Spiritual commons: sacred sites as core of community-conserved areas in Kyrgyzstan

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Abstract: We analyze sacred sites in Ysyk-Köl Biosphere Reserve, Kyrgyzstan, from the commons perspective. There are some 130 sacred sites in the region, and these fit into the subcategory of cultural/spiritual commons within the broader category of new commons. They can be classified according to their biophysical characteristics, and the reasons why people visit them. Communities have developed rules to protect sacred sites, including the traditional institution of sacred site guardians, people who voluntarily take responsibility to look after a site. Sacred sites as commons have many similarities to conventional commons. But there are also some differences: the more people visit a particular site, the stronger is the ‘power’ of that site and more conservation effort is directed to it. This characteristic distinguishes sacred sites from commons characterized by subtractability. As community-conserved areas, sacred sites have the potential to contribute to biocultural conservation networks. They are an important means of expression and transmission of culture, necessitating recognition and support for the rights of their traditional caretakers and local communities.

Keywords: Indigenous and community conserved areas, sacred sites, spiritual commons

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I. Introduction

Although much has been written about sacred sites, there is very little literature that examines them from a commons angle. This is perhaps surprising because clearly sacred sites are shared resources and are significant in terms of biocultural conservation (Maffi and Woodley 2010; Gavin et al. 2015). This is especially so in regions where sacred sites are alive and well as community-conserved areas, including parts of Africa, Latin America, South and Southeast Asia, and Australia (Thorley and Gunn 2008; Pungetti et al. 2012), and Central Asia (Verschuuren et al. 2010; Verschuuren and Furuta 2016).

Sacred sites are places in the landscape that have a special significance under local tradition, not only in indigenous contexts, such as Australia (Rose 2005) but even in contemporary Europe (Frascaroli 2013). Defined by the Kyrgyz scholar Altpaeva (2013, 7) as “areas of land and bodies of water, as well as constructions and items, which are spiritually and/or religiously meaningful for local people and where sacral practices are performed”, sacred sites fit into the broader classification of Indigenous and Community Conserved Areas (ICCAs) in the International Union for Conservation of Nature (IUCN) category of protected areas (Borrini-Feyerabend et al. 2004; Wild and McLeod 2008). At the same time, sacred sites are a type of “spiritual/sacred commons” within the broader category of cultural commons (Hess 2008).

Until 1995 almost all papers presented at the International Association for the Study of Commons (IASC) focused on environmental commons such as jointly used fisheries, forests and water resources. Hess (2003) observed that the 1995 conference on the theme of Reinventing the Commons encouraged the expansion of the field for the broader study of jointness and shared resource dilemmas, above and beyond environmental commons. There were four papers on non-environmental commons in 1995, increasing to 28 by the 2000 conference. The developing literature required the addition of several new subject areas to the IASC database by 1996: global commons, urban commons, information and knowledge commons, and the miscellaneous category of new commons (Hess 2003).

According to Hess (2008), new commons may simply be defined as various types of shared resources that have recently evolved or have been recognized as commons. Her commons classification recognizes seven categories of new commons, in addition to “traditional” environmental commons such as forests or water resources. Of these non-environmental kinds of commons, knowledge commons has received a great deal of attention (e.g. Hess and Ostrom 2006). Cultural commons, another category of non-environmental commons, has been characterized mainly by studies of privatization of cultural heritage, with other contributions in the areas of commodification of cultural objects, common heritage of humankind, role of customs as an alternative to private property rights, and the global cultural economy (Hess 2008).

The area of spiritual/sacred commons, as subcategory of cultural commons (Figure 1), seems to have received very little attention in the commons litera-
ture. We were able to find only one published paper in this area, (Rutte 2011) that directly addresses spiritual/sacred commons, although there are others that address it indirectly or use different terminology. Heinemaki and Herrmann (2013) discuss the formal recognition of Arctic indigenous peoples’ sacred natural sites from a legal rights perspective, but not as commons rights. Similarly, the literature on Native American sacred sites on United States public lands (e.g. Yablon 2004) is about legal aspects of indigenous property rights but does not engage with commons theory.

Using a meta-analysis, Rutte (2011) found that most sacred natural sites resembled commons; others resembled public goods, club goods or private goods. Many of the Ostrom (1990) design principles for commons were also found in traditional institutions used for governing sacred natural sites. For example, social and physical boundaries were often clearly defined, monitoring was often vested in community members who were accountable to the community, and graduated sanctions were frequently used – except where local people believed in supernatural monitoring and punishment for violating sacred sites (Rutte 2011). However, in Rutte’s sample of sacred sites, collective-choice arrangements were notably absent, suggesting that the responsibility for setting rules and performing rituals was vested in a few individuals of the community, such as elders, healers and shamans, mostly males.

Sacred natural sites are an interesting kind of commons because they are spiritually meaningful but without necessarily having intrinsic or instrumental value. Rather, these sites have values that derive from the relationship that people have to a particular site, what Chan et al. (2016) referred to as relational values. As such, there must be a critical number of people with a meaningful interest before a potential sacred natural site can actually be considered sacred.

This has two implications regarding commons theory. First, sacred natural sites are one kind of commons that cannot be privatized because they cannot
be held by one exclusive owner. Second, sacred natural sites need to have some kind of public property status to be open to all potential visitors who may have relational values concerning that site. In this regard, sacred natural sites may be similar, for example, to beaches where the public in many countries has traditional access rights, making beaches difficult to privatize and close public access (McCay 2008). Such a status is consistent with the legal theory of public trust, “to the effect that the public has always had rights of access to the property in question” (Rose 1986, 714). However, sacred natural sites also require some kind of institution to play a custodial role, protecting and maintaining the site. That role may fall on some community or custodian acting on their behalf; or, as often is the case, protection may be supplied by supernatural powers. Previous work shows that supernatural sanctions are the rule in Kyrgyz sacred sites, reducing the need for community monitoring and sanctioning (Aitpaeva 2009, 2013).

By definition, all sacred sites include a cultural element. But much of the literature emphasizes the “natural” in sacred natural sites (e.g. Verschuuren et al. 2010), and many of the generally accepted definitions of sacred natural sites leave out the built or human-made element (Wild and McLeod 2008). This is perhaps because authors want to make a distinction between built sacred/religious sites such as temples as opposed to natural places. However, other authors point out that in some cases the distinction is difficult to sustain (Thorley and Gunn 2008). For example, Öner et al. (2010) argue that a stand of junipers, including trees of up to 500 years old, in the semi-arid northern Anatolian plains of Turkey, was conserved not because juniper is considered sacred (as elsewhere in many Turkic areas) but because the local people pay respect to the grave of a holy person (evliya) in that grove.

Nevertheless, one reason to emphasize the natural is that sacred sites have an important role in biodiversity conservation (Bhagwat and Rutte 2006; Salick et al. 2007; Metcalfe et al. 2009). They are diverse and vary in size; they may be represented by a single element such as a tree, spring, or boulder, or may comprise entire ecosystems such as a grove, a lake, or a mountain (Thorley and Gunn 2008; Dudley et al. 2009). The sacredness of a particular site, related to local worldviews and beliefs, may be manifested in the form of tribute to ancestors, access to supernatural dimensions, and respect for spiritual entities that reside in the area (Schaaf and Lee 2006; Verschuuren and Furuta 2016). There is usually an element of power attached to a sacred site that pilgrims may be seeking; for example, some pilgrims may go to a site to ask for health or for luck in a particular undertaking (Aitpaeva et al. 2007).

This paper discusses sacred sites as commons, analyzing the similarities and some differences of sacred sites from conventional commons, and explores the implications of this with regard to biocultural diversity conservation. Following a section on the study area and methods, we illustrate the prevalence of sacred sites in one area of Kyrgyzstan, and classify them according to their biophysical characteristics. We then turn to the questions of commonly observed rules, why people visit these sites, and the kinds of rituals and ceremonies conducted
in them. Having established the biocultural significance of these community-conserved areas, we then explore some of the implications of commons theory for the long-term conservation of these sites for both their cultural and biodiversity values.

Kyrgyzstan, a relatively small Central Asian country where sacred sites have enjoyed a cultural revival in recent years after the breakup of the former Soviet Union, is a suitable setting for this study. A large number of active sacred sites exist, and many of these across the country have been documented in some detail by Aigine Cultural Research Center, a Kyrgyz national NGO based in Bishkek (Aitpaeva 2009, 2013). However, research results on Kyrgyz sacred sites have found their way to a little extent into the international literature. Within Kyrgyzstan, sacred sites are the subject of some debate, with respect to their importance for Kyrgyz culture, their compatibility with fundamentalist interpretations of Islam (the dominant religion of the country), and their potential role in biodiversity and biocultural diversity conservation (Samakov and Berkes 2016).

2. Study area and methods

The study was carried out in Ysyk-Köl region of Kyrgyzstan. Kyrgyzstan is a former Soviet Union Republic which gained its independence in 1991. Kyrgyzstan covers an area of 198,500 km² and has a population of 6 million. Ysyk-Köl region is 43,100 km², with a population of 0.5 million. Seventy-five percent of Ysyk-Köl’s population lives in rural areas, whereas the urban population is concentrated in three cities, namely Balykchy, Cholpon-Ata and Karakol. Ethnic groups residing in the region are: Kyrgyz (86%), Russian (8%), Kazakh (1.5%), Uyghur (0.9%), Kalmyk (0.9) and Dungan (0.7%). Two languages are widely spoken in the region: Kyrgyz is the state language, and Russian has the status of an official language. Main economic activities include livestock farming (sheep, cattle, horses, yaks, poultry); agriculture (wheat, potato, barley, sunflower) and horticulture (apricots, apples, pears, various berries); and hospitality, mostly in the northwestern part of the lake during tourist season. Annually, during the short summer tourist season, about one million tourists visit the Biosphere Reserve (Ysyk-Köl Biosphere Reserve 2nd Periodic Review 2013).

Ysyk-Köl region contains diverse habitats and vegetation zones, bodies of water (springs, streams, glaciers and lakes), geological formations, valleys and mountains reaching 7000 m, part of the Tian Shan range, locally called Ala-Too Mountains. Ysyk-Köl has been a UNESCO Biosphere Reserve since 2001 and also recognized by other international entities for its biodiversity. Ysyk-Köl Lake is a designated Ramsar site, a Freshwater Ecoregion of World (#627), and some parts of the lake are recognized as an Important Bird Area by Birdlife International. Mountains in the Ysyk-Köl region are recognized as biodiversity hotspots by Conservation International. World Wildlife Fund (WWF) included the Ysyk-Köl area in Global 200 Ecoregions as the ‘Tian Shan Montane Steppe and Meadows’ (Wunderlich et al. 2014).
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The study used both primary and secondary data. Using Aigine’s survey of sacred sites in Ysyk-Köl area (Aitpaeva 2009) as baseline data, we created a map of sacred sites in the Ysyk-Köl Biosphere Reserve. Our map has four sacred sites not mentioned in Aitpaeva (2009). The map shows the approximate locations of the sacred sites and it was created using Photoshop graphic software in June–November, 2016. Precise location of sacred sites are not given due to ethical considerations.

The same survey (Aitpaeva 2009) describes the kind of biophysical elements (i.e. vegetation, water bodies, rocks) that characterize each sacred site on the list. We used Aitpaeva’s (2009) list to create a table in the Results section. To make the sampling pool as representative as possible, a total of 29 sites were visited during this study (marked with blue on Figure 2). The aim was to visit at least one sacred site that contained a particular biophysical element perceived as sacred. Primary data were collected in June-November 2014 through participant observation, semi-structured interviews (n=49), and one focus group discussion with sacred site guardians (n=15). Semi-structured interviews used snowball sampling technique and involved representatives of three stakeholders groups: (a) state officials involved in the governance and management of the Biosphere Reserve (n=23); (b) traditional practitioners (e.g. sacred site guardians) and local communities (n=15); and (c) local scholars and NGO experts working on environmental issues (n=11). The focus group discussion with the sacred sites involved sacred site guardians from all over the country (not only Ysyk-Köl region). Three out of 15 focus group participants were also interviewed in earlier stages of the study. In addition to the focus group discussion organized with sacred site guardians, the researcher attended three group discussions facilitated by others. These discussions were informal and were not audio recorded. Prior and informed consent was obtained from the group discussion participants to take observational notes. Table 1 summarizes the place, date and major theme of the group discussion.

The scale of the study did not allow detailed village-by-village survey of all sacred sites in the Biosphere Reserve. Some apparently ‘empty’ areas of the Biosphere Reserve, especially areas that are difficult to access, with no sacred sites marked on them should not be understood as areas with no sacred sites; rather, they should be regarded as under-researched areas (Figure 2). The classification used in Table 2 follows Aitpaeva (2009) and is consistent with previous publications on sacred sites that have provided a classification of the biophysical elements that characterize these sites (Dudley et al. 2005; Schaaf and Lee 2006; Verschuuren et al. 2010). There is no standard local classification of sacred sites, but most informants tend to refer to ‘their reasons’ for visiting these sites, which is the classification used in Table 3.

3. Results

Sacred sites in the study area are diverse with regards to their biophysical elements and size. Sacred sites may be characterized by the different types of
Figure 2: Red and blue dots show approximate location of sacred sites within the Ysyk-Köl Biosphere Reserve.
Table 1: Topics, number of participants and date and location of a focus group discussion (FGD) and group discussions (GD) carried out during the field research.

| Title/subject                                                                 | Participants | Date and location               |
|------------------------------------------------------------------------------|--------------|---------------------------------|
| FGD: Role of sacred sites and their guardians in conservation                | 15           | Bishkek, October 26, 2014        |
| GD: Nurturing, preserving and losing sacredness                             | 50           | Bishkek, October 27, 2014        |
| GD: Meeting of government officials with local community leaders on establishment of Khan-Tenir National Park | 70           | Karakol, July, 2014              |
| GD: Meeting with traditional practitioners on indigenous research ethics at Aikol Orgo | 35           | Kok Jar village, October 1, 2014 |
| GD: Spiritual practices and livelihoods in sacred sites in mountainous areas | 30           | Bishkek, October 28, 2014        |

vegetation such as trees and bushes, water bodies such as springs and lakes, and geological formations such as boulders and rocks that they contain. Some of the sites encompass whole ecosystems or biomes, such as Ysyk-Köl Lake, or primarily built elements. Table 2 summarizes the nature of sacred sites in the Biosphere Reserve by their biophysical characteristics and the elements under each characteristic, the number of such sites found in the Biosphere Reserve, and provides an example from each category. For verification, at least one sacred site of each kind (with one exception) was visited in fieldtrips. If a sacred site contained several elements, it was counted in each of the respective sections. For example, Mai-Bulak [lit. oily spring], which consists of a hawthorn tree, a boulder and a spring was counted in a box for ‘hawthorn tree’ under ‘vegetation’ section, ‘stone’ box under ‘geological formations’ section as well as ‘spring’ box under ‘water bodies’ section. The table consists of three main columns: the first one lists what biophysical elements make up a sacred site. The second column shows how many sacred sites in the research area have that particular biophysical element; and the third one provides an example of a sacred site with a local name (in Kyrgyz language) and the literal translation of the name into English following in square brackets.

Many sacred sites incorporate natural as well as built-up or human-made elements. To illustrate, the first four examples in Table 2 all include a grave or burial place (mazar), in addition to apple, apricot, birch trees, and shrubs that characterize those four examples of sites classified by their vegetation. Also noteworthy, the biophysical element that characterizes a site is often an unusual feature – a very old tree for example or a tree that grows in an unusual habitat. For example, Archaluu, listed in Table 2, is a very ancient and well known sacred site. The site is surrounded by arid hills; there is no water and no grass or bushes, let alone trees. Local people see the sacredness of the site in the fact that a juniper tree grows there, even though junipers cannot usually grow in a place with such conditions. Many springs have that ‘magical’ quality, perhaps the main reason why in Table 2 there are so many sacred sites, which are springs. (But of course not all springs are sacred sites). Striking geological formations are also well represented.
Table 2: Diversity of sacred sites in the Biosphere Reserve with respect to biophysical elements perceived as sacred.

| Biophysical elements of sacred sites | Number | Example |
|------------------------------------|--------|---------|
| Vegetation                         |        |         |
| Apple tree                         | 3      | Alma [apple] mazar, a site with a very old, single apple tree |
| Apricot tree                       | 10     | Oruk [apricot] mazar, a big, old apricot tree grows on a hill. There is no vegetation around. |
| Birch tree                         | 1      | Kyzyl-Jar [red cliff], a birch tree has grown on the burial place of a sheyit, an innocently killed person. |
| Bushwood shrubs and bushes         | 4      | Bala [child's] mazar is part of bigger sacred site called Chungkur-Bulak [spring in the hole]. |
| Dog rose bush                      | 1      | Chong-Kyzyl-Suu [big red water], a dog rose bush is located near the entrance to the Jyluu-Suu [Warm water] sanatorium (health spa) |
| Fir tree                           | 6      | Oluya Zaur Ata [oluya Zaur father] is a big fir tree with three intertwined trunks. |
| Hawthorn                           | 6      | Mai-Bulak [oil spring] consists of a hawthorn tree, a boulder and a spring. Local people believe that the guardian-spirit of local land lives there. |
| Juniper bushes and trees           | 7      | Archaluu [place with juniper] has juniper bushes and trees that grow in a hilly terrain with no other vegetation around it. Mostly people who want to have a child come for a pilgrimage. |
| Mountain ash tree                  | 4      | Aziz [a respectful term for snake] is a mountain ash tree with prayer flags tied to it. A white snake is believed to be the guardian-spirit of the place. |
| Persian olive                      | 1      | Jiide, the site, has an old silver berry tree, also known as Persian olive or oleaster, locally called jiide. |
| Pine tree                          | 1      | Altyn-Bulak [golden spring] is a pine tree with a warm spring next to it. |
| Poplar (various species)           | 26     | Ak-Terek [white poplar] consists of six poplars and a spring. The poplars have grown bending into each other and they look like a yurt. The spring starts a little higher than the trees and flows to them. |
| Rowan tree                         | 1      | Sary-Bulung [yellow gulf] is the name of the village where a sacred rowan tree and a spring are located. |
| Sea-buckthorn bushes               | 3      | Kessengir [mountain ridge covered with tall grass] consists of sea-buckthorn bushes and a spring at the beginning of the Kes-Senir canyon. |
| Walnut tree                        | 1      | Talip-Akun-Ata [father Talip Akun] consists of a walnut and a willow tree. It was named after a very wise and skilful person who built a school in olden days. |
| Willow (various species)           | 28     | Mazar Bulak [mazar spring] is a cluster of old willow trees and a spring. According to local beliefs, this is one of the oldest sacred sites. |
| Water bodies                       |        |         |
| Lakes                              | 2      | Tuzduu-Suu [salty water] is a small salty lake whose waters are known to cure skin diseases. |
| Ponds                              | 3      | Bakaluu-Kol [frog lake] is a pond which used to be a big lake according to folk history. Sacred white frogs were believed to inhabit this lake. |
| Springs                            | 42     | Manjyly-Ata [father Manjyly] contains seven springs, each of which has distinct kaset [spiritual power]. |
| Biophysical elements of sacred sites | Number | Example |
|-------------------------------------|--------|---------|
| **Geological formations**           |        |         |
| Rocks and cliffs                    | 3      | Jeti-Oguz [seven oxen], a red limestone formation that resembles seven oxen. |
| Hills                               | 2      | Kindik-Dobo [belly button hill] is a sacred hill with a shape resembling a belly-button. |
| Mountains                           | 2      | Han-Tengir [Tengir is the name of the Creator] is a tall mountain with a sharp peak about 7000 meters high. |
| Salt formation                      | 1      | Tuz [salt] is a hole with salt crystals in it. |
| Stone                               | 13     | Tamga-Tash [stamp boulder] is a boulder with natural marks resembling a stamp (seal) |
| **Ecosystems**                      |        |         |
| Grove ecosystem                     | 1      | Kamanduu-Kol [wild boar lake] is a grove with different kinds of trees and shrubs; springs come out from under the roots of some of the trees. |
| Alpine ecosystem                    | 2      | Tastar-Ata [father Tastar] is a valley named after a mountain with the same name. Alpine summer pastures are located at the higher elevations. |
| Lake ecosystem                      | 1      | Ysyk- Köl Lake, the second largest high altitude lake in the world, is considered a sacred site as a whole. |
| **Built elements**                  |        |         |
| Mausoleums                          | 7      | Karga-Ake is a recently built mausoleum for a historical figure known for his wisdom and justice. |
| Tombs/graveyards                    | 12     | Karakol-Ata [Father Karakol] comprises a tomb, three yellow willow trees, a poplar tree and a spring. This complex is located in a Muslim cemetery. |
Table 3: Some of the main reasons why local people visit particular sacred sites.

| Purpose of visiting sacred sites | Example from Ysyk-Köl region |
|----------------------------------|-----------------------------|
| Wellness/health                  | Pilgrims often come to the Karakol-Ata sacred site and pray for wellness and health. |
| Fertility related                | Women and couples wishing to have children visit Archabai (Archaluu) sacred site. Some of them bring cradles with them and conduct certain rituals. |
| Riches, wealth-related, livestock| Cholpon-Ata is a pir\(^1\) for sheep and that is why it is generally considered to be a sacred site where people ask for wealth of different kinds. |
| Power/career                     | Er-Tabylidy is named after the 18–19th century hero who fought for the Kyrgyz people. Pilgrims say that those seeking political power and authority and those wishing to have fortune in their career should come to this site. |
| Knowledge and wisdom             | Kalygul-Oluya is named after a historical figure well-known as an oracle and for his wisdom. That is why this place is associated with those seeking knowledge. |
| Finding and accepting one's spiritual call (kasiet) | Bugu-Ene mazary is a site named after a mother deer that serves to provide for a person’s spiritual call for healing, fortune telling, Manas reciting, etc. |

\(^1\)Pir is a guardian-spirit of a person, place or animal (Aitpaeva 2013, 235).  
\(^2\)Manas is the heroic epic of the Kyrgyz people and a key element of traditional culture and worldview.

Sacred sites are special places. Creator bestowed kasiet [special power] onto those places. Because of their kasiet, springs emerge on sacred sites and trees grow even though there may be no other trees around or a place may not be favorable for the tree growth altogether. Creator gave us sacred sites so that we could go there and find cure for our diseases, purify ourselves and find our own paths. Sacred sites are like mosques under the blue sky (Traditional practitioner, Ysyk-Köl region, pers. comm. 2014).

Figure 2 shows the approximate locations of the sacred sites identified in this study. Mapping of the sacred sites showed that most of them are located primarily in the Ysyk-Köl valley and only few in remote mountainous areas (Figure 2). However, sacred sites in the Biosphere Reserve area do include some high mountain peaks, as elsewhere in the world, for example, in the Bolivian Andes (Boillat et al. 2013). One example is Han-Tengir, a distinctive peak of some 7000 m (Table 2).

For most sacred sites, being accessible to visitors and pilgrims is important because, according to local beliefs, the more people come and revere a sacred site, the stronger is the power [kasiet] of that site (as long as crowding does not cause damage). Without this power [kasiet], the biophysical elements of a site are not distinctive. For example, if a sacred site consists of few trees and springs, these biophysical elements as well as anything located in this area is revered and conserved by the local people. That means that those trees would not be cut down, domestic livestock would not graze there and any living being (that otherwise
could be hunted for instance) would not be harmed on and around sacred sites (as opposed to non-sacred areas, where a tree is just another tree that does not enjoy special revered attitude towards itself). This illustrates how the notion of sacredness leads to conservation by preventing direct exploitation of the biophysical resources on the site and promoting use of this site for cultural and spiritual practices. The latter is regulated by informal rules (discussed further in the text) and can be seen as ‘conservation-through-use’.

Sacred natural sites in the Ysyk-Köl region are not recognized by the government or by the Biosphere Reserve. In fact, sacred sites were denied existence and the pilgrims were persecuted during the Soviet times. Despite the oppression, sacred sites in Ysyk-Köl area have been preserved by local communities as community-conserved areas (for ICCAs see: Borrini-Feyerabend et al. 2004). The basis of community conservation of these sacred sites is rooted in local traditional knowledge, practices, institutions, and belief systems. Thus, these sites provide an illustration of traditional ecological knowledge, which may be defined as a knowledge – practice – belief complex (Berkes 2012). The cultural component is important, and for many Kyrgyz people, sacred sites are part of what it means to be Kyrgyz. Indeed, sacred sites are perceived by local people as part of kyrgyzchylyk – ‘a complex of historically accumulated knowledge, traditions and thinking patterns indicative of Kyrgyz people’ (Aitpaeva 2013, 234).

As biocultural heritage, sacred sites have a body of traditional knowledge associated with them (Berkes 2012). This knowledge connects local people to their land, and includes information about the site itself, oral history of the surrounding area and communities; knowledge about spirits, people, animals, and plants, as well as the medicinal or curative properties of certain plants, springs, and soils. For example, of utmost importance is the knowledge of the kasiet of a sacred site. These are the special powers of the site, such as the ability of curing illnesses, both spiritual and physical, bringing luck, repelling misfortunes, and easing people’s burdens. The kasiet of a sacred site is associated with its guardian spirit, which is called ee (literally, owner of the site).

Kasiet of a particular sacred site often defines the pilgrims’ incentives for visiting that site. A Kyrgyz saying illustrates this point: ‘If you are longing for a child, go to Manjily-Ata; if you are longing for livestock, go to Cholpon-Ata; if you are longing for a throne (i.e. power) go to Kochkor Ata; if you are longing for health, go to Ysyk-Ata’ (Aitpaeva 2009; Usubalieva-Grishchuk 2012). Although this saying is well-known and generally accepted, it is not followed to the letter. Pilgrims generally believe that one can go to a sacred site with any wish and ask for whatever one needs. Pilgrims say that the ‘success’ of the pilgrimage depends on the pilgrim’s intent and ability to connect with a sacred site. If a pilgrim is connected, then he/she can make a variety of wishes, such as wellbeing, happiness, spiritual growth, developing some exceptional abilities and/or talents at the same sacred site. Table 3 lists some of the main purposes for visiting a sacred site, with examples from the region.
I visited many sacred sites all over Kyrgyzstan but I mostly come to Mazar-Bulak [sacred site]. When I first came to Mazar-Bulak, I realized that I used to see it in my dreams, this place felt so familiar to me. Ever since, I come to this sacred sites to conduct small rituals to ask good luck when my children are about to travel somewhere, to ask for health when someone I know gets sick, etc. I owe a lot to this sacred site and that is why I keep coming here (Local villager, Ysyk-Köl region, pers. comm. 2014).

Traditional knowledge about sacred sites incorporates unwritten rules for visiting sacred sites. The rules summarized here were elicited from pilgrims and sacred site guardians in Ysyk-Köl region. According to the informants, these rules are consistent with the rules accepted in sacred sites in other regions of Kyrgyzstan. These rules can be distilled into several conditions and taboos.

Before coming to a sacred site and while being on a sacred site, a pilgrim must:

- Have good intent, respect and belief in the sanctity of a sacred site
- Conduct ablution before visiting the sacred site
- Bring some ritual food, depending on the pilgrim’s economic well-being.

At the sacred site, a pilgrim must:

- Keep the sacred site clean and take care of sacred places as far as opportunities permit
- Conduct necessary rituals and ceremonies: recite the Quran, make wishes, and pray
- Make a donation (as much as one can or want, depending on his/her financial capacity) if there is charity box

Sacred site visitors must not:

- Pollute and litter a sacred site
- Cause damage to a sacred site’s biophysical elements (such as cutting the branches of the trees, or bushes, breaking boulders or rocks, filling up springs with soil)
- Take away anything that belongs to the sacred site (e.g. pilgrims leave some dishes and utensils near a sacred site so that other pilgrims can use them. Things left at a sacred site for common use must stay there, and no one is allowed to take them for their own use outside of a sacred site)
- Do culturally inappropriate (‘dirty’) things such as drinking alcohol, smoking, uttering swear words, having sexual intercourse, urinating and defecating
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- Shoot firearms
- Come with uncovered head and other intimate parts of the body
- Visit sacred sites during one’s menstrual cycle
- Tie votive rags to branches of trees and bushes on sacred sites (because this causes damage to the trees and bushes by choking them)

The prohibition on votive rags is relatively a new rule. Some pilgrims and traditional practitioners are against votive rags because they realize that this practice, when carried to extreme, is actually harming the sites. Another reason for prohibiting the votive rags is that some visitors have been known to tie all sorts of items on sacred trees, such as handkerchiefs and pieces of plastic bags, which is seen as ‘polluting’ a sacred site. Nonetheless, although new rules may emerge, they are not likely to make their way into everyday practice overnight. That is why both sacred sites with votive rags and those without are present in Ysyk-Köl region.

The study participants emphasized that observing the rules of visiting sacred sites ensures that the *kasiet*, that is the special power of sacred site stays intact. Whereas the violation of rules or negligence towards sacred sites by pilgrims can lead to *kasiet kachuu* [migration/escape of sacredness], that is a particular sacred site’s losing its sacredness. Research participants have warned that even Ysyk-Köl Lake itself, if it continues to be polluted and degraded, can lose its sacredness.

If a sacred site is neglected, polluted or mistreated, kasiet leaves that place and that site ceases to be ‘special’, i.e. people who go there don’t get healed, prayers are not accepted. For example, look at our sacred Ysyk-Köl Lake. Back in the day, our ancestors would not even swim in it because they revered its sacredness. People would just dip their hands into its waters and wash their faces asking for blessing. And now people swim in it drunk, do all sorts of ‘dirty’ things on its shores and all sewage from the villages and resorts around it go down to the soil and eventually seep into the lake. Kasiet of our sacred lake can leave it if we continue to treat our lake like that (Traditional healer, Ysyk-Köl region, pers. comm. 2014).

Thus, sacred sites in Ysyk-Köl region are a dynamic phenomenon. New sacred sites can emerge; in turn, other sacred sites, which no longer attract pilgrims or become defiled or befouled, can lose their sacredness. The implication of this finding is that the map of sacred sites in Figure 2 should best be considered as a map valid only for a given period of time.

Traditional knowledge form the foundation of practices conducted on sacred sites. Pilgrimage as such is the major form of practice that consists of visiting a sacred site and conducting various rituals and ceremonies. Pilgrimages are conducted individually or as part of a group. Some pilgrims stay at a sacred site overnight. The majority of rituals is related to the well-being of an individual
or a community, and may include healing rituals, sacrifice rituals and blessing ceremonies. Some rituals are performed to repel misfortunes and some are done in gratitude for luck, individual success, or community well-being. Rituals can be conducted individually or collectively, depending on their nature and purpose (Table 4).

**Table 4: Some rituals conducted on sacred sites by individuals and communities.**

| Name of the ritual                  | Description                                                                                                                                 |
|-------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| **Aidar (Niyaz) chach aluu**        | *Aidar chach* is a lock of hair, which is left on the long-desired baby’s head after the first haircut to assure well-being and protection of the baby. The ritual of *aidar chach* is usually conducted at a sacred site by healers or sacred site guardians. |
| **Ak chachuu**                      | Traditionally, this is a ritual of pouring out something white such as milk, yogurt, or flour to appease, show respect, and drive snakes out of person’s house, garden, or any other place. Sometimes it is also used to greet and show respect to sacred site guardian spirits. |
| **Aktykty moyunga aluu**            | This is a ritual of person’s accepting his/her spiritual mission such as healing (physical and/or psychological conditions), fortune telling, and/or spiritual channeling. The form and content of this ritual varies from case to case, although frequently it is conducted at sacred sites. |
| **Jar saluu**                       | This is a ritual of singing/reciting/chanting words from the Quran and inviting spirits who support you. |
| **Jeti tokoch**                     | *Tokoch* is a type of round fried or baked bread. It is usually prepared by pilgrims before visiting sacred sites. This ritual is done to honor the guardian spirit of a sacred site and other invisible forces. |
| **Sham jaguu**                      | *Sham* is a ritual hand-made candle. A wisp of cotton is soaked in plant oil or animal fat and is usually wrapped around a dry reed stalk. *Sham jaguu* is a ritual of lighting these candles; it can be conducted both at home and on a sacred site. The ritual may be done for various purposes such as to show respect to guardian spirits, to pray, and to receive spiritual information from them in memory of the departed. This ritual is outlawed by the followers of radicalized Islam, and in some sacred sites it is prohibited. |
| **Tuloo**                           | This sacrifice ritual is dedicated to a particular occasion. It is done to divert bad luck, overcome misfortunes, or safeguard individual or collective well-being. Livestock such as sheep, goats, cattle, and horse as well as poultry are acceptable sacrificial offerings. |
| **Zikir chaluu**                    | *Zikr* is an Islamic ritual of reciting the names of Allah and glorifying his greatness, qualities, and omnipotence. This ritual is a part of other healing rituals. |
When there is no rain for a long time, people in our neighborhood get together and conduct *tuloo* [ritual] asking God for rain. Every person contributes to purchasing a sheep or cow, which is then sacrificed. Often *tuloo* is conducted on a sacred site (Local villager, Ysyk-Köl region, pers.comm, 2014).

Sacred sites have the traditional institution of guardians or custodians, people who voluntarily take care of sacred sites. Men are not more likely to become guardians than women; numbers of men and women are roughly equal. Sacred site guardians/custodians (called *karoolchu* or *shaiyk* in Kyrgyz) take up their responsibility of looking after particular sacred sites as a spiritual calling (Aitpaeva 2009). In some cases, sacred site guardians are elected by their communities to look after a particular site. The sacred site guardian’s main responsibilities include protecting the site from damage, keeping it clean and respectable; informing pilgrims about the *kasiet* of the sacred site and the rules to be followed; and reciting verses from the Quran and assisting pilgrims with conducting rituals. Some guardians remain in this capacity until their death; in other cases a guardian can transfer his/her obligation to the next guardian. At the time of the study, three out of 29 visited sacred sites had permanent guardians.

Traditional knowledge and practices related to sacred sites have a prominent belief component. Here, belief refers not only to religious belief but also to cultural belief and worldview, for example the belief in *ee* at the center of the rules for visiting sacred sites and performing rituals. As for violating rules, there are no legal or social sanctions (at least, not overt ones) for violating rules; therefore, only a belief in supernatural sanctions enforces rules of conduct. The sanctions are graduated (Ostrom 1990) and may vary from illness or misfortune to death of the violator, depending on the severity of violation. It is also believed that sanctions for some violations may affect not only the violator but also one’s kin and progeny.

Notion of *ee* is related to the belief in *kayip duino*, the invisible world. Sacred sites are perceived as places (‘portals’) that connect this world with the invisible one and where pilgrims can obtain information and/or message from various forces living in *kayip duino*. Thus, sacred sites belong not only to this world but to the invisible world as well. Such beliefs contribute to local communities’ perception of sacred sites as commons. Sacred sites have an *ee*, and *ee*’s rights (in the sense of property rights in commons) overlap with property rights of those who own the land (i.e. individual, municipality or state). Thus, exclusion is costly; that is, those who own the land and sacred site cannot usually exclude others from accessing the site because exclusion may trigger supernatural sanctions from the sacred site’s *ee*, its guardian spirit and owner.

4. Discussion and conclusion

Findings in the Ysyk-Köl Biosphere Reserve are consistent with the idea that sacred sites are a type of spiritual/sacred commons within the broader category
of cultural commons (Hess 2008). As commons, some of the Ostrom principles emphasized by Rutte (2011) hold (e.g. clearly defined physical boundaries). But some of the other principles do not. Social boundaries in Ysyk-Köl sacred sites are flexible: pilgrims may come from anywhere. In contrast to Rutte’s (2011) cases, the guardians are not all men; about equal numbers of men and women hold this responsibility. The guardians and the community no doubt keep an eye on the sacred site, but monitoring is implicit and there are no explicit sanctions. Rather, violating sacred site rules draws supernatural punishment, as in some other parts of the world (Premauer and Berkes 2012). Collective choice arrangements are absent (Rutte 2011) only in the sense that rules-in-use have been basically set and are not under negotiation; they have been in effect for a long time and appear to be consistent through the region and across Kyrgyzstan (Aitpaeva 2013). At the same time, emergence of new rules (such as on votive rags) is evidence of adaptability of practice and part of the argument for the resilience of sacred sites.

Four major factors or considerations seem to enable community-based conservation of sacred sites in the study area: sacred sites are “special” places; sacred sites are linked to individual and community wellbeing; sacred sites are dynamic; and sacred sites are commons through traditional social institutions, rules and taboos. The combination of these four factors makes sacred sites what they are, as expanded upon below.

Sacred sites are special places, and the peculiar or mysterious characteristics of sacred sites are often seen as the manifestation of the sacredness of a place. That peculiar quality can be its unusual location and properties such as shape, color, and age. For example, some trees, which are considered sacred, are located in places where trees do not usually grow. Springs, which are regarded sacred, may be located in very dry areas and may have some unique properties such as saltiness, color, taste and smell. The sacredness of the Archaluu site is a good example. The sacredness of the place is marked by the fact that a juniper tree grows in that place, even though (ecologically) it should not. However, the peculiarity of the place is not sufficient by itself to make that place a sacred site and worthy of protection.

The key cultural value is that the place should have power, with the potential to contribute to individual and community wellbeing. Different sacred sites have different kinds of special power (kasiet) which provide people the incentive for visiting that site, whether it is to wish for good health or prosperity. Hence, the biodiversity conservation value of a place is not an intrinsic value as in conservation biology, but a culturally determined relational value (Chan et al. 2016) that accompanies and drives the biodiversity value (Thorley and Gunn 2008; Verschuuren et al. 2010). However, the cultural value is not fixed because the kasiet of a sacred site can increase or decrease, depending on visitors’ belief in, or perception of, the powers of that site. It can also be lost if the sacred site is not taken care of properly.

The notion of kasiet kachuu (lit. escape of sacredness) makes sacred sites a dynamic phenomenon. The major implication of the kasiet kachuu concept is that
people should respect, conserve and use sacred sites with due care to preserve the sacredness of the place. Thus, the belief that sacredness may be lost, or may move to another place, motivates local communities to preserve sacred sites. The body of traditional knowledge, rules, beliefs, practices and taboos rooted in local worldviews directly contribute to the conservation of sacred sites. There are strict rules against polluting and littering a sacred site, as well as causing damage to its biophysical elements. Traditional knowledge and worldview shape the local community’s attitude and behavior toward sacred sites. Rules-in-use to protect the site and collective interest marks sacred sites as commons.

Sacred sites are commons – but with a difference. They do meet the excludability criterion of commons definition (Ostrom et al. 1999). It is costly to exclude other users because no person or community owns the sacred site; the guardian spirit of the place is the main owner. (This is the case in the sacred sites in this study, but not necessarily in all Kyrgyz sites or those elsewhere.) If someone unjustly excludes other pilgrims from accessing a sacred site, that person may suffer sanctions such as illness, misfortune, or even death. Thus, exclusion is possible (but costly) and under the current rules, not desirable. What makes sacred sites commons-with-a-difference is that they do not quite satisfy the subtractability criterion.

Sacred sites have two dimensions: a physical world dimension with a tangible element (e.g. a tree, spring, boulder, bushes) and a spiritual world dimension, kasiet where kaiyp duino of a sacred site is rooted. In the physical dimension, subtractability is possible. For example, if too many pilgrims visit a sacred site and crowd the space around it, then other pilgrims cannot use the site. Thus, in the commons sense, exploitation by one user reduces sacred site availability for others. The situation is congruent with the subtractability criterion. However, the intangible dimension of a sacred site (its kasiet) is not subtractable. In fact, according to local beliefs, the more people come and revere a sacred site, the stronger kasiet of the place becomes. Thus, sacred site commons in the spiritual dimension may be said to have “increaseability”, meaning that use of the “resource” by one user increases its availability for others.

This tension between conservation and use is significant for commons theory. First, the sacred commons of the study area show why privatization or sole ownership would never work: the sites would simply lose their sacredness. Second, the guardians or the local community cannot close access either; they can only act to uphold proper practices, or public trust in the sense of Rose (1986). Pilgrims to whom the site has relational value have an inalienable right to visit the site, as long as they observe the rules. Commons theory often assumes that commons values are objective and transparent to all. However, Kyrgyz sacred sites examples indicate that a commons may have multiple values, including some that may not be transparent to outsiders.

Many Kyrgyz sacred sites have elements that are both natural and built, supporting Thorley and Gunn (2008) that the distinction between the two is often difficult to sustain. The local community perception of sacred sites as commons

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improves their conservation status for two reasons. First, one of the basic rules of visiting sacred sites is to conserve them. Hence, the more people visit a particular site, the more conservation effort is directed to that particular site. Second, the more people visit a sacred site, the more people get to know it as a place to be preserved because of its sacredness. Thus, social institutions (such as sacred site guardians), social norms, rules and taboos, as well as perception of sacred sites as commons, contribute to their conservation. Social institutions and local communities use these perceptions to promote traditional practices and contribute to the management of sacred sites. Given that the tradition of visiting sacred sites is deeply rooted in Kyrgyz culture with little variation across the country (Aitpaeva 2009, 2013), it appears that social institutions pertaining to sacred sites have been in place for a long time. However, if sacred sites have been preserved and respected by local people for centuries, and if the tradition is still strongly alive, how come sacred sites are not taken into account in formal conservation?

Sacred sites are often hotspots for biodiversity (Metcalfe et al. 2009; Ormsby 2011), but there are very few cases where formal conservation institutions incorporate sacred sites into conservation strategies. There is one example from Tibet (Shen et al. 2012) and another from Canada. The co-managed Gwaii Haanas National Park Reserve in British Columbia incorporates indigenous sacred sites and other cultural heritage values in its formal conservation planning (Stephenson et al. 2014). There are probably more cases where a national park was situated in an area that incorporates sacred natural sites and where the cultural values of the site receive merely lip service – without allowing the very practices and uses that conserved that biocultural landscape in the first place. Kaz Mountain National Park in Turkey is a case in point (Berkes 2012, 42).

Nonetheless, sacred sites have been recognized for their potential to contribute to biodiversity conservation in many parts of the world, such as India (Bhagwat and Rutte 2006), Tanzania (Mgumia and Oba 2003), and Tibet (Salick et al. 2007). The study area of Ysyk-Köl region is home to a huge biosphere reserve, and yet the sacred sites of the area are not in the conservation planning process for the biosphere reserve. This may be considered a missed opportunity because traditional knowledge related to sacred sites can be used to promote the concept of biosphere reserve among the local people, and sacred sites can serve as a communication platform for Biosphere Reserve managers (Samakov 2015). However, lack of communication and cooperation between managers and local communities is a major barrier to using the formal conservation model (the Biosphere Reserve) and the traditional model (sacred sites) together for biocultural conservation (Samakov and Berkes 2016).

In conclusion, local community perception of sacred sites as collectively owned, not only prevents the notorious tragedy of the commons, but also contributes to better conservation. Local communities have developed institutions to manage sacred sites, including the traditional institution of sacred site guardians, people who voluntarily take responsibility to look after a site. Moreover, basic rules of visiting sacred sites promote direct conservation of sacred sites by every
visitor and pilgrim. Taboos prevent visitors from causing harm to a sacred site and prescriptive rules such as the rule “keep the sacred site clean and take care of sacred places as far as opportunities permit” promote sacred site conservation. Thus, the more people visit a particular site following the rules, the more conservation effort is directed to it. The importance of cultural beliefs such as kasiet [the special power] of sacred sites makes sacred sites in the Ysyk-Köl area different from conventional commons, in the sense that the “resource” (i.e. the kasiet) is virtually non-subtractable and possibly “increasable” through use, provided that rules of use are observed.

Thus, sacred sites in the study area are conserved by local communities and run as commons, a point not discussed in the extensive literature on sacred sites, except by Rutte (2011). Social institutions (such as sacred site guardians), rules and taboos resemble institutions for governing other kinds of commons (Rutte 2011). They have the potential to contribute to conservation of sacred sites as informal protected areas but with due recognition of their cultural significance. Sacred sites are an important means for the expression and transmission of culture, and therefore the control of local management rights needs to be protected. As supported by findings elsewhere (such as Bhagwat and Rutte 2006; Salick et al. 2007; Metcalfe et al. 2009), the formal recognition and support of sacred sites is a significant policy issue (Heinemaki and Herrmann 2013). Such recognition can be carried out in culturally appropriate ways, enhancing biocultural conservation and affirming the rights of their traditional caretakers.

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