of these different from Mt. Yulong?
5. What is the importance of sacred sites?
6. Is there a spiritual connection between Mt Yulong/other sacred sites and god(s)?
7. Are there festivals/rituals/legends/beliefs associated with Mt. Yulong/other sacred sites?
8. Previously, we found more plants, more biodiversity and older trees in sacred sites. Does this mean something?
9. Would it be good to conserve sacred sites? Why/for what purpose?
10. How would you feel about conservationists conserving sacred sites for biodiversity? If conservationists could conserve sacred sites for biodiversity, would that be inconsistent with their sacred status?

**Participatory mapping:**

We provided large poster paper and markers and asked the local experts to map Mt. Yulong and environs, including sacred sites and other salient features (Figure 3). They then narrated their maps freely. One Dongba voluntarily depicted (painted in Dongbawen) the entire Naxi creation
myth (Figure 4), since he interpreted this protracted chant as being integrally associated with Naxi sacred sites, sanctity, and cosmology. Several other Dongba drew their maps with Dongbawen, augmenting sacred sites with sacred script. Later, at the Dongba Cultural Research Institute in Lijiang, we identified sacred sites with geographical locations on paper and electronic maps, and finally transposed these map iterations of sacred sites to GIS at the Missouri Botanical Garden (Figure S1 with attached photos and Dongbawen). Results were also compared to the significant documentation of Naxi sacred geography that exists in the corpus of works by Joseph Rock, including his narrative and cartographic (1947-48), ethnographic (1952, 1955) and lexicographic works (1963, 1972). Other ethnographers were also consulted (Goullart 1957; Oppitz and Hsu 1998; Mathieu 2003; Arcones 2012).

**Results**

People who local Naxi considered experts on sacred sites were very diverse (Table 1), surrounding Mt Yulong, although most were male and elderly. The oldest man (95y) was a Lama at a prominent Naxi temple who spent his life taking care of one sacred Camellia tree that was over 500 years old; “One life, one tree,” he explained philosophically. Academics and teachers

![Figure 3. Participatory map (a) with sacred sites demarcated and named with Dongbawen, sacred Naxi script (b) as drawn by prominent Naxi Dongba He Zhenwei. This elegant cartography with Dongbawen script linked multiple perspectives: Naxi cosmology, sacred geography and language, representation and symbolism, horizontal and vertical planes, place and meaning, material and philosophical contexts.](image)
Table 1. Sacred sites free listed by twenty Naxi participants, including local elders, experts, scholars, doctors and religious practitioners.

<table>
<thead>
<tr>
<th>Location</th>
<th>Age</th>
<th>Occupation</th>
<th>Sacred Sites (free list)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>North</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yingpan Village</td>
<td>57</td>
<td>Naxi historian</td>
<td>Mt Yulong, stones, groves, temples, suicide sites, meadows, Tiger Leaping Gorge, Black and White Rivers, caves</td>
</tr>
<tr>
<td>Mingyin Village</td>
<td>45</td>
<td>Naxi scholar</td>
<td>Yun Meadow, headwaters, Mingyin Temple, trees, graves, Jolitzu Meadow, Mt Jizu, Yufeng Temple Wenfeng Temple, Jingding Temple, hearth, 12 sacred mountains: Mt Yulong, Mt Wenbi, Mt Ma’an, Mt Lengang, Mt Guifeng, Mt Zengzhenxiuqu, Mt Meici, Mt Gengcici, Mt Xuzi, Mt Lawu, Mt Laoying, Mt Maoniu</td>
</tr>
<tr>
<td><strong>East</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yuhu Village</td>
<td>78</td>
<td>village elder</td>
<td>Yuzhuquingtian Jade Pillar, trees, temples, Sanduo footprint and handprint, Mt. Yulong, mountains, rocks, golden river sand</td>
</tr>
<tr>
<td>Jade Water Village</td>
<td>35</td>
<td>Dongba priest</td>
<td>12 sacred mountains, White Water Terraces, springs, headwaters, water sources, rocks, rivers, trees, groves, lakes, Lake Malidajiha, Tzetzehalum rock, Shiri separates/supports heaven and earth</td>
</tr>
<tr>
<td>Dongba Valley</td>
<td>70</td>
<td>Dongba priest</td>
<td>many mountains, meadows, graves, trees, rocks, Mt Yulong, Mt Haba, Mt Black Snow, meadows: Sabago, Gabago, Dasago, Gusugo, Cumaigo, Zazabu</td>
</tr>
<tr>
<td>Baisha Village</td>
<td>89</td>
<td>Naxi doctor</td>
<td>Mt Yulong (esp. high), sacred trees</td>
</tr>
<tr>
<td></td>
<td>58</td>
<td>Doctor's asst.</td>
<td>Mt Yulong (esp. high), sacred trees</td>
</tr>
<tr>
<td>Yulong Village</td>
<td>52</td>
<td>botanical garden</td>
<td>Sanduo temple, river temples, Heji, Lijiang temples</td>
</tr>
<tr>
<td></td>
<td>63</td>
<td>Dongba teacher</td>
<td>Mt Yulong, Sanduo Temple</td>
</tr>
<tr>
<td>Sanduo Temple</td>
<td>55</td>
<td>caretaker</td>
<td>groves</td>
</tr>
<tr>
<td>Yufeng Temple</td>
<td>95</td>
<td>Lama</td>
<td>Camellia: “one life, one tree”</td>
</tr>
<tr>
<td><strong>South</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fuguo Temple</td>
<td>71</td>
<td>Lama/caretaker</td>
<td>Shi Yue Temple, Fugou Temple, Mt Yulong, Yu Feng Temple, Pu Ji Temple, Mt Wenbi, Tiger Leaping Gorge, Mt Funguan</td>
</tr>
<tr>
<td>Wenhai Village</td>
<td>57</td>
<td>Naxi teacher</td>
<td>Baisha Bihuajela, Sanduo Temple, Mt Yulong</td>
</tr>
<tr>
<td>Lijiang</td>
<td>70</td>
<td>ethnobotanist</td>
<td>sacred groves, water sources, ancestor trees, mountains, temples</td>
</tr>
<tr>
<td></td>
<td>28</td>
<td>Dongba Institute</td>
<td>mountains, suicide sites, family clan sites, trees, rocks, springs, graves, Shu sites</td>
</tr>
<tr>
<td><strong>West</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Longpan Township</td>
<td>33</td>
<td>Naxi farmer</td>
<td>Lacquer Tree, Ganiaju Temple, wild persimmon grove, Sacred Tower, graves</td>
</tr>
<tr>
<td></td>
<td>76</td>
<td>landlord/farmer</td>
<td>Shanshen Temple, Mt Sanha, Taizi Cave, trees, graves, Banyaoshan Meadow, Sacred Tower, Lacquer Tree, graves, Tiger Leaping Gorge, Mt Yulong, village temples</td>
</tr>
<tr>
<td></td>
<td>68</td>
<td>elder/farmer</td>
<td>graves, Banyaoshan Meadow, Sacred Tower, Lacquer Tree, graves, Tiger Leaping Gorge, Mt Yulong, village temples</td>
</tr>
</tbody>
</table>
ranged widely in age (28 to 70y), included women, and were associated with many different institutions including the Dongba Cultural Research Institute, Chinese Academy of Sciences (CAS), Chinese Academy of Social Sciences (CASS), and local schools and monasteries. A Naxi traditional medicine doctor (89y) was both locally renowned and famous nationally and internationally among patients and documentarians visiting from around the world. Several farmers, village elders and sacred site caretakers (33-76y) bore their role as oral historians very seriously.

There was little emergent consensus on the topics listed above and emphasis on individual visions and interpretations, in a country professing shared ideas and goals, is in itself thought provoking. For the free-list of sacred sites (#1; see Table 1 for brief summary), there was a local orientation with a tendency to list and map immediately proximate sites (Figure 5). At the hyper-local extreme, the Lama who spent his life tending the single sacred camellia tree thought that this tree was the only truly sacred site in the area. Similarly, other caretakers of sacred sites lived at and concentrated solely on preserving the physical integrity and narrative continuity of their immediate site (Figure 5, left with distances of 0). Exceptions to this locaphilia included some of the more worldly (and otherworldly) Dongba and scholars of Dongba texts; one Dongba who was especially versed in the oral and textual traditions reported a canon of sacred mountains that extend sacred space widely throughout the region, and deeply into the history of the Naxi people. At the extreme, two scholars had such a wide-ranging view of sites, including specific, categorical and cosmological sites, that it was impossible to quantify distances (Figure 5, right with broken line distances).

In response to whether Mt Yulong is sacred (#2), most respondents were unequivocally positive; however, two respondents said ‘no’ with the qualification that all mountains are gods and that sites on the mountain (especially the top) were sacred; and a few said they did not know. Even among those for whom Mt Yulong is definitively sacred, individual interpretations varied widely: Yulong either is or is not a sacred mountain in the Dongba texts; it is Sanduo or is his home; and Sanduo himself is either a historical defender of the Naxi and/or a god whose left hand and footprint are cast in rock and can be seen.
Figure 4. Naxi creation myth, written in Dongbawen, is chanted during sacred site rituals. Dongba explained that this myth imparts sanctity and purity to sacred sites. In a larger sense, Naxi oral historians presented both narrative and physical attributes of sacred sites, linking tangible (biology and geography) and intangible heritage (cosmology and myth).
The multiplicities of sacred sites listed, discussed and mapped (#3 summarized in Table 1, Figure 1 and Figure S1) included holy mountains, groves, meadows, trees and other plants, springs and other water sources, lakes, rivers, rocks, temples, towers, family clan sites, ancestor trees, and graves. One scholar interpreted the multiplicity of sacred sites and interpretations as pluralism among the Naxi. In spite of ubiquitous sacred sites, one person had a difficult time with the concept, both in definition and identification. The distinctions (#4) and connections (#6) among smaller sacred sites and the larger (e.g., Mt Yulong) were both conceptual and functional. People described sacred sites as nested, smaller within larger, across the landscape. At a macrolevel, through Mt. Yulong one can connect to the “third kingdom,” a heaven – a cosmovision; in contrast, at a microlevel, if there is too little rain people pray and perform rituals at local, particularly water related, sacred sites. Mt. Yulong too is nested within the greater sacred Naxi territorial landscape and Naxi cosmovision.

**Figure 5.** Locaphilia of Naxi sacred site experts. Y-axis is the mean distance from participants to the sacred sites they freelisted; most people were interested in nearby sacred sites. Caretakers of specific sacred sites were only concerned with their sacred site (mean distance of 0). Exceptional Dongba scholars knew many sacred sites from holy and historical texts and myths that were distant or cosmological (not geographical and demarcated by broken lines).
Discussions expanded from why Mt. Yulong is sacred and what that means (#2) to the conceptual importance of sacred sites (#5). Mountains are where gods live and scriptures define sacred sites, while temples are built to praise gods. Sacred sites are connections among gods and people. Beauty and purity are associated with sacredness. Taboos are in force, especially related to pollution, which is interpreted both physically and spiritually. Men gather to perform rituals but women do not participate. One participant illustrated the contingency of gods on people with the following story:

There was a huge disaster and Lawulasa rode his white horse to heaven to speak with god in his palace, but god did not want to help. Lawulasa argued, “but if people perish, who will pray to you and burn incense?” This convinced god to save people, who thus are obligated to worship.

Closely related to sacred sites are festivals, rituals and legends (#7), which are prolific and described by ethnographers elsewhere in detail (Rock 1955; Oppitz and Hsu 1998, Mathieu 2003, Yang 2004). Festivals are held for Buddha’s birthday, Sanduo, the Moon, ghosts, Shu (nature spirit) and Su (life spirit), and for longevity, wedding, fertility, health, death, wind and the hunt. If gods are not propitiated, then disaster ensues. Rituals include offerings, sacrifices, prayer, blessings, purification, decoration, burning incense, anointing, chanting, kowtowing, cleansing, picnicking, moving house, flying banners, drumming and making music. Dongba rituals are particularly arcane and complex, dictated by custom, oral history and religious text. Many rituals relate to cleanliness: sprinkling water with Rhododendron leaves, spreading pine needles over the ground, growing willows around doors, and sweeping tombs. Cosmological virtue and purity is represented by snow, green mountains and clean water.

We cannot begin to plumb the deep history and mythology of sacred sites, which would necessitate access to the most sacred texts (20,000 scriptures) with extensive interpretations, for which we are not qualified. Nonetheless, history and legend abounded in discussions of the first free lists of sacred sites, as well as question #7. The sacred temple of Fugou, reportedly the oldest and largest temple near Lijiang, was originally located near the summit of Mt Yulong but moved down in the early seventeenth century. Tiger Leaping Gorge was the site where Mujie, a person who believed in his own divinity and not in reality, leapt between Mt Yulong and Mt Haba and fell into the gorge, returning directly to heaven. Suicides were often recounted in
association with sacred sites (see Jackson 1971) being direct gateways to the third kingdom. Young lovers not allowed to marry (Naxi traditions, influenced by Confucian strictures, define marriageable couples) go to Mt. Yulong to commit suicide.

When we relayed the results of our previous studies on sacred sites (Anderson et al. 2005; Salick et al. 2007) – namely that sacred sites held more species of plants, more plant diversity, and larger trees – and asked for clarification and causation (#8), responses were readily forthcoming. Participants explained that Naxi worship nature and that nature, through elevation and geography, forms biodiversity; nature creates sacred sites and biodiversity in tandem. Religious doctrine affects peoples’ actions. Cutting old growth forest and trees was taboo and traditionally would never have happened; however, during the Cultural Revolution, sacred sites were cut around temples and many old growth forests and trees were lost. Also, participants extrapolated: this deforestation and government development (especially tourism) were causing climate change that was making the seasons unpredictable and the snows and glaciers melt. They predicted ensuing disaster. These are contemporary issues with Mt Yulong’s sanctity that were volunteered, especially the melting snows and glaciers, often attributed by participants to government-promoted tourism and a tourist cable car to the summit. More snow was equated with purity and better life.

When asked if it would be good to conserve sacred sites (#9), most agreed in the affirmative, although one person thought that “outsiders” should not become involved with sacred sites and particularly with graves. Other participants thought that Mt Yulong was protected by Sanduo or by a white tiger and that conservation was not a realm for people and particularly not “outsiders.” Another said that the government already had its conservation area on Mt Yulong (with the tourist cable car and melting glaciers) and should not be involved with Naxi sacred sites. Generally, participants stressed that Naxi believe in the interconnection of culture and nature and that conservation of nature allows humans to survive. Thus Naxi must be responsible for nature conservation. They felt that if Dongba knowledge were used to develop conservation strategies and practices, then Naxi beliefs would be reinforced and conservation would be strengthened.

When we finally asked about the compatibility of biodiversity conservation with Naxi sacred sites (#10), most participants were favorable with varying reservations involving government
participation and Naxi control. Agnosticism was present. Notable dissent was both practical and theoretical. Practically, dissenters were not impressed with how the government controlled the Yulong Snow Mountain Administrative Committee, developing tourism at the expense of nature and to the detriment of sacred Mt. Yulong, which is rapidly losing its permanent snow and glacial ice. Several participants framed issues with nature conservation within the Naxi human-nature balance: “Today humans are getting stronger and stronger and invading nature, even small nature reserves are difficult to conserve.” A more detailed parable was recounted to explain the issue theoretically:

> When water came to the earth, people and nature were born from one father and two mothers; thus people and nature are half-brothers. When the father died, his properties were separated, but three objects were kept together: a sacred hat, a sacred staff and a sacred knot, which hold people and nature together. If humans and nature come into conflict, nature hides the three sacred objects in the ocean and grabs human properties. As a result, if conflict arises between people and nature, humans would not be allowed to build houses because trees belong to nature, humans could not graze animals because the mountain meadows belong to nature, and jealous nature might not even allow crops to grow. This is the Naxi consciousness of conflict between nature and people.

One participant explained that the notion of ‘conservation’ puts the power to conserve in the hands of people with nature as a subsidiary, which threatens the balance of power between people and nature and therefore the long-term survival of both humans and nature. It is crucial to preserve nature’s power as equal to human power.

Assenting reactions to the incorporation of biodiversity conservation with sacred sites equally stress the importance of maintaining the balance between the half-brothers, people and nature. The founder of Dongba (Dongbashiluo) resolved the conflict between nature and people with 3 rules for limited use of mountains: humans may graze their animals, humans may catch fish and humans may cut wood and hunt on mountains, but only for personal subsistence. So Naxi conservation of sacred sites is based on reasonable use and not preservation. These participants advocated a strong role for Naxi sovereignty and the derivation of biodiversity conservation principles and practices from Naxi culture and Dongba beliefs. One Naxi scholar explained, “Culture is people’s soul: people and nature are closely connected, so conservation needs to
depend on cultural traditions to protect nature.” This biocultural conservation included restoration: rebuilding Fugou Temple in its original location near the lower summits of Mt Yulong was proposed as an initial endeavor to unify biodiversity conservation with sacred Mt Yulong and its greater, encompassing sacred landscape.

Discussion

The cleverness and subtlety of integrative and transcendent thinking shown by the revered participants was recognized and valued among the Naxi. The oral historians promulgated both narrative and physical space of a sacred site, linking tangible (natural sites, biodiversity and ecosystem services) and intangible heritage (cosmology, sacredness and myth). Similarly, cartography with Dongbawen script linked multiple perspectives: cosmology, sacred geography and sacred language, representation and symbolism, horizontal and vertical planes, place and meaning, material and philosophical contexts. Extended conversations with the holders of Naxi traditional knowledge were captivating and enlightening beyond the scope of this study.

In traditional Naxi culture, the spiritual world is always present, with gods and demons nearby and sanctity and brotherhood pervading relations between people and nature. Few conservationists plumb these depths, although for Joseph Rock, who came to Mt Yulong as a Western botanist, documentation of Naxi geography (Rock 1947-8), ethnography (Rock 1952, 1955), and language (Rock 1963, 1972) became a life’s work. Naxi scholars have explored the centrality of environment and place in Naxi culture and cosmology and its links to biological conservation (Yang 2004; and see citations in Efird 2011).

Two main legends were related in relation to sacred sites: the complex Naxi creation myth, a ritual poem in five syllable verse (Figure 4; similar in content to the one translated in Mathieu 2003 pp. 433 – 464), and the half-brotherhood of people (Naxi) and nature (Shu) who have a common father. Rituals constantly readjust the relationship between Shu and Naxi and give Naxi the right to enjoy the benefits of land and nature (Mathieu 2003). People must be moderate in their use of nature and must worship Shu through ceremonies and taboos, repaying their debts to Shu. Sanduo, god of Mt. Yulong and most important nature god for Naxi in the area, and Shu, nature itself, are closely interrelated (Arcones 2012).
Ritualized suicide has great cultural salience to the Naxi (Rock 1955; Jackson 1971). Under the influence of Chinese Confucianism, Naxi marriage was strictly circumscribed: first cousins are expected to marry. Lovers outside of this tradition could commit suicide, a practice common enough that rituals to propitiate the associated demons were well-known (He and He 1998). People committing suicide enter the third kingdom, an elaborate heaven, from natural sacred sites, which are considered gateways to heaven including several on Mt Yulong. Joseph Rock romantically described his encounter of two young women who committed suicide:

I went out to see and lo and behold two strong husky girls tied together at the waist had jumped in [a pond] to commit suicide and were dead. They looked like fairies through the greenish blue crystal waters; one lay somewhat on her back and the other girl held her with her hands about her shoulders, her face bent down over her dead friend; thus they were balanced semierect in the water. Their goat jackets lay on the banks of the pond, their shoes in the aquatic plants; their hair was loose and some raw silk thread from tassels floated on the water .... The whole reminded me of a tableau of wax in a panopticon .... they were to have been married in a couple of days. [Rock 1929]

Similarly, Sacrifice to Heaven (Rock 1943; Oppitz and Hsu 1998; Mathieu 2003) is a set of rituals in which the creation myth (Figure 4) is chanted and blood sacrifice is performed to balance relations between the Naxi and nature. This elaborate ritual is not obviously related to a piece of land nor does it have a direct biological context from the viewpoint of a conservationist. However, in Naxi cosmology, sacred sites, the creation myth and ritual are intimately and irrevocably integrated. For the integration of sacred sites with conservation, these mountain sacred sites closely linked with myth and blood ritual, including ritual suicide might be challenging.

Personal, family, village, local and regional echelons of sanctity are embedded within geographically nested sacred sites so that there are different scales of recognition and dimension. Personal or local sacred sites recognized by few people are protected within the more widely recognized and larger sacred sites. Small sacred sites – trees or graves – are certainly no less significant, but they are personal and may be secret. Mt Yulong, recognized far and wide, protects a myriad of small sacred sites recognized only locally or personally. Nesting and overlapping strata would need to be recognized with varying, flexible and sensitive conservation
strategies. No one wants conservationists interfering with their ancestors’ graves or their secret family tree, old growth though it may be.

The worldwide encounter between conservation and sacred sites that has been developing over the last forty years (since Gadgil and Vartak 1975) deepens both our cross-cultural understanding and appreciation of complexities and nuances. Science and religion need not be in opposition, but that does not mean that they are completely compatible or that they have the same associates. In our study of Naxi sacred sites and biodiversity conservation on Mt Yulong, both consistencies and ambiguities abound. Although the potential for partnership is apparent, so are potentials for tension. The Naxi may be dubious about government intervention into religious domains, as may conservationists be doubtful about suicide and blood rituals. The Naxi find conservation a human construct, which appropriates power from Nature; while conservationists usually view their relationship to Nature more ethically and pragmatically. Nonetheless, the alliance of sacred sites and biodiversity conservation is captivating and is unlikely to disappear soon. Developing our appreciation for nuance can only improve the situation.

**Online Supplementary Figure S1.** Interactive map of Mt Yulong sacred sites with locations, Dongbawen (Rock 1972) and photographs attached. [http://arcg.is/1IGQTOa](http://arcg.is/1IGQTOa)
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