

CREATING COMMON GROUND

The role of Indigenous Peoples' sacred natural sites in conservation practice, management and policy

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Creating Common Ground

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Thesis

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“The potential for Indigenous ontologies to unsettle dominant ontologies can be easily neutralized as a trivality, a case study or a trinket, as powerful institutions work as self-legitimizing systems which uphold broader dynamics of (neo)colonial power.”

Hunt (2013, p. 30)

“...there are opportunities to rethink the conceptual building blocks that are conventionally used to shape and reshape landscapes in the image of a Eurocentric vision of what should be. In the process, we might dance into being ways of weaving the social fabric that acknowledge ontological pluralism as an everyday reality in Australia, and to begin recognizing and responding respectfully to those elements of cultural landscapes that Eurocentric management discourses routinely deny exist.”

Howitt and Suchet-Pearson (2006, p. 333)

Contents

Acknowledgements	13
Preface	14
Chapter 1	
Introduction	17
1.1 Tracing the sacred in nature	18
1.2 Creating a common ground for the conservation of sacred natural sites	21
1.3 Problem statement	25
1.4 Research objective	26
1.5 Conceptual Framework	27
1.5.1 A conceptual approach for constructing a common ground	27
1.5.2 Biocultural diversity: reconciling nature and culture	29
1.5.3 Rights-based approaches	30
1.5.4 Ontological plurality	31
1.6 Research questions	33
1.7 Description of Research Locations	33
1.7.1 Northeast Arnhem Land, Australia	34
1.7.2 El Quiché, Guatemala	35
1.7.3 The Upper West Region, Ghana	35
1.8 Methodology	36
1.8.1 Doing applied and participatory scientific research	37
1.8.2 Free Prior and Informed Consent	39
1.9 Structure of the thesis	40
1.9.1 Chapter 2: Sacred Natural Sites: Ancient Foundations for Modern Conservation	41
1.9.2 Chapter 3: Integrating biocultural values in nature conservation: perceptions of culturally significant sites and species in adaptive management	42
1.9.3 Chapter 4: Developing biocultural conservation approaches for sacred natural sites	42
1.9.4 Chapter 5: Mixing Waters: A Cross-Cultural Approach to Developing Guidelines for Fishers and Boaters in the Dhimurru Indigenous Protected Area	42
1.9.5 Chapter 6: Spiritual leaders build common ground for community conservation of sacred natural sites in the face of neoliberalism in Ghana and Guatemala	43
1.9.6 Chapter 7: Connecting Policy and Practice for the Conservation of Sacred Sites	43
1.9.7 Chapter 8: Conclusions and Discussion: A common ground for worldviews in the conservation of Indigenous sacred natural sites	44

Chapter 2

Sacred Natural Sites Ancient Foundations for the Conservation of Nature in a Modern Era	47
2.1 Introduction	48
2.2 Definitional fuzziness of sacred natural sites	48
2.3 Sacred natural sites and religion	49
2.4 Locations of sacred natural sites	51
2.5 International importance of sacred natural sites for conservation	51
2.6 Ten key issues and challenges for the conservation of sacred natural sites	53
2.6.1 Sacred natural sites as a primary conservation network for nature and culture	55
2.6.2 The rapid degradation and loss of sacred natural sites	56
2.6.3 Recognizing sacred natural sites gives voice, rights and action to local people	57
2.6.4 Faith, spirituality and science provide complementary ways of knowing	58
2.6.5 Indigenous sacred natural sites require rapprochement	60
2.6.6 Understanding inter-relationships of sacred natural sites for human well-being and development	61
2.6.7 Sacred natural sites as nodes of resilience, restoration and adaptation	62
2.6.8 Sacred natural sites need to be consciously included in conservation approaches	62
2.6.9 Support from local to global levels for the survival of sacred natural sites	64
2.6.10 Developing a broad strategy for conserving sacred natural sites	66
2.7 Developing a global initiative for the conservation of sacred natural sites	67

Chapter 3

Integrating biocultural values in nature conservation: perceptions of culturally significant sites and species in adaptive management	69
3.1 Introduction	70
3.2 Definitions and concepts	71
3.3 Managing the whole spectrum: from culture to science	73
3.4 Community conservation and sacred sites and species	74
3.5 Integrating biocultural values in nature conservation	75
3.6 Sacred significance of nature in conservation and adaptive management	76
3.7 Finding indicators for the cultural and spiritual significance of sacred sites and species	79
3.8 Conclusions	80

Chapter 4

Developing Biocultural Conservation Approaches for Sacred Natural Sites	83
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4.1	Introduction	84
4.2	Recognition of cultural, spiritual and sacred values in conservatio	86
4.2.1	Bridging the nature culture divide in conservation	86
4.2.2	Including cultural and spiritual values in conservation approaches	87
4.3	Developing biocultural conservation approaches	88
4.3.1	Exploring biocultural diversity	88
4.3.3	Hotspots of biocultural values?	89
4.3.4	Including indigenous peoples, mainstream religions and broader society	89
4.4	Lessons learned in support of biocultural conservation approaches	90
4.5	Conclusions	91

Chapter 5

Mixing Waters: A Cross Cultural Approach to Developing Guidelines for Fishers and Boaters in the Dhimurru Indigenous Protected Area, Australia 93

5.1	Introduction	94
5.1.1	Origins of the 'both ways' approach	95
5.1.2	The "both ways" approach in Dhimurru Indigenous Protected Area	96
5.1.3	The Yolŋu, Saltwater People living on sea country	98
5.2	Methods	101
5.3	Results	102
5.3.1	Species and Areas of Importance to Yolŋu and IPA management	103
5.3.2	Perception of fisheries related issues and their cultural significance	106
5.3.3	Management Implications and Responses	109
5.3.4	Guidelines for Recreational Fishers and Boaters: a 'both ways' approach	111
5.4	Conclusions	114
5.4.1	Improving cross-cultural learning within the 'both ways' approach	115
5.4.2	The role of researchers in a 'both ways' approach	116

Chapter 6

Spiritual leaders build common ground for community conservation of sacred natural sites in the face of neoliberalism in Ghana and Guatemala 119

6.1	Introduction	120
6.2	Methodology	121
6.3	Results Ghana	122
6.3.1	Spiritscapes and the role of spiritual leaders in Ghana's Upper West region	122
6.3.2	Community capacity building helps creating a common ground	126
6.3.3	A rights-based approach to help protect the Sacred Groves	128
6.4	Results Guatemala	130

6.4.1	Legal recognition for Guatemala's spiritscapes and sacred sites	130
6.4.2	Ajq Jiab working with the government	135
6.4.3	Ajq Jiab facing opposition from the private sector	137
6.5	Conclusions and discussion: elements for creating a common ground	138

Chapter 7

Connecting Policy and Practice for the Conservation of Sacred Natural Sites		143
7.1	Sacred natural sites: Past, present, Future	144
7.1.1	Sacred to whom, where, when?	145
7.1.2	Sacred natural sites in the conservation movement	147
7.2	Opportunities for including sacred natural sites in conservation policy and practice	149
7.2.1	Policy spaces under the CBD for the recognition of sacred natural sites	150
7.2.2	Sacred natural sites, effective means for conservation?	153
7.3	National uptake and implementation	154
7.4	Towards a common ground	156

Chapter 8

Conclusions and Discussion: A common ground for worldviews in the conservation of Indigenous sacred natural sites		165
8.1	Results by research question	166
8.1.1	The significance of Indigenous sacred natural sites for nature conservation practice, management and policy	167
8.1.2	Biocultural approaches and their contribution to the conservation of Indigenous sacred natural sites	168
8.1.3	Indigenous efforts towards creating common ground in conservation and their implications for Indigenous rights and ontologies	169
8.1.4	Universal elements to create a common ground for the conservation of Indigenous sacred natural sites	171
8.2	Conclusions & discussion on the significance of the research	173
8.2.1	Biocultural conservation approaches can enable the creation of a common ground, but they may also constrain Indigenous ontologies	173
8.2.2	Conservation and development actors can learn from other worldviews and ontologies in order to improve the conservation of Indigenous sacred natural sites	175
8.2.3	Non-human agency and spiritual governance are under-recognised in the conservation of spiritscapes and sacred natural sites	176
8.2.4	Combining an ethnographic approach with an engaged and participatory research strategy is useful for considering multiple ontologies	177
8.3	Possible social impact of the study: moving towards a new paradigm of conservation requires a common ground	178

8.4	Reflections on the study, identification of weaknesses and their significance for my research results	179
8.5	Recommendations	181
8.6	Final remarks: from common grounds to common ground?	182
References		185
Glossary		202
Abbreviations		204
Summary		206
Samenvatting		210
Resumen		214
About the Author		218

List of figures photos and tables

Figure 1.1	Shu Sagrib-Al, a sacred mountain in north-western Guatemala.	17
Figure 1.3	Multi-scale and multi-level conceptual framework for the study of common grounds for the conservation of Indigenous sacred natural sites.	28
Figure 1.4	Map showing research locations	34
Figure 1.5	Thesis structure.	41
Figure 2.1	Sign at Cape Arnhem in Dhimurru Indigenous Protected Area, North East Arnhem Land, Australia.	47
Figure 2.2	Rogelio Mejia and José de los Santos are Tayrona from the Sierra Nevada de Santa Martha in Colombia.	59
Figure 2.3	Ceremony at Bogd Khan Mountain, Mongolia.	66
Figure 3.1	Karamala Dreaming.	69
Figure 3.2	Integrating biocultural diversity in nature conservation	74
Figure 3.3	Expressions of cultural and spiritual values related to sacred sites and species.	77
Figure 4.1	Goreumbi sacred natural site, Jeju, South Korea.	83
Figure 4.2	The ruins of Tikal, Petén National Park and World Heritage site, Guatemala.	85
Figure 4.3	The Blue and John Crow Mountains in Jamaica.	88
Figure 5.2	Dhimurru Indigenous Protected Area in North East Arnhem Land, Australia.	97
Figure 5.3	President Kevin Rudd receiving Dhuwa law.	101
Figure 5.4:	Yolŋu Traditional Knowledge in sea country: Species, habitats and indicators.	103
Figure 5.5:	Perceived environmental issues, impacts, cultural importance and management implications.	107
Figure 5.7:	Guidelines for Fishers and Boaters (adapted from Dhimurru 2010).	112

Figure 5.8 Sea Country Rangers on Patrol.	115
Figure 6.1 Ceremony at Shu Sagrib-Al, Guatemala.	119
Figure 6.2 Poster developed for CBD COP 10, in Nagoya, Japan 2010.	123
Figure 6.3 The Tingandem and his assistant inspect the damage of illegal mining activities, Tancharra, Ghana. Source: Bas Verschuuren.	126
Figure 6.4 Sequence of events of different stakeholders on the sacred groves conservation project .	127
Figure 6.5 Cover of the “Initiative in support of the law on Sacred Natural Sites of Indigenous Peoples No. 3835.”. Source: Oxlajuj Ajpop.	131
Figure 6.6 A visitor sign saying “No against mining” at Shu Sagrib-Al, sacred natural site, Santa Cruz del Quiché, Guatemala. Source: Bas Verschuuren.	133
Figure 7.1 Mphathe Makaulule from Venda, South Africa speaks about her experiences with the IUCN-UNESCO Guidelines.	143
Figure 7.2 Cloch-Chearcal Agus Cairn also called Dromberg Stone Circle.	146
Figure 7.3 The custodians and their supporters that drafted the six-point plan to help protect sacred natural sites. Source: CSVPA.	160

Cover Image: Pacaya Volcano is one of the most sacred natural sites to the Maya in Guatemala. Source: Bas Verschuuren.

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Preface

This thesis is not merely a scientific inquiry but also encompasses my personal exploration of a common ground for understanding sacred natural sites. It is the result of my conservation work and applied scientific studies which I undertook for almost two decades. Coming from a background in Tropical Forestry – Nature Conservation (BSc) and Environmental Systems Analysis (MSc), my earliest explorations of sacred natural sites took an environmental sciences perspective, after which I gradually moved towards the fields of sociology and anthropology. I have experienced this shift as a natural process of change that shows throughout my career.

Over the course of the last decade when the importance of sacred natural sites became recognised more explicitly by the conservation community, I was fortunate to take part in many international conferences and meetings that signified this process. These meetings brought together scientists, practitioners as well as policy makers from various governments and multilateral conventions to build a body of reference work that would help guide protected area managers and conservation planners in working with sacred natural sites and their custodian communities. The introduction of the concept of sacred natural sites in the international conservation community also led to two notable developments: the IUCN-UNESCO Best Practice Guidelines No. 16 (Wild & Mcleod, 2008) as well as the first peer reviewed benchmark publication on the subject (Verschuuren et al. 2010). The first provided me with an opportunity to contribute to a technical way forward to help obtain recognition for sacred natural sites in practical conservation projects, while the second inspired me to do more academic work and pursue applied research on the subject.

Both developments also inspired me to co-found the Sacred Natural Sites Initiative (SNSI, see: www.sacrednaturalsites.org), which allowed me to collaborate directly with custodians, traditional knowledge holders, conservationists, academics and others in support of the conservation and revitalisation of sacred natural sites. Since 2008 SNSI built a conservation programme that supports the custodians of sacred natural sites in Zanzibar, Ghana, Guatemala, Mexico, Nepal and many other places. The initiative also provided a platform for the custodians of these sacred places at the conservation meetings mentioned above. Here, they could network, present their work and make their voices heard.

After many years of supporting custodians, developing inroads into the conventional conservation community I felt that many important questions remained unanswered. This thesis is my way of charting out deeper scientific explorations that

may add new insights to the interdisciplinary fields of environmental and social science, and help build partnerships between applied research and the conservation needs of sacred natural sites and their custodians on the ground.

Over the years, I gradually became more interested in sacred natural sites as social constructs, hence in the ways in which they are understood by Indigenous peoples, conservationists and other actors such as policy makers. The book I co-edited in 2016 (Verschuuren & Furuta, 2016) clearly manifests this interest, because it was developed in parallel to my writing of this thesis. I became more acutely aware of the ontological differences between Indigenous peoples and conservationists as well as the ways in which these multiple ontologies were played out in the struggle for the conservation of sacred natural sites. I became aware of the many disjunctures, tensions and contestations between these different worldviews and I realised that they would need to be bridged and reconciled if conservation was to proceed on a common ground. Such common ground would be crucial to the development of a new paradigm for conservation in which conservation would be co-created, more equitable and ethically just, more sustainable and effective as well as more widely supported. Through my work on this thesis I have been able to explore these different aspects of sacred natural sites conservation, and I hope it will assist myself and others in enabling the creation of a common ground between Indigenous peoples and other conservation and development actors.



Chapter 1

Introduction

< Figure 1.1: Shu Sagrib-Al, a sacred mountain in north-western Guatemala.

The Mayans described Shu Sagrib-Al in the Popul Vuh - the Maya Holy Book - as the place of the awakening of the sun. The communities surrounding Shu Sagrib-Al bought the summit of the sacred mountain to protect it from forestry and mining operations. The national council of spiritual leaders (Oxlajuj Ajpop) aims to support the restoration of many more sacred natural sites identified in the Popul Vuh by using the expertise of local communities as guidance for restoring biocultural landscapes. Source: Bas Verschuuren.

1.1 Tracing the sacred in nature

Whether we are aware of it or not, the way we view nature is culturally determined and reflects a certain Zeitgeist. Think of the pristine wilderness of the great American nature philosophers Muir, Thoreau and Leopold. Their wilderness was essentially constructed by the Indigenous nations that roamed and cultured these lands long before their scholarship arrived. Obviously, these Indigenous nations did not simply abandon their ancestral lands and sacred sites to make way for the wilderness of these philosophers. Despite violence, persecution and forced eviction, at the hand of a developing nation, the Indigenous First Nations of the north American continent constantly co-constructed a middle ground where the process of change could be negotiated to take place (White, 1991). While many lost their ancestral lands and were moved to reservations, the predominant paradigm of wilderness gave birth to the conservation movement, that would once again preserve natural beauty and landscapes and create the world's first national parks. Nonetheless, like elsewhere in the Americas (see figure 1.1) Indigenous beliefs related to nature and their sacred places remained and keeps challenging the dominant cultural construct of nature until this very day.

In Europe, shifting cultural views of nature have similarly affected the importance that sacred natural sites have in the contemporary landscape and society. The view of nature as the divine Garden of Eden within a European repertoire - as found in the work of 18th century German writers von Schiller, Hölderlin and Goethe, the French philosopher and composer Rousseau and English romanticists Wordsworth, Shelley and Keats - was build up from a romanticized Christian worldview common in these times. Before our collective modern worldview of nature appropriated these earlier romantic constructs, nature was a much more mythical and spirited place and full of sacred places. In medieval Europe, for example, nature was a dangerous place beyond the protection of God and the comfort of cities and homesteads. It was a place filled with sacredness and the supernatural; it was the place where witches practiced their rituals, monsters and dragons roamed, and where endless forests presented the risk of, falling off the edge of the world. Gustave Moreau's (1826-1896) romantic account of St George slaying the dragon, dating back to the 7th century (Figure 1.2) is symbolic of how the influence of the Church was engrained in the romanticists' notions of nature. Slaying the dragon was slaying medieval pre-Christian spirituality and its related views of nature.

It took Christianity more than seven centuries to do away with the traditional nature beliefs that had populated Western European lands for generations.

Practitioners of those beliefs became “witches” and “heathens” and were persecuted while their sacred places were destroyed and - in the seventh century by Papal decree - replaced by chapels, shrines and churches. Traditional days of ceremony and ritual were replaced by Christian name days of saints. This process of change took place through brutal domination and subordination and co-optation along the continuous construction of a common ground. The cultural and religious views shifted due to the will of dominant religious-political powers and deep-seated local beliefs in nature spirits and mythological worldviews transformed into a new image of nature where sacred places were mostly seen as historic and symbolic exemplars of times past and on occasion revived.

From a God-fearing place in the Middle Ages to the garden of Eden in 18th century romanticism, nature has now become ‘biodiversity’ (Takacs, 1996) or a set of ‘ecosystem services’ readily available to the global capitalist system. Within this scientized, monetized understanding of nature there is little space left for what figured so prominently only a few centuries ago: the spiritual and the sacred. Yet, at the very height of neoliberalism, nature as we know it starts to show cracks, and is being ‘rediscovered’ (Posey, 1999). Conservation scientists investigating places of high biodiversity and ecological value find that these were often places of cultural importance, deemed sacred and looked after by local and Indigenous people for centuries. Subsequently these areas have become known as sacred natural sites (Bhagwat & Rutte, 2006; Dudley et al. 2010; Lee & Schaaf, 2003; Verschuuren, 2010).

Figure 1.2: Saint-Georges et le dragon. St George and the dragon. Source: Gustave Moreau [Public domain] Wikimedia Commons.



Sacred groves, mountains, lakes, caves, rivers, and rocks are all spiritual places where religious wisdom, traditional knowledge, and indigenous science converge with features of the geographical landscape. Well-known places are Uluru, the monolith in the centre of Australia's co-managed protected 'Uluru Kata Tjuta', the sacred forests of the Western Ghats stretching thousands of kilometres along India's western coast and covering over seven UNESCO World Heritage sites. Or Mount Kailash - a transboundary protected area situated in India, China and Nepal and sacred to hundreds of millions of followers of Hinduism, Sikhism, Jainism, Tibetan Buddhism and Bon shamanism. Sacred natural sites can be considered to be the oldest conserved areas on earth (Dudley, 2010). Yet, they have received scant recognition for their prominent role in protected areas, World Heritage sites or conservation in general. Where they did receive attention they have been subsumed under a global protectionist conservation paradigm in the name of biodiversity; only recently have sacred natural sites been acknowledged as places rich in social interactions including the maintenance and replication of social practices, beliefs, and institutions (West & Brockington, 2006).

The sacred natural sites of Indigenous people are managed and governed by their human guardians: shamans, healers, custodians, and rural communities rather than by religious adherents and institutions. Sacred natural sites are thus rooted in an animated spirituality that is innate to nature and Indigenous worldviews. Although sacred natural sites are gradually becoming known for their potential in nature conservation, the importance of the underlying cultural and spiritual significance of these sites remains undervalued and insufficiently understood by scientists, conservationists and policy makers. How then are these animated places included, integrated and negotiated in nature conservation discourse, planning, and project implementation?

1.2 Creating a common ground for the conservation of sacred natural sites

In this thesis, I focus on the creation of a common ground for the conservation of sacred natural sites of Indigenous people in Northern Australia, Ghana and Guatemala. In these places, Indigenous people hold old cultural worldviews distinct from the non-Indigenous people that have more political power. A common ground then consists of the worldviews and realities of Indigenous people as well as non-indigenous conservation and development actors that affect sacred natural sites. Such common ground is commonly created out of the resolution of contestation, violence, political opposition, participation, representation, reconciliation and diplomacy.

This thesis builds on applied ethnographic research undertaken mostly as part of conservation projects. I looked for spirited rocks, rivers, mountains, and trees that could be integrated into conservation plans. I realised that the real challenge would not be understanding the geography, ecology and biology of these sacred natural sites or our ability to integrate these into conservation plans, but rather; finding a way for the spirits and worldviews of Indigenous people to equally contribute to the creation of a common ground.

I learned that sacred natural sites may inspire current conservation practices, as Indigenous realities are real in their consequences (Thomas & Thomas-Swaine, 1928). These indigenous worldviews challenge the ontological foundations on which conventional conservation management and policies - often dominated by Western science and interventions of NGOs and governments - are usually based. I used my experience in studying the construction of common grounds in Australia, Guatemala and Ghana as case studies to further demonstrate the importance of indigenous ontologies have to the conservation of sacred natural sites.

In Australia, land and seascape were created by the tracks of the ancestral beings in a time called "the dreamtime"; today these are visible in the features of the landscapes (Bird-Rose et al. 2002; McNiven, 2004). The spirits of these ancestral beings - giant lizards, emus, kangaroos and other mythical figures - still imbue rivers, mountains, deserts and rocks with meaning. Connected through song, story, ceremony and Indigenous law these features are part of a sacred geography or spiritscape that connects the spirits and Aboriginal and Torres Strait Islanders to the land. When a person is born, he or she receives a spirit from the place of conception, a spirit that is linked to a totem animal living in that particular feature of the sacred landscape and that stays with the person throughout his or her life. These spirits play a key role in daily life; they are a source of Indigenous law and consequently also guide the conservation efforts of the Dhimurru Indigenous Protected Area. I found that Indigenous ontologies and indigenous ways of knowing are of tremendous importance to our understanding of the role that sacred natural sites play in daily practices and the governance systems over land and seascapes. This I find to be a substantial contribution to nature conservation on which many of the vital biological and ecological functions and values of sacred natural sites including the wider land and seascape depend.

For the Maya people of Guatemala, ancestors are fearsome gods who, according to the revelations of the Popul Vuh, created the Earth and the Maya in one single day. The Popul Vuh describes the places where the gods created the Earth and many of those places are now known as sacred natural sites. The Maya worldview is based

on mythology and astronomy which inform much of the purpose of ceremony and the potential use of particular sacred sites in Guatemala. I found that the communal and spiritual significance of Maya sacred natural sites has become an essential driver to conservation of natural resources and nature. This involves advocacy efforts and rights-based approaches as well as the development of community capacities to fend off the increasing influence of uncontrolled neoliberal development interventions (e.g. industrial forestry and mining) by private companies operating with permits issued by the government. In the face of increasing threats from religious imposition and uncontrolled development pressures, a draft law to make Indigenous people *de facto* managers and governance authorities over their sacred sites was proposed in Parliament. After years of advocacy and lobbying it was not approved - following a line of argumentation that draws on potential obstruction of the implementation of neoliberal privatisation policies (Gomez, 2010). In this thesis, my research focuses on how Maya spiritual leaders and their national organisation attempt to construct a common ground for their own ontologies to be weighted equally with those of conservation and development actors.

In the Upper West Region in Ghana I encountered a patchwork of community sacred groves that was similarly under threat from neoliberal development interventions. Across the region, ancestral spirits inhabit sacred groves that are looked after by spiritual leaders of their respective communities. In Tancharra, the local custodians of the communities' sacred forests, the *Tingandem*, came together to resist an international mining company and protect their sacred groves. Together with a group of lawyers and a local NGO, I assisted in the provisioning of para-legal training and helped develop community protocols to increase the capacity of the communities to defend their rights vis-à-vis the mining company and the government. This collaboration contributed to building a common ground between all actors, and in this thesis, I focus on the role of the local NGO, the communities and their spiritual leaders in constructing this common ground.

As the above experiences and others in multiple countries show, the conservation of sacred natural sites is often rooted in the application of rights-based approaches (Jonas, 2012; Bavikatte, 2009; Colchester, 1994, 2004). After generations of 'protecting' nature by moving Indigenous people out we now know that these very people contributed significantly to the creation of the environmental qualities and heightened biodiversity that conservationists value in those areas (Caillon et al. 2017; Wilshusen et al. 2011). These insights have also given rise to tensions with those defending protectionist conservation practices at the expense of community conservation efforts (Lele et al. 2010). I have recently explained (Verschuuren

2016b) how ancient religious and Indigenous philosophies and practices can be made more relevant to modern conservation approaches, such as protected areas. In places where protected areas and World Heritage sites have been developed on ancient sacred sites their conservation narratives are often interwoven with histories of religious, societal and political contestation. While the recognition and conservation of sacred natural sites certainly benefit from the development of rights-based approaches (see for example Chapters 2, 6 and 7), they also provide opportunities for creating a common ground between Indigenous and non-Indigenous actors such as western conservationists and development actors.

In my view, there is something more elementary besides access, ownership and cultural use rights, something more fundamental and more human. Perhaps it is the very diversity and uniqueness of Indigenous peoples that marks their real value to humankind and is worthy of recognition and legal protection? I think that cultural diversity in all its expressions and forms, especially the spiritual, is critically important to the shaping of people's worldviews, their understanding of sanctity and their interactions with nature. This view has not been given much consideration, let alone priority in developing global conservation and development efforts until relatively recently.

Perhaps a significant turning point in the community of proponents of protected areas were the recommendations on cultural and spiritual values of protected areas drawn from the 2003 World Parks Congress (IUCN-WPC, 2003). These recommendations opened the way for sacred natural sites to be taken seriously by large conservation actors such as UNESCO and IUCN. I have personally been part of these developments from inside of IUCN and I am currently involved with developing IUCN Best Practice Guidelines on the cultural and spiritual significance of nature in the governance and management of protected and conserved areas (IUCN & WCPA, 2018), as well as the production of an edited volume on the same topic (Verschuuren & Brown, n.d.)

Bringing spirituality and worldviews into the nature conservation debate requires probing terrain yet mostly uncharted by conservation and development actors. It requires recognizing and taking seriously the realities of Indigenous people. This will no doubt affect the philosophies and practices that have shaped conservation and development to date. In search of how a common ground can be constructed between Indigenous people, conservationists, and neoliberal development actors, this thesis explores the manifold ways in which spirituality and sacred natural sites have made inroads into the conservation of nature.

1.3 Problem statement

Indigenous and local communities have since long managed and governed the landscapes they inhabit, often producing and sustaining high levels of biodiversity, particularly in sacred natural sites (Bhagwat, 2006; Dudley, 2010; Persoon, 1994). Despite the existence of thousands of Indigenous cultures, indigenous worldviews and knowledge are only sporadically taken into account by institutions responsible for managing and conserving landscapes and protected areas. Vested global conservation interests lead to a revival of protectionist approaches in biodiversity conservation but these are based on incomplete arguments against community-based conservation (Wilshusen, 2011). Most of these arguments do not consider the historical and cultural context and influences of Indigenous and local people on biodiversity in the region. I here examine the idea that the continuously evolving concept of biocultural diversity, e.g. the recognition that biological and cultural diversity are inextricably linked (Posey 1999; Pilgrim et al. 2009) can create common ground for conservation. The alternative is seeing nature and culture as separate, with their own fields of management and governance, and which can make nature and heritage conservation problematic (Harmon, 2007). As mainstreaming social sciences into conservation efforts is seen as a way to strengthen the recognition of biocultural diversity, in this thesis I show that it can also contribute to creating a middle ground based on a better understanding of the societal and ontological aspects of conservation issues (Bennett et al. 2016).

In addition, many authors have stated that the reconciliation of worldviews and cosmovisions would allow to bring enchanted and mystified views of nature back into the realm of conservation, but they offer little practical advice as to how this should be achieved (Agrawal, 2003; Alegre & Paulo, 2006; Byrne, 2010a; Mallarach & Papayannis, 2007). The same goes for postcolonial studies and political ecology, which have pointed at the structural inequities and power imbalances that bedevil the realms of conservation practice and policy making today (Verschoor 2009; Vivieros de Castro 2008). I recognise the need to better understand previously undervalued worldviews, the supernatural and the numinous character that instils agency in Indigenous sacred natural sites and makes them capable of creating real change.

Authors like Lele (2011) also argue that protectionist approaches to conservation are based on a compartmentalised understanding of scientific disciplines, which does not take into account peoples' worldviews. Indeed, when conservation efforts are based on Cartesian science and fail to recognise Indigenous peoples' ontologies this is likely to jeopardise conservation outcomes such as the protection of biodiversity and ecosystems (Reyers, et al. 2010). When sacred natural sites are deprived of the

very people that hold them sacred, and spirituality no longer helps to govern and maintain them, their *de-facto* conservation benefits such as elevated biodiversity and ecosystem health are often degraded quickly (Verschuuren et al. 2010; Pungetti et al. 2012).

The failure to recognise Indigenous worldviews and cosmovisions as being of equal value as scientific knowledge is a gap that continues to exacerbate political, economic, religious, educational and conservation inequalities (Atran et al. 2005; Bartlett et al. 2012; Peterson et al. 2010). Conservationists see sacred natural sites as places that can contribute land and biodiversity to the conservation domain. This view leaves little space for the realities of Indigenous people that see these places as central to their spirituality and cosmology, and that define the world as they know it. Many conservationists often have difficulties in seeing that sacred natural sites are spiritual, cultural and social constructs as much as features of nature or natural areas; yet these aspects are in fact interrelated. It may not come as a surprise that most of the recent literature on sacred natural sites has been produced by conservationists focussing on biodiversity conservation, hence the focus on the 'natural' aspect of sacred sites. Several authors offer concise overviews of this work (Tiedje, 2007; Verschuuren et al. 2010; Verschuuren et al. 2016). One reading of this literature is that sacred natural sites and their cultural and spiritual values should be promoted and integrated into existing conservation efforts. Although these efforts are laudable and increasingly informed by the social sciences, they remain insufficiently informed by Indigenous worldviews and neither are they based on a common ground.

1.4 Research objective

This thesis aims to better facilitate the plurality of constructions of common grounds based on the recognition of the rights and realities of Indigenous people and contribute to conservation practice, governance and policy. Interest in the importance of sacred natural sites for nature conservation purposes has seen an upsurge roughly since the turn of this century. Although this heightened interest has contributed to our understanding of how conservationists perceive sacred natural sites to be important, we know relatively little of their role in Indigenous people's realities (Berkes, 1999; Carmichael et al. 1994; Posey, 1999). Indigenous people are increasingly invited to participate in conservation and aspects of their knowledge are integrated in ways that conservation is practiced but Indigenous people's ontologies have long been hidden or omitted from the conservation narrative, its practices, management and policy.

In order to address this gap, this thesis aligns with Robson (2011), Byrne (2010, 2012), Studley (2002) and Verschuuren and Furuta (2016) in terms of

advancing a social science perspective on the conservation of sacred natural sites. It offers an opportunity for considering multiple ontologies and hence for treating indigenous ontologies equally to those of non-indigenous conservation and development actors. Doing so will lead to identifying ontological disjunctures as well as synergies that are required to come to a better understanding of the differences between multiple ontologies and how common grounds are being constructed between them.

1.5 Conceptual Framework

This thesis engages with several emergent discourses on Indigenous peoples' worldviews, spirituality and rights in order to improve recognition for the role of sacred natural sites in conservation practice, management and policy from the local to the international level. The framework has been developed on the basis of the following, mutually interdependent conceptual elements brought together to analyse the creation of common grounds, namely the concept of a common ground itself but also the concepts of biocultural diversity (e.g. reconciliation of interconnectedness of nature and culture); rights-based approaches (including cultural and biocultural rights); and the notion of multiple realities and ontological plurality which are further explained below.

1.5.1 A conceptual approach for constructing a common ground

This thesis brings together empirical studies and critical analyses of Indigenous sacred natural sites in different geographical, ecological, cultural and spiritual contexts. As these contexts vary across different case studies I study the development of different common grounds between indigenous and non-indigenous actors in the specific locations. Eventually, I bring these studies together in an effort to distil common elements for the construction of a generic common ground, a concept developed by White (1991) and Cronon (1996).

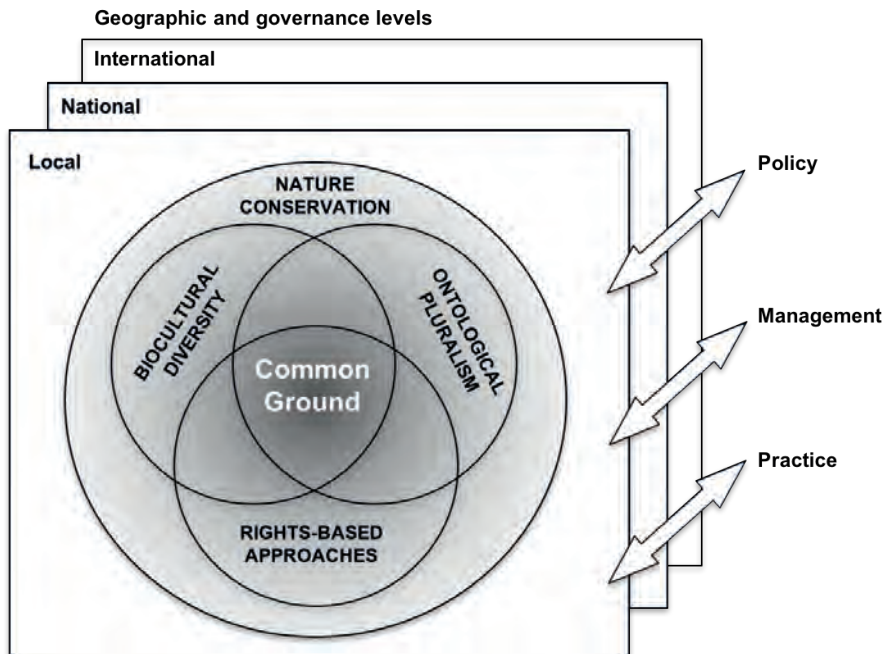
Complex multi-scale and multi-level perspectives meet with worldviews and spirituality across geographical scales and governance levels (Figure 1.3). Where they meet, I argue, a common ground is created. This common ground is based on White's ideas about his work on the middle ground:

“Diverse peoples adjust their differences through what amounts to a process of creative, and often expedient, misunderstandings. People try to persuade others who are different from themselves by appealing to what they perceive to be the values and the practices of those others. They often misinterpret

and distort both the values and practices of those they deal with, but from these misunderstandings arise new meanings and through them new practices” (White, 1991, p. 10).

I use the term common ground because, as Deloria (2006) suggests, “...the idea [of a middle ground] gets simplified: in two words it invokes a contest for terrain and a sense of dualistic boundaries that, in relation to another, produce a middle”. The concept of a common ground, on the other hand, enables an improved understanding of the role of worldviews in nature conservation practice, management, and policy (the arrows in figure 1.3) across geographical and institutional levels, e.g. local, national and international (the square fields in figure 1.3). The concept of a common ground thus helps to prevent unintended creation of a simplistic dualistic notion that is often foreign to indigenous ontologies. The common ground thus manifests itself as an analytical platform with space for the ontological politics of humans as well as non-humans, and which includes the spiritual dimension of sacred natural sites.

Figure 1.3: Multi-scale and multi-level conceptual framework for the study of common grounds for the conservation of Indigenous sacred natural sites. Source: Adapted from Verschuuren et al (2010).



The conceptual framework for studying the creation of a common ground suggests that sacred natural sites are local phenomena that can be viewed as elements of an

international biocultural conservation network. Recognizing sacred natural sites as a network derives from the worldviews of Indigenous custodians who see these places as ontologically and spiritually connected (Dobson & Mamyev, 2010) as well as from conservation biology perspectives where sacred natural sites contribute to species and ecosystem connectivity across landscapes (Bhagwat et al. 2005; Callicott et al. 2007; Freeman, et al. 2015). The conservation of sacred natural sites thus requires working with networks of various actors, both human and non-human, who interact across geographical scales and intersect with different levels of governance. At the international level, which consist of institutions, agreements, and conventions, sacred natural sites increasingly gain recognition. Specific international tools and guidance have been developed for integrating Indigenous peoples perspectives into conservation and development projects at the national and regional levels (Secretariat of the Convention on Biological Diversity, 2004; Wild & Mcleod, 2008). Implementing this guidance at the national level is critical because here national policies, laws and state actions are set, but recognition of sacred natural sites is often insufficient. At the local level, village committees, networks of elders, spiritual guides and individual custodians represent locally respected and venerated deities, spirits and ancestors which in turn instil agency on their respective sacred natural sites that may affect the wider land and sea scape (see Chapter 6). This representation of institutional power directly draws on Indigenous people's worldviews, especially on the ways in which their ontologies are enacted and the spiritual and supernatural become manifest. Inadequate national recognition of this local spiritual and institutional agency can directly jeopardise conservation of sacred natural sites as it may expose the vulnerable to the forces of development, religion, modern education and even conservation itself.

1.5.2 Biocultural diversity: reconciling nature and culture

Nature conservation has traditionally been informed by debates between biocentric and anthropocentric approaches. This study continues along the lines of several authors who aim to bridge this perceived divide (Brosius, 2006; Harmon, 2007; Mascia et al. 2003). I draw on knowledge from approaches such as socio-ecological systems and adaptive management (Berkes & Turner, 2006; Holling, 2001) and examine the concept of biocultural diversity in relation to the conservation of sacred natural sites (Apgar, et al. 2011; Hay-edie, et al. 2011; Maffi, 2005a). According to Posey (1999), biological and cultural diversity are inextricably linked as a phenomenon known as biocultural diversity. Biocultural diversity, the total variety exhibited by the world's natural and cultural systems on which all life is formed

(Maffi, 2001) has been measured by Harmon and Loh (2005) at the national level to elucidate correlations, relationships, and complex interactions between human and non-human species. They use the number of languages, religions, and ethnic groups as a proxy for cultural diversity, and the number of bird and mammal species and the number of plant species as a proxy for biological diversity.

The concept of biocultural diversity is also deployed in the development of biocultural conservation approaches - especially for overcoming the nature-culture dichotomy (Caillon, 2017; Harmon, 2007; Pungetti & Cinquepalmi, 2012; Verschuuren, 2010). While most of the literature on biocultural conservation approaches describes the explicit inclusion of Indigenous and local people's knowledge and expertise, ontological pluralism as means for developing biocultural conservation approaches remains under explored. This conceptual intersection is subject to the research in this thesis, especially within the context of creating common grounds for the conservation of Indigenous sacred natural sites.

1.5.3 *Rights-based approaches*

Past practices of conservation have led to forced resettlement, harsh enforcement mechanisms and physical as well a psychological abuse of Indigenous people's lifestyles and cultures. Conservation organisations have responded slowly but over the past decade they have developed Rights-Based Approaches (RBAs) to conservation to redress past and prevent future injustices. These RBAs have mostly been based on the realisation that conservation and human rights should go hand-in-hand (Campese et al. 2012). This thesis shows how Indigenous people have used RBAs to gain control over their sacred natural sites, and in some cases also specific natural resources that were sought after by neoliberal development actors such a mining companies. Conservation can assist Indigenous people in gaining substantive rights not only to nature, but also to their culture, religion, health and food. Most of the Indigenous people I worked with shared a holistic understanding in which nature and human well-being are closely linked.

In search for a more holistic approach towards RBAs I explored the concept of biocultural rights (Bavikatte, 2014; Jonas, 2012) and their application in Biocultural Community Protocols (BCPs) (Bavikatte, 2009). The concept of biocultural rights hinges on the application of a bundle of rights (Bavikatte, 2014). The concept is of critical importance to the legal empowerment of Indigenous people and local communities and directly links this to natural resource use and well-being. However, the concept has also been criticized for devaluing the rights of Indigenous people because the rights they had already obtained would be reduced to the same denominator as those of non-Indigenous people whose rights were not legally

recognised. Some indigenous lobby groups are now concerned that some States or actors will no longer respect or recognise their indigenous rights as they are tangled up with the rights or claims to rights of others (Jonas, pers. comm. 2016). Nevertheless, the development of the BCPs remains central to this thesis (see Chapters 6 and 7).

The local communities in Australia, Ghana and Guatemala where I worked formed an excellent opportunity to experience different political settings and local struggles for recognition of Indigenous people' rights and practices in conservation, particularly in relation to sacred natural sites. Much of my collaboration with them dealt with the support of their rights, making their voices heard, and their values and ontologies count (Gomez, 2010; Guri & Verschuuren, 2014; Guri, 2012; Verschuuren, 2016b, 2010). In international conservation circles these are seen as evidence of a growing effort for developing rights-based conservation approaches in support of Indigenous and local communities.

1.5.4 *Ontological plurality*

Humans in different places of the world have different ontologies that shape how they know and see the world and how they behave. Anthropologists such as Viveiros de Castro (2004; 2008) and Descola (2005, 2006, 2009) have convincingly described the implications of the ontological underpinnings of Indigenous Amerindians' worldviews for western societies and science. They have described how small-scale societies conceive of themselves as part of their environment while maintaining relationships with humans and non-humans (Viveiros de Castro, 1996; 2008). In such relational ontologies, non-humans such as plants and animals may be considered as persons living in societies of their own and entering into relations with humans because they are cosmologically related (Viveiros de Castro, 2004). The notion of humans and agential non-humans, including rocks, trees, spirits and animals, is often central to the politics of Indigenous sacred natural sites where Indigenous ontologies collide with dominant ontologies of conventional, western-educated conservationists and development actors.

In its attempt at constructing a common ground for a variety of ontologies, this thesis looks beyond the dualism between nature and culture that is part of what Descola (2006) and Latour (2012) describe as modern ontology. This modern ontology also implies "multiculturalism", the idea that we share a common reality or nature - which is all encompassing - and which is seen in different cultural ways (Latour, 2011). Most conservationists would resort to multicultural approaches that are suited to understand one version of nature, the same species of wildlife or the same landscape and seascape in order to create better conservation results. Although

this thesis draws heavily on multiculturalism, it also explores the possibilities of multiple realities that do not necessarily merge together into a one-world worldview but instead co-exist at the same time (Law, 2011).

The co-existence of multiple realities implies that there is not one agreed-upon universal reality. To quote Woolgar & Lezaun: “The empirical focus of ontological investigations is on the practices of world-making” (2013, p. 324). Hence it follows that the politics of ontologies no longer focus on who gets to speak about reality but what the reality is that is enacted and what people come to live in (Mol, 2014). This poststructuralist way of conceptualizing nature through multiple realities will have radical implications for conservationists in terms of moving beyond multidisciplinary and multicultural approaches, a view also held by Archambault (2016). It also unsettles the science-politics arrangement because it challenges the premise of one objective reality as held by natural scientists (Lorimer, 2012).

As Howitt (Howitt, 2001, p. 234) puts it: “Resources are fundamentally a matter of relationships, not things. They do not exist outside of the complex relationships between society, technology, culture, economics and environment in some pre-ordained form”. This exemplifies a relational ontology that can easily exist within the context of ontological plurality (Wildman, 1984). As such, Indigenous people are seen as world makers; they enact, perform and ‘do’ different social realities. These realities may be contested, overlapping, interacting or fluid while together they participate in the creation of a common ground.

How people understand what exists in the world around them and what does not, affects the way they make observations and give meaning to them. The Thomas theorem holds the same view: “If men define situations as real, they are real in their consequences” (Thomas, 1928, p. 527). This also suggests that the existence of an ‘objective reality’ is insufficient for explaining people’s behaviour and their resulting practices. Beliefs and practices are culturally determined or are otherwise intricately related to a worldview. This is particularly relevant to the conservation of sacred natural sites where many different realities –such as those of conservationists, Indigenous peoples and national ministries - are enacted and populate an inherently political common ground.

Creating a common ground of different ontologies also allows me to focus on the spiritual dimensions of sacred natural sites. Spirituality is often conceptualised as a value that is attributed *to* nature by humans but in Indigenous ontologies spirituality is often embodied *in* nature in the form of an ancestor, a spirit, a deity or a life force. People experience, enact and interact with spirituality in their relationship with sacred natural sites. In most worldviews, spirituality is what makes sacred natural

sites stand apart from other culturally and socially important natural places. Therefore, it plays an important role in the ontological politics of their conservation. This type of ontological politics involves itself with human as well as non-human actors that have a place in the common ground that is not only known through objective experiences and science but also through myth and cosmology (Blaser 2012; Woolgar & Lezaun 2013; Wildman 1984). In this thesis, I explore and hold a plea for the recognition of the integration of Indigenous peoples' realities in relation to their role in the conservation of their sacred natural sites. I also look at how Indigenous people's realities can be integrated into and lead to co-creation of new forms of nature conservation. Hence, I argue that the common ground has the capacity to transform conservation practice, management and policy.

1.6 Research questions

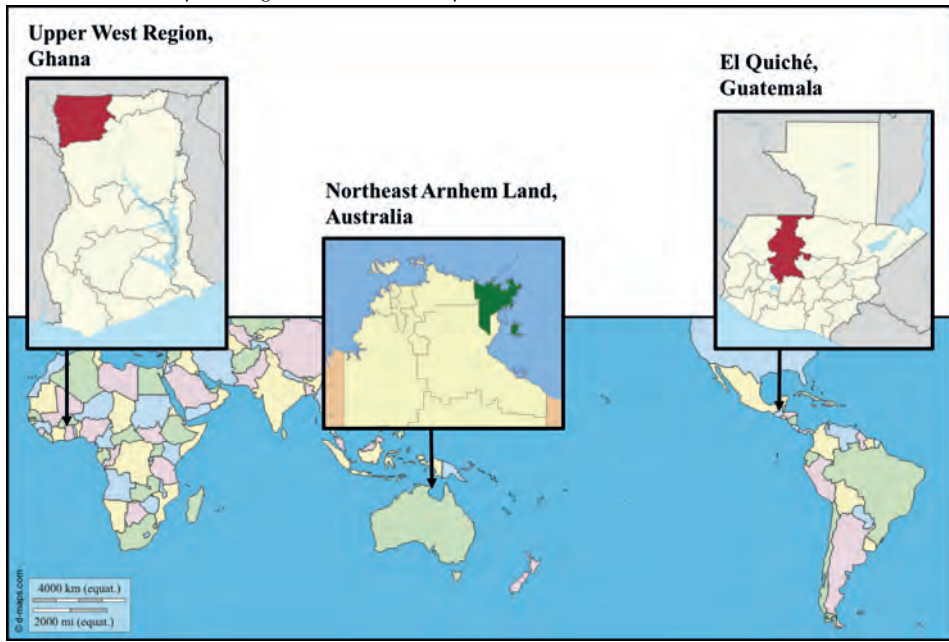
Grounded in the conceptual framework, this thesis is guided by the following research questions, and which will be answered on the basis of empirical research primarily conducted in Australia, Guatemala and Ghana.

1. How has the significance of Indigenous sacred natural sites been recognised in nature conservation globally and what are the main implications and challenges for nature conservation practice, management and policy?
2. How do biocultural conservation approaches contribute to creating common ground for the conservation of Indigenous sacred natural sites and species?
3. How do Indigenous people contribute to the creation of a common ground for the conservation of sacred natural sites and to what extent does this affect Indigenous rights and ontologies?
4. What elements are universal to the process of creating a common ground for the conservation of Indigenous sacred natural sites?

1.7 Description of Research Locations

I have spent substantial time in the field combining my work on the implementation of conservation projects with applied research, notably in Arnhem Land, Australia (about 18 months during five years), El Quiché, Guatemala (around nine months during four years) and the Upper West Region of Ghana (three months during four years). The three field locations are ecologically, culturally and spiritually very different from each other; this makes them of interest for comparing ways in which a common ground is created by Indigenous people and non-Indigenous conservation and development actors. Below I will introduce these research locations.

Figure 1.4: Map showing research locations. Sources: Composite map by the author using the following images: World map: Source: adapted from d-maps.com; Source of inset map of Ghana: By Derivative work: User: Profoss, CC BY-SA 3.0, wikimedia.org; Source of inset map Northeast Arnhem Land Australia: CC BY-SA 3.0, wikipedia.org; Source of inset map Guatemala: TUBS, CC BY 3.0, Wikimedia commons.



1.7.1 *Northeast Arnhem Land, Australia*

I have worked with the Riratjingu and Gumatj clans of the Yolŋu people in Northeast Arnhem Land, Australia. This territory, owned and governed by Indigenous people, is located in one of the most isolated regions in Australia (Figure 1.4) and has an annual temperature of 26.8 °C and an average annual rainfall of 1472 mm. (BoM, 2017). There are no major cities within a 900-km. radius, and an airstrip provides access for people working in the local mining industry that was shut down in 2014. The region has been subject to continued European settlement since the first missionaries arrived in the early 1930's. I worked with the second and third generation of Yolŋu who have been in contact with white Australians. Over thirteen languages are spoken in the region and English is often the third, fourth or fifth language of the older people that I worked with. The region is known for its coastal ecosystems and large tropical rivers that flood during the wet season and inundate the coastal zone up to 20 km inland, making it inaccessible for any traffic by land. I did my research in the Dhimurru Indigenous Protected Area (IPA) which covers 550.000 km² (Figure 5.2). Dhimurru IPA is owned and governed by Indigenous people according to Yolŋu and

Australian law and managed following IUCN category V standards e.g. a protected land and seascape where the interaction of people and nature over time has produced an area of distinct character with significant ecological, biological, cultural and scenic value (Dudley, 2008).

1.7.2 *El Quiché, Guatemala*

Guatemala is located in Central America (Figure 1.4) and has an Indigenous population of over 70% that speak over 40 different languages. My research focussed on the Quiché region around Chichicastenango and Santa Cruz del Quiché, particularly the village of San Andrés de Sajcabaja. Average annual temperature is 17.1 °C in this mountainous and heavily forested region, and average annual rainfall is 1028 mm. (INSIVUMEH, 2017)

The population here is predominantly Maya K'iche mostly practicing subsistence farming, hunting and forestry. In recent history (1960-1996) the Indigenous people of the region have been persecuted by the government throughout a series of civil wars. Despite the fact that 40.5 % of the Guatemalan population consists of Indigenous people (INE 2017), Guatemala's politics are still dominated by mestizo culture favouring neoliberal interventions over local people's well-being and territorial rights. Local communities maintain a network of Indigenous Maya sacred sites described in the Popul Vuh, see figure 1.1. Under the growing influence of evangelical and Pentecostal churches moving in from the USA many of the communities abandon their traditional Maya beliefs and their sacred natural sites. This opens the way to privatisation and modernisation that includes development of previously well governed and managed natural resources.

1.7.3 *The Upper West Region, Ghana*

The Upper West Region of Ghana is located in the sub-Saharan region bordering Burkina Faso (Figure 1.4). The research for this thesis was mostly carried out around the ten sub-communities that make up the greater community of Tancharra which is located in the sub-district of Lawra. The name Tancharra means "in between mountains" in Dagaare; both mountains are sacred. The communities of Tancharra are scattered through the hot and dry savannah landscape where rains are unreliable. Average annual temperature is 27.8°C with an annual rainfall of 998 mm. (GMA, 2017). Possibilities of employment are limited and people farm for subsistence as well as to generate income but farming is difficult and 'as unreliable as the rains' (van der Geest, 2011). Multinationals push the diverse local rain-fed agricultural system

towards mono-cropping of rice and maize, leaving farmers' families with nothing to eat when crops fail. The traditional system of governance in Tancharra, like in many other parts in Ghana, is centred around the *Na*, the chief or the *Pogna*, the chief's mother or sister, and the spiritual leader or *Tingandem*, for each of the 10 sub-counterparts. Traditional spirituality is practiced in many of the villages but there is also syncretism with Catholicism, different strands of Christianity and Islam. The discovery of gold has sparked a rush of artisanal and illegal goldmining while the government leases large concessions to foreign multinationals.

1.8 Methodology

This thesis draws on more than a decade of work as an applied scientist and conservation professional on the conservation of sacred natural sites, including extensive field experiences. The professional networks with their programmes, projects, congresses and working groups have proven a vital ground for doing applied scientific research sustained over a longer period of time. This thesis also draws on two edited volumes that each draw on a variety of unique case studies and information derived from research carried out specifically for these publications (Verschuuren 2010, 2016). I combined these sources with ethnographic and empirical data gathered from field studies based on more recent participative research experiences carried out during applied conservation projects in Australia (Chapter 5), Guatemala, and Ghana (resp. Chapter 6 and Chapter 7). These experiences, along with various other assignments of conservation work in Mexico, Mongolia, Cameroon and elsewhere, have formed the basis of my applied and collaborative research approach.

This doctoral thesis further draws on general conservation literature, grey literature and scientific articles from various disciplines ranging from biology, ecology, and geography to sociology, anthropology, and political ontology. In addition, policy research has been carried out through the review and analysis of international and national policies that set the context for the applied research from which this PhD thesis emerges.

Studying the creation of a common ground for the conservation of Indigenous sacred natural sites I concur with Lele (2011) who states that conservation is not a discipline in the sense that we understand disciplines in academia. He states: "Conservation is a goal to which conservationists subscribe. They use generalized knowledge from all relevant academic disciplines, natural and social, plus their own experiential knowledge to decide on particular actions in particular contexts to achieve their particular goal." (Lele, 2011, p. 331). Conservation is better understood

as a 'pragmatic inter-discipline' which I regard to be on a par with engineering, farming or forestry as described by Max-Neef (2005). My own experiences in combining applied ethnographic research and practical conservation-advisory work have exposed me to this 'pragmatic interdisciplinarity' as it is understood in conservation. It has led me to facilitate and analyse the creation of three different common grounds in Australia, Ghana and Guatemala. In learning lessons from creating multiple common grounds I seek to find out if these can contribute to identifying universal recommendations for creating common ground for Indigenous sacred natural sites.

1.8.1 Doing applied and participatory scientific research

Much of the research presented in this thesis has been undertaken in an applied, participatory and collaborative setting while doing conservation work. As a practitioner and engaged academic (Rasch & Köhne, 2016) I gained experience in working with several Indigenous and local communities around the world. Doing applied research answers the immediate need of local communities and is very different from being flown into an area and or community to do a consultancy and deliver external or expert advice that usually turns out to be of limited value, or disconnected from the local communities and organisations involved (Lauber et al. 2011). Instead, doing applied research and developing long term relationships with local and Indigenous communities can contribute to locally significant and useful outcomes (Guri et al. 2012; Verschuuren et al. 2015). Being in the field with people sharing different worldviews also provides an excellent opportunity for analysis and reflection on the different approaches to conservation and the common problems encountered in different management situations and governance arrangements.

Working in conservation projects involves a collaborative setting amongst Indigenous people's organisations, NGOs and governments. I also got involved with the organisation of action research (McNiff & Whitehead, 2006) that would be carried out by collaborating NGOs and Indigenous people (Chapter 6). On occasion, I also applied a collaborative research approach (Sagor, 1992) where I trained and worked alongside Indigenous people who then also undertook semi-structured interviews and directed focus group discussions (Chapter 5). What follows is a brief encounter of the specific methods applied in each of the field locations, including the specific conditions that affected the application of these methods.

In Northeast Arnhem Land, Australia, I worked on a fellowship with the Marine Biology Conservation Association with the Dhimurru Aboriginal Corporation. I did fieldwork while carrying out a consultancy on the development of guidelines for

fishers and boaters in the Dhimurru Indigenous Protected Area. From 2007 onwards, I spent three months for three consecutive years with Dhimurru and I returned again for a shorter visit in 2011 to give training workshops on sacred site management. In the field, I did participatory research, participant observation, carried out more than 20 semi-structured interviews and conducted approximately six focus groups (see the methods section in Chapter 5). I worked closely with Dhimurru staff especially the Senior Cultural Ranger who supported translation in situations which so required. In other instances, such as in interviews and cross-cultural meetings, most informants spoke English.

In Guatemala, I worked mostly with Maya K'iche from the western highlands through the National Council of Maya Spiritual Leaders, Oxlajuj Ajpop. Oxlajuj Ajpop and Sacred Natural Sites Initiative jointly developed a project taking the protection of Maya sacred natural sites as a guide for developing nature conservation planning. The collaboration created a dynamic research setting where I shifted between my roles as a project coordinator and a researcher. These positions allowed me to do research on practice, management and policy from the local to the national and international levels. I conducted 13 one-to-one, in-depth interviews with Mayan spiritual leaders, constructed two life histories, organised five focus group discussions with community members, and did participant observation especially during ceremonies held at sacred natural sites, meetings and demonstrations (Chapter 6). Some of my data were derived from the research undertaken by community members themselves as part of a participatory video project about their sacred natural sites which I organised to raise awareness and empowerment. Participant observation and interviewing were at times compromised by the safety situation in Guatemala City. While in the field, getting entangled with police brutality and violence aimed against the Indigenous people that I worked with became a very real threat. Some of my informants had suffered physical and mental abuse during the civil wars and several times these encounters came up in interviews, creating unexpected dynamics to deal with for me in my role as a researcher.

In Ghana, I worked with an NGO, the Centre for Indigenous Knowledge and Organisational Development (CIKOD) as well as spiritual leaders of the Tancharra community in the Upper West Region. Although I visited them only twice for two months in 2011 and 2014, I was able to collect a substantial amount of data, and use the data that CIKOD had collected from 2010 to 2014 doing action research during the ETC-COMPAS' African Endogenous Development Programme funded by the Dutch Ministry of Foreign Affairs. I was tasked with the internal evaluation of the programme and I also co-developed the "African Community Protocols Programme"

with ETC, Natural Justice and SNSI to which CIKOD was an implementing partner (2011-2014). While providing para-legal training on the Community Protocols (Chapters 6 and 7) we targeted the legal protection of sacred groves under threat from gold mining. At the same time, I was able to do ethnographic field research and study the processes of interaction between NGO's, foreign experts, the government, a mining company and the spiritual leaders of the wider Tancharra community. I conducted semi-structured interviews with three spiritual leaders, one of their assistants, five NGO staff, two lawyers, one representative of the mining company, two traditional chiefs, and one Pogna (the female counterpart of the chief). I also did participant observations during two ceremonies in the sacred groves.

The research supported dissemination of the project results into policy circles and to the general public. Videos and posters carried the voice of the spiritual leaders to a policy audience at the UN Forum on Forests and a concept paper on cultural and sacred forests that informed the special report of the Director General of the UN Forum on Forests (Wild et al. 2011). I also co-published an article about the communities' struggle against mining (Guri et al. 2012) and included an article on the development of the community protocols in Tancharra in a special issue of *Langscape* (Booker & Shrumm, 2012).

Although not structured as event ethnography, I undertook policy research based on participatory and observational research, expanded with semi-structured interviews undertaken during various international meetings and policy-making processes. The thesis structure (Figure 1.5) covers these applied research and practical conservation experiences from the case studies in the field to policy analysis at the international level. Often, I was also able to invite my colleagues and research subjects from the field to present their work at policy venues and international meetings such as the IUCN World Conservation Congress (2008 Spain, 2012 South Korea, 2016 Hawaii) and the CBD Conference of the Parties (2010 Japan, 2012 India). One could argue that I was perhaps more 'activist' than researcher but I concur with Rasch and Köhne (2016) that my role was more that of an 'engaged academic' as it was at times heavily co-defined by my research participants (see Chapters 5 and 6). While several chapters draw heavily from document research on international policies, insights into the workings of those policies have also been obtained through discussions and interviews with particular policy makers.

1.8.2 Free Prior and Informed Consent

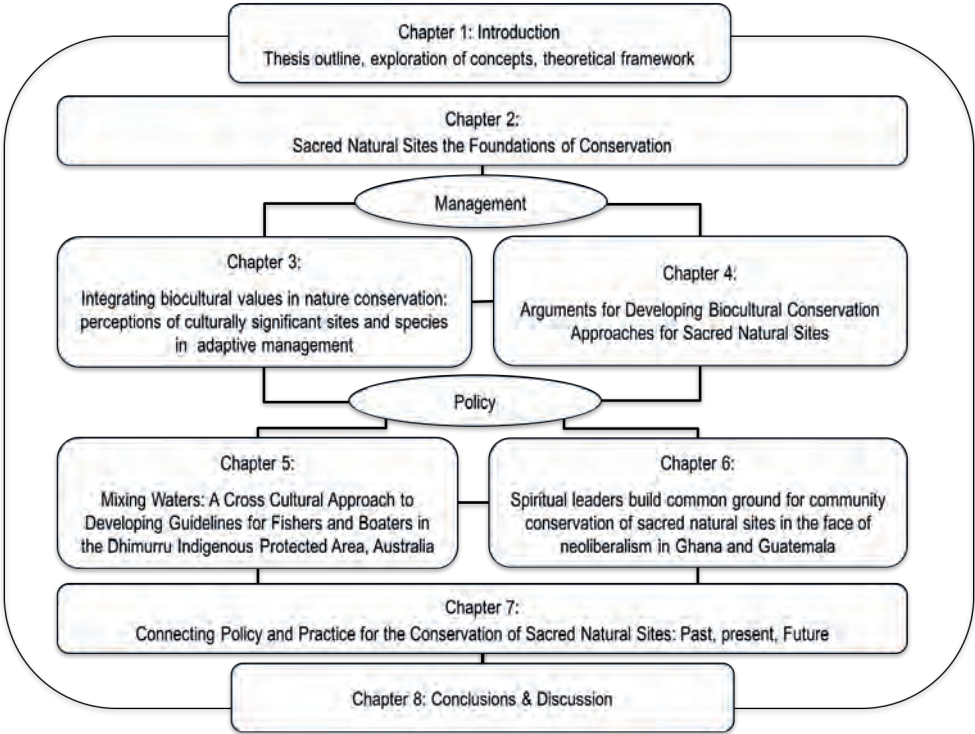
Free Prior and Informed Consent (FPIC) has emerged as a standard for engaging with Indigenous people and local communities. For many custodians of sacred natural

sites secrecy is of the utmost importance and needs serious consideration and respect (Wild & McLeod, 2008). At the same time, it should be recognized that research and stock taking can be powerful tools for the communication and conservation of sacred natural sites. For this research, I have obtained FPIC through research agreements with the Dhimurru Aboriginal Corporation in Northeast Arnhem Land in Australia and similarly with Oxlajuj Ajpop, the National Council of Mayan Spiritual Leaders in Guatemala. As my research in Ghana in part took place as an employee of ETC COMPAS my research was subject to contractual agreements between the ETC COMPAS in the Netherlands and CIKOD in Ghana. These agreements also included protocols on collecting and sharing information that I had to abide by as an employee. After my time with ETC COMPAS came to a pass I continued working with CIKOD doing applied research but this time FPIC was secured in an MoU between the Sacred Natural Sites Initiative and CIKOD.

1.9 Structure of the thesis

The thesis is structured in such a way that the management of conservation projects is dealt with in Chapter 3 and Chapter 4, and that policy aspects feature more prominently in Chapter 5, Chapter 6, and Chapter 7 (Figure 1.5). Descriptions of conservation practices can be found throughout the thesis as they permeate both management and policy. The thesis follows the premise that cultural rights in themselves are not enough in order to develop a common ground for conservation but that spirituality, worldviews and ontologies also need to be included. This approach is evidenced in the conclusions of each chapter as well as in the conclusions and recommendations chapter (Chapter 8). Figure 1.5 presents an overview of the structure of this PhD thesis, followed by a brief statement about each of the chapters.

Figure 1.5: Thesis structure.



1.9.1 Chapter 2: Sacred Natural Sites: Ancient Foundations for Modern Conservation

This chapter provides an introduction to sacred natural sites and why they are important to the conservation of nature and biodiversity (see; Verschuuren et al. 2010). It is based on the introduction and conclusion chapters of Verschuuren et al (2010) and includes a cross-disciplinary review of the literature across different academic disciplines and conservation practitioners’ areas of expertise. In addition, the chapter is based on a critical review of more than twenty case studies that specifically cover the conservation challenges of sacred natural sites, published in this same book. Chapter 2 concludes that sacred natural sites form an informal network managed and governed by local Indigenous people that goes largely unrecognized by the international conservation community as well as local protected area managers and planners. They demonstrate high conservation potential and they present an opportunity to significantly contribute to protecting and restoring biological and cultural diversity.

1.9.2 Chapter 3: Integrating biocultural values in nature conservation: perceptions of culturally significant sites and species in adaptive management

Chapter 3 shows the importance of different perceptions of sacred sites and species in the context of adaptive management. The chapter departs from a multicultural perspective and recognises a multiplicity of worldviews. It uses examples of Indigenous worldviews and conservation practices from around the world to demonstrate that these examples form part of approaches that integrate biocultural values in nature conservation. I argue that in order to be effective and sustainable, nature conservation requires to be based on both science and culture, and combine scientific data on the natural world with experiential knowledge about nature of the social-cultural groups involved. The chapter concludes that for management to be truly adaptive it requires to respond to societal and cultural changes which can be achieved by enabling Indigenous people and local communities to guide conservation efforts.

1.9.3 Chapter 4: Developing biocultural conservation approaches for sacred natural sites

This chapter addresses the sacred dimensions of nature in a historical context where the expansion of mainstream religions, colonialism, scientism, technology and globalisation prove to have had a significant impact on the survival and conservation of sacred natural sites of Indigenous people. Focusing on the modern conservation movement, these impacts have often been treated separately because of a cultural and institutional divide between culture and nature. Because this divide often impairs the management of sacred natural sites, I propose that there is a need for a conservation approach that combines nature and culture. In this biocultural discourse, the spiritual and the sacred are essential to the conservation of sacred natural sites which are presented as an interconnected network of biocultural hotspots.

1.9.4 Chapter 5: Mixing Waters: A Cross-Cultural Approach to Developing Guidelines for Fishers and Boaters in the Dhimurru Indigenous Protected Area

This chapter demonstrates the importance of Indigenous ontologies in cross-cultural coastal conservation management, particularly the development of locally relevant guidelines for fishers. The Yolŋu people identified concerns regarding recreational

fishing and boating practices of non-Yolŋu and engaged in a discussion of the issues and the subsequent formulation of Indigenous management responses. I explore the 'both ways' approach adopted by Dhimurru Aboriginal Corporation that guides collaboration between Yolŋu and non-Yolŋu. Disjunctures and synergies between the two ontologies are identified and I argue that these can be compatible as part of the 'both ways' approach. Learning from this action research, I reflect on the role of the researcher in the cross-cultural co-production of guidelines for fishers and boaters.

1.9.5 Chapter 6: Spiritual leaders build common ground for community conservation of sacred natural sites in the face of neoliberalism in Ghana and Guatemala

In efforts to protect and conserve sacred natural sites spiritual leaders in Ghana and Guatemala follow their own practices and worldviews and engage in rights-based approaches - such as developing law proposals and biocultural community protocols to gain legal recognition and protection for their spiritscapes. In the process, they also construct a common ground from the different ontologies that enrich and enable one another. The research demonstrates that beyond rights-based approaches, this common ground is essential to developing feasible and acceptable solutions for the protection and conservation of sacred natural sites. I identify 'ontological equity' as an important principle for establishing this common ground. I then argue that neoliberal approaches to conservation and resource development are prejudiced because they ignore the principle of ontological equity and suppress lived realities of sacred natural sites and the existence of the wider spiritscape.

1.9.6 Chapter 7: Connecting Policy and Practice for the Conservation of Sacred Sites

The chapter presents an analysis of some of the emerging spaces in international policy as well as recent developments in conservation practices in order to identify opportunities for the conservation of indigenous sacred natural sites. I argue that as cultural and spiritual values of nature become increasingly recognized in conservation, explicit attention to the ontological dimension of these values will be key to develop more inclusive forms of biocultural conservation. I describe how a series of conferences and the development of guidelines for protected area managers have worked to sensitize conservationists to sacred natural sites and their custodians. I then reflect on the spaces that have opened up in international policy and the opportunities these offer for the conservation of sacred natural sites, and provide two

examples of how international legislation could be implemented nationally. The chapter concludes that the conservation, management and governance of sacred natural sites should be based on a common ground.

1.9.7 Chapter 8: Conclusions and Discussion: A common ground for worldviews in the conservation of Indigenous sacred natural sites

In this Chapter I present the key findings derived from the answers to my research questions, notably several universal elements to the creation of a common ground: willingness to learn about other worldviews; application of participatory approaches and applied research; the use of cultural brokers; active processes of stakeholder engagement; agreement on governance arrangements and the adoption of ontological equity. I then discuss these four conclusions derived from the main research results: 1) Biocultural conservation approaches can enable the creation of a common ground, but they may also constrain Indigenous ontologies; 2) Conservationists should learn from other worldviews and ontologies in order to improve the conservation of Indigenous sacred natural sites; 3) Non-human agency and spiritual governance are under-recognised in the conservation of spiritscapes and sacred natural sites; 4) Combining an ethnographic approach with an engaged and participatory research strategy is useful for considering multiple ontologies. Subsequently I discuss the methodological implications of my research and indicate how the major shortcomings reflect on the conclusions. The recommendations could form part of a future research agenda for the development of a common ground between Indigenous people and conservation and development actors in relation to the conservation of Indigenous sacred natural sites.

SITE of SIGNIFICANCE

WITHIN THE ZONE DEFINED BY SIGN-
POST'S IS A SACRED AREA OF UNIQUE
SIGNIFICANCE TO ABORIGINAL PEOPLE.

UNDER SECTION 69 OF THE ABORIGINAL
LAND RIGHTS (NORTHERN TERRITORY)
ACT 1976. UNAUTHORISED ENTRY ON A
SACRED SITE CARRIES A PENALTY OF
\$1000.

IF ACCESS IS REQUIRED, THE ABORIGINAL
OWNERS CAN BE CONSULTED.

BY REQUEST OF TRADITIONAL OWNERS.

Chapter 2

Sacred Natural Sites Ancient Foundations for the Conservation of Nature in a Modern Era

Adapted from:

Verschuuren, B., Wild, R., & McNeely, J. (2010). Introduction: Sacred Natural Sites the Foundations of Conservation. In B. Verschuuren, R. Wild, J. McNeely, & G. Oviedo (Eds.), *Sacred Natural Sites: Conserving Nature and Culture*. Earthscan, London. pp. 1–13.

Wild, R., Verschuuren, B., & McNeely, J. (2010). Conclusions: Sustaining Sacred Natural Sites to Conserve Nature and Culture. In B. Verschuuren, R. Wild, J. McNeely, & G. Oviedo (Eds.), *Sacred Natural Sites: Conserving Nature and Culture*. Earthscan, London. pp. 281–291.

< Figure 2.1: Sign at Cape Arnhem in Dhimurru Indigenous Protected Area, North East Arnhem Land, Australia.

In the Northern Territory of Australia, state law protects sacred sites that have been registered with an independent authority by the Traditional Owners. Signs are put up to warn people against trespassing on the site. Source: Bas Verschuuren

2.1 Introduction

Uluru (Ayers Rock) in Australia, Mato Tipila (Devil's Tower) in the US, Mt Kilimanjaro on the border between Kenya and Tanzania, Mt Kailash on the border with Nepal, India and China, Sagarmatha/Chomolongma (Mt Everest) in Nepal and Tibet, Lake Titicaca in Bolivia, Lake Baikal in The Russian Republic, the Ganges and Brahmaputra rivers in India are but a few of the sacred natural sites that include some of the most iconic places on the planet. Among such sacred natural sites there are many more that remain little known and unsung, such as the Dai Holy Hills in Yunnan China, the Holy Island of Lindisfarne in the UK, the Golden Mountains of Altai in the Russian Republic, the sacred groves of the Western Ghats in India, the sacred lakes of the Niger delta in Nigeria and the numerous sacred islands, groves, and springs found throughout the world. In these places nature and humanity meet, and people's deeper motives and aspirations are expressed through what is called 'the sacred'. Many of these places are virtually forgotten, some receive pilgrims by the millions, and yet others are the closely guarded secrets of their local custodians. People of faith or religion, or of no particular faith at all, find inspiration in these places, and they resonate across a wide spectrum of humanity.

With habitats and ecosystems degrading and the extinction of animal and plant species increasing, sacred natural sites have drawn the attention from conservationists as potential reservoirs of biodiversity. Schaaf and Lee (2006), who compiled such conservation perspective, propose that the effective conservation of sacred natural sites will help to protect diverse and threatened human cultures and a substantial portion of increasingly vulnerable nature. Sacred natural sites, therefore, concern the well-being of both nature and humans and encompass the complex, intangible and spiritual relationships between people and nature. This chapter focusses on providing an introduction to the phenomena of sacred natural sites and their value to the conservation movement, as seen from a conservation perspective. Further on in this thesis this Chapter is placed within the context of the broader topic: "creating a common ground between Indigenous peoples and conservation and development actors for the conservation of Indigenous sacred natural sites."

2.2 Definitional fuzziness of sacred natural sites

Sacred natural sites have been defined as "areas of land or water having special spiritual significance to peoples and communities" (Oviedo & Jeanrenaud, 2007). This working definition is deliberately broad and open and recognizes the limitations of each of the words 'sacred', 'natural' and 'site'. Other terms are used in this thesis to suit specific or disciplinary purposes, see for example Chapters 4 and 7. These

terms are also covered under the broad definition of sacred natural sites which ensures that the concept remains open to further articulation. Here I present some of those definitions and their use as we explore different narratives of linking local people's and conservation practices and conservation policy.

Each of the terms 'sacred', 'natural', and 'site' has its limitations. 'Sacred' has different meanings to different communities. Basically, it denotes deep respect and being 'set aside' for spiritual or religious purposes. The original term had an aspect of 'fear' for the disapproval or wrath of the gods, spirits or ancestors that is now less current. The word 'natural' is used to contrast with areas of human construction with little or no nature (e.g. mosques, churches or temples), which are commonly understood as sacred sites in the developed world, see for example Mallarach and Papayannis (2010) and Mallarach et al (2012). Thus, 'natural' denotes that a site contains 'nature' of some kind that is often regarded as valuable. What exactly 'natural' means or should mean has long been debated within the conservation world (Callicott, 1994). In the context of sacred natural sites, it certainly does not mean an absence of human connection, influence or interaction (Golliher, 1999). Finally, the term 'site' is a broad concept which includes vast areas and places of all kinds, encompassing complete territories and extensive landscapes, as well as small places like a single rock or tree. In this thesis, I use the term 'sacred natural sites' as an open concept created by conservationists but with an evolving articulation and contestation by indigenous peoples, scientists, and policy makers alike.

Sacred natural sites are part of a broader set of cultural values attached to places and which "fulfil humankind's need to understand, and connect in meaningful ways, to the environment of its origin and to nature (Putney, 2005, p. 132). Sacred natural sites consist of all types of natural features including mountains, hills, forests, groves, rivers, lakes, lagoons, caves, islands and springs. They consist of geological formations, distinct landforms, specific ecosystems and natural habitats. They are predominantly terrestrial but are also found in inshore marine areas, islands and archipelagos. In many sites nature is itself sacred, while in others sanctity is conferred onto nature by connections with spiritual heroes, religious structures or sacred histories. Many sacred sites are primarily built places, such as temples, mosques, chapels and even churches and while being supportive of their conservation; such archaeological or architectural elements are not specifically addressed in this thesis as it focusses on Indigenous sacred natural sites.

2.3 Sacred natural sites and religion

The term sacred natural sites implies that these areas are in some way holy,

venerated or consecrated and connected with religion or belief systems, or set aside for a spiritual purpose. The word 'spiritual', does not necessarily imply a religious institution. Most people who experience the spiritual significance of nature (including secular scientists) do not belong to a formal religion (Taylor, 2010). Not all of these spiritualities will be linked with sacred natural sites but those sacred natural sites that are associated with living cultural and spiritual practices usually do have current institutions and rules associated with them. These institutions are usually religious or spiritual in nature, e.g. guided by divinities or angels and may be distinct from other parts of society, while in some communities of indigenous and traditional peoples, sacred site institutions are closely integrated within society with little distinction between the sacred and the secular, the religious and the civil.

The vast majority of sacred natural sites were arguably founded by indigenous or folk religions and spiritualities (Golliher, 1999), but many were subsequently adopted or co-opted by mainstream or world religions. There is consequently a considerable 'layering' and mixing of religious and other belief systems. While 80 per cent of the world's population profess to belong to Christianity, Islam, Hinduism, or Buddhism, many continue to adhere to some traditional beliefs or folk religion (O'Brien & Palmer, 2007). Sacred natural sites are thus connected to a wide range of socio-cultural systems and institutions and to different dynamics of change and cultural interaction. Sacred natural sites are the focus of spirituality interacting with nature. In cases they are being revived or rearticulated through the mainstream faiths (O'Brien, 2007). Interestingly, their co-optation by mainstream faiths and their destruction by the forces of Modernity have generated a movement among indigenous groups to globally claim control over their sacred sites and exercise their responsibilities as rights and duty bearers (see Chapter 7). In this thesis, I analyse just how a common ground is built between Indigenous peoples, conservationists and development actors not just at the global level but also by building on case studies from Australia (Chapter 5), Ghana and Guatemala (Chapter 6).

Establishing a duality between 'indigenous', in the sense of being native or belonging to a place, and 'mainstream', while pragmatic for discussion, does present some problems. Some scholars would associate sacred sites of indigenous peoples with animism, understood in anthropology as the belief in the existence of 'spiritual beings' embodied in natural elements – plants, animals, or inanimate constituents of nature, as classically described by Tylor (1871), or more contemporarily as a relational ontology in which the world is found to be, and treated as, a community of persons not all of whom are human (Bird-David, 1999). In 'animist' spirituality there is an intrinsic sacramental dimension in natural sites themselves.

For most mainstream religions, primarily in monotheist traditions, a fundamental feature of belief is the purely non-material nature of divinity; de-sacralisation of nature has been the norm for them rather than the exception. In the case of Christianity, this was closely connected with the Platonic doctrine about the soul as an entity essentially separated from nature - a doctrine that would become the foundation of many philosophical and theological formulations, including rationalism and centred on the separation between soul and body and between spirit and nature (Callicott, 1994). Although some trends in theological thinking promote new embodiment of beliefs in nature, the distance between animism-based spirituality and mainstream faiths remains wide and probably inevitably at the roots of theology.

2.4 Locations of sacred natural sites

Sacred natural sites are, with the exception of Antarctica, found on every continent and in every country. Some of them are surely among the oldest venerated places on Earth and at the same time new sacred natural sites are still being established, in some cases by migrants to new countries (Lee, 2003; Schaaf, 2006). Paleo-anthropological evidence indicates that earlier humans such as Neanderthals practiced ancestor worship at burial sites over 60,000 years ago, which is arguably one of the origins of sacred sites. Australian sacred sites may go back at least 50,000 years; rock art considered of a sacred nature dates to 20,000 years ago and some of the Neolithic henges date from 5,000 years ago (Carmichael, 1994).

Because of their diversity, origins, and different and varying degrees of sacredness of their elements, it is not really possible to have full knowledge about the number of sacred sites existing in the world today. Registering and recording sacred natural sites has been initiated at the request of custodian communities, and with the help of Free Prior and Informed Consent (FPIC). However, estimates have been made for some countries, notably India, where at least 13,720 sacred groves have been reported and where experts estimate that the total number of sacred sites may range from 100,000 to 150,000 (Malhotra et al. 2001). However exceptional, Asia may be paralleled by Africa regarding its widespread practices about sacred groves and estimations show that sacred natural sites must exist in the hundreds of thousands (Dudley, 2010).

2.5 International importance of sacred natural sites for conservation

Many sacred natural sites have been well protected over long time periods and have seen low levels of disturbance. Many are demonstrably high in biodiversity and

represent a strong biodiversity conservation opportunity (Dudley, 2010). Sacred natural sites also represent ancient and profound cultural values; indigenous communities and world religions alike showing dedicated efforts as custodians of nature in various ways.

While, on the one hand, sacred natural sites constitute an intangible heritage, they also strongly support human society materially. In addition to being places where animals and plant species survive, they provide natural resources such as water and medicine, they are the location of events and ceremonies, and they are traditionally sites of education. They link to livelihoods in many ways and the concepts of cultural services and human well-being are associated with them (MA, 2005). They also support pilgrimages and tourism, both of which have large associated service sectors and generate significant economic activity.

Despite their great cultural and economic value, sacred natural sites were not on the agenda of nature conservation worldwide until recently. Apart from some pioneering work of documenting sacred groves for example in India, the literature that highlights the conservation value of sacred sites only started to emerge in the 1990s (Chandrashekara, 1998; Knudtson & Suzuki, 1992; Ramakrishnan, 1996). Scholars interested in specific ecosystems such as mountains, forests (Chandran & Hughes, 2000) or rivers (Blatt 2005; Klubnikin et al. 2000), or in interdisciplinary research of ethnobiology and ecological anthropology, have been actively promoting the integration of cultural concerns in ecology and conservation. Sacred sites as such however became a subject of consideration in conservation circles only about the turn of this century. Following a series of seminal workshops organized by UNESCO in 1998 (Lee, 2003; Schaaf, 2006), international conservation organizations like WWF and IUCN, working with indigenous groups and networks such as the Rigoberta Menchú Tum Foundation started to explore ways to integrate sacred natural sites in their conservation work. A number of international events and processes followed, and case studies and scientific and practitioners' publications started to appear in books and journals. These events marked the urgency for protection of sacred natural sites and for bridging the knowledge gap that persists with many conservation managers and agencies. The 2003 Fifth World Parks Congress held in Durban, South Africa, was the first global venue where sacred natural sites were put on the formal protected areas agenda. It was also a turning point in the work of IUCN on the non-material values of protected areas (Harmon & Putney, 2003).

After the 2003 Congress, IUCN's Specialist Group on the Cultural and Spiritual Values of Protected Areas (CSVPA) that was established in 1998 continued the work on guidelines for the management of sacred natural sites (Wild, 2008). CSVPA has

since advanced a significant amount of work on sacred natural sites and species (Mallarach and Papayannis (2007), Papayannis and Mallarach, (2009) Pungetti et al (2012) and Verschuuren et al (2010). The urge for the protection of sacred natural sites has also been recognized by the Convention on Biological Diversity (CBD) and the UN Permanent Forum on Indigenous Issues. The CBD in 2004 developed the Akwé Kon - Voluntary guidelines for the conduct of cultural, environmental and social impact assessments regarding proposed developments that may affect sacred sites and on lands and waters traditionally occupied or used by indigenous and local communities (Secretariat of the Convention on Biological Diversity, 2004).

The adoption of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) is an important political benchmark. Article 12 in particular provides significant political leverage for developing appropriate policies for the protection and recognition of sacred natural sites at national level. It states:

“Indigenous peoples have the right to manifest, practice, develop and teach their spiritual and religious traditions, customs and ceremonies; the right to maintain, protect, and have access in privacy to their religious and cultural sites; the right to the use and control of their ceremonial objects; and the right to the repatriation of their human remains.” (UNDRIP, 2008)

Among international conservation NGOs, The Nature Conservancy has developed a planning tool for the conservation of sacred sites and cultural heritage in protected areas and tested it across countries in Central America such as Honduras, El Salvador, Mexico and Guatemala (Secaira & Molina, 2005). The WWF (Dudley et al (2005) studied sacred sites in 100 protected areas. The Millennium Ecosystem Assessment adopted the concept of cultural services (including spiritual) as one of the four kinds of ecosystem services (the others being protecting, provisioning, and regulating). In the ‘Conditions and Trends Assessment’ and ‘Policy Responses’ (Bhattacharya et al. 2005) developed under the Millennium Ecosystem Assessment sacred sites are recognized as areas of key interest for the conservation of biodiversity and culture. But it is also concluded that more research is needed to understand how they further contribute to human well-being (Millenium Ecosystem Assessment, 2005).

2.6 Ten key issues and challenges for the conservation of sacred natural sites

The overarching conclusion reached by Verschuuren et al (2010) is that sacred natural sites are an important but largely unrecognized, and highly threatened, primary network of “conservation” sites with the power to make a significant

contribution toward protecting and restoring biological and cultural diversity. I now present 10 key issues that have emerged out of Verschuuren et al (2010). These issues improve our understanding of the challenges that sacred natural sites pose in terms of their conservation and their significance to conservationists:

- 1 Sacred natural sites have long served as a primary conservation network for conserving nature and culture.
- 2 The rapid degradation and loss of sacred natural sites severely threatens critical biodiversity, ecosystem services, cultural resources and even ways of life.
- 3 Recognizing sacred natural sites supports community autonomy, promotes effective management and gives voice, rights and action to local people.
- 4 Faith, spirituality and science provide different but complementary ways of knowing and understanding human-nature relationships.
- 5 Mainstream, folk and indigenous religions and spiritualities have complex, sometimes conflicting relationships; enhanced mutual respect and in some cases rapprochement is required for collective care of sacred natural sites.
- 6 Successful co-existence of sacred natural sites and modern economic imperatives requires a better understanding of their inter- relationships and of the broad values and benefits of sacred natural sites for human well-being and development.
- 7 Sacred natural sites as nodes of resilience, restoration and adaptation to climate change offer opportunities for recovering ecologically sound, local ways of life.
- 8 Sacred natural sites need to be consciously included as part of a coherent and coordinated response to global change.
- 9 Local commitment, wide public awareness, supportive national policies and laws, state protection and broad international support are essential for the survival of sacred natural sites.
- 10 A broad strategy for conserving sacred natural sites, defining the priority actions required and building a global coalition to carry out these actions is urgently needed.

In order to obtain a comprehensive idea of conservationists' understanding of sacred natural sites, each of these issues will be further explained and detailed in the following paragraphs.

2.6.1 Sacred natural sites as a primary conservation network for nature and culture

At the time of the founding of the world's first modern national park (Yellowstone National Park in the United States) some 150 years ago, a widespread network of what have now been termed Sacred Natural Sites (SNS) already existed. They covered almost every biome and habitat type and most parts of the globe. These sites were (and often still are) culturally paramount to the societies who had formed them and who also conserved nature. Not only were these sacred natural sites the world's earliest protected areas; it is probably not an overstatement to say that these sites have provided the backbone of today's global network of modern protected areas.

The earliest cultures of our species, *Homo sapiens*, depended directly on the goods and services provided by nature through hunting, gathering and scavenging. Archaeological evidence, art and the burial practices of Stone Age peoples indicate their strong cultural links to nature (Frazer, 2004; Plets et al. 2012). It is evident that early human societies recognized that certain sites were of particular importance and that these sites – springs, seasonal breeding grounds of prey species, productive trees and so forth – were considered sacred and were protected by cultural practices, restricted hunting seasons and limited access.

Many sacred natural sites, therefore, have ancient origins and even those that do not have a current custodian community have often retained at least some strong cultural values until the present. The cultural phenomenon of sacred natural sites has therefore been passed on to the modern era as a universal heritage. Many of these are contained within modern protected areas, but many others remain on the lands of indigenous peoples and lands owned by major religions.

Sacred natural sites are one reminder that our species still depends on nature, not only for material needs but also for spiritual fulfilment. This dependence is, however, no longer so obvious in modern societies - especially for the 50 per cent of the world population which now live in cities. But as climate change, earthquakes, floods, droughts and other extreme events dramatically illustrate human vulnerability, sacred natural sites prove their value as part of the natural fabric of the planet and as places central to knowledge on cultural adaptation and resilience. In the words of their custodians, they provide "a network of planetary healing points", inspiring a more balanced relationship between people and the rest of nature (Sacred Natural Sites Custodians, 2010).

Only fairly recently, however, have conservation biologists realized that sacred natural sites are also extremely valuable in conserving biological diversity, and that

this conservation is intimately linked to culture and cultural heritage (Carmichael, 1994; Dudley, 2005; Harmon, 2003; Papayannis, 2009). Sacred natural sites are, therefore, a primary conservation network. They often overlap with other conservation networks such as government protected areas, non-sacred indigenous and community conserved areas (e.g. grazing and other community resource use areas) and private protected areas.

Despite the wide distribution of sacred natural sites, this primary conservation network has gone unrecognized by many conservationists, developers, managers and policy-makers. Highlighting sacred natural sites as a primary conservation network will lead to a better analysis and understanding of their role in conserving biodiversity, and providing ecosystem services such as provisioning (e.g. food and medicinal plants), regulation (e.g. water and climate), support (nutrient cycling and soil formation) and the more obvious cultural services (e.g. spiritual, religious and sense of place). This may also allow the economic valuation of sacred natural sites (see 2.6.6 below) based on holistic approaches to valuation that include broad measures of human well-being (cf. Delgado et al. 2010).

2.6.2 *The rapid degradation and loss of sacred natural sites*

Despite their multiple values sacred natural sites are being lost in many parts of the world. Key causes include:

- destruction due to land-use change and conversion promoted by government economic policies
- damage and deterioration from insensitive nature conservation and archaeological policies and practices
- erosion due to cultural change, modernity and broad ‘progressive’ development contexts
- damage and sometimes destruction from religious absorption, adoption, competition and impositions
- pressures from population increase, resources shortages and material poverty.

Examples of direct land-use change include the loss of 90 per cent of sacred forest area in parts of Yunnan, China (Shengji, 2010) and 35 per cent loss of sacred groves from 1985 to 1990 in Sindhudurg District, India (Mandal et al. 2010). In both of these cases much of the losses were due to government industrial forestry policies driven by economic imperatives. Plantation forestry, industrial agriculture, road and railway construction, urban development, mineral extraction and oil and gas

pipelines are some of the causes of sacred natural site loss. These developments are also more widely disrupting natural ecosystems and the services they deliver to people (MA, 2005), as material interests have increasingly disrupted the balance between resource harvesting and spiritual values.

The progressive exclusion of local communities and indigenous peoples from their traditional lands and from access to their sacred sites due to government nature conservation policies can cause biodiversity loss and ecological changes when traditional management ceases (Dowie, 2009; Mandal, 2010). In some cases the research and conservation of archaeological work damages the sites - to the deep concern of traditional custodians who view this as desecration (Carmichael, 1994; Dobson, 2010).

The erosion of sacred groves in Cameroon (Kamga-kamdem, 2010) clearly illustrates how areas that have long received special attention by local people are now under pressure from changing values but within a national development context that includes population growth, resource shortages, increasing household livelihood demands, poverty, changing social beliefs, modernity and the weakening of traditional beliefs in the face of influence of mainstream faiths (Kamga-kamdem, 2010; Mandal, 2010). The relationships between faiths and sacred natural sites are further discussed under 2.6.5.

2.6.3 Recognizing sacred natural sites gives voice, rights and action to local people

Sacred natural sites need to be part of effective restoration of both ecosystems and community institutions, thus enabling sacred natural sites to support biodiversity as well as the improved well-being of growing human communities (see 2.6.7). The wise use and protection of natural resources is best secured at the local level. Recent reports in relation to deforestation and carbon storage indicate that indigenous people and local communities are often better at conserving forests than governments are (Chhatre & Agrawal, 2009; Nelson & Chomitz, 2009; Stevens, 2014b; Wilshusen, 2011). In general, the greater the rule-making autonomy at the local level, the higher the amount of carbon stored and greater the benefits to local livelihoods (Nelson, 2009; Nepstad et al. 2009). This is a contemporary confirmation of a growing consensus that biodiversity is often best conserved at the community level, particularly in traditional economies which receive appropriate support from the state (Robson & Berkes, 2009; Rutte, 2011). Mechanisms that support communities of different types are urgently needed to continue to protect and manage their sacred natural sites as well as their other territories.

In many cases the management of sacred natural sites is linked closely to indigenous and local community rights, and based on the struggle for independence and control over resources. Such political issues play a key role in the policy discussions at the national level that, once successfully resolved, could enhance the well-being of custodians and their sacred natural sites and (at least indirectly) biodiversity as well. Development projects that aim to improve livelihood security and alleviate poverty through new economic activities may present threats to sacred sites, but this can be avoided by improved integration of cultural and spiritual values. Through such integration in development projects, sacred natural sites can become a locus where integrated conservation and development strategies can earn strong local support, especially where sacred natural sites form a focus of community cohesion.

2.6.4 Faith, spirituality and science provide complementary ways of knowing

For communities to have greater autonomy for managing nature they may benefit from the experience of conservation biologists and other scientists in respectful mutual exchanges regarding methods of ecosystem management. During the 4th IUCN World Conservation Congress held in Barcelona in 2008, the IUCN Specialist Group on the Cultural and Spiritual Values of Protected Areas convened a dialogue (Posey, 1999) of custodians of sacred natural sites. The custodians came from eight indigenous communities from four continents and produced a statement which underscores the values that sacred natural sites have for indigenous people and local communities. This statement (Sacred Natural Sites Custodians, 2010) gives voice to concerns and recommendations of custodians of sacred natural sites, and illustrates some of the different ways of knowing nature.

While recognizing the value of scientific and technical understanding of the biodiversity values of sacred natural sites, this thesis also presents and recognises the complementary knowledge, wisdom and science from different cultural realms. This approach is in line with recent developments in the fields of nature conservation, where nature and culture are increasingly recognized as inextricably connected (Posey, 1999), especially within the unifying concept of 'biocultural diversity' (Maffi & Woodley, 2008; Verschuuren, 2010).

Figure 2.2: Rogelio Mejia and José de los Santos are Tayrona from the Sierra Nevada de Santa Martha in Colombia.

Rogelio and Jose present their concerns about their sacred natural sites to the group of Indigenous custodians gathered at a side venue of the IUCN World Conservation Congress in 2008. Source: Bas Verschuuren.



Conservationists must be engaged in the dialogue that brings sound natural science together with traditional knowledge and indigenous science, and thus contribute to a holistic view of human-nature relationships. The reality is that nature conservationists are increasingly challenged to deal with social issues and beliefs (for example when managing cultural heritage sites that are considered sacred), and this approach can bring many mutual benefits. Therefore an appropriate balance is needed between the values associated with the fields of biodiversity conservation, cultural heritage management and traditional knowledge and wisdom (Hill et al. 2011; Verschuuren, 2010). In academic terms these have been conceptualized by different sciences such as anthropology, archaeology, biology, ecology, etc.

The management of sacred natural sites requires knowledge from these disciplines as well as combining and adjusting planning tools from the various practitioner realms and which often include sacred knowledge. In order to effectively conserve and protect sacred natural sites, interdisciplinary approaches need to be established by negotiating mutually acceptable conservation ethics and agendas. Openness, willingness to engage in dialogue and developing a cross cultural

understanding and, where appropriate, brokering (Studley, 2007, 2010), will be important. Enhanced sensitivity to this relationship of spiritual and inter-disciplinary differences can help us find new approaches to cultural and natural conservation management.

2.6.5 *Indigenous sacred natural sites require rapprochement*

Sacred natural sites, contrary to the assumption of some that they are confined to the non-western world, exist all over the world. Sacred natural sites are places in which humans at different times have engaged spiritually with their topographic surroundings (Byrne, 2010b). Mainstream religions have historically had somewhat different interpretations of the sacred from their folk variants and animistic and indigenous traditional spiritualities. Despite these differences, many religions, faiths and spiritualities have often harmoniously shared the same sacred natural sites. This fact needs to be better understood and promoted and specific cases understood (see for example Wickramasinghe 2006; Grainger & Gilbert 2008). In some instances, however, these basic differences in combination with geo-political factors (primarily colonization and post-colonial power structures) have created conflict, damaged cultures and impaired the conservation of sacred natural sites. For example Christianity, which has its own sacred natural sites (see Wild 2010; Pritchard & Papayannis 2010) has been antithetical to sacred natural sites of other faiths. Byrne (2010b) provides early examples of Christianity's strategies for the destruction or assimilation of pre-Christian sacred natural sites and Bernbaum (2010) provides an example of how Christian priests aim to remove the pre-Columbian reverence of mountains in the Bolivian Andes that they initially embraced.

While Buddhism is generally more tolerant of earlier religions, the process of Buddhism increasing its influence over previously animistic peoples in Asia is described as Buddhization by Studley (2010), Spoon (2010) and Byrne (2010b), who relate the reliance of eco-Buddhist monks on earlier animistic beliefs for conservation purposes. The process of Hinduization (or Sanskritization) is also mentioned by Godbole et al (2010), Mandal et al (2010) and Dudley et al (2010). These authors indicate a gradual adoption or absorption of sacred natural sites of indigenous groups by mainstream faiths, initially via folk variants, which were later expunged. Further, where some consider that a mainstream faith has an environmental ethic, this tends to be more symbolic than the practical applications in the indigenous or folk faiths (Studley, 2010). Sacred natural sites are therefore a stronger practical ethic of care among indigenous groups and folk religions. These instances of conflict are not only restricted to the mainstream faiths mentioned but are more widely applicable. This

historically theological and ideological whirlpool of beliefs and spirituality clearly indicates differences between the established mainstream faiths and the indigenous religions and spiritualities as described in the introduction. Mainstream faiths play a major role in the conversion of traditional spiritualities and folk religions, but some of these folk religions and spiritualities show remarkable resilience and adaptability and inform and enrich the mainstream religion. Not only should indigenous and folk spiritualities be better recognized, but the mainstream religions need in general to show greater respect for other faiths and their sacred sites. The effective common purpose and mutual respect of sacred natural sites of all religions can be an important part of a major collective effort to conserve nature.

2.6.6 Understanding inter-relationships of sacred natural sites for human well-being and development

The dominant global economic system needs to be adapted to recognize and restore the values of sacred natural sites in many contexts. These include those of limited livelihoods and poverty, intensive agriculture, mass tourism and societal 'needs' for extracted minerals. This is particularly important in the light of the potential doubling of the human population over the coming century and the additional pressures on resources that this will certainly bring. The dominant global economic system based on the premise of endless consumption and growth is 'not fit for purpose' and is seriously threatening the global ecosystem. The human economy needs to be situated in a wider context of a) broader concepts of human well-being and b) deeper meanings in relation to nature. This calls for narrow economic measures to be broadened and also for the relationship between ecology, society, economy and spirituality to be put back into proper balance (Brown & Garver, 2009).

It may well be that the alienation and social breakdown that increasingly characterizes modern industrialized and technologically developed cultures can be counteracted by helping people rediscover individual or collective spirituality which has connections to nature. While retaining the benefits of rationality, it would seem far better to view the Earth and all its manifest and profoundly interconnected life with deep respect or, in the words of faith, as essentially sacred so as to ethically maintain an ecological balance (Thorley & Gunn, 2007).

However, internalizing the full value of the relationships between culture and nature remains a challenge for modern societies. As societies unnecessarily lose sacred ground to mining, forestry, infrastructure and other industries, these sectors appear largely uninformed about the values of sacred natural sites and often seem to lack incentives to engage as partners to conservation strategies. The leaders of today who are shaping these processes can induce a critical change or a 'paradigm shift' when

sensitized to the multiple values in the diversity in biological and cultural systems at sacred natural sites (Stevens, 2014b; Studley, 2010; Verschuuren, 2010, 2012b).

2.6.7 Sacred natural sites as nodes of resilience, restoration and adaptation

The widespread survival of sacred natural sites amongst many cultures indicates that these sites have had significant value to humans. Those that survived were adaptable and had custodians whose cultural beliefs enabled them to adapt to the changing conditions under which they lived. Hence the traditional cultures, which have survived until the present, deserve our highest respect, and modern societies may have important lessons to learn from them. Sacred natural sites can be considered nodes of resilience, or even resistance, to global change. In many cases, sacred natural sites offer opportunities for building landscape connectivity networks because they form important refugia for biodiversity and maintain a dynamic cultural fabric in the face of global change. They are remnants of variety, heterogeneity and multi-functionality in increasingly simplified homogeneous landscapes, and it is increasingly recognized that diverse biological and cultural systems are more resilient and adaptable than homogeneous systems (Bhattacharya, 2005). Some communities are already taking cultural recovery into their own hands (see for example Dobson and Mamyev 2010, and Borde and Jackman 2010).

An important message from the custodians of sacred natural sites is that these areas are not isolated but need to be thought of as a network that crosses cultural differences and brings a sense of unity of purpose and action. The protection, restoration, management and celebration of sacred natural sites presents just one essential strategy for improved planetary care (see for example Dobson and Mamyev 2010, and Rodriguez-Navarro 2014). The protection and restoration of sacred natural sites may offer a potential safeguard to critical habitats and threatened species and distinctive human cultures, but the specific approaches and technologies for this restoration are in their infancy and need research and experimentation.

2.6.8 Sacred natural sites need to be consciously included in conservation approaches

Sacred natural sites and their associated communities have demonstrated themselves to be remarkably resilient to change; however, the scale of these changes is now taking its toll. Today, global change is a term increasingly used to describe processes in human society and the environment characterized in terms of uncertainties (Singh, 2005). Changes such as biodiversity loss, environmental degradation, human population increase, shortages of resources, imbalances in wealth and poverty,

increasing cultural homogenization and modernity all contribute to impacts on sacred natural sites. Deriving from and linked to these is global climate change, which is escalating uncertainty and is noticeable at a number of sacred natural sites. Increasing numbers of extreme droughts, floods and hurricanes and other extreme weather events constitute existential challenges to many societies. The links between human behaviour and environmental change are complex and the effects of these links on biological and cultural diversity are in many cases unpredictable.

Global trends such as increasing tourism also affect values related to sacred sites. Spoon (2010) illustrates how tourism is weakening some of these values, while reinforcing and remaking others related to place-based knowledge of Beyul sacred natural sites in the Sagarmatha (Mt Everest) region as a result of exposure to market forces. Ormsby and Edelman (2010), on the basis of studies on the regulation of ecotourism in a sanctuary for sacred monkeys in Ghana, recognize that tourism can also help generate income and enforce cultural practices, knowledge and education, especially when developed in tandem with conservation objectives. Although sacred natural sites are most often conserved for cultural and spiritual reasons, the details of these justifications are also subject to change. Sampang (2010) discusses social changes gaining a foothold in the degradation of the traditional fishing practices of the Palawan Ancestral Domain in the Philippines. These changes are becoming more common as a result of more rapid global cultural and societal change characterized by phenomena such as language loss, acculturation, modernization and urbanization.

Valuable traditional ecological knowledge, for example on healing practices, spiritual well-being, food provisioning, seed conservation, land management and social relations are often celebrated at sacred natural sites. Ceremony, dance, song, storytelling and arts are the intangible companions to these special places, and even while they are being strengthened in some sites, they are rapidly being lost in others. Dudley et al (2010) confirm that the remaining sacred natural sites often contain high biodiversity values, creating opportunities for landscape connectivity and the creation of corridors between conservation areas which are much needed in the face of climate change and economic growth. In the rapidly developing response to climate change, sacred natural sites need to be taken fully into account, see figure 2.3. They can make substantial contributions to climate change mitigation and adaptation, but there are dangers that inappropriate policies, for example in forestry, could inflict further damage. Increased research and understanding on the roles of sacred natural sites in biological and social resilience are needed and this need to be translated into effective policies.

2.6.9 Support from local to global levels for the survival of sacred natural sites

Sacred natural sites are rarely considered in national-level decision-making processes and coherent, policy, legal and management approaches are lacking (Bhattacharya, 2005). Many sacred natural sites that lie outside government protected areas are increasingly being recognized at the international level as protected areas, or Indigenous and Community Conserved Areas (ICCA) in their own right (Dudley et al. 2009; Pungetti, 2012; Ramakrishnan, 1996; Schaaf & Rossler, 2010). In some cases, this support will enable the innovative creation of conservation networks such as the extension of the protected areas network based on sacred natural sites currently under way in Benin. Such successes require the combination of wide public awareness, strong local commitment, national policies that recognize the value of both sacred sites and local knowledge and protection by the government against other competing forms of land use.

Many mechanisms are being tested to support communities to continue to protect and manage their sacred natural sites as part of their territories. At the international level increasing recognition of sacred natural sites is reflected in several policy documents, such as the CBD Akwé: Kon Voluntary Guidelines (Secretariat of the Convention on Biological Diversity, 2004); the 2007 United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP, 2007) and IUCN-UNESCO Sacred Natural Sites Guidelines (Wild & McLeod, 2008). One of the major gaps in legislation is the development of national policies such as found in Guatemala, and laws that protect sacred sites in a way that does not undermine community level governance (Delgado & Gomez, 2003; Gomez, 2010). Dobson and Mamyev (2010), Sampang, (2010) and Mandal et al (2010) indicate some useful directions.

At the national level, it is particularly important that appropriate laws are developed to support traditional custodians. Care needs to be taken to avoid national government interventions that could actually jeopardize the conservation of a sacred natural site by developing inappropriate legal frameworks. Using Free, Prior and Informed Consent (FPIC) can empower custodians and help reduce destructive commercial and livelihood pressures on sacred natural sites. With some notable exceptions, recognition of sacred natural sites has continued to decline at the national level. Environmentally and culturally damaging development proposals continue to be developed in the name of 'progress and privatisation'. Some welcome exceptions include:

- the aforementioned Benin, which is currently developing a specific category of Protected Areas for Sacred Natural Sites in collaboration with UNDP and the World Bank (GEF, 2009);

- Estonia, which is completing a national inventory of over 2000 pre-Christian sacred natural sites and creating a proposal for a new law to protect these places (Kaasik, 2012);
- Kenya, where the Mijikenda Kayas (sacred forests) have been inscribed on the World Heritage List and protected under the National Monuments legislation (Kibet & Nyamweru, 2008; Schaaf, 2010);
- Australia, where the oldest contemporary piece of sacred sites legislation is from the Northern Territory, originating in 1954 but consolidated in 1983 in its present form;
- Mongolia, which has given a high emphasis on protecting sacred natural sites and designated them as Special Protection Areas;
- Guatemala, where the ‘Law for Indigenous management of sacred sites’ was passed by Parliament (Gomez, 2010).

Several countries have legislation that aids the protection and conservation of sacred sites, often as part of legislation on cultural heritage, indigenous burial places and protected areas. A systematic review of national legislation for sacred natural sites is currently lacking. In Verschuuren et al (2010) I have identified several priorities for immediate legal action. Kamga-Kamden (2010) calls for a special law recognizing sacred sites as a forest category at the national level in Cameroon; Anwana et al (2010) uses two Ramsar Convention resolutions (Ramsar Resolution VIII.19 and IX.21) to suggest special laws enabling the recognition of traditional management practices based on sacred natural sites in the Niger Delta in Nigeria, and Delgado et al (2010) discuss the legal proposition for the recognition of indigenous custodianship over sacred natural sites at the national level in Guatemala. The development of supportive national policies and laws probably represents the single most important gap in the conservation of sacred natural sites.

Figure 2.3: Ceremony at Bogd Khan Mountain, Mongolia.

Mongolia's Bogd Khan gazetted a protected area in 1778 before Yellow Stone National Park is associated with the life of Ghengis Khan. This sacred natural site has long been in use by local Bon shaman and after many years of communist suppression (1917–1989), ancient ceremonies have been revived led by local Buddhist lamas. Here the group that performed the ritual returns from the top led by monks. Third person from the left is Mr. J. Boldbaatar, the director of Khan Khentii special protected area with on his right the first modern day park ranger. Source: Robert Wild.



2.6.10 Developing a broad strategy for conserving sacred natural sites

Sacred natural sites are important to humanity and collective work is required to protect them, making full use of international partnerships and networks (IUCN-CSVPA, 2010; Schaaf, 2010). A growing committed international partnership could lead to a critical mass of individuals and agencies that will lead a major shift of consciousness, and which in turn will enhance the future of sacred sites worldwide (Thorley, 2007). The Christensen Fund has been taking a specific interest in this area and with its partners, specifically the Sacred Land Film Project, it is working towards facilitating a coalition. Similarly, a number of conservation NGOs are taking a more strongly cultural approach to their work (e.g. Worldwide Fund for Nature, International Union for Conservation of Nature, the Gaia Foundation and Fauna and Flora International, Sacred Natural Sites Initiative among many others, see figure 2.2).

Some parts of the commercial private sector are also getting involved, especially the resource extraction industries that often have major impacts on sacred natural sites.

2.7 Developing a global initiative for the conservation of sacred natural sites

One way to ensure that sacred natural sites receive the attention they deserve would be by establishing global initiatives as part of a coalition of institutions that could include sacred natural sites as well as other forms of land use that have high conservation value. To enhance the effectiveness of such conservation networks it would also be appropriate to indicate those forms of land use that pose potential threats to conservation, biodiversity and sacred natural sites, such as the conversion of primary forest to plantation forests and the allocation of mining concessions over areas with current high conservation value. Being able to assess the conservation potential and sacred natural sites of those lands would greatly improve planning and allocation of such activities and help generate advice for improving the policies and market mechanisms currently guiding such practices in favour of sacred natural sites. Being able to assess what is needed to make the most effective conservation measures work for sacred natural sites would require testing these ideas through an initiative with a global scope and endorsement of a large range of institutions and organizations. This could start with demonstrations of case studies that may inspire stronger support for sacred natural sites from a far broader constituency, including governments, the mining and forestry industries, biologists and development planners.

Our planet is going through a largely human- inflicted crisis resulting in the extinction of many species of animals and plants, decrease in the diversity of biological and ecosystems, loss of languages, cultures and human diversity as well as changes in the global climate. These major threats require urgent and coordinated societal action. Sacred natural sites represent places where biological and cultural diversity come together within the context of humanity's highest ethical systems. They can provide a starting point to meet humanity's greatest challenge yet.

The aforementioned conservation challenges and issues canvassed the common ground that is, or in certain cases could be, created by the extended networks of actors - including the Indigenous custodians of Indigenous sacred natural sites. Further on in this thesis we will see that the role of Indigenous peoples' in the process of creating common ground leads to more complex situations that can become highly problematized.



Chapter 3

Integrating biocultural values in nature conservation: perceptions of culturally significant sites and species in adaptive management

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< Figure 3.1 Karamala Dreaming.

Magpie Dreaming. In a time called the dreamtime, this sacred natural site was created by an ancestral Magpie Goose called Karamala and is currently located in Litchfield National Park, Northern territory, Australia. Source Bas Verschuuren.

3.1 Introduction

Ecosystems not only consist of physical attributes, they are subjected to and influenced by cultural perceptions and values. As Schama notes, “Landscapes are culture before they are nature; constructs of the imagination projected onto wood water and rock” (1995, p. 65). Schama goes further by stating that there is an elaborate frame through which our adult eyes survey the landscape and that, before landscape can ever be a response for the senses, it is the work of the mind. This leads Schama to conclude that the landscape’s scenery is built up as much from strata of memory as from layers of rock. Hence, cultural perceptions and shared history of landscapes result in different and even contesting meanings of ecosystems and landscapes (Agrawal & Gibson, 1999; Stewart & Strathern, 2003).

In some cultures, the spiritual values of certain sites and species may be important enough for local people to conserve and protect the ecosystems that contain them. This occurs, even though an economic cost–benefit analysis may advise conversion of the ecosystem through resource development such as mining or agriculture. To members of these cultures, the spiritual significance of rivers, mountains, or even individual tree or animal species such as the black-necked crane mentioned further on in this chapter, has led to their veneration and recognition as sacred. Those sacred sites and species are increasingly known for their significant contribution to biodiversity values (Stewart & Strathern 2003; Dudley et al. 2010; Putney 2005; Bhagwat & Rutte 2006; Verschuuren et al. 2010).

Sacred places have traditionally often been managed on the basis of ancestral intergenerational principles that in many cases ensure cultural continuity and environmental management (Berkes, 1999; Oviedo, 2007; Verschuuren, 2006a). The cultural and spiritual importance of sacred sites and species is often ignored in Western-style landscape and ecosystem management. This chapter investigates the role of sacred sites and species in new emerging biocultural approaches in nature conservation and ecosystem management.

New understandings and approaches are very much needed for strengthening Western-style conservation management in biocultural diversity protection, and this chapter discusses the potential role of integrating cultural and spiritual values into conservation management. In doing so it focuses on the potential for setting historic baselines and developing indicators for ecosystem change based on Traditional Ecological Knowledge (TEK) and cultural perceptions. Taking into account such intangible cultural values and TEK in day-to-day management is furthermore seen as a means for engaging local communities and indigenous peoples in the development of biocultural approaches and finding new ways for the management of Indigenous and Community Conserved Areas (ICCAs).

3.2 Definitions and concepts

Equitable and sustainable management is the result of decision-making processes initiated by people; their decisions are inherent constituents of social choice in any given culture. These social and cultural dimensions are also reflected in conservation management. Jepson and Canney (2003) explain them as sets of ideals and beliefs to which people individually and collectively aspire and which they desire to uphold. They structure the traditions, institutions and laws that underpin society. Thus, in line with Jepson and Canney (2003), it becomes clear that we believe certain things not because they are logically evident, but because we live in a group where these ideas are supported and confirmed (Stark, 1996). Due to the importance of the implications of integrating cultural and spiritual values in conservation management, this chapter makes use of the following operational definition for cultural and spiritual values based on the IUCN's World Commission on Protected Areas' Specialist Group on Cultural and Spiritual Values of Protected Areas (CSVPA):

“Those qualities, both positive and negative, ascribed to nature, landscapes and ecosystems by different social groups, traditions, beliefs, or value systems that fulfil humankind's need to understand, and connect in meaningful ways, to the environment of its origin and to nature” (CSVPA, 2005).

In order to investigate such meaningful connection of humankind with nature, especially where nature is venerated and held sacred, this chapter focuses on the role that people's perceptions can play in developing biocultural management approaches. All around the world, in the field protected area managers have encountered situations in which sacred natural sites and species play a pivotal role in local people's relationship with nature (Dudley, 2009; Verschuuren, 2006a). On many occasions, such cultural perceptions have proved to be invaluable in building approaches to sustainable management. Sacred sites and species are often the focal points for such approaches and for the purpose of this chapter I make use of Oviedo and Jeanrenaud's definition:

“specific places and species recognised by people as having spiritual and religious significance or as sites and species recognised by institutionalised religions or faiths as places and species of worship and remembrance” (Oviedo, 2007, p. 77).

The revitalised interest in including cultural and spiritual values as a measure of biocultural diversity offers opportunities for renewing concepts such as sacred sites

and species in order to develop the dynamic nature of conservation and ecosystem management approaches. The sacred and spiritual dimensions of nature are experienced individually but also collectively, as is often the case with sacred sites. The distinct cultural perspectives associated with sacred sites and species are considered shared values amongst a group of people that have a culture clearly distinguished from others (Carmichael, 1994). Nonetheless, the spiritual and sacred dimensions of nature can also be transcendent when sacred natural sites form a shared source of inspiration that is appreciated and recognised by a variety of social and cultural groups.

To understand the transcendental dimensions of people's relationships with the sacred in nature, it may be beneficial to extend an inquiry into people's cultural ontologies (Williams & Harvey, 2001). The concepts of worldview and cosmovisions may provide a foundation for building a framework for understanding and reconciling cultural and spiritual values with Western-style conservation management in order to involve the sacred in day-to-day management in a constructive way. Haverkort and Reijntjes (2007) have emphasised that cosmovision is not something abstract, but is a reality based on concrete observation and experience. They offer the following definition:

“the way an individual or a certain population (community or cultural group) perceives the world and cosmos. It includes assumed interrelationships between the spiritual, natural and human world and provides the basis on which people relate with nature and the spiritual world and take decisions.” (Haverkort & Reijntjes, 2007, p. 15).

A good example of this may be that traditional worldviews often consist of an ontology that does not contain a linear conceptualisation of time as it would be known to most Western-style conservationists. Instead, they are made up of a cyclic conceptualisation of time, based on complex and mutually constitutive cycles in which interaction and change confirm and renew relationships with nature and the sacred. Hence, traditional cosmovisions may include the profound interferential guidance of ancestral spirits with the present natural world and encompass many generations into the present. In order to advance current management approaches this chapter suggests that new approaches derived from different worldviews are needed, rather than more information derived from conventional mind-sets and accompanying monitoring systems (Pilgrim, 2009).

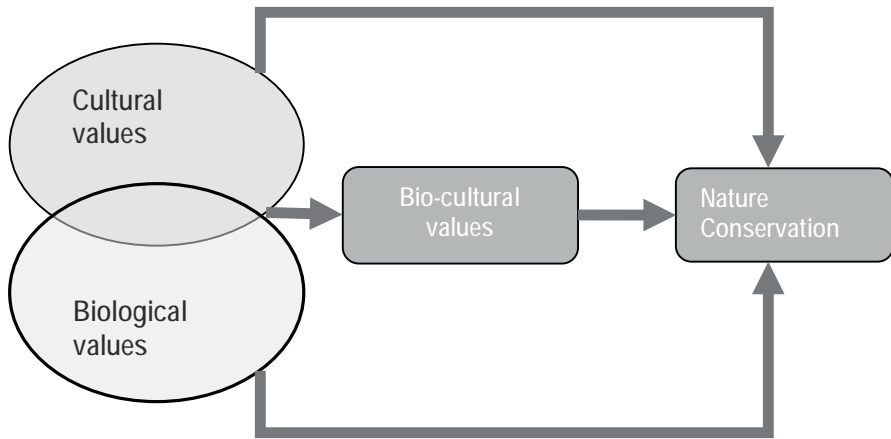
3.3 Managing the whole spectrum: from culture to science

Most management problems are perceived when people's values are inadequately interpreted or defined. Attention is required in selecting the methodology and frameworks used in order to capture and communicate people's values to the decision-makers, especially when the people themselves are not, or cannot, be involved in the decision-making process. According to English and Lee: *"The fact of defining intangible values is not itself culturally neutral; it comes from the Western scientific tradition but if we do not define intangible values in some way, it will be virtually impossible for them to influence management"* (2004, p. 45). As a possible solution, and in line with English and Lee (2004) I suggest that both cultural and natural values need to be taken into account in conservation management (Figure 3.2). Of specific interest are the inextricable linkages that exist between the two value sets, as these are vital to people's unique understanding of the environment and are therefore considered of paramount importance when integrating cultural and spiritual values in conservation management.

When evolving from a biophysical to an anthropocentric sphere, the role of perception is important because if one assumes that values are merely objective then they can be managed along with the biophysical environment; if they were merely subjective, management would consist of adjustment to public preference (Harmon, 2003). In fact, this argument illustrates the dilemma of differentiating and valuing use and non-use values, tangible and intangible values, extrinsic and intrinsic values, as well as biophysical and spiritual values.

Many societies and cultures place a high value on the maintenance of either historically or culturally important landscapes as well as culturally significant sacred species (Posey, 1999). Consider, for example, the cultural use and maintenance of sacred groves around the world. In India, these groves are maintained despite the increasing pressure for economic development at regional and national levels. They form fragmented mosaics of bio-diversity havens that offer unique opportunities for conservation management to target the improvement of landscape connectivity (Bhagwat, 2005, 2006). A good example of a sacred species is the black-necked crane (*Grus nigricollis*), whose sacred status has led to the recognition of Ramsar status in southern Tibet's Napahai wetlands (China's north-west Yunnan Province). The wetlands are under increasing population pressure, but the black-necked crane has offered opportunities for conservation, ecotourism and education based on people's traditions and beliefs (Gujja, 2003). The black-necked crane is a symbol of peace and has been revered by Tibetan Buddhists for centuries because it is believed that previous incarnations of the Dalai Lama were carried from monastery to monastery on the backs of these holy birds.

Figure 3.2: Integrating biocultural diversity in nature conservation



Carter and Bramley (2002) define such values in terms of a resource's intrinsic (objectively measurable) and extrinsic (largely subjectively measurable) qualities. Both value types are significant, but they are not often integrated into the management process. This dilemma has manifested itself as a continuous status quo for managers and decision-makers, although it is generally becoming more accepted that both types of values need consideration (see Figure 3.2). In line with Berkes and Folke (1998; 2007); Berkes (1999); Maffi (2005b); English and Lee (2004); and Cocks (2006) it is the viewpoint of the author that the inter-play of cultural and biological values is of elementary importance to conservation management of sacred sites and species.

3.4 Community conservation and sacred sites and species

Integrating sacred sites, or more broadly, the perception of the sacredness of nature into conservation planning can only be achieved by doing this across ideological, physical and institutional borders, in and outside protected areas (Verschuuren et al. 2010; Wild & McLeod 2008). In short, this is a process that hinges on the integration of knowledge and wisdom. Including sacred sites in all IUCN protected area categories builds on their intercultural and cross-cutting values, which leads to equitable synergies between spiritual, cultural and natural diversity and therefore supports more holistic and often also more sustainable conservation objectives (Dudley, 2008; Verschuuren, Mallarach, & Oviedo, 2007). Moving towards such conservation objectives, sacred sites are currently not effectively reflected in

protected area designations and management plans, although guidance for doing so has been developed and will need to become part and parcel of the protected areas' planning domain (Dudley, 2008). Existing policy and legal frameworks do not adequately support sacred natural sites (Oviedo, 2007; Shackley, 2001; Wild, et al 2010). This in itself is remarkable, as there is sound and widespread evidence that sacred natural sites over the centuries have been providing, and continue to provide effective, locally grounded conservation of biodiversity and culture (Berkes, 1999; Bhagwat, 2006; Dudley, 2010; Oviedo, 2007; Darrell Allison Posey, 1999; Tiedje, 2007).

Recommendation 5.13 from the Fifth World Parks Congress (IUCN, 2003) called for management planning, zoning and training of managers, especially at the local level, in order to give balanced attention to the full spectrum of material, cultural and spiritual values; and requested the IUCN to review the 1994 Protected Area Category Guidelines with the aim of including cultural values in the planning of the management and policy guidelines of governments, non-governmental organisations (NGOs), local communities and civil society (Dudley, 2008). The recommendation aims to ensure that protected areas approach cultural and spiritual values as co-creators for potential management objectives in categories where they are currently excluded.

3.5 Integrating biocultural values in nature conservation

Over recent decades a strong current has developed among international conservation institutions across the world, demonstrating that working with people is essential in order to achieve conservation targets. It is thought that this movement, which has brought forth concepts such as Indigenous Protected Areas (IPAs) and ICCAs, may be very effective in terms of conserving desirable levels of biodiversity. When conservation targets are leading the way in endogenous development, these often result in sustainable living and land use outside protected areas boundaries (Haverkort & Reijntjes 2007; Verschuuren 2006b). Sacred sites are a useful concept for setting conservation targets based on culture and endogenous development. In ecosystem management, sacred sites may be a keystone in landscape connectivity and biodiversity conservation, and they can be integrated within the concept of ICCAs and IPAs. Such synergies would be a mixture of cultural, community and conservation values (Bhagwat, 2005; Kothari et al. 2012). It is therefore fundamental to empower and facilitate those communities that are key stakeholders through equitable governance arrangements and the co-development of ecosystem management strategies that can help achieve effective biodiversity conservation.

Conservation professionals should take care not to create their structures and impose a process of co-optation. A people-oriented discourse that is cognisant of conservation objectives, in and outside protected areas, is likely to provide a successful approach towards developing sustainable and equitable 'pro-conservation' communities that are synchronised with conservation objectives (Borrini-Feyerabend & Oviedo, 2004; Cocks, 2006; Wilshusen, 2011).

3.6 Sacred significance of nature in conservation and adaptive management

According to Allaby (2010), ecosystem management is the active manipulation of an ecosystem in order to exploit its productivity or to enhance its biodiversity and conservation values. Adaptive management has been developed from the 1970s onward as a management method that is able to respond to uncertainties (Crawford & Holling, 1978). Human behaviour causes anthropocentric pressures on the environment, often as a response to changing environmental conditions. Consider the adaptation to climate change or the availability of fuelwood. This chapter argues that these strategies are likely to increase the resilience of biocultural values in the face of cultural development and adaptation to uncertainties in environmental problems (Berkes, 1999, 2007).

The power of the spiritual and the sacred lies in the fact that its essence is intangible or, as Burkert (1994, p. 23) puts it, 'unseen' and 'non-obvious'; that is, it cannot be verified empirically. It can only be valued adequately by those who perceive its importance; therefore, the quality of the valuation resides with participants' interpretations and ability to communicate them (Carmichael, 1994). Communicating cultural and spiritual values to decision-makers in nature conservation is difficult because of double hermeneutics and the lack of an adequate framework or approach to capture the dynamics of culture (English, 2004; Verschuuren, 2007). In double hermeneutics, these values become distorted or get 'lost in translation', travelling from experience and perception through the assessment and valuation approaches before they reach decision makers (Giddens, 1995). In trying to assess and value the spiritual significance of nature one finds that the means to value it are complex and encompass issues like scale, perception and indicators and, in many cases, require integration of scientific disciplines - which may not be easy to comprehend. A possible way forward is to investigate the importance of understanding people's cultural perceptions and values in relation to developing biocultural approaches in ecosystem and conservation management (Verschuuren, 2010).

Ecological values are often based on information derived from species and ecosystem processes using biophysical methods. Over time, the use of traditional

ecological knowledge has gained a foothold in ecosystem management, particularly when this knowledge has been shown to be 'Western science-proof'. Cultural values, on the other hand, are based on how people perceive ecosystems and, in many cases, there may not be sufficient objective scientific proof - thus causing management to work with additional sources of information such as photographs, drawings, artwork or poems. These intangible cultural dimensions of the human-ecosystem relationship also become apparent in the spiritual, intellectual and physical links between human cultures and landscapes as well as ecosystems (Harmon, 2003; Posey, 1999; Schama, 1995). From these sources, indicators may be derived that can offer information on the status of natural processes. The UNESCO Convention on the protection of Intangible Cultural Heritage offers a more concrete expression of the 'intangible' aspects of culture in Article 2.2 (UNESCO, 2003):

1. oral traditions and expressions, including language as a vehicle of the intangible;
2. cultural heritage;
3. performing arts;
4. social practices, rituals and festive events;
5. knowledge and practices concerning nature and the universe; and
6. traditional craftsmanship.

Figure 3.3 shows biocultural values by depicting the numerous ways in which species and landscape are imbued with sacredness. The example is taken from northern Australia, where the author has been working with various groups of indigenous people (Verschuuren, 2006). It is intended to emphasise the critical importance of integrating cultural and spiritual values in conservation management because cultural diversity and biological diversity are mutually interdependent (Posey 1999; Berkes 1999; Cocks 2006; Callicott 1994). Sacred landscapes pose a particular set of opportunities for ecosystem management, such as the secrecy of knowledge and the transboundary nature of cultural perceptions and patterns of land use. One needs to be aware that in some indigenous worldviews the concept of sacred is absent because its opposite, the profane, is not recognised as real. This means that everything is perceived as sacred, a phenomenon which coincides with the non-dualistic dimensions shared by mystics of mainstream faiths (Burkert, 1994; Stark, 1996).

Figure 3.3: Expressions of cultural and spiritual values related to sacred sites and species.

See colour plate section. (a) Magpie geese rock paintings, the world's oldest painting tradition and a form of intergenerational transmission of knowledge. (b) and (c) Ceremonial dance. Magpie geese can be mimicked in ceremonial dances like this to depict a creation story. [Figures are deliberately out of focus.]

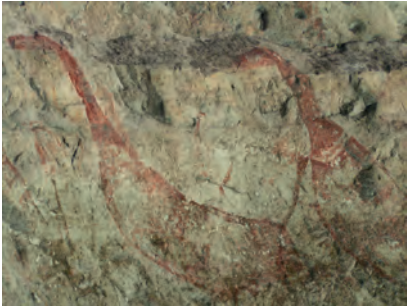
(d) Magpie as food source. (e) Magpie Dreaming. This site was created by an ancestral being depicted as a magpie goose called Karramala (see also figure 3.1). Source: Bas Verschuuren.



Preparing Magpie Geese - Adjumarllarl Rangers. Rituals and hunting are connected to the Magpie Goose as a food source.



Ceremonial dance. Magpie Geese can be mimicked in ceremonial dance like this to depict a creation story.



Magpie Geese rock paintings, the world's oldest painting tradition and a form of intergenerational transmission of knowledge.



Traditional art work by George Milpurruru, Ganalbingu. This art work is highly valued by art galleries and collectors worldwide.



Magpie Dreaming. This site was created by Marketing of Magpie Geese inspired an ancestral being depicted as a Magpie clothing by Numa with Magpie Geese. Goose called Karramala (Rose et al. 2002).

3.7 Finding indicators for the cultural and spiritual significance of sacred sites and species

When embracing cultural diversity, its perceptions and consciousness in relation to the sacred, particular challenges exist for establishing management objectives and related indicators to inform upon the status of these objectives. In some cases, current biophysically founded management actions will need to give way to new, co-created value sets and accept culture as a dynamic force in shaping conservation management and policies. Concurrently, including different cultural perceptions in conservation and ecosystem management demands an understanding of local and indigenous peoples' way of life. Their right to self-determination will need to be incorporated into ecosystem management and models for the governance of nature conservation. Within the United Nations, the Permanent Forum on Indigenous Issues also addressed the issue of indicators in relation to human well-being as it was brought forward in the Millennium Ecosystem Assessment (Millenium Ecosystem Assessment, 2005); furthermore, through the framework of the Millennium Development Goals, indigenous experts agreed that:

“Indicators must place significant emphasis on indigenous peoples’ inherent values, traditions, languages, and traditional orders/systems, including laws, governance, lands, economies, etc. Indicator development should reflect true indigenous perspectives such as portraying approaches grounded in wholism and unique values.” (UNPFII, 2006, p. 6)

Indicators have been defined in the literature by several authors based on this purpose. For example, Natcher and Hickey (2002) state that communication is the primary function of indicators and they should enable or promote information exchange regarding the issue they address. This simple definition, especially in the connect of community conservation, seems to easily allow for the inclusion of perception-based indicators. For example, more often than not, people and land managers tend to incorporate ‘exotic’ species as part of their perception of a given landscape and as part of their ethno-botanical repertoire, particularly when economic, agricultural and aesthetic motivations are involved. In northern Australia’s Kakadu National Park and World Heritage Site, this has led to a growing appreciation of the presence of wild horses in the park. In particular, the Aboriginal

people that co-manage the park with the Parks and Wildlife Service insisted on this introduced (some would say “pest”) species being maintained in the park despite the impact it causes on the park’s ecology (Lawrence, 2000). In fact, Aboriginal peoples place a cultural– historic value on horses that has simultaneously led to the species’ growing spiritual significance. Because of this, Aboriginal people now recognise places in the landscape that are called ‘horse dreaming’ which, like other dreaming sites, are venerated and imbued with spiritual importance. Naturally, these places are an expression of human–ecosystem relationships and form focal points of cultural and spiritual values. They offer opportunities for specific management objectives that fit into the concept of sacred natural sites. Hence, protecting biological diversity and ecosystem integrity as well as cultural and spiritual diversity (sacred sites and species) poses a challenge to managers and policymakers that requires them to search for appropriate solutions beyond their conventional references and beliefs.

3.8 Conclusions

Traditional ecological knowledge concerning sacred sites and species can play a key role in understanding the broader landscape and ecosystem processes in the way they are currently perceived in Western-style conservation management. This chapter started from the idea that the real use of TEK lies in the need to see and structure management approaches in a qualitatively new way. On the one hand, this entails the recognition that accumulating knowledge on cultural and spiritual values on sacred sites and species is indeed important in terms of documenting their cultural significance and diversity. On the other hand, I argue that such information will always be incomplete and that, instead of gathering more quantitative data, we might look towards the application of its qualitative aspects and integrate different ontologies and worldviews into management. For such new biocultural approaches to be applied in conservation management, the underlying values of such data need to be understood from the perspective of a different worldview or mind-set, rather than by simply applying well-known conventional Western-style management approaches. This suggests that investigating people’s perceptions of the sacred dimensions of sites and species can contribute towards creating new approaches in adaptive management, the inclusion of local and indigenous peoples in the management and governance process and the development of perception-based indicators, and reactive and participatory monitoring. Such approaches are thought to be of critical importance for the conservation of biocultural diversity.



Chapter 4

Developing Biocultural Conservation Approaches for Sacred Natural Sites

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< Figure 4.1 Goreumbi sacred natural site, Jeju, South Korea.

Shimbang (shaman) Hong Sunyoung invites 1800 gods and goddesses into the sacred natural site of Goreumbi. The over one thousand years old ritual invokes the abundance of the sea and is part of the spiritual heritage celebrated during the Tamnaguk Ipchun Gutnory festival. The site, a 1.2. km stretch of porous coastal rock, harbours unique marine life and borders a World Heritage site. Source: Bas Verschuuren.

“We understand that what is regarded as sacred is more likely to be treated with care and respect. Our planetary home should be so regarded. Efforts to safeguard and cherish the environment need to be infused with a vision of the sacred”.

(Knudtson, 1992).

4.1 Introduction

Experiencing the sacred in nature signifies one of the oldest human-nature relationships embedded in the cultural fabric of many societies (Berkes, 1998; Burkert, 1994), see figure 4.1. Since the beginning of human history, people have treated nature with awe, leading to fear, veneration and worship at places known as sacred natural sites. From the earliest forms of animism and indigenous spiritualities to present day institutionalised mainstream religions, the reverence of nature reflects the spiritual importance of societies’ very life support systems. The spiritual and cultural ties with nature have contributed to our understanding of sustainable human-nature relationships and are fundamental to the moral and ethical foundations of many of the world’s cultures and societies. Scholars and conservation practitioners suggest that the sacred dimensions of nature have helped to constitute the world’s first conservation areas which were often sacred natural sites and landscapes (Dudley, 2009; Palmer, 2005; Wild & McLeod, 2008).

Despite this, a large part of the human population has lost this sacred relationship to the earth. This may partly be due to a lack of experience and direct interaction with nature and partly because people place less importance on conscious, religious and spiritual connections with nature. The role of sacred natural sites in sustainable human nature relationships are often rooted deeply into the animistic histories of many cultures. These cultures have often been transformed from being nature-based to being fused with the world’s cross-cultural mainstream religions (Buddhism, Christianity, Hinduism, Islam, Judaism, Sikhism, and Taoism) (O’Brien, 2007). Byrne (2010a) illustrates how the spread of Christianity has contributed to the loss of many sacred sites such as standing stones, forests, groves, trees, wells and mountains in Europe. In Latin America, similar patterns of destruction occur but there is also evidence of diversification where indigenous peoples blended Christianity with their pre-Columbian spiritual and religious traditions (see figure 4.2). Today, the mainstream religions increasingly use their teachings for the purpose of conservation as we elaborate later in this chapter.

The development of science during the Enlightenment and the technological advances during the industrial revolution have also critically disrupted the worldviews of the people to whom sacred natural sites are central. The loss of traditional and indigenous worldviews has been called the 'de-sacralisation of the cosmos' by Nasr (1996) and 'disturbing the Sacred Balance' by Posey (2000) and has led to the loss of sacred sites and landscapes. Modernization and development have further accompanied unprecedented resource acquisition and caused the absorption of many great civilisations and cultures through western colonisation. Under such conditions many sacred natural sites have been purposefully or unwittingly destroyed. As a result, they are under threat or go unrecognised and their values unprotected by law.

The interactions between cultural and biological diversity lead to a state of consciousness that makes us human (Harmon, 2007; Posey, 1999). This chapter therefore suggests that enhanced sensitivity to the interaction between cultural and biological diversity can help societies find new approaches for conservation in general and specifically for the conservation of sacred natural sites.

Figure 4.2: The ruins of Tikal, Petén National Park and World Heritage site, Guatemala.

The ruins of Tikal mark an ancient sacred place that is being revived by practitioners of the ancient Maya beliefs after it had been abandoned in pre-Colombian times. Source: Bas Verschuuren.



4.2 Recognition of cultural, spiritual and sacred values in conservation

4.2.1 Bridging the nature culture divide in conservation

The multiple values involved in sacred natural sites management pose challenges for management and policy, especially conservation organisations that are typically used to dealing primarily with biological values. The ideological roots of the western conservation movement – starting some 150 years ago - are embedded in a deep respect and even reverence for nature and creation. However, scientifically-expressed natural and biodiversity values have been prioritised over the cultural and spiritual values attached to nature. The ‘wilderness’ which the new nature conservation movement set out to protect left little space for people (Brown, 2008). As a consequence, people were sometimes removed from their ancestral homes while their lands and sacred natural sites were being incorporated into parks and protected areas (Williams and Hutton, 2007). Many cultural practices and beliefs that related to sacred natural sites went unrecognised and as such many were lost in the process. This juxtaposition of people and landscapes appeared most dramatically in the context of colonial regimes that subjugated landscapes and people to the will of dominant economic and religious powers.

Fortunately the conservation movement started adopting more comprehensive approaches based on the understanding that the aesthetic, moral, and spiritual values of biodiversity, permeating all cultures and religions, provide a firm imperative for its conservation (Mittermeier, 2003). Conservationists have developed more inclusive and participatory forms of management of which Indigenous and Community Conserved Areas (ICCAs) are most notable (Chape, 2008). ICCAs include many sacred natural sites that have often lacked legal protection and recognition of their cultural management. ICCA designation may help change this situation. The guidelines for the management of sacred natural sites developed by Wild and McLeod (2008) are particularly valuable to the management of these places within and outside government designated protected areas. Rather than fencing off the borders of conservation areas, people determine the extent of the conservation areas through practices of sustainable and customary use. Bhagwat and Rutte (2006) have called this ‘the social fence’ which depends on shared cultural - sacred and spiritual - values that form the basis of people’s traditional conservation ethics, and sacred natural sites provide an especially good examples of this.

Restoring and strengthening the sacred and spiritual dimension of human-nature relationships may help to meet traditional and contemporary spiritual needs and contribute to moral and ethical arguments for nature conservation. In fact, seeing the world’s cultural and biological diversity in peril has alarmed people worldwide and

appeals to their sense of responsibility for the well-being of humanity and the natural systems on which humanity depends. People's collective awareness of these issues has contributed to the creation of the world's Protected Areas Network and the establishment of World Heritage Sites and Biosphere Reserves. The global recognition of protected areas for their biological and cultural importance has led them to become icons that have once again taken on a sacred dimension (Putney, 2005), see figure 4.3.

4.2.2 Including cultural and spiritual values in conservation approaches

According to Suzuki (2007) and Posey (2000), the equilibrium between nature and culture is mediated through the sacred. This equilibrium is disturbed when the highest form of awareness - spiritual consciousness - is removed from human-nature relationships. The 'Millennium Ecosystem Assessment' (Bhattacharya, 2005) as well as the 'Global Environmental Outlook' (UNEP, 2007) recognise that culture, spirituality and the sacred are dynamic co-creators of biodiversity as well as important drivers of human development processes. It has become clear that failing to recognise cultural and spiritual values can exacerbate conflicts of interests between local peoples and conservationists and consistently hamper conservation objectives (Verschuuren, 2012b). Therefore it is important to remember that in its very essence the importance of conserving the diversity of life on earth - for human well-being as well as for intrinsic reasons - is often said to be based on the ethical and moral grounds where life itself is held sacred (Harmon, 2003). Recognising cultural and spiritual values is essential for respecting the sacredness of life and in doing so the conservation of sacred natural sites has repeatedly shown to yield improved results for conservation of biological and cultural diversity.

Legal recognition of sacred natural sites and their spiritual values has contributed to more effective conservation management in numerous cases worldwide. For example, in Northern Australia the Jawoyn Traditional Owners claims of cultural and spiritual values attached to Coronation Hill eventually held off uranium mining because they believed damaging the site would bring doom and ill health upon all mankind. Legal recognition of their claims enabled conservation status of the site which is now partly included in Kakadu World Heritage Site and National Park (Keen et al. 1993). In other cases, such as that of the Windward Maroons in Jamaica, the recognition of sacred natural sites has enhanced development of holistic management of the natural and cultural values of protected areas (John, Harris, & Otuokon, 2010), see figure 4.3.

Figure 4.3 The Blue and John Crow Mountains in Jamaica.

The Mountains form an important part of the Windward Maroon's history in Jamaica. Sacred natural sites play a significant role in the past and present cultural history of the area. The recognition of this history inclusive of its sacred natural sites have led the government of Jamaica to nominate the protected area as Jamaica's first World Heritage site in 2015. Source: Kimberley John.



4.3 Developing biocultural conservation approaches

4.3.1 Exploring biocultural diversity

Because of sacred natural sites' outstanding cultural and biological values, understanding how these values may be linked is crucial to developing appropriate conservation approaches. Posey's statement that biological and cultural diversity are inextricably connected became part of "The Declaration of Belem" (International Society of Ethnobiologists, 1988). It was one of the first articulations of the concept of biocultural diversity and several scientists have attempted to define biocultural diversity since. Existing definitions are broad and need to be redefined to a specific local context, often based on the overlap of language and the distribution of species in the environment (Loh, 2005; Maffi, 2002; Pilgrim, 2009). The ISE code of ethics has developed a basic definition suitable for the purpose of conserving sacred natural

sites which - once adopted - does not need to be limited to indigenous peoples, traditional societies and local communities:

“Biocultural heritage is the cultural heritage (both tangible and intangible, including customary law, spiritual values, knowledge, innovations and practices) and biological heritage (diversity of genes, varieties, species, ecosystems) of humans, which often are inextricably linked through the interaction between humans and nature over time and shaped by their socio-ecological and economic context” (International Society of Ethnobiology, 2006, p. 22).

Biocultural heritage of sacred natural sites may be passed down from generation to generation, developed, owned and administered collectively by their custodians and communities. Not surprisingly, significant overlap exists between areas with sacred natural sites that contain high biodiversity and areas with high cultural diversity.

4.3.3 Hotspots of biocultural values?

There is increasing interest to merge biological and cultural diversity into the concept of ‘biocultural’ diversity and apply it in ecosystem management and nature conservation strategies (Cocks, 2006; Harmon, 2007; Verschuuren, 2006a). Several scientific inquiries have been made to map the extent of biocultural diversity (Maffi, 2005a; Skutnabb-Kangas et al. 2003; Stepp, 2002). For example Loh and Harmon (2005) measure biocultural diversity by parameters for cultural diversity (numbers of languages, ethnicities, and religions) and biological diversity (numbers of bird, mammal, and plant species) at the national level. While these studies indicate countries where biological and cultural diversity are inextricably linked, they provide only limited guidance for supporting the conservation of sacred natural sites because many sacred natural sites are found outside the high biocultural diversity areas indicated by these studies. Sacred natural sites have been recognised as hotspots of biodiversity (Metcalfe, et al 2009) but also feature outstanding cultural, spiritual and religious values. Therefore, the importance of many of these sites may be better reflected when speaking of hotspots of ‘biocultural’ values.

4.3.4 Including indigenous peoples, mainstream religions and broader society

Indigenous people preserve up to 80 per cent of the world’s biodiversity and they speak most of the world’s 6,000 to 7,000 languages commonly accepted as indicators for cultural diversity (Sobrevila, 2008). Many languages are rapidly disappearing

together with the biological and cultural diversity intrinsically connected with indigenous people. Indigenous territories comprise 7 per cent of the world's surface - officially recognised by nation states - and another estimated 13 per cent go unrecognised (Posey & Dutfield, 1996; Sobrevila, 2008). Examples of these are biodiversity hotspots that cover 2.3 per cent of the earth's surface, mega diverse wilderness areas cover 44 per cent of the planet (Mittermeier, 2003), Protected Areas 12 per cent and Indigenous and Community Conserved Areas 20 per cent (Chape, 2008). Because of the overlap among these landscapes, biocultural approaches to conservation are essential to the success of conservation as a whole.

During the past decade the perception that protection of biological and cultural diversity is often associated with indigenous peoples has been tested and diversified (Cocks, 2006). Certainly, in the case of sacred natural sites a wide variety of groups (indigenous, religious, new age and tourists) are taking an interest in the biocultural values of these sites. Religion for example is often included in the analysis of biocultural diversity and is a core value to many sacred natural sites. Religious institutions own about 7 per cent of the earth's land surface (Palmer, 2005), oversee a US\$7 trillion International Interfaith Investment Group (Bhagwat & Palmer, 2009) and have adherents amongst 80 percent of the earth's population (O'Brien, 2007). Their involvement in conservation of biological and cultural diversity is therefore very important and may be combined effectively with concerns over sacred natural sites. Currently the Delos initiative is developing specific guidance for this process (Papayannis, 2010).

4.4 Lessons learned in support of biocultural conservation approaches

The cultural and natural values of sacred natural sites are interrelated so impacts on natural values may also affect the cultural values and vice versa. Because of this interdependence, drivers of change may pose a double impact to the overall values. Strategies for the conservation of natural and cultural values of sacred natural sites should focus on the ways these are both resilient and adaptive to the challenges our society faces today, including the biodiversity crisis, climate change mitigation, and poverty alleviation. Biocultural conservation strategies will therefore need to be supported at various levels of governance and management. Reconciling management strategies and policies for cultural and natural heritage management is key to effective conservation of sacred natural sites. Their conservation can be enhanced through extending protection beyond formally recognised conservation areas into the cultural domain. In order to do this, local stakeholder need to be involved in the process and multidisciplinary approaches need to give equal weight to different world views and ways of knowing.

Although lessons are being learned in the course of applying biocultural approaches for the management of sacred natural sites, these are dispersed and often lack an overarching approach. But sacred natural sites could form a global conservation network and be good indicators of biocultural diversity. More information is needed on the levels of biodiversity, of sacred natural sites and their capacity for ecological connectivity at a landscape scale. But sacred natural sites are already providing learning opportunities for developing sustainable management strategies based on the fact that the traditional management of these places has proven resilient and adaptive often already for many centuries.

4.5 Conclusions

In order to restore critical spiritual connections that persist in the links between people and nature, a fourth pillar ('spirituality') next to the commonly recognized pillars of sustainability ('people', 'planet' and 'profit') may need to be considered. Making people aware of the sacredness of nature requires raising consciousness of spiritual values which are not only found in traditional worldviews but also among the people who dominate today's modern global society. As such, lessons learned from and for sacred natural sites may assist in improving the human-nature relationships of the planet's increasing urban population. Engagement in environmental and sustainable ways of living remains a key issue to the success of conservation and the survival of humanity as a whole. Spirituality is a key value of sacred natural sites and therefore central to the restoration, conservation and protection of the natural and cultural values these places represent.



Chapter 5

Mixing Waters: A Cross Cultural Approach to Developing Guidelines for Fishers and Boaters in the Dhimurru Indigenous Protected Area, Australia

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< Figure 5.1: Mixing waters on saltwater country in the Dhimurru IPA, North East Arnhem Land, Australia. The place where salt and fresh water mix is called Ganma in Yolŋu language and holds a metaphor for the 'both ways' approach combining Indigenous and non-Indigenous ways. Source: Bas Verschuuren.

5.1 Introduction

Indigenous people have long managed and governed the landscapes they inhabit in order to sustain their livelihoods and cultures. Conservationists are often drawn to the variety of ecosystems and high levels of biodiversity maintained within these landscapes. Although conservationists as a broad term can include activists and laypersons we use the word “conservationist” more specifically to refer to scientific researchers and practitioners such as conservation biologists and ecologists.

Increasingly, and in response to a greater appreciation of interdisciplinary approaches, conservationists seek to take the interests and knowledge systems of local people into account by attempting to integrate successful aspects of traditional knowledge into their contemporary conservation management (Redford, 2011; Waltner-Toews et al. 2003). However, they often overlook the sociocultural and political context within which they are embedded and practiced (Wilshusen, 2011). Indigenous knowledge is not the same as a ‘separate’ scientific discipline but rather a body of knowledge that reflects a particular worldview based on its own ontological premises (Muller, 2012). While we are aware that this generalization does not do justice to existing epistemological and ontological differences within scientific fields, the failure to put indigenous ontologies on a par with ‘Western’ knowledge is increasingly viewed as an underlying cause for political, economic, religious and educational inequities and the disempowerment of indigenous peoples (Hunt, 2013; Verran, 1998). These inequities can also be seen as a schism between different and, at times, competing and conflicting worldviews and ontologies. In the realm of conservation, the failure to recognise this disconnect is likely to jeopardise conservation outcomes such as the protection of biodiversity and ecosystems (Blaser 2009; Reyers et al. 2010).

Historically, contemporary conservation approaches were less concerned with and informed about indigenous management and governance practices. In particular, the intangible cultural, spiritual and sacred values that are an integral part of Indigenous ontologies were poorly understood and often dismissed on the basis of being irrelevant to conservation (which mostly took its merit from Western science). As a result, many Western-trained conservationists and policy-makers remain unable or even unwilling to acknowledge the indigenous ontologies that shape the areas they are required to manage (Atran et al. 2004; Berkes, 2006; Blaser, 2009). This is lamentable given that a growing body of research shows that indigenous ontologies can be legitimised within Western scientific approaches; examples for this are the ‘Two-Eyed Seeing’ in Canada (Bartlett, 2012) and the ‘Two-Ways’ management in Australia (Hoffmann et al. 2012; Muller, 2012). However, the legitimization of Indigenous knowledge by Western science should not be considered a precondition for its utility to conservation or as a prerequisite for engaging with Indigenous groups.

In this chapter, we identify some of the ontological differences between contemporary Western conservation and the worldviews harboured by the Yolŋu Aboriginal people of northeast Arnhem Land, Australia and explore how these may be reconciled. We first explore the history and meaning of the 'both ways' approach (also called two-ways management) and provide examples of its application within the Dhimurru Indigenous Protected Area (IPA). Using the 'both ways' process we identify potential synergies between Yolŋu and non-Yolŋu 'ways of doing' as a basis for finding desired solutions to fisheries problems identified by Yolŋu. We outline how we operationalized this action-research in order to formulate practical guidelines for recreational fishers and boaters. The results describe the outcomes of the action-research such as culturally relevant species, the problems and management issues that Yolŋu identified and the responses they formulated in an effort to create and manage a common ground for Yolŋu and non-Yolŋu fishers and boaters. The results also include ethnographic data on the disjunctures and synergies between Yolŋu and non-Yolŋu that were encountered during the research process. The conclusion reflects on lessons learned in working within the 'both ways' approach as part of the process of developing the guidelines for recreational fishers and boaters.

5.1.1 Origins of the 'both ways' approach

The term 'both ways' originally emerged as a concept known as 'two-way schooling' which referred to drawing from two separate domains of knowledge derived from both Yolŋu and Western culture (Harris, 1990). Harris maintained that 'Aboriginal people today are increasingly interested both in being empowered in terms of the Western world and in retaining or rebuilding Aboriginal identity as a primary identity' (Harris 1990: 84) Later, the 'both ways' approach came to signify the acceptance of a mixing of Western and Indigenous knowledge (Marika et al. 2009). The 'both ways' approach has been applied across many areas of Yolŋu knowledge as well as non-Yolŋu domains. Examples are scientific disciplines or professions such as education and teaching (Harris, 1990) nursing, medicine and healthcare (Kendall et al. 2011) as well as land and sea management (Ens & McDonald, 2012; Hoffmann, 2012; Marika, 2009; Yunupingu & Muller, 2009). The 'both ways' approach cultural meaning stems from the word Ganma: "Ganma has many meanings, one of which is a place where fresh and salt water meet and mix. The fresh water and the salt water refer to parallel systems of knowledge" (Muller, 2012, p. 61). The 'both ways' approach therefore allows for taking an ontological approach to management issues.

5.1.2 The “both ways” approach in Dhimurru Indigenous Protected Area

We applied the ‘both ways’ approach in formulating guidelines for fishers and boaters (Dhimurru, 2010). This was carried out in response to Yolŋu expressing a need to mitigate impacts arising from fisheries activities occurring on their traditional land and sea estates, presently situated within the Dhimurru Indigenous Protected Area (IPA), see figure 5.2. The Dhimurru IPA is legally owned by Yolŋu people under the Northern Territory Aboriginal Land Rights Act of 1976. Established in 1992, the Dhimurru IPA is based on a voluntary management agreement with the Australian Government (Dhimurru, 2008). A Yolŋu community-owned land and sea management organization called Dhimurru Aboriginal Corporation (referred to hereafter as Dhimurru) manages the IPA. This is done in accordance with IUCN Protected Area Category V where the focus of management is on the interaction between people and nature, including all relevant cultural and recreational activities.

Dhimurru encourages a ‘both ways’ approach to land and sea management by utilizing both Western and Indigenous knowledge systems and mixing them into a new and fluid domain. However, the sole management responsibility remains in the hands of the Traditional Owners - in line with the vision expressed by the Yolŋu elders (Dhimurru, 2008; Yunupingu, 2009). Yolŋu elders state in Dhimurru’s constitution that:

“We envisage working together with the Parks and Wildlife Commission [Northern Territory]; we need their help in making our vision a reality, but the only people who make decisions about the land are those who own the law, the people who own the creation stories, the people whose lives are governed by Yolŋu law and belief.” (Dhimurru 2008: 4)

Figure 5.2: Dhimurru Indigenous Protected Area in North East Arnhem Land, Australia.
Source: Dhimurru Aboriginal Corporation.



The total area of the Dhimurru IPA is approximately 920 km² of which almost 90 km² consists of coastal waters (Dhimurru, 2008) that were extended into a much larger marine IPA in 2013 (Dhimurru, 2013). Given the extent of coastal areas under management by Dhimurru, it is not surprising that fishing and boating activities may affect culturally significant coastal biodiversity and ecosystems in accordance with Yolŋu law and belief systems. In order to aid management, Yolŋu believe that culturally appropriate responses are required in order to mitigate these impacts and curb the behaviours that drive them. Importantly, management responses also need to be embedded within a strategy geared to sensitising non-Yolŋu to Yolŋu culture:

“When ŋäpaki [non-Yolŋu people] come here ...fish and stay on country we want them to understand our rom [law] and dhäwu [creation story] so they see it and respect that djalkiri there [sacred site, also; foundation].” (Yolŋu interviewee pers. com.).

The ‘both ways’ approach was the basis for Dhimurru’s working agreement with the Parks and Wildlife Commission of the Northern Territory (PWCNT). Rangers and staff from both Dhimurru and the PWCNT share and practice aspects of traditional and contemporary land management on a daily basis. In staying true to its foundations, Dhimurru has been pursuing the ‘both ways’ approach in order to develop constructive cross-cultural working relationships with conservation, government agencies, universities and other organisations.

Partnerships in the spirit of the ‘both ways’ approach extend to collaborations with scientists from different disciplines. For example, anthropologists have mapped the stories (*dhäwu*), songs (*manikay*) and art (*miny’tji*) related to the sacred sites (*djalkiri*) in the Yolŋu coastal zone (Leo, 2010) and ecologists have investigated and mitigated the presence of invasive species such as the Cane Toad (*Rhinella marina*, formerly *Bufo marinus*) (Boll, 2006) and the Yellow Crazy Ant (*Anoplolepis gracilipes*) (Hoffmann, 2012). Scientists who have collaborated within the ‘both ways’ framework recognise its potential in allowing Dhimurru and other Indigenous land management organisations across northern Australia to effectively combine Yolŋu knowledge and practices with conservation management and planning (Christie, 1991; Ens, 2012; Hoffmann, 2012). However, experiences of scientists and Yolŋu struggling with the deeper ontological implications of working with the ‘both ways’ approach have also been cited (Muller, 2012).

5.1.3 The Yolŋu, Saltwater People living on sea country

The Yolŋu, like many Aboriginal people living in the coastal areas of northern Australia, refer to themselves as Saltwater People (Drill Hall Gallery & Buku-Larrngay

Mulka Centre, 1999; Williams, 1986). In the Yolŋu worldview, the land and sea are inextricably linked and Yolŋu attachment to the sea is just as great as that with to the land (Yunupingu, 2009). Because of the absence of a distinct divide between land and sea environments, sea can be referred to by Yolŋu interchangeably as sea country, saltwater country or simply country (McNiven, 2004; Williams, 1986), see figure 5.1. This holistic view has its origins in the creation stories and the Yolŋu law *rom* as is illustrated by the following:

“This water is saltwater. ...And in that water lays our sacred Law. Not just near the foreshore. We sing from the shore to where the clouds rise on the horizon. ...Everything that exists in the sea has a place in the sacred songs... seaweed, floating anemones, turtle, fish etc. The songs follow them out from the deep water into the beach.” (Drill Hall Gallery & Buku-Larrngay Mulka Centre, 1999, p. 19).

Like on land, the seabed and the intertidal zone contain similar *Dreaming* tracks related to sites of special cultural significance known as *djalkiri* sacred sites, all of which are protected under the Northern Territory Sacred Sites Act (Northern Territory of Australia, 2013). *Dreaming Tracks* are routes walked by *Wangarr*, ancestral ‘mythological’ beings such as the Rainbow Serpent, the Dugong, the Groper and the Shark during the *Dreamtime* period. These ‘mythological’ beings created the land, sea and everything in it and they laid down the *Rom* for Yolŋu people. The records of their actions have been passed on over generations through cultural concepts such as story *dhāwu*, song *manikay* art *miny’tji*, and ceremony *bunggul* and are intrinsically linked to the Yolŋu spiritscape (McNiven, 2004). The Yolŋu also link social groups through an intricate kinship system named *gurrutu*, which are in turn linked to geographical areas of land and sea country termed *Wāṅa* (Williams, 1986).

In Yolŋu ontology, these cultural and spiritual concepts also link terrestrial and marine environments and have therefore also been incorporated in Dhimurru’s Plan of Management (Dhimurru, 2008) as well as the sea country management plan (Dhimurru, 2006, 2013). They are also reflected in Yolŋu perspectives on policy affecting the intertidal zone as well as eventually the *Guidelines for Recreational Fishers and Boaters* (Dhimurru, 2010), as the culmination and output of this research. Indigenous perspectives of law or policy are often distinguished from that of most contemporary policy makers whose notions of law are typically based on state law which in turn is rooted firmly in colonial law (Marika, 2009; Verran, 1998). An example of this is the public right to navigate versus the traditional Yolŋu system of asking permission to access or harvest from sea country in a manner that that is

cognisant of its cultural significance, e.g. minding sacred sites and creation stories. This differentiation is also expressed in the Dhimurru Sea Country Plan (Dhimurru, 2006, p. 4):

“There are inconsistencies between our rights and responsibilities under our customary law and those recognised under contemporary Australian law. We are struggling to have our sea rights recognised in the same way as our rights on the land are recognised. While that struggle is continuing, we take this opportunity to present our plan regarding the use, conservation and management of the sea.”

However, in a relatively recent ruling, the Yolŋu won legal recognition over the intertidal zone based on their intergenerational cultural occupation and spiritual affiliation with this zone (Federal Court of Australia, 2007). The evidence of Yolŋu ownership and occupation of the coastal zone was based on *dhäwu*, *manikay* and *miny'tji* as established and brokered by anthropologists recognised by the Federal Court (Barber, 2005; Morphy & Morphy, 2006). These efforts helped create a common ground informing the policy making process where indigenous ontologies were equally weighted to those of non-indigenous peoples. Another example of Yolŋu creating common ground is that of the same tribes offering their law, expressed in art and writing to the Australian president Kevin Rudd as a statement of their recently won sea rights and indigeneity, see figure 5.3.

Figure 5.3 President Kevin Rudd receiving Dhuwa law.

In 2008 then Australian president Kevin Rudd was presented with the Dhuwa law in a traditional ceremony in Yirrkala in an attempt of the clans to affirm their Sea Rights. North East Arnhem Land Australia. Source: Bas Verschuuren



5.2 Methods

Research was carried out over two to three month periods in 2007, 2008, 2009 and a shorter period in 2011. We applied an action research approach using ethnographic methods, including a review of scientific literature and relevant management and policy documents from sources such as government agency websites, files made available by Dhimurru and the Buku-Larrnggay Multimedia Art Centre. According to McNiff and Whitehead (2006), action research is about doing research through active participation in a dynamic and evolving reality, whilst being part of an existing organization. In conducting action research as part of the ‘both ways’ approach, the process was greatly enhanced by being able to engage in participatory observation and in-situ learning opportunities when assisting Dhimurru rangers with land and sea management activities (e.g. coastal patrols and monitoring, marine debris clean-ups, ethno-ecological surveys, stakeholder liaison) or accompanying other Yolju on traditional fishing outings.

Interviewees were identified using snowball sampling and selected according to their role in IPA management or planning as well as their culturally defined responsibilities such as the ability to be able to 'speak for' sea country (Bernard, 2006). We used free listing exercises in order to elicit the cultural significance of species and habitats and semi-structured interviews for gaining insight into the boating and fisheries-related issues Yolŋu perceived to be of concern to sea country (Bernard, 2006). Semi-structured interviews were held with 29 informants with an initial interview guide of 18 questions being used. Three senior Yolŋu acted as key informants and allowed extensive interviews in order to facilitate in-depth understanding of the cultural context, knowledge and the management implications. This approach assisted with the triangulation of information in order to understand the extent to which identified issues were shared across geographic areas and clan groups (Bernard, 2006). Validated information was subsequently listed in an 'issues and management implications matrix' to allow grouping of the perceived issues and management implications suggested by the participants (Figure 5.5). Guidelines were then developed based on these groupings, with additional feedback from Yolŋu and non-Yolŋu staff within Dhimurru Aboriginal Corporation.

This action research approach allowed Yolŋu to participate throughout the full research process (from design to implementation and analysis) in a way that guaranteed that their original concerns were addressed. This approach is also supported by others such as Denscombe (2010, p. 6) who states that; "action research aims to solve a particular problem in a practical context and to produce guidelines for best practice. In our case, the particular problem is the social-ecological impact on the coastal zone as perceived by Yolŋu and the best practice relates to the *Guidelines for Fishers and Boaters* that were collaboratively developed for the Dhimurru IPA.

5.3 Results

Initial results identified the species and areas in the coastal zone that are important for Yolŋu day-to-day life and sea country management (Figure 5.4). Subsequent findings were based on Yolŋu perceptions of fisheries issues and their cultural relevance, such as impacts on sacred sites, totem animals and creation stories (Figure 5.5; two left hand columns). These concerns were then linked to the management implications and management responses that Yolŋu and Dhimurru IPA staff identified (Figure 5.5; two right hand columns). These results subsequently formed the basis of the applied research output which was the *Guidelines for Fishers and Boaters* (Dhimurru, 2010). A further result of this action research outcomes is evaluative in

terms of reflecting on our roles as researchers in the cross-cultural process that is part of working within the 'both ways' approach underlying the development of the guidelines for fishers and boaters (Dhimurru, 2010) (Figure 5.7). The following paragraphs present these series of results in this particular order. The results should be interpreted with an understanding that all 'country' (sea, sky, estuaries, beach etc.), living and non-living, is important to Yolŋu, and that all aspects come with a deep sense of cultural and spiritual custodianship, sacredness and bestow identity upon Yolŋu.

5.3.1 Species and Areas of Importance to Yolŋu and IPA management

Associations with plant and animal species are key to Yolŋu worldviews and cosmologies (Magowan 1995). Therefore, the initial phase of the research primarily focused on Yolŋu traditional knowledge. Yolŋu identified species and habitats of importance, and seasonal (phenological) indicators that assist sea country management processes and practices. During the course of this research, Yolŋu individuals identified 50 marine species of importance; however, we reckon that this list is non-exhaustive. These marine species concern eight species of turtle (Miyapunu), one species of reptile (crocodile, Baru), two species of mammals (Djunungayŋu), eight species of shellfish (Djiny), one species of sea urchins (Dharnpa), twenty-two species of fish (Guya), four species of stingray (Gurrtpi) and four species of sharks (Māna). Yolŋu names have been verified using Barber (2005). Figure 5.4 shows the results of the free listed and categorised responses to the first part of the research: Yolŋu Traditional Knowledge in sea country: Species, habitats and indicators. The later are not brought down to the species level in the presentation of the results, instead we focussed on identifying management issues that pertained of several of the species identified.

Figure 5.4: Yolŋu Traditional Knowledge in sea country: Species, habitats and indicators.

What species are important?

All species are important. Specific species mostly identified during interviews and observation. Yolŋu names have been verified using Barber (2005):

Marine turtle and Dugong, *Miyapunu*; *Miyapunu*- Turtle (all species); *Dhalwatpu*- Green turtle (*Cheloniemydas*); *Guwarrtji*- Hawksbill Turtle (*Eretmochelysimbricata*); *Muduthu*- Olive Ridley Turtle (*Lepidochelysolivacea*); *Ngarriwa*- Flatback Turtle (*Cheloniadepressa*); *Garun*- Loggerhead Turtle (*Caretta caretta*); *Warrnumbili*- Leatherback Turtle (*Dermochelyscoriacea*); *Djunuguyangu*- Dugong (*Dugong dugon*).

Reptiles: *Baru*- Crocodile, (*Crocodylusporosus*).

Mammals: *Mirinyungu*- False Killer Whale, (*Pseudorca crassidens*), several species of whale undetermined).

Shellfish: *Djiny*- Mud crab (*Scylla serrata*); *Gatjini*- Sand Crab (*Sesarma* spp), *Mandi*- Cray fish (*Panulirus cygnus*); *Nyurr*- Endeavour Prawn (*Metapenaeus endeavouri*); *Namura*- Sydney Rock Oyster (*Saccostrea glomerata*); *Mekawu*- Mangrove oysters (*Crassostrea rhizophorae*); *Dhalimbu*- Giant clam (*Tridacnagigas*); *Buyn'bu Ngukaliya*- Lesser longbum (*Terebraliapalustris*).

Sea urchins *Trepang*- Sea cucumber, (*Scarus vetuala*);

Fish: *Balin*- Barramundi (*Latescalcarifer*); *Dhinimbu*- Spanish Mackerel (*Scomberomorus commerson*);

Gopu- Longtail Tuna (*Thunnus tonggol*); *Dhakuda*- Golden trevally (*Nathanodon speciosus*); *Nguka*- Giant trevally (*Caranx ignobilis*); *Yorkal*-Black tailed Trevally (*Caranx carangus*); *Dhambeku*- Parrot fish (*Bolbometopon muricatum*);

Wakun- Sea Mullet (*Mugil cephalus*); *Lalu*- Blue uskfish (*Choerodon cyanodus*); *Bambi*- Black-spotted whiplay (*Himanturatoshi*); *Dhan'pala*- Mud mussel (*Polymesoda aerea*);

Womayo- Snapper, (*Lutjanus johnii*); *Bulmarra*- Red Emperor (*Lutjanus sebae*);

Matpuna- Black Bream (*Acanthopagrus butcheri*); *Makani*- Talang Queenfish (*Scomberoides commersonianus*); *Ngurrunaku*- Baramundi cod (*Cromileptes altivelis*);

Mundjulungu- Pangled Emperor (*Lethrinus nebulosus*); *Birrwirra*- Pennantfish (*Alectisciliaris*); *Nguka*- Giant trevally (*Caranx ignobilis*);

Minyga- Stout Longtom (*Tylosurus gavialoides*); *Dikarr*- argescale Flyingfish (*Cypselurus oligolepis*); *Dayng'be*- Coral Trout (*Plectropomus maculatus*); and various other reef (unidentified).

Stingray: *Gurritjpi*- Cowtail Ray (*Pastinachus sephens*); *Bambi*- (*Himantura uarnak*); *Nganalk'mi*- Mangrove Whipray (*Himantura granulata*); *Marr'gala*- Manta Ray (*Manta hirostris*).

Sharks, *Mana*- *Garrungunung*- Hammerhead Shark (*Sphyma* spp); *Lemon Shark* (*Negaprion acutidens*);

Nervous Shark (*Carcharhinus cautus*); *Spot-tail Shark* (*Carcharhinus sorra*).

Other: Mangrove ribbon worm (*Teredo* spp.); some bird species (unidentified) and eagrass (*Halophila ovalis*, *Halodule uninervis*).

Why are they important?

Species are important for; *manikay*- song and songlines, *miny'tji*- art; *bunggul*- ceremony and dance, *lhawu* stories and *rom*- law which are all connected in Yolŋu culture. Hence species play an important role in Creation stories, as totem and identity, as flagship and indicator, as food sources or medicine as well as their in association with many other uses and values such as: ceremonial, spiritual, educational.

What areas are of importance?

Breeding, resting, sleeping, mating and foraging grounds for species. Dreaming places, places of song and totem and sacred sites.

Where do they occur?

ŕangi- beach, sand; *Gunda*- rock, stone, reef. *Batpa*- seagrass beds (turtle and dugong feeding habitat);

Vinydjia- floodplain; *Gathul*- mangrove area; *Dholu*- mud flats; *Monukgapu*- saltwater, sea, ocean;

ŕaypinygapu- freshwater; *Mayang*- river, creek.

What are the most used signals used in determining seasonality?

turtle tracks and turtle nesting places on the beach; surfacing dugong surfacing, flowering or *calendar* plants. Nowadays GPS tracking and using 'Cybertracker', also called I(ndigenous)- Tracker is also used in combination with traditional knowledge.

How are signals found? When is the right time?

Use of species tracks, spoor etc. Using (cultural) *phenology* of fauna and flora species through inherited *seasonal calendar* knowledge on the timing and appearances of certain species, e.g. observing flowering of the native cashew tree (*Semecarpus australiensis* or nowadays the mango tree can be also used) to indicate when the time is right to hunt mud crab and stingray. Traditional hunting seasons, species migratory patterns, customary closures and restrictions are also used to guide behaviour.

When inviting Yolŋu to identify what species are of importance and why, they mentioned the species role in creation stories (*dhäwu*) or as a totem animal and, to a lesser degree, their function as a flagship species in conservation management. Flagship species are often species at risk of extinction; they play a key ecological role and have charismatic appeal in the public domain (Bowen-Jones & Entwistle, 2002). Yolŋu usually did not assign flagship status to a species, with the exception of sea turtle and dugong (*Dugong dugong*) which Yolŋu know enjoy (inter)national interest and also have prominence in Dhimurru's nature conservation projects:

"We know all the fish and this country, we sing them. That Miyapunu [sea turtle]... ...we also hunt. So ŋäpaki [non-aboriginal person] like that Miyapunu too, he worries! We go [satellite] track that Miyapunu with Rod [a sea turtle researcher], it goes all the way to Queensland!" (Yolŋu interviewee pers. com.).

Many recreational fishers also view sea turtles and dugong as important and express willingness to assist with their conservation. These species become an ideal vehicle for educating both Yolŋu and non-Yolŋu recreational fishers about the underlying threats to their populations and the role that Dhimurru plays in their conservation. For this reason, turtles and dugong have been given appropriate attention in the Dhimurru Sea Country Plan (Dhimurru, 2006, 2013) and also in the *Guidelines for Fishers and Boaters* (Dhimurru, 2010).

The importance of a given species is very tightly bound to Yolŋu culture and examples of cultural values and appropriate cultural behaviour were also provided: *"If someone passes away, [one] cannot catch that fish or cannot eat octopus as it has a certain relation to them. [It is also] dependent on your relationship to that species."* (Yolŋu interviewee pers. com.)

Other factors about individual animals that were culturally significant are the size of the animal and whether a female is carrying progeny or not. Specific species were mentioned for their cultural significance or particular management concern (Figure 5.5). The challenge for modern-day conservation is to be able to effectively transpose such intimate cultural and spiritual relations into ecosystem management (Verschuuren, 2012b) - in our case the *Guidelines for Fishers and Boaters*. Coombes et al (2014) surpass this notion 'transposing' by reconceptualising notions of participation, action and representation of doing research with Indigenous people.

5.3.2 Perception of fisheries related issues and their cultural significance

In the second phase of the research, the analysis of issues of importance to Yolŋu focused on the fishing interests and activities of predominantly non-Yolŋu recreational fishers and, to some extent, concerns about commercial fishers (whose vessels usually - but not always – operate further from the coast). Fishing activities were reviewed and grouped based on the issues identified and observed by Yolŋu (e.g. such as vessels trawling or anchoring over sacred sites). Much concern was given to areas where spiritual values are connected to specific places in the coastal zone or seabed such as, for example, Shark Dreaming that covers areas many square kilometres. Despite that many sacred sites have been registered in an atlas that commercial fishers are required to consult, prawn trawlers have in cases been observed operating over them, thus causing worry and concern with Yolŋu (Yolŋu interviewee, pers. com).

Other issues raised by Yolŋu concern: fishers accessing sacred outcrops and islands; excessive vessel speed over sea grass areas and sacred sites; improper discard of fish and by-catch; the catch of too many or (from a Yolŋu perspective) undersized fish; and access to the water for fishers' vessels (Figure 5.5). Other issues pertained to increased pressure on sacred animals like the Giant Trevally *ŋuykal* (*Caranxignobilis spp.*), Dugong and various species of sea turtle including the endangered Hawksbill Turtle (*Eretmochelys imbricata*):

“You don't go there, [to] Gaynada (see figure 5.6), ŋuykal [Giant Trevally Dreaming, known as Twin Eagles in English] when they got the roe... you know when they have eggs in them, no swimming, no hunting... we do not disturb them, no one goes on the water then.” (Yolŋu interviewee pers. com.)

The issues identified in this phase of the research helped with the identification of the main body of guidelines, which were subsequently complemented by the management implications identified during our research.

Figure 5.5: Perceived environmental issues, impacts, cultural importance and management implications.

Perceived issues	Impacts	Cultural relevance	Management implications
Speed, noise and boat strikes			
Propeller damage to sea grass in shallow waters.	Dugong feeding grounds, sea grass (indicator species) damaged	Affects wild food source (dugong); Induces a concern or 'worry' about the dugong's well-being.	Habitat mapping, surveying and long-term monitoring, speed of boats urged to slow down in indicated areas
Boat strike of dugong and sea turtle; wash-up of dead or injured dugong with boat strike.	(Fatal) injuries to and decreasing dugong and sea turtle populations	Affects availability of wild food source (dugong, turtle) and harms species considered to be of sacred or totemic importance.	Regulate boat access and speeding indicated areas; Yolŋu to survey for injured animals
Noise from outboard motors.	General noise pollution; disturbance of marine species populations and sacred sites or ceremonies	Desecration of sacred sites and ceremonial areas; Disrupting tranquil areas	Zoning; no go or sacred zones; engage in education and signage
Boat speed.	Damage to sea grass and marine species; increased chance of boat strike or propeller damage	Affects availability of wild food source (dugong, turtle); Harms or kills species considered to be of sacred or totemic importance.	Zoning; 'go slow' zones; impose speed limits; engage in education and signage
Commercial trawling over sea grass areas.	Damage to sea grass areas; dugong feeding grounds affected; damage to sacred sites, crocodile and shark dreaming	Affects wild food source (dugong). Induces concern about the dugong's and desecration of sacred sites.	Work with fishers to identify areas of concern and possible options; enforce Sacred Sites Act over Crocodile Dreaming or other sacred sites
Littering and discards			
plastic bags.	Sea turtle mortality	Affects availability of	Retail outlets in township

		through becoming trapped or consuming plastic bags	wild food source (turtle); potential mortality of totemic /sacred species; a feeling of sadness and worry	shift from plastic to paper bags; beach clean-ups; rubbish bins made available
Discarding fish remains at boat ramps (after filleting).	Discarded fish attract crocodiles		Discards or waste of any fish are culturally inappropriate; boat ramps are popular swimming spots for Yolŋu	Visitor information and education; fishing guidelines
Rubbish at beaches including ghost nets / marine debris.	Pollution of the coastal environment; incidental catch of turtle, shark and dolphins in ghost nets		Unhealthy ea Country induces worry and concern; affects key totemic species	(Community) clean-up activities, monitoring Ghost nets; media and public awareness; lobbying regional & (inter)-national governments
Commercial fishers discard sharks after cutting fins.	Declining shark population and damage to breeding populations		Affects especially the four clans with 'Shark Dreaming' totemic links; agitation over 'waste' of species; induces worry and concern	Lobby to improve shark fishing protocols within fishing industry (at various scales); enforce Sacred Site Act over Shark Dreaming/sacred sites

Access and recreation

Swimming at specific sites (at certain times of the year).	Disturbance of species behaviour (e.g. Trevally with roe are disturbed and leave the area)		Affects (presence and populations of) sacred species and availability of wild food source	Visitor information; education and signage; enforcement in recreational zones
Visitor access to beaches.	Trespassing on sacred sites; driving over turtle nests or disrupting turtle nesting; leaving garbage and other waste; Noise pollution		Desecration of sacred sites; culturally inappropriate behaviour; frustration and 'worry' within the Yolŋu community; possible impacts on key species	Education and signage; monitoring and enforcement; restrict access to certain areas
Anchoring over sacred sites, coral reefs and sea grass.	Damage to sacred sites, coral reefs and sea grass		Desecration of sacred sites; decreasing quality of coral reef habitat	Register more sacred sites; map sacred sites at sea; indicate 'no go zone' on maps; education and signage

By-catch: Sea turtles and crocodile become caught in commercial and sometimes recreational fishers' nets.	Decreasing sea turtle and crocodile populations (as well as other less visible species); decapitated crocodiles have been found floating on the water	Affects sacred/totemic species; affects wild food source; causes agitation amongst clans with Turtle or Crocodile Dreaming	Urge fishers to use Turtle Exclusion Devices (TED) and to check nets regularly to prevent species (e.g. crocodile) from drowning
Turtles become caught on (discarded) recreational fishing lines.	(Fatal) injuries to sea turtle	Sacred-totemic species; affects wild food source and the two clans with Turtle Dreaming	Educate fishers on safe release procedures; investigate (and stimulate) the use of steel hooks
Increasing number of vessels on waterways.	Increased recreational fishing pressure and illegal catch	Affects availability of wild food source - reducing hunting 'success'; increase of impacts on sacred sites	Encourage adherence to protocols; limit access and permits; enforce boat registration and tracking; increase enforcement patrols
Difficult to check bag or "catch" limits.	Potential overfishing or illegal fishing; pressure on fish stocks	Feeling of not being in control of activities taking place on Yolŋu estates	Train Indigenous enforcement officers; increase monitoring capacity

Indigenous Yolŋu harvest

Increasing and uncontrolled traditional (Yolŋu) sea turtle and dugong hunting.	Contributes to pressure on species populations; Yolŋu may (over) hunt species (previously) considered taboo according to cultural protocols	Traditional law is not in place – or enforced (particularly for younger Yolŋu); reduced respect for Yolŋu hunting culture, identity and Dreaming by non-Yolŋu; current policies often inconsistent with traditional species use	Monitor and record numbers hunted within community; participatory education of youth with Yolŋu elders; reinforce traditional law; further develop <i>Both Ways</i> management approach; resolve inconsistencies in policies
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5.3.3 Management Implications and Responses

The third phase of the research focused on Yolŋu management responses to the previously identified management and policy issues through a 'both ways' approach (Figure 5.5, far-right column). The issues were identified on basis of what Yolŋu perceived as important, including the extent to which the issue is understood to affect current, future or intergenerational well-being. For example, the aforementioned concern with the Giant Trevally led to consideration of announcing seasonal closures and banning of fishing activities at nearby situated campsites and

recreational areas from September to November when Giant Trevally carry roe (Figure 5.6).

Figure 5.6: Gaynada, Twin Eagles, Cape Arnhem, North East Arnhem Land, Australia.

Gaynada is a Giant Trevally dreaming, a sacred natural site located in Dhimurru IPA and is subject to several management measures such as seasonal ban on swimming, fishing and boating. Source: Bas Verschuuren



Both Yolŋu and non-Yolŋu interviewees made suggestions for management (Figure 5.5). These were primarily related to: the issuing of fishing permits; imposing speed limits over sea grass and sacred sites; the development of guidelines for recreational fishers; and the education of youth through school programs and by liaising with amateur fishing clubs and associations. This latter initiative was well received by management:

“We [as Dhimurru staff] are interested in the offer of the [local] Fishing Club to distribute a fishing kit and information package to school kids. We can then provide school talks on how to fish in manner that is respectful of Yolŋu culture and safe. We can distribute the guidance we are developing and improve collaboration with the Fishing Club and the schools directly; the problem is capacity...” (Non-Yolŋu interviewee pers. com.)

The most relevant management implications were either translated into the *Guidelines for Fishers and Boaters* or contributed to making better-informed decisions in day-to-day management by Dhimurru’s Sea Country Rangers.

5.3.4 Guidelines for Recreational Fishers and Boaters: a ‘both ways’ approach

The primary purpose of the *Guidelines for Fishers and Boaters* is to help alleviate Yolŋu concerns and support their cultural responsibilities surrounding sea country, as it relates to activities carried out by non-Yolŋu fishers and the broader range of stakeholders active within the coastal zone on Yolŋu land. The main concerns and issues identified by Yolŋu as being necessary to be countered through implementing the guidelines have similarly been translated into concepts easily understood by recreational fishers (table 5.2). Each of these issues were elaborated in clear polite ‘plain-speak’ language offering guidance and preventive measures in line with rules and regulations governing the Dhimurru IPA.

Since their publication in 2010, the *Guidelines for Fishers and Boaters* have been made available through the IPA permit office, the Dhimurru website (see: <http://www.dhimurru.com.au/recreational-fishing.html>) and local, specialised shops for fishers. This in itself resulted in a reasonable distribution of the guidelines. Several informants indicated that more could be done to disseminate and enforce the guidelines more efficiently. They suggested providing the guidelines as a supplement with fishing permits and making them available on related websites and printed materials which fishers regularly access such as fishing magazines, tide and fish charts, or other brochures distributed by recreational fishing and Indigenous organizations. Such efforts are part ‘both ways’ collaboration and provide an avenue

for sensitising non-Aboriginal people about Yolŋu ways of life. Making the *Guidelines for Fishers and Boaters* available was seen as an important step towards changing the fisher and boater behaviour and is consistent with the approach set out in the Dhimurru Sea Country Plan (Dhimurru, 2006, p. 4):

It is still our wish to engage in a positive way and in a spirit of good will with those who share the sea with us. We wish to work toward reconciliation of two management systems to ensure the best possible outcomes for our sea country.

Figure 5.7: *Guidelines for Fishers and Boaters* (adapted from Dhimurru 2010).

Sea Grass

Slow down: Reduce speed over sea grass areas or preferably avoid them altogether

Reduce noise: Be aware of the effect that motor noise has on marine life

Avoid boat strikes: Keep an eye out for grazing dugong or surfacing turtles

Discards

Be thoughtful: Yolŋu are proud of their tradition of harvesting only what they need and using their catch to the fullest. Remain sensitive to the cultural environment in which marine life is caught and how it utilized

Be mindful: When discarding fish carcasses, please do so well away from the boat ramps

Possession limits

Comply: Stick to the bag limits recommended by your local fishing club and beware not to exceed personal possession limits as stipulated by the NT Fisheries Act

Anchoring

Be aware: Do not drop anchor over sea grass or sacred site areas and avoid damage to fragile coral beds. If you are not sure where these are contact Dhimurru Aboriginal Corporation for more information

Seasonality

Be informed: Seasonal cultural or natural resource management closures may apply to certain areas at times

Access

Stick to the law: Whether or not you intend to fish, a fishing permit is essential to legalise your access to the intertidal zone and permits you to fish outside designated Dhimurru Recreation Areas

Be sure: When you want access beyond the intertidal zone, outside designated recreational Areas. Accessing Aboriginal Land including offshore islands without an appropriate permit is an offence under the Aboriginal Land rights Act and may be an offence under the NT Aboriginal Sacred Sites Act

Be prepared: All permits can be obtained from either the Northern Land Council or Dhimurru Aboriginal Corporation Offices

Reporting

Use your eyes: Dhimurru Sea Rangers are out patrolling to check access permit compliance and looking after Sea Country. Feel free to record and report any damage to the environment or suspicious and/or

unlawful behaviour to them, the Dhimurru Office, Police or the Northern Land Council

Give a hand: Recording your catch, e.g. species and size, to your local fishing club helps all of us with 'both ways' management in monitoring our resources

Turtles: If you accidentally hook a marine turtle, take a picture and report the catch. Remove the hook or remove the line as close to the hook as possible and release the turtle back into the sea

Enforcement

Be responsible: These Guidelines for Fishers and Boaters are in principle voluntary. However, some of the guidance provided can be enforced under Commonwealth and Northern Territory Laws

The *Guidelines for Recreational Fishers and Boaters* (Dhimurru, 2010) is deliberately intended to strike a chord of mutual collaboration and appreciation for sea country as a way to engender open-mindedness. They urge fishers to observe, respect and adhere to guidance, tradition and restrictions, which are enforceable by law. This is important as earlier research suggests that fishing in the Northern Territory is generally experienced as 'a lifestyle' where much value is placed on open public access and free use of resources whereby any restrictions are viewed as an impingement on the perceived rights and freedoms of non-Aboriginal fishers (Palmer, 2004). Non-Yolŋu fishers interviewed as part of this research repeatedly use phrases such as "a matter of principle" when explaining their unwillingness to conform to the implications of the Blue Mud Bay case which legally requires visitors to obtain a fishing permit when active within the Yolŋu-owned intertidal zone. The Blue Mud Bay case was decided by the Federal Court of Australia on 23 July 2008 and resulted in the recognition of Aboriginal peoples' legal rights over approximately 80 per cent of the Northern Territory's coastal intertidal zone to the mean lowest watermark. Indigenous people now negotiate access and use of this zone in relation to recreational and commercial fisheries. This offers opportunities to extend Yolŋu values into conservation planning processes as well as economic development of the coastal zone.

Due to such prevalent perceptions, the Yolŋu (through Dhimurru) decided that illegal fishing activity and land access would not be legally pursued if the offender subsequently obtained a fishing permit, which would then be backdated. Yolŋu hope that this conciliatory approach will help in sensitizing non-Indigenous fishers to Yolŋu cultural values, which are central to resolving the problematic issues they identified. In general, Dhimurru staff reason that:

"when fishers take an interest in why sea country is healthy, it is hoped that they will also want to know how they can help maintain sea country when they are on the water." (non-Yolŋu interviewee pers. com.)

There also exists a general consensus that the *Guidelines for Recreational Fishers and Boaters* will only achieve their purpose when adequate communication and dissemination pathways are followed up by appropriate enforcement. Nevertheless, most Yolŋu were unclear about what type of enforcement efforts would be required. This could in part be explained by Yolŋus' unfamiliarity concerning the potential legal implications of the Blue Mud Bay case.

Several Yolŋu suggested increased compliance checks in the face of rising concerns and feelings of not being in control over activities taking place on their land and sea estates. Currently, Indigenous rangers have no or little legal enforcement capacity. However, they are permitted to check fishers' catch, record and report marine wildlife casualties as well as report illegal access and inappropriate behaviour to the Australian Customs and Border Protection Service, local police and/or the Parks and Wildlife Commission (PWCNT). Other interviewees suggested that it would be more effective to increase Indigenous enforcement capacity and investigate less labour-intensive methods of checking compliance such as obligatory GPS tracking of fishers and vessels on Aboriginal land and waters as well as improved registration of the catch. Many interviewees expected that enforcement by Dhimurru's sea rangers would help decrease incidences of inappropriate behaviour and, importantly, also act as an effective vehicle for facilitating cross-cultural understanding between Commonwealth law and Yolŋu law (*Rom*), see figure 5.8.

5.4 Conclusions

This research elicited Yolŋu perceptions of sea country activities and management as basis for formulating practical outcomes that are cognizant of Yolŋu and non-Yolŋu cultural values. The action research process deployed, which resulted in the *Guidelines for Fishers and Boaters*, has also contributed to 'both ways' management by placing emphasis on the importance of improving mutual understanding and cross-cultural learning among researchers, IPA staff and other stakeholders. The 'both ways' approach –the framework for our research - has been valuable in this particular conservation context. Similarly, the *Guidelines for Recreational Fishers and Boaters* may serve as an example of a process and product to other Indigenous groups both along the Northern Territory coastline or in other parts of the world.

Figure 5.8 Sea Country Rangers on Patrol.

Sea Country Rangers Balapalu Yunupingu (left) and Patrick White (right) and are on patrol checking whether recreational fishers and boaters respect the non-access policy for many sacred rocky outcrops in the Dhimurru IPA sea estate. Source: Bas Verschuuren.



5.4.1 Improving cross-cultural learning within the ‘both ways’ approach

We highlight the importance of solution-oriented action research in addressing conservation concerns in a cross-cultural context. Cultural values are largely intangible and render themselves invisible to most non-Indigenous people. Therefore, challenges persist in guiding and sensitizing non-Indigenous use of the Australian coastal zone in a cross-cultural context. Our research process enabled us to appreciate the synergies that can be found when doing research and developing guidelines through the ‘both ways’ approach. That is, making a shift from learning *about* the natural world to learning *from and within* the natural world based on a Yolŋu worldview. Berkes has described this ‘synergising’ as a process or bringing into dialogue of different ontological knowledge systems (Berkes, 2009) whilst others have called it ‘weaving’ (Bartlett, 2012) or ‘co-motion’ (Muller, 2014).

In remaining true to the Yolŋu analogy of *Ganma* (i.e. a place where fresh and salt water meet and mix), we believe that the metaphor of ‘brackish water’ could be invoked as a new way of understanding the ‘both ways’ process as being fluid rather than static. In this mixed domain, it is possible encounter both, aspects of Indigenous ontologies (e.g. certain spirit-beings that appear as animated currents, rocks and animals) as well as of scientific conceptualizations such as keystone or flagship species. This mixing can enrich the social learning process such that outcomes engage with new audiences, disciplines, sectors with the ultimate aim of being recognized or, further, legitimized by becoming embedded in institutional

mind-sets and contemporary policy. In achieving conservation outcomes, social learning is as important as conceptual learning (Lauber, 2011). Mixing Indigenous knowledge and land management practices with Western views on conservation management can lead to new understandings of conservation management and a broader recognition of the contribution of Yolŋu ontologies in achieving and maintaining regional and national conservation targets.

However, on its own, the *Guidelines for Fishers and Boaters* have so far been incapable of bringing about a significant change in non-Yolŋu fishers' behaviour, or at least to the extent that it alleviated the Yolŋu's original concerns. Social learning is therefore only as effective as the extent to which social actors demonstrate an openness and willingness to learn. In the contemporary northern Australian context, effective broad scale social learning (and intercultural appreciation) will require more intensively tailored approaches that engage specific stakeholders and target specific behaviours as part of the application of a well-formulated community-based social marketing strategy (McKenzie-Mohr, 2011). However, this may require more resources and capacity than most small research teams have at their immediate disposal.

5.4.2 The role of researchers in a 'both ways' approach

We conclude that applied research in a local and social context must strive for participation and shared problem-solving aimed at guiding well-informed action. This process rests on a shared willingness among researchers, practitioners and stakeholders to be open to the validity of the each other's perceptions in order to stimulate mutual learning for developing sustainable options for management problems (Hoffmann, 2012; Waltner-Toews, 2003; Yunupingu, 2009). It also places a responsibility on researchers to ensure that results and newfound knowledge are ready to be translated into materials that support implementation (Lauber, 2011; McNiff, 2006; Pohl et al. 2010).

The scientific researchers working through the 'both ways' approach on this project experienced that their aim as researchers did not simply restrict itself to the production of knowledge but rather involved knowledge co-production through social learning. This required the researchers to take on different roles also described by Pohl et al (2010) as 'the reflective scientist', 'the intermediary' and 'the facilitator' of a joint learning process (Pohl, 2010). Like Coombes et al (2014) suggest, those in the roles of researchers were also invited and challenged to engage across boundaries of difference in new ways.

Whilst conceptualizing and understanding ontological differences may not be easy, it is nevertheless integral to the co-production of knowledge and the social

learning process which underpins successful participatory conservation strategies. When subsequently providing a framework for mixing such different cultural views and logics, a key determinant is whether the resultant behaviours of the value system applied are likely to sustain the ecological context upon which they depend. We believe that a 'both ways' approach helped ensure that the *Guidelines for Fishers and Boaters* adhered to this logic.



Chapter 6

Spiritual leaders build common ground for community conservation of sacred natural sites in the face of neoliberalism in Ghana and Guatemala

< Figure 6.1: Ceremony at Shu Sagrib-Al, Guatemala.

Maya communities with Ajq Ijab (in white pants and headscarve) engage in ceremony at sacred natural site Shu Sagrib-Al in In Santa Cruz del Quiché, Guatemala. Source: Bas Verschuuren.

6.1 Introduction

In indigenous societies in Ghana and Guatemala, sacred natural sites are central to people's spiritual life and well-being and play an integral role in natural resource management and governance (Delgado, 2010; Guri, 2014; Ybarra, 2011). The spiritual significance of sacred natural sites extends to and is characteristic of indigenous peoples' relationship with the wider landscape, also understood by Mc Niven (2004) and Studley (2010) as 'spiritscapes'. The landscape becomes a spiritscape because it is animated with ancestors, spirits, creator beings and other mythological or symbolic figures that imbue it with spiritual energies, life and sentience. Plants, animals and other natural denizens of the landscape can be seen as expressions of spiritual significance – as sacred beings that are central in the constitution of spiritscapes. According to Callicott et al (2007) the spiritscape paradigm is characterised by psycho-spiritual connections which are enacted through ritual and ceremony and preceded over by spiritual guides, shaman or custodians (Studley 2016; McNiven 2004) who maintain harmony and good relations between all the elements - human, natural and spiritual - of their cosmologies.

In this chapter I view spiritscapes as defined by indigenous ontologies brought into being by engagement, attachment and enactment of the landscape (Woolgar & Lezaun 2013; Dwiartama & Rosin 2014; Blaser 2012; Viveiros de Castro 2008). I investigate the role of sacred natural sites from the ontological perspective of spiritual leaders from Ghana (*Tingandem*) and Guatemala (*Ajq Ijab*) who view them as part of the wider spiritscapes and their inherent numinous dimension (Byrne, 2010a). This ontological perspective is followed throughout the creation of the common ground (Gonzalez, 2011; William Cronon, 1995). I show that the common ground is in part created out of indigenous ontologies that derive strength from ancient forms of spirituality and traditional law linked to sacred natural sites. The extent to which this can be achieved depends on how they are understood by and affect other actors (such as private companies) who often go hand in hand with the neoliberal development policies of the state.

I analyse the creation of the common ground in Ghana and Guatemala (Figure 1.1) as local spiritual leaders and their communities develop dialogues and build bridges between their communities and governments at the national and international level as well as with other stakeholders. In Ghana, I follow the *Tingandem* and the Centre for Indigenous Knowledge and Organisational Development (CIKOD), an NGO working with *Dagara* communities in the Upper West Region. I also follow the *Ajq Ijab* of Maya communities and Oxlajuj Ajpop (the National Council for Maya Spiritual Leaders in Guatemala) working mostly in Santa Cruz del Quiché with *Maya K'iche* communities in Guatemala. In doing so, I demonstrate how disjunctures

spring from the contestation of different ontologies, spiritualities and knowledges that mutually create the common ground.

6.2 Methodology

Some of the data that I use in this chapter has been collected by CIKOD and Oxlajuj Ajpop, mostly through action research undertaken as part of the ETC-COMPAS and SNSI intervention programmes - the latter focussing primarily on supporting custodians with protection, conservation and revitalisation strategies for indigenous sacred natural sites. I see this research as a product of myself as an engaged academic (Rasch & Köhne, 2016). I was involved with the implementation of field programmes through which I engaged with action research while doing my own applied ethnographic research simultaneously. This was possible because the research was part of my long-term collaboration and relationships with spiritual leaders, national NGO's and local communities in Ghana and Guatemala.

I look more closely at the role of the spiritual leaders in relation to the wider community and the process of action research undertaken by CIKOD, Oxlajuj Ajpop and SNSI. According to Richard Sagor, action research is: "a disciplined process of inquiry conducted by and for those taking the action. The primary reason for engaging in action research is to assist the "actor" in improving and/or refining his or her actions" (1992, p. 7). Collaborations in Ghana and Guatemala started in 2010 and while these are still ongoing at the time of writing this chapter, the bulk of the research used for this chapter was completed in 2014. In Ghana, CIKOD did most of the field data collection and I made two field visits of up to two months, in 2011 and in 2013. In Guatemala, I worked in the field together with Oxlajuj Ajpop for three months every year during three consecutive years (2012 - 2014).

I also apply discourse analysis (Boni et al. 2015) to the field programmes and action research carried out with and by the NGO's. I combine this with my own ethnographic research data obtained through participant observation, focus groups, and semi-structured interviews through snow-ball sampling methods (Bernard, 2006). In Ghana, I conducted semi structured interviews with 3 spiritual leaders, one assistant of the spiritual leaders, five NGO staff, two lawyers, one representative of the mining company and two traditional kings or chiefs and one queen. I also did field observations while participating in two ceremonies in the sacred groves. In Guatemala I conducted 13 one-on-one in-depth interviews with Mayan spiritual leaders - see for example; Verschuuren (2012a) and Chapter 6 – and I compiled two life histories, organised five focus group discussions with community members and carried out participant observation. I also made use of information gathered by

Oxlajuj Ajpop through action research and participatory video projects that I was also involved with. For additional information on the methodology see Chapter 1.

6.3 Results Ghana

6.3.1 *Spiritscapes and the role of spiritual leaders in Ghana's Upper West region*

Across communities of the Upper West Region, islands of sacred trees and forests can be found across the agricultural landscape of maize, cassava, yam and guinea corn. Many of the sacred groves are remnants of natural forest vegetation that have been preserved for spiritual purposes. They are believed to house the local gods, the ancestors and protectors of the community. They are governed by customary laws and taboos that guide the use of the forest and other natural resources. The community traditional spiritual leader who is often a representative of the local family - the *Tingandem* – oversees the sacred groves. One of Tancharras' *Tingandem* describes the origins of the *Tingandem* as follows: *"The Tingandem is the grandfather of the land. The forefathers of the Tingandem family are the gods of the land. So, I am the one closest to the gods in our village."* This spiritual connection between the *Tingandem* and the land is most clearly evidenced in sacred groves of the community. Figure 6.2 shows one of the Tancharra communities' *Tingandem*. Because the sacred groves are the homes of the ancestors they are numinous and pose agency that is mediated by the *Tingandem* – an inherited institution:

"When I die the one who inherits my role will have to come back from wherever they are and play the role. It will be mandatory. So, there is no doubt in my mind that in the future the Tingandem will continue to play the same role in the community as I do today." (*Tingandem, pers.com*).

Figure 6.2: Poster developed for CBD COP 10, in Nagoya, Japan 2010. The poster shows the Tingandem from the Tancharra community in the Upper West Region in Ghana. Source: ETC-COMPAS & CIKOD

“Our sacred groves have been here since ancient times. Nobody in our community has ever cut down one sacred tree, and we continue this tradition.”



Tindaana Dokora Zukpur and his kinsmen, Tancharra

“When there is a drought we go to the sacred grove to ask our gods to give us rain today or tomorrow or the next day, and if the rain doesn’t come tomorrow it comes the following day, so our sacred groves are important places for prayers and sacrifices.

As Tindaana (chief priest) it’s my responsibility to do these sacrifices and protect our sacred groves together with all the members of the community. Everybody who lives here knows it is taboo to cut down trees or farm them.

Due to population growth and churches some people want to cut down trees or take stones from

our sacred groves. When we try to stop them they just say, “We don’t believe in those taboos, we don’t care!” They just want to take the stones or cut down the trees.

If somebody tries to destroy these places the whole community will have to bear the consequences. No rain will fall and nothing will grow on our farms. So we pass on our traditions to our children in the same way we inherited them from our ancestors. In future our traditions and sacred groves will continue to exist.”

As remnant native forests, sacred groves have been praised as indigenous methods of biodiversity conservation; they are important for sustaining native plant and animal species.

However, these forests are under threat from human population pressures, adjacent intensive agricultural practices and the disappearance of traditional knowledge, beliefs and practices.



GUARDIANS OF THE SACRED GROVES

For generations, the *Tingandem* have tended to the spiritual bond between the people and their ancestors through ritual sacrifice and pouring libation which brings rains and water to the land. As explained by a *Tingandem* in Tancharra:

“I am the one who makes sacrifices to the gods. To bring rain so that our women and children have food. When I was a boy our sacred groves were already there. Protected by our ancestors. We were taught to pour libation in the groves to bring rain.”

On several occasions that I was present during libations and ceremony in the sacred groves, the *Tingandem* recited lineages of *Tingandem*. The *Tingandem* explained that they do this in order to invoke the presence and wisdom of their ancestors. The duties of the *Tingandem* are not all ceremonial, and include managing and governing the sacred groves and other natural resources:

*“It is true that the gods give us the rain we depend on for water. Sometimes the ponds where rain water accumulates get silted. I as *Tingandem* organize the community to go and desilt those ponds so we can continue to gather water. Sometimes I also organize the harvesting of fish from the ponds to provide food for the community”.*

Many of these activities have to do with the conservation of natural resources; yet they also concern agricultural and (agro)forestry systems and take into account economic considerations:

“We always prohibit felling of trees in our sacred groves. However, I also encourage and assist the community to grow more economic trees in other parts of our community to gain income and prevent cutting trees. We do have a lot of wild fruit trees but sometimes people harvest them prematurely so I normally place a ban on the harvesting until all the fruit is matured and we harvest the trees together.”

Other examples of *Tingandem* organising management activities include the regulation of medicinal and spiritual plant collection and fire management. In some communities, the *Tingandem* are also responsible for organising and training a group of community fire fighters who burn understory to prevent large fires that pose a threat to fruit trees and trees and shrubs with medicinal properties that are of importance to the communities' traditional healers. Through their institution they

maintain a balance between the spirit world and the daily practices of the community, thus becoming de facto governance agents - a form of governance that is also known as spiritual governance (see Studley 2010; Verschuuren 2016b). The *Tingandem* are part of the broader traditional governance system of the Tancharra community that also includes a chief or king called *Na* and a queen-mother called *Pogna*. The *Tingandem* is influential in managing conflict situations such as disputes over land and natural resources because he mediates with the gods and informs (and is consulted by) the *Na* and *Pogna*. Traditional authorities like the Chief, the *Pogna*, Elders and *Tingandem* are important to the maintenance of community harmony and to prevent and resolve conflicts.

In 2004 an Australian mining company, Azumah Resources Limited, was granted a licence to prospect for gold in the Upper West Region by the Ghanaian government. This attracted illegal miners whose activities polluted community lands, waters and sacred groves, see figure 6.3. In response, the ten *Tingandem*, one from each of the smaller communities that make up the greater Tancharra community, came together and formulated a statement to protest against both legal and illegal mining activities. It was the first time in history that a group of *Tingandem* united and undertook such an action. One of them explained:

“Our main concern is a mining company that is about to enter our community. I called a community meeting, so everybody would know about this mining issue. These days nobody wants to look like a fool, so I gathered my people together and now we are united and ready to prevent future problems.”

The *Tingandem* formulated a statement protesting the activities of the miners and asking the government to safeguard their sacred groves and sites from both legal and illegal mining. All the *Tingandem* appended their thumb prints on this paper and requested CIKOD to send this to the appropriate authorities for their attention and action.

Figure 6.3: The Tingandem and his assistant inspect the damage of illegal mining activities, Tancharra, Ghana. Source: Bas Verschuuren.



6.3.2 Community capacity building helps creating a common ground

The actions of the *Tingandem* started a process in which the Tancharra community took up action against the gold mining in an attempt to save the sacred groves from destruction and have their traditional rights and self-governance respected. Besides this, drinking water was being threatened by pollution and children dropped out of school to work for the illegal miners and earn cash. The oppositional process followed from their collaboration with CIKOD which had started in 2003, and which had involved different stakeholders and events over the years, see figure 6.4. Some of the staff members were from the community and the surrounding region and hence the collaboration enabled the strengthening of community self-reliance. Following a community visioning exercise the *Na* and *Pogna* decided that they had no way of dealing with the threats the mining company and the illegal miners posed to them, so they agreed for CIKOD to help them. In 2007, field programmes were agreed upon between the community, ETC-COMPAS, and CIKOD. These dealt with revitalizing sacred groves and strengthening traditional authorities through increased community organization and the implementation of a rights-based approach to counter the impacts of the illegal and legal mining activities.

Due to the strengthening of the traditional leadership, the *Tingandem* were able to bring the issue of mining to the attention of the Tancharra community and other stakeholders. The traditional leadership raised awareness and created capacity within the community so that it could start creating common ground with other stakeholders. After the *Tingandem* demanded protection of sacred groves against gold mining in a statement to the government, CIKOD assessed the perceptions of Tancharra community members regarding the impacts of gold mining on their well-being. Community meetings and focus group discussions with men, women, elders, youth and traditional authorities were undertaken. The results were discussed in a series of community meetings and it was decided that the traditional leadership would ban illegal mining from the community. CIKOD organised visits for the traditional leadership and those community members directly affected by the mining to see the impacts of mining in other regions that were more heavily affected - something quite possible to happen in Tancharra. As a result, the traditional leadership offered support to those families whose lands were affected and also those whose children were recruited for labour in the mines. Eventually, the communities drove away the illegal miners who came mostly from outside the community, thus protecting their land, drinking water and sacred forests. In this way, the children of some of the poorer families were no longer leaving school to be recruited as cheap labour in the illegal mining operations and attention shifted to the threats posed by corporate mining.

Figure 6.4: Sequence of events of different stakeholders on the sacred groves conservation project

Time	Actions by the community, CIKOD, the Government and the Mining Company
2003	– CIKOD and Tancharra communities agree to work together and use Community Organisational Development (COD) tools for endogenous community development
2004	– Government of Ghana grants Azumah Resources Ltd. rights to prospect for gold in Upper West Ghana. Communities and NGOs are not informed, nor involved
2010	<ul style="list-style-type: none"> – <i>Tingandem</i> demand protection of sacred groves against gold mining in a statement to the government – Assessment study by CIKOD on how affected communities perceive the impact of gold mining on their well-being – Several Civil Society Organisations (including CIKOD) to review the Natural Resources and Environment sector. They voice concerns on gold mining – Communities, CIKOD and District Assemblies organise an Advocacy and Validation workshop on the impact of gold mining on community well-being – District Assemblies, Upper West Regional House of Chiefs and CIKOD organise a Regional Forum on Gold Mining in which Azumah Resources Ltd. participated – Community meetings and Focus Group Discussions with men, women, elders, youth, Traditional Authorities
2011	– CIKOD participates in the African Biocultural Community Protocol Programme and a

	<ul style="list-style-type: none"> – first draft of the Tancharra BCP is developed based on community meetings – CIKOD and SNSI start collaborating on the Sacred Groves Expansion Project – CIKOD staff facilitates Tancharra community self-assessment, including appreciation for custodians of sacred groves and biodiversity
2011-2012	<ul style="list-style-type: none"> – CIKOD hires Centre for Public Interest Law to document community rights, customary and (inter)national laws to face lawyers of the mining company – Action-research with stakeholders, including Azumah resources and illegal miners for clarifying how the BCP is empowering disadvantaged communities – CIKOD and SNSI prepare a strategy for protection, conservation and expansion of the sacred groves
2013-2014	<ul style="list-style-type: none"> – Azumah Resources announces a one year moratorium on prospecting in Tancharra Community and the wider Upper West Region

6.3.3 A rights-based approach to help protect the Sacred Groves

As a means to build the community’s capacity to engage with other stakeholders on the mining issue I worked with CIKOD and the NGO Natural Justice to support the Tancharra community to develop a biocultural community protocol (BCP). The BCP served as a tool for the Tancharra community to negotiate with the mining sector and other outsiders and to assert their rights and responsibilities including their terms of engagement (see Chapter 7). The BCP is a document developed by and for the community that explains the community’s values and resources and outlines the community’s strategy to govern and manage those within the bounds of the traditional, national and international legal frameworks (Jonas et al. 2010). The community’s cohesion was strengthened by the community organisational development process, guided by CIKOD, laid the foundations for the development of the BCP. In doing so it was important to go at the pace of the community, especially the elders, and to ensure that traditional authorities were aware of their accountability to the community. This was critical because it was rumoured that the gold mining company tried to bribe other chiefs, bypassing the broader Tancharra community’s views and consent.

A first draft of the BCP drew on information gathered during the ongoing community development work, that included mapping of the sacred groves, wetlands and burial grounds, and traditional decision-making structures. The draft was then discussed with community groups – men, women, elders, youth and traditional leaders – to ensure that all parts of the community had a say. Nonetheless the engagement of the *Tingandem* in this process deemed more difficult than expected:

“These Tingandem have always seen to their tasks in their communities but they have never been working together until they realised that the mining issue was affecting all of them. They know the traditional laws, the

importance of ritual and the spiritual functions of these groves but they are also afraid of these other [international and state] laws because these have been the cause of much problems ever since colonial times” (Daniel Banuoku, pers. com).

The draft BCP documented the community’s cultural values, vision for endogenous development, customary rights and responsibilities, and institutions and processes for Prior Informed Consent (PIC). In addition, the Commission on Human Rights and Administrative Justice (CHRAJ) in Ghana documented community rights according to customary, international and national laws that were included in the BCP. The anticipated legal recognition of customary laws in Ghana, as promoted by the Convention on Biological Diversity’ (CBD) Nagoya Protocol (Article 12) provided a significant boost to the community’s efforts to assert their rights and start creating a common ground.

With the BCP ready it was time to start working with other stakeholders. To guide this process, CIKOD together with the community and the District Assemblies of the Upper West Region, organised an advocacy and validation workshop on the impact of gold mining on community well-being. Parallel to this, CIKOD facilitated visits of community leadership to neighbouring communities to discuss the mining. For months CIKOD supported Tancharra and other affected local communities in making their voices heard on the regional radio station. As a result of the attention raised on the subject, the District Assemblies and the Upper West Regional House of Chiefs engaged with CIKOD and organised a regional forum on gold mining in which Azumah Resources Ltd. participated and the BCP was discussed. The affected communities also invited Azumah Resources to several village meetings and eventually Azumah Resources appointed a Community Engagement Officer who was to act as a central liaison between them and the communities. This helped the Tancharra community in focussing their demands and communicating the BCP with the mining company.

At the national level, CIKOD, together with other NGOs, reviewed the government’s new strategy for the Natural Resources and Environment sector and was able to raise concerns on the negative impacts of goldmining on local communities and make recommendations on the use of BCPs in the sector. As the situation was brought to the attention of the national government in Accra, Azumah Resources noticed that the affected communities were getting more organised and had learned about the Commission on Human Rights and Administrative Justice working with the communities. This initially resulted in Azumah Resources

postponing prospecting and operations in and around the Tancharra community from 2013 to 2014.

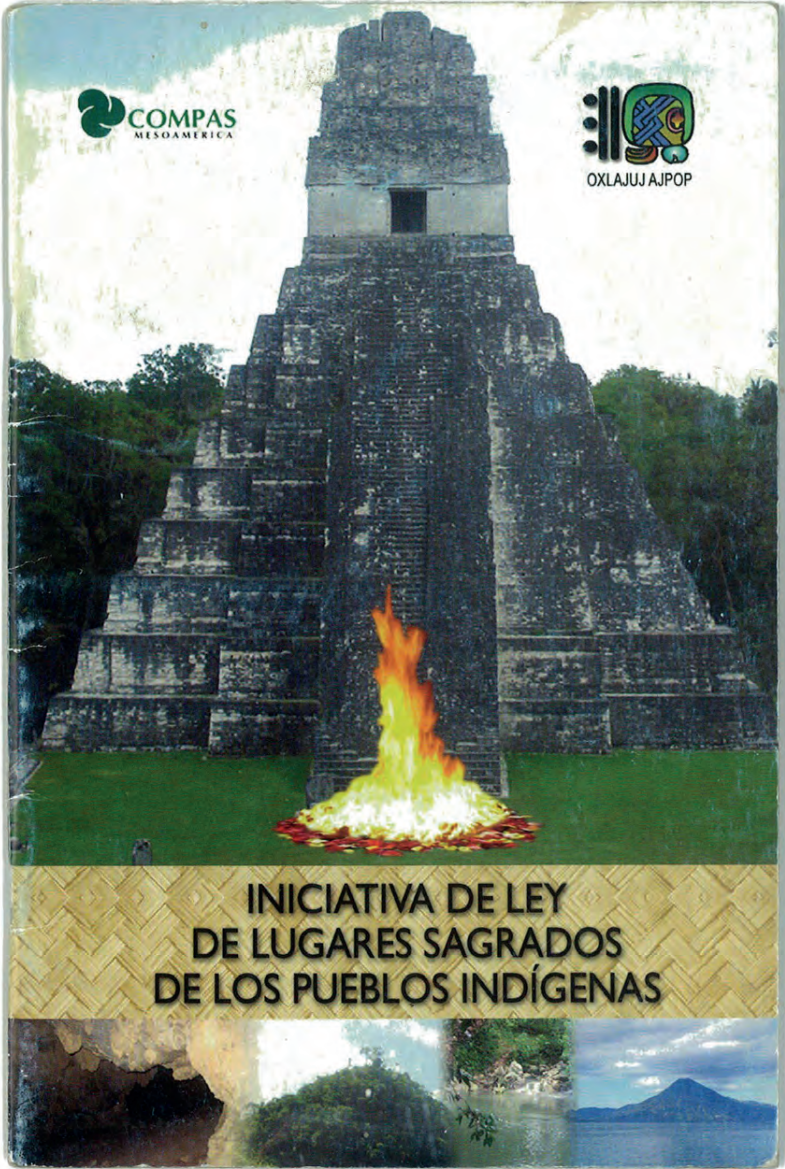
The BCP may have helped the communities and their Tingandem negotiating with other stakeholders and creating a common ground but it is not legally binding and it did not offer direct solutions for the conservation of the sacred groves. The *Tingandem* were able to fend off the mining company for some time. However, they have not yet succeeded in creating wider support for themselves in playing a role in the future strategy to conserve the sacred groves.

6.4 Results Guatemala

6.4.1 Legal recognition for Guatemala's spiritscapes and sacred sites

In Guatemala, I worked closely with Oxlajuj Ajpop, an organization of Indigenous spiritual leaders named *Ajq Ijab*. Oxlajuj Ajpop - which means 'the thirteen spiritual leaders' - was conceived in 1991 by seven organisations of Maya priests from the Maya, Xinca, and Garífuna ethnic groups and includes over 1,100 spiritual leaders from 12 states throughout Guatemala (Gomez & Caal, 2003). My first interactions with them were through a development programme with ETC-COMPAS, funded by the Dutch Ministry of Foreign Affairs. As I worked with the *Ajq Ijab* I learned that their efforts to protect their sacred sites were an affirmation of what it means to be Maya, a spiritual responsibility to the land, the ancestors and the cosmos. In my conversations with the *Ajq Ijab* they often stressed the need to protect, restore and re-dignify many of the traditional sacred sites that are located around the country. Initially Oxlajuj Ajpop had developed a law proposal (No.3828., hereafter referred to as 'the law proposal') to put the management and governance over sacred sites in Guatemala in the hands of Indigenous people (Oxlajuj Ajpop, 2008a), see figure 6.5. I had for some time followed the development of the law proposal (see Gomez, Hiemstra and Verschuuren, 2010). This proposal could provide a legal backing for a conservation strategy for the numerous sacred natural sites across Guatemala. Not only are many of these sacred natural sites located in special ecosystems, harbour endangered species and help protect biodiversity; they are also connected as a network central to the spirituality and well-being of the Indigenous communities that have looked after them for generations - a social-spiritual conservation network (Verschuuren et al. 2010).

Figure 6.5: Cover of the “Initiative in support of the law on Sacred Natural Sites of Indigenous Peoples No. 3835.”. Source: Oxlajuj Ajpop.



Oxlajuj Ajpop decided to work with me as a co-researcher and to develop a project to test how the Maya worldview could be used to develop a legal and practical

conservation strategy for sacred natural sites surrounding several villages in Santa Cruz del Quiché. In this section of the chapter I describe my findings as a researcher with the development of the law proposal and the joint project on sustainable governance and management of Maya sacred natural sites.

Oxlajuj Ajpop had already undertaken much work on the legal aspects of the law proposal, including a legal review and sectoral analysis across administrative fields (i.e. forestry, water and education) and set out recommendations to enable the implementation of the law proposal (see Oxlajuj Ajpop, 2008b). There were many more challenges. According to some of the *Ajq Ijab*, several sacred sites that are located on lands owned by individuals, rather than by the community, have lost the protection of the landowners because they converted to evangelicalism:

“Having the management and governance of sacred natural sites legally recognised is important for the continuation of indigenous worldviews. There are problems with sacred sites such as companies that want to develop constructions on top of them or the catholic church who replace the sacred places with images of its own” (Ajq Ijab, pers.com).

In several communities, private land ownership has been a conscious strategy that the communities chose during the land reform after the civil war (Ybarra, 2013). The main objective was for the community to maintain sole governance over its ancestral land and sacred sites and prevent the possibility of selling large tracts of land to private companies or leasing them out for economic gain. In one particular site Oxlajuj Ajpop was able to acquire ownership of the most central part of the sacred site and hold it in trust for the *Ajq Ijab*. Oxlajuj Ajpop and the *Ajq Ijab* came to this decision out of fear for mining companies that were known to undertake prospecting missions throughout the country (see figure 6.6). Such prospecting as well as most mining activities would damage sacred natural sites and the fear existed that the government would lease these lands to mining companies because it legally owns all minerals below the subsoil.

Figure 6.6: A visitor sign saying “No against mining” at Shu Sagrib-Al, sacred natural site, Santa Cruz del Quiché, Guatemala. Source: Bas Verschuuren.



The Indigenous populations of Guatemala know a long and violent history of persecution and civil war and are struggling to rebuild their communities and get their interests represented in national politics. Guatemalan politics are dominated by *Ladino* (non-indigenous, i.e. Guatemala’s dominant social group) proponents of a neoliberal economy where the rights to exploit the countries’ natural resources are sold to private businesses. The impact of mining, forestry and hydro-electric projects on the territories and resources of indigenous communities is significant. This also leads to misappropriation, violence and abuse of Indigenous peoples’ rights. The work on the law proposal and the parallel strategy to reclaim the administration of sacred sites across Guatemala can also be interpreted as part of a broader struggle for the expression of Maya identity, its cosmivision and a claim for what Ybarra calls “Maya spiritual rights” (2013, p. 549). This term is also used by Oxlajuj Ajpop in relation to a provision of the law proposal which states that:

“The Government assumes the commitment to promote, jointly with indigenous spiritual organizations, regulation of access to these ceremonial centres, guaranteeing the free practice of indigenous spirituality within

conditions that are respectful of spiritual leaders” (Ministerio de Cultura y Deportes & Conferencia Nacional Oxlajuj Ajpop, 2008, p. 12).

The above of course is a legal expression - an outcome of the struggle for recognition of Maya identity and an affirmation of the importance of the free practice of Maya spirituality and the role of the *Ajq Ijab* in Maya society. In daily life, sacred natural sites help maintain this spirituality not only through communal relationships with the cosmos but also in individual well-being. The *Ajq Ijab* that perform the rituals of healing during ceremony explained to me that they perform other healing activities with individuals, even over long distances: *“A sacred natural site is important to a person’s well-being. It makes a person integer and whole and at peace with himself so he grows in his spirituality and thinking and can have a positive influence on a situation” (Ajq Ijab pers. com).* The role of the *Ajq Ijab* is to resolve conflicts and speak justice, and can be understood to be advising and guiding the community as well as individuals. One *Ajq Ijab* explained his role as follows:

“Maya Ajq Ijab are gynaecologists, specialists who guide marriages, guide the life of the community, the spiritual life and some are even specialists for the treatment of bone. The symbol of our authority is the staff that stands for justice, righteousness, good behaviour and the wise advice passed onto us by our ancestors.” (Ajq Ijab, pers.com).

Throughout my research many sacred natural sites have shown to be spaces for retreat and strengthening of indigenous identity based on the practice of ceremony that connects individuals and communities with the cosmology of the Maya spiritscapes. Ceremony is typically guided by one or more spiritual leaders who create a process for healing individuals as well as groups of people. Such processes can be seen as therapeutic counselling but also as strengthening indigenous identity through Maya spirituality and cosmology. Quang et al (2013) already found that sacred sites can be used by Indigenous people to retreat and resist the oppression of mainstream politics and serve as places of learning while aspiring to new visions of Indigeneity and law. As such, sacred natural sites are places of power that, through their numinous character, possess an agency that affects indigenous peoples’ relations to the state and possibly the ability of indigenous peoples to resist neoliberal state politics.

6.4.2 *Ajq Jlab working with the government*

The *Ajq Jlab* gathered in Oxlajuj Ajpop not only produced the law proposal, they also produced a book about their role in the traditional juridical system (Oxlajuj Ajpop, 2005) as well as a Social-Environmental Agenda for Guatemala based on the indigenous worldviews and the Rights of Mother Earth (Oxlajuj Ajpop, 2009). As part of this work a dialogue process with the Ministry of Agriculture and Natural Resources took place in which the need for new constitutional and legal reforms that respect Mother Earth, indigenous territories, biodiversity, and a legally pluralistic state was emphasized. All of these documents have been based on consultations with representatives of Maya, Garifuna and Xinca - many of them spiritual leaders - throughout a long and elaborate process. Indeed, this has been not only a process across many communities but also one of creating common ground by reaching out to many other stakeholders - including various layers of government. According to Ybarra (2013) the work of Oxlajuj Ajpop helps to link a politics of recognition to a politics of distribution because it links not only to resources but is also area-based and thus concerns territory. This is important because in Guatemala territorial rights have not been granted to communities yet.

Clearly, the work on the law proposal for sacred sites has not been undertaken in isolation: it took place as part of a broader movement of Indigenous people in Guatemala claiming their rights and asserting their identity - a larger process of creating common ground. The start of creating this common ground was made when the National Law for Peace Agreements, signed in 1996, came into force. It acknowledged the rights of indigenous peoples to practice their cultures on a specific territory and sacred (natural) sites as part of that territory. In this context, the Commission for the Definition of Sacred Sites was formed on the initiative of Oxlajuj Ajpop (Oxlajuj Ajpop, 2008a). An *Ajq Jlab* explains:

“In those days, the work we did in the commission was thought to be really valuable and many people were busy working on it. We got a lot of support from civil society and government and started building on ideas of national inventory and legal protection. It was only later when the law proposal started to take shape that the politics changed again and eventually the commission was disbanded by the government.” (Ajq Jlab, pers.com).

To this day, the law proposal for Sacred Sites has not been accepted by all members of the Guatemalan Congress and the government, although negotiations still continue. As such, the law proposal could not only lead to a politics of distribution

(as Ybarra reasons) but also to a politics of cultural and legal plurality. This is a politics that many Maya have been fighting for in order to achieve indigenous governance and control over territories. Through the creation of a common ground with mainstream politics, some of the first Maya majors have been elected into municipal power (Rasch, 2011).

These developments essentially led to renewed governmental agreement to support sacred sites and Oxlajuj Ajpop consulted its member organizations, formed its own technical and legal team, developed a strategic plan and organized linguistic groups of Mayas, Garífuna, and Xinca to discuss its contents. In Santa Cruz del Quiché, Oxlajuj Ajpop implemented various activities on sacred sites, the environment, festivals, and community education. Over 20 communities reflected on the importance of sacred sites, recorded and documented their histories, assessed their current ecological and legal status, and held celebrations to re-sanctify them. In the process, the indigenous communities also became aware of their rights to participate in the administration of sacred sites - based on their indigenous management and governance systems. Adoption and implementation of the law proposal would enable the Mayan worldview to complement the contemporary western state-based system currently adopted by the Guatemalan government. In fact, this would mean that a pluri-legal society would be created in which sacred natural sites would be recognised as sources of law to indigenous peoples. In that sense, the law proposal serves as an important step towards the development of not only a culturally pluralistic (Nash, 2001) but also a legally pluralistic society in Guatemala.

The Plenary of the Congress of the Republic of Guatemala received the law proposal and registered it for its study and approval. Technical and legal advisors of different political parties then studied the text and six articles were revised through a dialogue with Oxlajuj Ajpop. This was a formal process of negotiation in which Oxlajuj Ajpop and the Commission for the Definition of Sacred Sites succeeded in maintaining the essence of the law proposal in the final text (Oxlajuj Ajpop, 2008a). One could say that this was a written act of building bridges and creating common ground. Surrounding this process many public meetings took place and various politicians from several parties were contacted and liaised with. Finally, in 2013, in a public meeting the Commission to Define Sacred Sites and Oxlajuj Ajpop gave a petition to the Congress (channelled through the Peace Commission) to approve the law proposal. The petition however was blocked by the private sector.

6.4.3 Ajq Jiab facing opposition from the private sector

Within the current political context of Guatemala, not all parties are yet supportive of the law proposal or respect historic, spiritual and cultural rights. The processes of privatisation of land meant that many Indigenous communities had to go through difficult periods of reform through which many spiritual leaders decided to leave sacred sites unmarked on the grid of private titles as a means of protection (Ybarra, 2011). Many non-indigenous political parties are linked to extractive economic enterprises in the country and are concerned that the law proposal restricts their ability to exploit natural resources. Interest groups lobbying the Guatemalan parliament on behalf of the private sector have on several occasions during discussions in Parliament put forward that Article 20 affects private property. As a result, the article was modified in 2009 and does no longer directly enable indigenous action that may affect ownership, exploitation of, as well as access to private property and natural resources contained therein. This complicates the indigenous custodianship of sacred sites on private lands and, I argue, also threatens the future creation of a pluri-legal society in Guatemala. Custodians of sacred sites need access to sacred sites for carrying out their responsibilities and customary use such as performing ceremony and ritual. These activities are vital to keeping a form of spiritual governance in place and in turn instructs indigenous management of sacred natural sites and the broader territory including its natural resources. When owners of the land on which sacred sites are located have made no provisions for such activities, the custodians face problems regarding their duties in relation to the social, material and spiritual well-being of the communities which they represent. In an attempt to resolve such situations, Oxlajuj Ajpop has been inspired by the ancestral Maya law and ways of managing conflict by transformation and prevention. A spiritual leader describes this traditional governance system as based on the Maya worldview linked closely to natural resources:

“Indigenous people must reclaim the principles of life of our ancestors. They can do this through a process involving sacred natural sites that are located in their communities. The revitalisation and signification of sacred sites coincides with the conservation of nature and at the same time goes hand in hand with restoring our spiritual governance, management and co-management. It does so through dialogues and by building bridges between the community level up to the national governmental level and in some cases the international level.” (Ajq ijab, pers.com).

The view of the *Ajq Ijab* also alludes to indigenous perspectives on building a common ground, through building of bridges and through dialogue while remaining in connection with the ancestors. This connection has reportedly come up in conversations with the *Ajq Ijab* as key to guiding processes on the interface of indigenous community interests versus interests from outsiders.

6.5 Conclusions and discussion: elements for creating a common ground

Creating a common ground requires different worldviews to come into play in (neoliberal) interventions such as mining and agriculture as well as area-based conservation projects. If these worldviews are not taken into account in governance and management decisions these (neoliberal) interventions typically come at considerable social and environmental costs. In Africa, Baltissen and van der Haar (2016) show that - while discussing the role of local government in commercial land acquisition - strengthening both local populations and the linkages between local authorities can assist in addressing the governance gap around commercial pressures. In Tancharra, building capacity of traditional authorities has shown to be an effective means of overcoming this governance gap and it was achieved by directly engaging spiritual leaders. Empowering traditional authorities and spiritual leaders has also shown to be helpful in terms of recognising and legitimising the spiritual governance systems embedded in worldviews, in both Ghana and in Guatemala.

Recognition of the importance of myths, divine beings, the ancestors, sacred people, objects, plants, animals and sites helps in developing a better understanding of the spiritual dimensions of a worldview and opens the way for multiple ontologies to come into play. The research shows that in Ghana and Guatemala the spiritual dimension affects the governance and management of natural resources and land that is regulated through indigenous institutions and community decision-making. Together these also influence the experimentation with, and attitudes towards, new practices and developments that may shift roles, duties and responsibilities within indigenous communities. It is important to understand that indigenous knowledge systems and practices are closely linked to traditional governance and decision making, and that these include a distinct spiritual dimension with a role for the *Tingandem* and *Ajq Ijab*. Their duties, responsibilities and ceremonial practices are an integral part of ensuring the well-being of the community.

Communities, both in Ghana and Guatemala, developed strategies for the protection and conservation of their sacred natural sites; they did so as part of broader strategies to enhance community well-being and self-governance. In order to achieve this the

spiritual leaders had to play an active role in mobilising the community and help facilitate efforts to advocate and negotiate their worldviews – as expressed in community vision planning in Ghana and the development of a law proposal in Guatemala. The focus on rights-based approaches also brings to the fore the need to express and negotiate different realities with others from outside the community. Changes in worldviews occur due to adjustments to ecological, technological, commercial, political or demographic changes brought about by actors with non-indigenous worldviews. Such changes prompt a response from the community and its spiritual leaders. Dealing with mining companies and government agencies requires a level of diplomacy and skills that spiritual leaders have been able to attain through collaboration with external NGOs and other actors - while at the same time maintaining their traditional institutions and worldviews as a starting point.

Spiritual leaders such as the *Tingandem* and the *Ajq Ijab* have an influential position within and among communities that share a similar cultural worldview, and this attributes agency to sacred sites and spiritscapes. In Ghana and Guatemala *Tingandem* and *Ajq Ijab* have used rights-based approaches to create common ground where elements of traditional law, science and indigenous ontologies can be considered. I argue that these different ontologies are at the basis for developing arguments and positions in negotiations between indigenous and non-indigenous peoples. Just as the ontology of western science qualifies science as a suitable means for decision-making, non-indigenous people should also include the ontologies of indigenous people. Cultural plurality and legal plurality are important but these do not by themselves guarantee that different ontologies are considered equally. Therefore, I argue that a principle of ontological equity should be established in order to take ontologies and different worldviews seriously in interactions with indigenous peoples.

While many spiritual leaders in Ghana as well as in Guatemala have shown leadership in governance and management over community-owned natural resources - involving ceremony and ways of mediation with ancestors through sacred sites – their roles and traditional institutions have historically been suppressed, disempowered and rendered invisible. As a result, they are poorly understood and left out of formal negotiations and legal processes. While the Ghanaian and Guatemalan constitutions both include provisions for the recognition of traditional governance systems as part of the recognition of rights of indigenous peoples and traditional communities, these are seldomly recognised or respected by private companies or by the government. A practice of FPIC involving activities that affect sacred natural sites is not standard operation in either Ghana or Guatemala, and research shows that spiritual leaders have been able to improve the positions of communities by assisting in the development of legal positions such as BCPs and the

Maya law proposal. These legal positions are based on the worldviews and values derived from indigenous ontologies, e.g. other cultural ways of understanding the world around us. I argue that not considering indigenous ontologies on an equal footing with non-indigenous ontologies (such as neoliberal or capitalist ones) is prejudicial. While constitutional rights consider free cultural and spiritual practice and belief, the neoliberal capitalist system provides a governance system based on private and communal property that leaves no space for spirits and ancestors.

Research on neoliberal conservation approaches have seen a shift in focus within capitalism from how nature and natural resources are used to how nature is being conserved (Büscher et al. 2012). While the culprit identified is often the capitalist system itself - geared at ever making more profit at the expense of social conditions and the environment - critiques of neoliberal conservation approaches rarely contribute any solutions or alternatives to this problem.

Through the analysis of practices and worldviews of spiritual leaders presented in this chapter I have identified forms of cultural and spiritual conservation that existed long before capitalism and neoliberal conservation approaches came into being. Because of the longevity of many spiritual and cultural conservation approaches I argue that they form viable alternatives to neoliberal conservation approaches. Such spiritual conservation approaches are however easily dismissed or subdued by development trajectories common to neoliberal conservation approaches but may gain support from those who critique neoliberal conservation approaches and identify ideological disjunctures of capitalism and conservation.

Many of the spiritual leaders that I have worked with recognise that the current dominant legal system does not allow enough space for their forms of spiritual governance and fear that neoliberal markets will eventually destroy the balance between the spirit world and community well-being because of the threats it poses to sacred natural sites. To prevent these problems from getting worse one *Ajq Ijab* explained a vision that Oxlajuj Ajpop should create a common ground and help counteract this issue. According to this *Ajq Ijab* an international body of spiritual leaders should demand that the United Nations develop a convention for keeping states, companies, research centres and faith groups to a code of conduct that will help respect and protect the sacred sites of Indigenous peoples. The *Ajq Ijab* expressed that an international council of elders would be required to oversee the creation of this international body and the implementation of the code of conduct.



Chapter 7

Connecting Policy and Practice for the Conservation of Sacred Natural Sites

Adapted from:

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Fausto O'sarmiento and Sarah Hitchner (Eds.). *Indigeneity and the Sacred:
Indigenous Revival and Sacred Sites Conservation in the Americas*. New York:
Berghahn Books.

< Figure 7.1: Mphathe Makaulule from Venda, South Africa speaks about her experiences with the IUCN-UNESCO Guidelines.

At the IUCN World Conservation Congress in Jeju, South Korea in 2012 she stresses the importance of internationally recognized guidelines that can help local custodians achieve recognition for their cause of protecting, conserving, and revitalizing sacred natural sites. Source: Bas Verschuuren, 2012.

7.1 Sacred natural sites: Past, present, Future

Sacred natural sites, pilgrimage routes and places of heightened spiritual or cultural significance are found in every country and in almost every continent. They form an interconnected fabric that is often neither sufficiently understood nor recognized in conservation policy and management. Evidently, this partly intangible fabric is part of the everyday reality of many rural and indigenous people as well as religious followers the world over who, often for many generations, have played a key role in the governance and management of these sites of worship and their surrounding environments and landscapes. With a view to maintaining the cultural and biological diversity that sacred natural sites embody, conservationists are posed with the question of how to recognise and accommodate the needs of sacred natural sites' custodians in conservation management, planning and policy. In this chapter, we explore sacred natural sites conceptually and identify opportunities for including them in conservation policy and practice. We suggest some possible ways forward that are cognizant of the ontological diversity that shape the existence of sacred natural sites.

The resilience of interconnected biological and cultural systems underscores the vitally important role of local and indigenous communities, faith groups, and others that seek spirituality in nature. As many sacred natural sites are increasingly under pressure from uncontrolled development activities, their resilience is often dependent on the role they play, not only in peoples' socio-economic realities but especially as regards their spiritual well-being (Delgado, 2010). Ultimately a broad variety of interest groups come together in the conservation of sacred natural sites, and lessons on conservation management and governance can be drawn from these encounters. Many of these lessons are rooted in a variety of worldviews influenced by historical, cultural, religious and spiritual dimensions related to nature (Berkes, 2009; Posey, 1999) and which encode important ethical and moral concerns and behaviours related to human well-being and the sustainable use of ecosystems. These worldviews are themselves dynamic and adaptive and do therefore not conform to static or prescriptive understanding

Sociologists, cultural anthropologists and political ecologists traditionally portray dilemmas of resource management and governance in terms of a clash between neo-colonial (or neoliberal) mentalities and indigenous ways of being (Blaser, 2009; Büscher, 2012; Hunt, 2013). This is perhaps not surprising given the historic legacy of human rights abuse by conservationists (Dowie, 2009; Stevens, 2010). Yet the practices and politics of conservation are changing and diversifying. In this chapter, we assess some of the emerging spaces in international policy as well as recent developments in conservation practices in order to identify opportunities for the conservation of sacred natural sites. We argue that as cultural

and spiritual values of nature become increasingly recognized in conservation, explicit attention to the ontological dimension of these values will be key to develop more inclusive forms of biocultural conservation (Mathez-Stiefel et al. 2007; Verschuuren, 2010).

Sacred natural sites comprise some of the oldest conserved areas on earth yet they have only recently gained attention among conservationists. To acquaint the reader with the notion of sacred natural sites, we first present the conceptualization and growing popularity of sacred natural sites in the modern conservation movement, and describe how a series of conferences and the development of guidelines for protected area managers have worked to sensitize conservationists to sacred natural sites and their custodians. We then reflect on the spaces that have opened up in international policy and the opportunities these offer for the conservation of sacred natural sites and provide two examples of how international legislation could be implemented nationally.

We conclude by making suggestions for the way forward. We posit that the opportunities identified within the policy frameworks discussed in this chapter need to be cautious and develop a set of sensibilities if and when implemented. Importantly, we argue that the conservation, management and policy of sacred natural sites should follow biocultural conservation approaches that consider the cultural, natural and spiritual values of sacred natural sites; that is, they should be rights-based and work to enhance the ontological self-determination of their custodians.

7.1.1 Sacred to whom, where, when?

Sacred sites have been subject to scientific inquiry for many decades. They have aroused the curiosity of scientists in different disciplines such as religious studies, the humanities, and the social and natural sciences (the latter perhaps more recently as the biodiversity values of sacred natural sites became evident and a case was built for their inclusion in the conservation agenda). In archaeology, cross cultural studies of sacred natural sites have made clear that these are dynamic and resilient spaces that are often attached to living, cultural. An innovative exploration, building on insights by Carmichael et al (1994), examines archaeologists' changing conception of sites' 'significance', especially in the context of site classification, site recording, and subsequent site management. According to Carmichael et al (1994 xiii), archaeologists defined sacred sites as "sites of special significance to people who created them, and/or those who now 'own', investigate or protect them." The wording of the definition suggests that the sacred dimensions of these places can also

be of significance to those who research or manage them in cases where the sites' creators are no longer present. Furthermore, Carmichael et al (1994) suggest that learning from living ritual practices can improve understanding of the role of sacred places in cases where the practice of ceremony and ritual have disappeared. These places pose significant challenges to site managers in terms of interpretation and conservation, especially when these are embedded in natural sites where there may be less evidence of previous human influence on the landscape (see Figure 7.2).

Figure 7.2: Cloch-Chearcal Agus Cairn also called Dromberg Stone Circle.

One of Europe's ancient indigenous sacred sites now managed by a government institution. Located in county Cork in Ireland, it is the most frequented sacred site by tourists of all sacred sites in Ireland, including those who use the site for the revival of ceremonial and spiritual purposes. Source: Bas Verschuuren.



These challenges are also indicative of the practical and legal challenges involved with the protection, conservation, and revitalization of sacred natural sites that do have current custodians and where ceremony and rituals are performed according to spiritual traditions. In such cases, their conservation and management is often required to go hand in hand with rights-based approaches that help secure cultural

management and religious practices in the face of external pressures. Often, these approaches are based on (aspirations to) hard won rights that assert indigenous peoples' right to self-determination and Free Prior and Informed Consent (FPIC), and represent a struggle for freedom, respect and reconciliation between dominant nation states and indigenous cultures.

7.1.2 Sacred natural sites in the conservation movement

There is mounting pressure on governments and corporate actors to increasingly get the rights of indigenous peoples recognized, and this struggle is reflected in the modern conservation movement too (Stevens, 2010). The governance arrangements and management practices related to sacred natural sites also challenge conservationists to become more sensitized to how the worldviews of indigenous custodians interact with science-based conservation practices as well as frameworks of national and international law. In fact, as indigenous peoples become more influential in the international environmental policy arena, they are reshaping the debates and the conceptual underpinnings of the dominant conservation paradigm. Also, when legal incentives are absent, good examples of conservationists and local people working together exist that are based on respectful and constructive forms of collaboration and partnership. These positive experiences also drive the growing recognition of sacred natural sites in the modern conservation movement.

Sacred natural sites gained importance in circles of cultural heritage and natural resource management during the late 1990s. Recommendation V.13, coming from the World Parks Congress held in Durban in 2003 raised attention for the recognition of cultural and spiritual values, and included sacred sites in global protected areas and conservation communities (IUCN, 2003). The Durban Accord further opened a space for recognition of sacred natural sites through the adoption of a new paradigm under which protected area laws, policies, governance and management can be integrated equitably with the interests of all affected people (Brosius, 2004; Stevens, 2014b). International bodies such as the United Nations Educational, Scientific and Cultural Organization (UNESCO), the International Union for Conservation of Nature (IUCN), and the Convention on Biological Diversity (CBD) further developed their interest in sacred natural sites which led to a series of international conferences (Jayakumar et al. 2007; Lee, 2003; Mallarach, 2012; Papayannis, 2009; Schaaf, 2006). The earliest attempt of conservationists to consolidate a working definition for sacred natural sites may be that of Oviedo and Jeanrenaud (2007, p. 77): *"Sacred natural sites include natural areas recognized as sacred by indigenous and traditional peoples, as well as natural areas recognized by institutionalized religions or faiths as*

places for worship and remembrance." Later, for the purpose of the IUCN-UNESCO 'Sacred Natural Sites Guidelines for Protected Area Managers', sacred natural sites have been defined as "*areas of land or water having special spiritual significance to peoples and communities*" (Wild & McLeod, 2008, p.7). The IUCN World Commission on Protected Areas Specialist Group on Cultural and Spiritual Values of protected Areas (CSVPA), which guided the development of these guidelines, also supported a coalition of organisations in the development of IUCN resolutions and recommendations. As a result, IUCN issued a resolution that focuses on sacred natural sites inside protected areas (IUCN, 2008), as well as a recommendation on the protection of traditional governance systems related to sacred natural sites in protected areas and the wider landscape (IUCN, 2012).

The IUCN Guidelines for Protected Area Categories now recognize that sacred natural sites exist in all categories (I-VI) and across all governance types (co-managed protected areas, private protected areas, indigenous and local community conserved areas) of protected areas (Dudley, 2008). More recently, sacred natural sites have been mentioned in the World Conservation Monitoring Centre's Protected Planet Report (Bertzky, et al. 2012) and the United Nations Environmental Program's Global Environmental Outlook 5 (UNEP, 2012). Within the global conservation movement, sacred natural sites have gained recognition as the oldest conserved areas in the world (Dudley, 2009) and as nodes in important socio-ecological conservation networks (Verschuuren et al. 2010).

It also became apparent that networks of sacred natural sites not only cover the lands of indigenous peoples in the so-called Third World, but that they extend into Europe and other developed countries, either as dormant remnants of past indigenous cultures which evaded or were revitalized by, mainstream religions, or simply discovered anew by those seeking to reintroduce spirituality in nature (Rountree, 2014; B. Taylor, 2010). The conservation management of sacred natural sites in technologically developed nations has been initially assessed over the course of a series of workshops and case studies that took place under the auspices of the Delos Initiative (Mallarach & Papayannis, 2006; Mallarach, 2012; Papayannis, 2009). This resulted in a rich body of work that allows for creating specific guidelines for management and policy regarding the conservation of sacred natural sites of mainstream religions. However, the studies also show that the complex nature of folk religions and the on-going influence of mainstream faiths in pre-existing sacred natural sites would benefit from more detailed research and analysis - especially where a balanced approach to conservation is required.

7.2 Opportunities for including sacred natural sites in conservation policy and practice

Protected areas and other conservation designations such as Indigenous and Community Conserved Areas, UNESCO World Heritage Sites and Biosphere Reserves, Ramsar Sites, and Globally Important Agricultural Heritage Systems create an important space in the policy and practice of conserving, restoring, and protecting sacred sites. Formal recognition that sacred sites form an interconnected and interdependent network is, however, lacking. Other efforts exploring the policies affecting sacred natural sites and territories bring this aspect to light (Jonas, Makagon, & Shrumm, 2012; Ormsby, 2011; Papayannis, 2010; Techera, 2010). These sources also suggest that international and national policies should be designed that adequately recognize traditional law and cultural practices related to sacred natural sites and their custodians. This would effectively support their protection, conservation, and revitalization as an interconnected network with a distinct spiritual dimension that is rooted in peoples' worldviews.

Various international treaties could be used for framing support for the protection of individual as well as interconnected networks of sacred natural sites and their custodians. Although reviewing these various international treaties would be a valuable exercise, more research and familiarization with jurisprudence in international and national policy would be required. A non-exhaustive list of key international instruments that could support the protection of sacred natural sites includes:

- 1) the Universal Declaration of Human Rights (1948),
- 2) the International Labour Organization's Convention (No. 169) concerning Indigenous and Tribal Peoples in Independent Countries (1989),
- 3) the World Heritage Convention - Cultural Landscapes (1992),
- 4) UNESCO's Man and the Biosphere's (MAB) Seville Strategy for Biosphere Reserves (1995),
- 5) UNESCO's Universal Declaration on Cultural Diversity (2001),
- 6) UNESCO's Convention for the Safeguarding of the Intangible Cultural Heritage (2003),
- 7) UNESCO's Convention on the Protection and Promotion of Diversity of Cultural Expressions (2005),
- 8) United Nations Declaration on the Rights of Indigenous Peoples (2007),
- 9) the Ramsar Convention on Wise Use of Wetlands (1971), especially Resolutions VIII.19 and IX.21,
- 10) the Declaration on the Rights of Pacha Mama (2010), and

- 11) the Convention on Biological Diversity (1992), especially Articles 8(j) and 10(c), the Akwé Kon Guidelines, the Tkarihwaí:ri Code of Ethical Conduct and the Community protocols under the Nagoya Protocol.

This corpus of international legal and policy provisions arguably provides significant political leverage for the recognition and protection of sacred natural sites at the international level, through which signatory States are encouraged or mandated to enact similar provisions at the national level. Whether States are mandated or simply encouraged to do so depends on whether or not the international instrument in question is legally binding. For example, while the Convention on Biological Diversity (CBD) and the provisions contained therein is legally binding, the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) is voluntary. Nonetheless, UNDRIP is being used by Indigenous peoples and local communities to pressure the CBD to adopt FPIC and encourage states to implement the Akwé Kon guidelines (Secretariat of the Convention on Biological Diversity, 2004) as well as the Tkarihwaí:ri Code of Ethical Conduct (Secretariat of the Convention on Biological Diversity, 2011b).

7.2.1 Policy spaces under the CBD for the recognition of sacred natural sites

In this section, we expand on specific elements of the CBD as this convention is focused on biodiversity conservation (the key objective of many conservationists), sustainable use and equitable benefit sharing. In 2004, the United Nations Convention on Biological Diversity developed the; 'Akwé Kon Voluntary Guidelines for the Conduct of Cultural, Environmental and Social Impact Assessment Regarding Developments Proposed to Take Place on, or which are Likely to Impact on, Sacred Sites and on Lands and Waters Traditionally Occupied or Used by Indigenous and Local Communities' (Secretariat of the Convention on Biological Diversity, 2004). These guidelines are an excellent example of how sacred natural sites could be taken into account in relation to development and conservation activities. Because of the voluntary status of the Akwé Kon Guidelines, so far the government of Finland is the only CBD signatory which has applied and reported on the application of these guidelines (Juntunen & Stolt, 2013). In addition, the Tkarihwaí:ri Code of Ethical Conduct to ensure respect for the cultural and intellectual heritage of indigenous and local communities relevant to the conservation and sustainable use of biological diversity (Secretariat of the Convention on Biological Diversity, 2011b) helps create a space for various stakeholders to exchange interests and become mutually affected by each other's worldviews in a respectful and constructive manner.

Several articles under the Convention such as Articles 8(j) and 10(c) have great potential to legally support the restoration, protection, and conservation of sacred natural sites by their traditional custodians. Article 8(j) states that contracting parties should:

“[s]ubject to its national legislation, respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices and encourage the equitable sharing of the benefits arising from the utilization of such knowledge, innovations and practices.”

(Secretariat of the Convention on Biological Diversity, 1992, p. 7)

As Article 8(j) aims for respect, preservation and maintenance of knowledge, innovations and practices of indigenous people and local communities, it remains bound to national legislation. The article furthermore suggests that parties promote the wider application of this knowledge with approval and involvement of the knowledge holders (but it does not offer any means as how these should be arranged).

Another potentially important vehicle for the conservation of sacred natural sites is Article 10c of the convention, which states that:

“Each Contracting Party shall, as far as possible and as appropriate protect and encourage customary use of biological resources in accordance with traditional cultural practices that are compatible with conservation or sustainable use requirements.” (Secretariat of the Convention on Biological Diversity, 1992, p. 8)

Here Article 10c provides an opening to recognize the diversity of protected area governance approaches, such as Indigenous and Community Conserved Areas (ICCAs) and sacred natural sites. It also supports the full and effective participation of indigenous and local communities through the recognition, promotion, use and application of traditional knowledge and traditional resource management practices. In relation to sacred sites this also includes spiritual and religious teachings that are often an essential part of indigenous ontologies.

The CBD holds a particular challenge in this respect as it obliges states to carry out reviews of national legislation and policies and implement reforms that

recognize indigenous legal systems related to systems of governance and administration for land and waters including sacred natural and other cultural sites. Two other provisions under the CBD could be marked as important motivators to this process, namely Aichi target 11 (which sets an ambitious goal for bringing more land and sea under conservation) and the Nagoya Protocol (which regulates fair and equitable benefit sharing and suggests the implementation of community protocols).

Perhaps the most promising incentive under the CBD to improve the recognition of sacred natural sites may be provided under the Strategic Plan 2011-2020, which presents five strategic goals and 20 corresponding targets for safeguarding biodiversity. These targets are commonly known as the Aichi targets (for a comprehensive overview of the Aichi targets see: www.cbd.int/sp/targets/Of/). Out of the Aichi targets, Target 11 is of specific importance in relation to the recognition of sacred natural sites and their custodians:

“By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.” (Secretariat of the Convention on Biological Diversity, 2011a).

Besides state protected areas, many areas are managed by non-governmental organizations, private landowners, communities, and indigenous peoples, as well as faith groups and other custodians. Within the CBD, there is a growing recognition of the contributions made by ICCAs, many of which include sacred natural sites (Kothari, 2012). ICCAs have been broadly defined by the IUCN as “natural and/or modified ecosystems, containing significant biodiversity values, ecological benefits and cultural values, voluntarily conserved by indigenous peoples and local communities, through customary laws or other effective means” (Borrini-Feyerabend, 2004). ICCAs, like many indigenous peoples’ sacred natural sites, are based on human-nature relationships deeply rooted in cultural worldviews. One of the aspects that might differentiate sacred natural sites within and outside ICCA’s could be that the ‘profound human-nature relationship’ in sacred natural sites is characterized by heightened spiritual significance (Wild & McLeod, 2008). Arguably, most sacred natural sites (like ICCAs) do classify as ‘other effective area based conservation measures’ and as such should be afforded recognition and appropriate protection under the CBD. This is important because a blanket protection for ICCAs would not automatically include all sacred natural sites, such as those of the established or

newer religious communities.

7.2.2 Sacred natural sites, effective means for conservation?

Sacred natural sites and ICCAs can be part of what the CBD recognizes as ‘other effective area-based conservation measures’ under Aichi target 11; a reliable reference as to how much land and sea is concerned however does currently not exist (Berkes, 2009; Stevens, 2014b, p. 32). Approximately 80% of the world’s biodiversity (Secretariat of the Permanent Forum on Indigenous Issues, 2009) and 95% of the world’s cultural diversity (Sobrevila, 2008) is found on lands belonging to indigenous peoples and local communities - many of which are recognized as sacred or contain sacred sites. The areas inhabited by indigenous peoples are often areas prioritized by biodiversity conservation organizations such as: a) biodiversity hotspots which contain most of the world’s biodiversity and cover 2.3% of the earth’s surface, b) mega-diverse wilderness areas which cover 44% of the planet (Mittermeier, 2003), and c) the 12.7% of the world’s terrestrial area and the 1.6% of the global ocean area that are currently designated by governments as protected areas (Bertzky, 2012). These designations show considerable overlap with Indigenous territories which cover approximately 20% of the world’s surface of which 7% is officially recognized by nation states whilst another estimated 13% remains unrecognized (Posey, 2000; Sobrevila, 2008; Stevens, 2014a).

Although they may potentially overlap, nature reserves and lands owned by religious institutions could potentially be included here, as they cover an estimated 7% of the world’s surface (O’Brien, 2007). Many of those lands also contain sacred natural sites and pilgrimage routes of mainstream religions that connect sacred natural sites; these can potentially play a tremendously important role in trans-boundary conservation. A good example of this is the Kailash Sacred Landscape Conservation and Development Initiative, which embodies a conservation effort between the governments of China, Nepal, India and Pakistan. This Initiative also intersects with the spiritual values of local and indigenous people as well as several major religious groups who journey on various pilgrimage trails to this mountain that is venerated by more than a billion Hindus and Muslims as the centre of the universe and the abode of deities (Bernbaum, 2010). Some of the pilgrimage routes and sacred natural sites may be looked after and governed by local communities or mainstream faiths whilst many of them may at the same time also come under the jurisdiction of the government or private landowners.

There appears to be a clear trend towards increased recognition of many of the sensitivities involved in the conservation of sacred natural sites by international

conservation organizations and conventions such as the IUCN, the World Conservation Monitoring Center (WCMC), the CBD and the World Heritage Convention. These organizations argue that cultural and social safeguards, such as FPIC, need to complement biodiversity goals, and that a start could be made by asserting and building on existing and emerging rights under national and international law. A good example of such social safeguards that would benefit from being made obligatory rather than voluntary are the CBD 'Akwé: Kon Guidelines.

These cultural and social safeguards are particularly relevant in the context of the CBD's Programme of Work on Protected Areas Element 2 on governance, participation, equity and benefit sharing, which amongst others includes goal 2.2 on enhancing and securing involvement of indigenous and local communities and relevant stakeholders (Secretariat of the Convention on Biological Diversity, 2011a). Most of the measures that were suggested under those goals were required to be implemented by the parties by 2008.

7.3 National uptake and implementation

In practice, it takes a long time for countries to translate the provisions of international conventions into appropriate, equitable, and effective national policy and legislation. In many countries, national policies and legislation on these matters are not being implemented or have a very limited degree of implementation (Jonas et al. 2012; Stevens 2014). It is not uncommon that such changes are driven by the outcomes of specific national or international court cases. This is precious time during which sacred natural sites and their biocultural diversity are being lost. Especially when it comes to improving the recognition for sacred natural sites and their custodians, lobbying international policy venues such as UNESCO and the CBD have to proceed hand-in-hand with advocacy efforts at the national level, often resulting from efforts at local, regional, and subnational levels. The National Biodiversity Strategic Action Plans (NBSAPs) under the convention of Biological Diversity offer a particular opportunity for the integration of sacred natural sites to ensure that this strategy is implemented across all those sectors where activities can have an impact (positive and negative) on biodiversity.

National governments generally require a comprehensive overview and understanding of how international policies intersect with their national legislation, see for example the case of Guatemala explained in chapter 6. In addition, a clear plan for their implementation can be extremely helpful in convincing specific government departments that the proposal is indeed feasible and has national value in terms of strengthening identity, values, and social cohesion. Of course, a law proposal will have to be preceded by a detailed process of local dialogue with

custodians, communities, and knowledge holders, as well as regional dialogue and consultation with interest groups, companies, and government departments.

Good experiences keep amounting to the development of new ways of working with custodians and the conservation of sacred natural sites. As these 'new ways' emerge they are best viewed as part of localized processes that may have a potential for out-scaling and up-scaling. From the ground up, various experiences derived from different countries may lead to the development of methods and approaches such as guidelines or even tool kits. Examples of this are the "IUCN UNESCO Best Practice Guidelines No.16" (Wild & McLeod, 2008) and several statements developed by custodians of sacred natural sites themselves, such as the Barcelona Statement "A Statement of Custodians of Sacred Natural Sites and Territories (Sacred Natural Sites Custodians, 2010); the "Statement on Common African Customary Laws for the Protection of Sacred Natural Sites" (African Custodians, 2012) and the Pyhätunturi Statement on "Recognizing and Safeguarding Sacred Sites of Indigenous Peoples in Northern and Arctic Regions" (Conference Participants, 2013). Bio Cultural Community Protocols (Bavikatte, 2009; Shrumm & Jonas, 2012) are also a good example of a means to capture and upscale local needs in a way that these can be communicated with external actors effectively. These community protocols intended to defend the community from particularly undesirable development interventions are to some extent similar to the statements that have been developed by custodians of sacred natural sites, but they expand on these by embedding specific issues of concern in a framework of traditional, national, and international law. In learning from some of those localized experiences with Biocultural Community Protocols (BCPs) that were created in order to protect sacred natural sites, the facilitators of these protocols conclude that they are best used in conjunction with a range of other tools and strategies to secure communities' rights, territories, and resources (see box 7.2). According to Shrumm and Booker (2012, p. 39), issues to consider when developing a BCP in relation to the protection and preservation of sacred natural sites include:

1. How to work effectively and appropriately with traditional authorities and custodians and in accordance with customary laws and values;
2. Careful contemplation of existing power dynamics to mitigate excessive influence of certain parties (including external parties);
3. Mindfulness of competing views within communities and the effects of rights-based advocacy with respect to conflict with external actors (particularly in politically sensitive or repressive countries);
4. BCPs are can be a lengthy process and are not a "quick-fix" - rushing the BCP process can cause conflict and mistrust within communities and care

- must be taken if communities face urgent or immediate concerns on their sacred sites;
5. Care must be taken when documenting sensitive community information - documentation can increase interest in natural resources or traditional knowledge by external parties; and
 6. BCPs can be used by external actors in unintended ways, such as coercing communities into agreements.

BCPs can be examples of what the CBD recognizes as Community Protocols under the Nagoya Protocol on Access and Benefit Sharing of Biodiversity. The Nagoya Protocol is a supplementary agreement to the CBD and provides a transparent legal framework for the fair and equitable sharing of benefits arising out of the utilization of genetic resources. This international recognition of community protocols has in turn boosted the local uptake of the tool as a means to assist local and indigenous peoples with communicating and with advocating their interests to external actors, something which is also very useful in the context of many sacred natural sites. Although community protocols in themselves are not new, many have been developed by communities over time for various different reasons, and the Nagoya Protocol effectively supports their wider development and application. The “Bio Cultural Community Protocol Toolkit” (Shrumm, 2012) has been developed based on learning from many different local experiences - many involving sacred natural sites - gathered from around the world. The example from Ghana in chapter 6 shows how capacity building can be achieved by building on endogenous values of the communities themselves. In doing so, the Tancharra community and a Ghanaian NGO - the Centre for Indigenous Knowledge and Organizational Development (CIKOD) - have worked together to protect its sacred groves from destruction by an Australian gold mining company.

7.4 Towards a common ground

Keeping in mind that sacred natural sites are part of peoples’ worldviews the risk exists that a dissection of biodiversity-related knowledge would isolate it from its spiritual meaning, which would arguably be indivisible in traditional lifestyles. The problems of isolating traditional ecological knowledge from its context (or worldview on which it rests) for business or conservation management purposes has been well documented (Berkes, 2007, 2006). Amongst scholars in political ontology this separation or isolation is perceived as one of the outcomes of ontological power imbalances between the ontologies of indigenous peoples and western planners and conservationists (Hunt, 2013). Moving beyond traditional ecological knowledge, the

custodians of sacred natural sites often mediate between the human and the spirit world. Hence, sacred natural sites can be seen as places for mediation, guidance and in cases as sources of traditional law. Because sacred natural sites depend on institutions that have the *de facto* and/or the *de jure* capacity to develop and enforce decisions based on traditional or cultural laws, they also need to be seen as part of the ontological fabric of indigenous peoples.

Because of the different assumptions about the Other, it is not uncommon that indigenous peoples and conservationists (many of whom have been trained in Western institutions) have different ideas about what concepts such as ‘conservation’ and ‘sustainable development’ might mean. Cultural anthropologists (Blaser, 2009; West, et al. 2006) have repeatedly shown that when both parties evaluate the outcomes of the conservation projects in which they participated they both feel that the other party falls short in delivering conservation and development. In such cases the different understandings and conceptualizations of conservation and development require sensitizing and understanding on both sides in order for both parties to meaningfully work together. This doesn't mean that an agreement needs to be reached on what constitutes the ‘true’ meaning of conservation and development: misinterpretation and distortion may be difficult if not impossible to rule out. Yet, as White (1991a, p. x) observes from a historical perspective, “from these misunderstandings arise new meanings and through them new practices – the shared meanings and practices of the common ground.”

In this respect, the very exercise of policy making is mostly influenced by dominant ontologies whilst others have traditionally been excluded. This is of particular importance for indigenous peoples and sacred natural sites custodians who would benefit from the creation and identification of spaces in international policies where they can bring their worldviews to the fore.

Within both the management and policy context, the recognition of sacred natural sites can also have undetermined and potentially negative side effects. One of them would be the inclusion of sacred sites in management or policy measures to which their custodians would not normally consent. Many sacred natural sites are culturally sensitive areas controlled by decentralized local or religious governance systems that may not have the capacity, knowledge, or means to facilitate appropriate linkages to existing national or international policy actions. Woodley et al (2012, p. 9) also recognize these sensitivities in relation to the recent creation of the ICCA Registry (see: www.iccaregistry.org) maintained by the World Conservation Monitoring Institute (WCMC): “Custodians of some ICCAs and sacred natural sites may have good reasons for not wanting to appear on an international database, because it could draw increased attention to sites that retain value in part because of their isolation.” Carmichael et al (1994) also mention the ‘secret sacred’ and

accordingly the need to control and manage knowledge related to sacred sites.

It is important to respect cultural protocols and realize that specific knowledge related to sacred natural sites is also regulated through cultural and social rules and regulations that are not readily accessible to outsiders such as companies, conservationists or researchers. This is of particular importance to the World Database on Sacred Natural Sites (SANASI – www.sanasi.org) which, like the ICCA registry, makes use of a FPIC procedure to check if information submitted is not culturally harmful for custodians and communities: it should be up to them to decide what information can be shared and what needs to remain within the community (Corrigan & Hay-Edie, 2013).

Appropriate recognition and innovative biocultural conservation approaches are required for the protection and conservation of sacred natural sites, especially if these are to help achieve the CBD's goal to increase the area of land under protected areas and other effective means to 17% by 2020 (Bertzky, 2012). Networks of resilient, adaptive, and effectively managed sacred natural sites are thought to be able to significantly contribute to this global conservation mission. In many cases the reality is that sacred natural sites require improved protection, conservation and restoration efforts. In order to recognize and restore this network of sacred natural sites to its potential conservation value a measure of its contribution to the global conservation target can work as an incentive. Given the cultural sensitivities, social safeguards such as FPIC and full compliance with the principle of self-determination will need to be observed in order to avoid adverse impacts on these sensitive places and their custodians.

The protection, conservation, and revitalization of sacred natural sites can be enabled within the framework of local, national and international laws. However, the praxis, management and policy engagement at each of these levels should be scaled to purpose, bearing in mind the need for local custodians to exercise their cultural, spiritual and religious responsibilities. Conservation organizations can also help to raise the bar with local, regional, and national governments by demonstrating best practice in this regard. To date, however, a review of existing laws and policies (international and national) that assist with the conservation of sacred natural sites and faith-based conservation areas is still lacking. Such an effort would include a review of existing rights, as well as regulations and policies that intersect with laws that help protect sacred natural sites and would need to be inclusive of community conserved areas and faith-based conservation areas. A promising initiative in this regard is the existing review focusing on ICCAs by Jonas et al (2012), whose work offers a synthesis based on the strengths and weaknesses of legislation in 18 countries

in the Pacific, South and Central Asia, East-, West and South Africa as well as Europe and the Americas. The review makes a distinct effort to look at sacred natural sites in each of these regions. As sacred natural sites are complex and often intersect with various pieces of legislation, not all legal representatives performing the review were able to focus on them throughout the research and instead prioritized the use of their limited resources to focus on the concept of territory. Additional and more comprehensive analysis covering a full suite of rights - including cultural and religious - will be required for sacred natural sites, landscapes and pilgrimage routes.

Biocultural conservation approaches are required to effectively combine the collective practices, knowledge, and wisdom of the custodians of sacred natural sites with contemporary conservation management and policy. Several initiatives are working to advance the conservation of sacred natural sites. Their activities have focused on supporting individual groups of custodians or specific types of sacred natural sites in selected regions in the world, see figure 7.3. Nonetheless, a set of strategic directions (each followed by a number of sub-actions) was developed by them to guide the most necessary actions for the conservation of sacred natural sites (Verschuuren et al. 2010):

1. Support the autonomous protection and management of sacred natural sites by their custodians;
2. Reduce the threats and halt the loss of sacred natural sites;
3. Support cultural revitalization and the strengthening of communities and their connections with their sacred natural sites;
4. Increase understanding and awareness, particularly at national level, of the importance and role of sacred natural sites and promote the formation of appropriate national policies and laws;
5. Build up a body of increased knowledge of sacred natural sites, using different ways of knowing, including traditional knowledge, holistic science, the arts and media;
6. Access and generate funding for sacred natural sites identifying a diversity of resources (financial and otherwise) to support sacred natural sites.

Figure 7.3: The custodians and their supporters that drafted the six-point plan to help protect sacred natural sites. Source: CSVPA.



In order to effectively promote the recognition for the protection, conservation, and revitalization of sacred natural sites, collaborative efforts towards implementing these strategic actions are required amongst custodians, communities, scientists, conservationists, and civil society organizations (see: www.sacrednaturalsites.org).

Sacred natural sites are increasingly recognized for their contribution to both the conservation and sustainable use of global biodiversity and that of tangible and intangible cultural diversity. Initially a small group of enthusiastic conservation professionals signalled the need to give more importance to sacred natural sites in the realm of conservation. They started working together with indigenous peoples, policymakers and relevant institutions to achieve a better understanding of the issues that are critical to their conservation. This work developed into a set of Guidelines for protected area managers (Wild & McLeod, 2008) which can help construct a common ground for sacred natural site custodians and conservationists. The Guidelines includes the following practical steps for management and planning (Wild & McLeod, 2008, p. 21):

Principle 1: Recognize sacred natural sites already located in protected areas;

Principle 2: Integrate sacred natural sites located in protected areas into planning processes and management programs;

Principle 3: Promote stakeholder consent, participation, inclusion and collaboration;

Principle 4: Encourage improved knowledge and understanding of sacred natural sites;

Principle 5: Protect sacred natural sites while providing appropriate management access and use;

Principle 6: Respect the rights of sacred natural site custodians within an appropriate framework of national policy.

The Guidelines are written in a manner that is cognizant of the importance of traditional custodians in managing their sites. They clearly recognize the duties and rights of custodians and announce that it would be inappropriate for organizations intervening from outside to provide management advice regarding sacred sites without the permission of, and advice from, the appropriate custodians who have often successfully cared for these sites for many generations. This way, the guidelines have been developed to promote cooperation between protected area managers and custodians towards the goal of enhanced protection and conservation of these special places.

Since their launch, the guidelines have been translated into seven languages: English, Russian, Spanish, Estonian, French, Korean, and Japanese. Translations of the essential parts of the Guidelines have also been made in Italian and Persian; increasingly, park services, local people, or dedicated individuals express an interest in translating the Guidelines into their respective languages with the desire to see them implemented. A good example of the national uptake of the Guidelines is the Estonian translation, which has been undertaken as part of a broader national strategy of sensibilisation and inventory of sacred natural sites (Kaasik, 2012).

Because of the recognition of duties and rights of traditional custodians, traditional custodians seeking to engage with environmental or protected area authorities and other external actors can also make use of the guidelines. For example, the Yolŋu people in northeast Arnhem Land, Australia, have themselves incorporated the guidelines in their Cultural Heritage Management Plan as part of their Indigenous Protected Area. Others, such as the Venda people in South Africa, used the Guidelines as an international standard to convince their government that their sacred sites were to be taken seriously. The custodians of the Venda clans' sacred sites, the Makhadzhi, formed a committee called Dzomo la Mupo (Voices of the Earth) which filed and won a lawsuit against a party that had initiated the development of a tourism resort on the grounds surrounding their sacred waterfall (see Figure 7.1). The Venda attracted the government's attention and are now

pushing on to have their sacred natural sites recognized as an interdependent network.

The guidelines also call on protected area managers and conservationists themselves to advocate for appropriate, relevant policy changes that will improve management of sacred natural sites locally, nationally, and globally. The guidelines generally develop from the specific and the local to the more general and national level. In this manner, they retain a high level of endogenous experience at the core of their implementation. To ensure that these locally relevant specificities do not get lost in overarching management decisions taken at the regional or national scale, it is recommended that individual protected area managers advocate for appropriate, relevant policy changes that will help improve management of sacred natural sites from the local to the national and international scale. One way to achieve this is through a national strategy that challenges protected area managers, heritage professionals and policy makers alike to engage in the construction of a common ground that overcomes the pitfalls of the past.

Chapter 8

Conclusions and Discussion: A common ground for worldviews in the conservation of Indigenous sacred natural sites

< *Figure 8.0: Pacaya Volcano, Guatemala.*

Pacaya volcano is one of the most sacred sites to the Maya in Guatemala. Source: Bas Verschuuren.

8.1 Results by research question

The main aim of this thesis has been to advance our understanding of the importance of the different dimensions of Indigenous sacred natural sites in nature conservation. Its purpose is to elicit how common grounds can be constructed for the conservation of Indigenous sacred natural sites from the local to the global level. In order to achieve this, I elaborated on four research questions:

1. *How has the significance of Indigenous sacred natural sites been recognised in nature conservation globally and what are the main implications and challenges for nature conservation practice, management and policy?*
2. *How do biocultural conservation approaches contribute to creating common ground for the conservation of Indigenous sacred natural sites and species?*
3. *How do Indigenous people contribute to the creation of a common ground for the conservation of sacred natural sites and to what extent does this affect Indigenous rights and ontologies?*
4. *What elements are universal to the process of creating a common ground for the conservation of Indigenous sacred natural sites?*

The answers to these research questions are important because they justify intervening in debates about the conservation of Indigenous sacred natural sites and the creation of common grounds that is needed in order to bring different ontologies into nature conservation.

In order to find answers to my research questions, I carried out ethnographic research in Indigenous communities in Northeast Arnhem land (Australia) between 2007 and 2011, and in the Upper West Region (Ghana) and Santa Cruz Del Quiche (Guatemala) between 2011 and 2014.

In this chapter I present the key findings derived in this thesis. I then discuss the significance of the main research results and several lateral findings encountered during the course of this research. Subsequently, I discuss the methodological implications of my research, and finish the chapter with some recommendations for future research on the development of a common ground between Indigenous people and conservation and development actors in relation to the conservation of Indigenous sacred natural sites.

8.1.1 *The significance of Indigenous sacred natural sites for nature conservation practice, management and policy*

The answer to Research Question 1: *How has the significance of Indigenous sacred natural sites been recognised in nature conservation globally and what are the main implications and challenges for nature conservation practice, management and policy?* has been developed primarily in Chapter 2 but I also draw on several of the other chapters of this thesis, notably 3, 4 and 7. The non-exhaustive literature review as well as the analysis of some twenty-two case studies presented in Chapter 2 provides an overview of the phenomena of sacred natural sites in the conservation arena. The literature and analysis of the case studies indicate that the interests of the global nature conservation movement originates from the components of biological diversity that sacred natural sites harbour, as well as their contribution to ecological dynamics and ecosystem functions. However, the literature and case study analysis also indicates that Indigenous sacred natural sites already form networks constructed by, and maintained through, the culture, spirituality and worldviews of Indigenous people. Chapter 2, 3 and 4 provide ample examples of how the cultural significance of sacred natural sites complements biodiversity and ecological values in conservation approaches. Most of the literature and case studies I analysed focus on how local practices and beliefs related to Indigenous sacred natural sites deliver conservation benefits. Very few case studies however focus on how to sustain and enhance the cultural and social fabric in which Indigenous sacred natural sites are enacted and from which they derive their agency (see Chapters 2 & 7).

Beyond local practice and conservation management, the global policies and conservation strategies have historically focused on protectionist conservation approaches informed by western sciences (see Chapters 2 and 4). The cultural importance of Indigenous sacred natural sites has long been under-recognised in conservation policy (see Chapter 2). This started to change at the World Parks Congress in 2003 (described in Chapter 3), where Indigenous people were given a voice in the conservation debate. There, a common ground started to be created that would later involve Indigenous sacred natural sites (see the example provided in Chapter 7) where Indigenous people represent the interest of Indigenous sacred natural sites at the Conference of the Parties of the Convention on Biological Diversity.

Based on these findings I summarise the main implications and challenges that sacred natural sites pose to conservation, practice, management and policy in ten key issues presented in Chapter 2. These challenges and implications all suggest interaction and mutual dependency between cultural and natural elements of sacred natural sites and recognise that impacts on cultural aspects also impact on biodiversity - and vice versa. Recognition of sacred natural sites should involve

support of Indigenous peoples, rights, worldviews, spirituality, management and governance systems (see Chapter 4). A better understanding is required of the inter-relationships between economics, conservation objectives and the broad values and benefits of sacred natural sites for human well-being and development. Conservationists recognise the opportunities of sacred natural sites to function as nodes of resilience, restoration and adaptation to climate change, but it remains unknown how to generate local commitment, wide public awareness, supportive national policies and laws, state protection and broad international support for the survival of sacred natural sites (Chapters 2 and 7). While it is recognised that a broad strategy for conserving sacred natural sites is urgently needed, the common ground to help develop and implement such strategy often still needs to be created (see Chapters 6 and 7).

8.1.2 Biocultural approaches and their contribution to the conservation of Indigenous sacred natural sites

The answer to Research Question 2: *How do biocultural conservation approaches contribute to creating common ground for the conservation of Indigenous sacred natural sites and species?* draws mostly from Chapters 3 and 4, a practical example from Chapter 5 and from the rights-based discourses described in Chapters 6 and 7. These chapters show that biocultural conservation approaches can help create a common ground in two important ways, namely by a) offering a conceptual framing that allows culture to be considered as inextricably linked with nature, and by b) integrating aspects of Indigenous peoples' worldviews (such as traditional ecological knowledge), but also Indigenous governance and management systems that are based on these worldviews and ontologies.

Throughout Chapters 6 and 7, different case studies from Guatemala and Ghana show that biocultural approaches may help placing more emphasis on the social, cultural and spiritual significance of Indigenous sacred natural sites within conventional conservation and development approaches. The application of biocultural community protocols in Chapter 6, for example, shows how the spiritual aspects of Indigenous sacred natural sites are unequivocally manifest, while integration of biocultural approaches in conventional conservation approaches is discussed in Chapter 3. Examples from Chapter 3 also show that locally situated adaptive management can be a means to *in situ* implementation of biocultural conservation approaches for sacred sites and species. It shows that adaptive management can serve to integrate Indigenous peoples' local practices and beliefs into conventional conservation approaches. This indirectly brings Indigenous peoples' emotional and spiritual attachments to the landscape into conservation

management and governance. It also opens up conservation to Indigenous peoples' self-representation and hence the creation of a common ground (be it, usually, on conservationists' terms). Apart from the case study in Australia, I have not been able to collect any evidence of Indigenous ontologies being considered on a par with western ontologies in shaping conservation. However, when Indigenous peoples' conservation practices and beliefs appear more prominently, the common ground led to new conservation practices, negotiated and devised from both Indigenous and non-Indigenous ontologies.

8.1.3 Indigenous efforts towards creating common ground in conservation and their implications for Indigenous rights and ontologies

Research Question 3: *"How do Indigenous people contribute to the creation a common ground for the conservation of sacred natural sites and to what extent does this affect Indigenous rights and ontologies?"* is the subject of Chapters 5, 6, and 7. These chapters provide examples of how Indigenous people directly contribute to the creation of a common ground for the conservation of sacred natural sites in Australia, Ghana, Guatemala as well as in the (inter)national policy making arena. They also provide a narrative on the role of rights-based approaches and multiple ontologies in the creation of a common ground.

At a communal and spiritual level the Maya (Guatemala), the Dagara (Ghana) as well as the Yolŋu (Australia) use their sacred natural sites as places for ceremony and critical self-reflection where they can escape power imbalances and imagine and develop alternative modes for community governance and management. Indigenous sacred natural sites are important sources for strengthening Indigenous peoples' culture, worldviews and ontologies, and as such support the creation of a common ground (see Chapter 6). Indigenous people like the Maya, Dagara and Yolŋu draw strength from ceremonies, which not only offer individual but also shared experiences that extend to the well-being of the whole community. Community members use their religious heritage and their cosmovision as a guide for developing a common ground and create alternative pathways of management and governance to conserve their sacred natural sites - in spite of the potential threats posed by conservation and development actors.

Chapter 5 shows that the creation of a common ground can be institutionalised by adopting a 'both ways' approach to the conservation of Indigenous sacred natural sites and territories. This approach combines traditional ways; cultural knowledge and practices, and exogenous ways; external knowledge and practices as used by experts and scientists in mainstream Australian society The

Yolŋu used the both ways approach as part of their governance based on *rom* (their traditional law) and applied it to the management of their lands -which are under a voluntary conservation agreement with the Australian government as an IPA. The both ways approach helps build common ground by having Indigenous and non-Indigenous people work together on education, health care, or land management. This research, which I describe as a form of participatory and applied research, took place through this 'both ways' approach and is an attempt to creating common ground - not simply because it aims at establishing cross-cultural conservation guidance, but also because Indigenous people engaged with scientists (including myself) in co-creating a research process based on both Indigenous and scientific ontologies. The common ground opened up through the IPA programme also enabled Yolŋu to directly negotiate with the government and a range of other actors involved with natural resource management and regional development. The interplay of ontologies on this common ground also proved influential in terms of affecting regional policies that directly impact on the conservation of Indigenous peoples' sacred natural sites.

In Chapters 5 and 6 I furthermore show how the creation of a common ground is supported by providing legal imperatives for Indigenous management and governance of Indigenous sacred natural sites. The both ways approach described in Chapter 5 was created by Yolŋu and based on land rights won in the past, and which helped broker conservation agreements with the federal government under the IPA programme. In Guatemala, the common ground was constructed throughout a process of developing and advocating a law proposal for the Indigenous governance and management of Indigenous sacred sites, while in Ghana this happened through the development of a biocultural community protocol. All cases required a series of well-managed processes of gathering data on traditional and state governance systems, brokering rights and interests with various actors, and seeking jointly supported resolutions for the best possible results, see Chapter 6. Clearly the Yolŋu, Dagara and Maya became more visible political actors once the process of creating a rights-based common ground really took off.

The examples from Ghana and Guatemala show that Indigenous peoples experience difficulties in getting their demands recognised and respected while developing a common ground because they are often disadvantaged by dominant (neo colonial) institutions and paradigms. The law proposal developed by Oxlajuj Ajpop (Chapter 6) has repeatedly experienced setbacks in Parliament due to pressures from neoliberal economic parties. Chapters 5 and 6 show that these approaches to the creation of a common ground are valued but that they do not guarantee improved conservation of Indigenous sacred natural sites as long as rights are not obtained and

respected. Thus, the law proposal in Guatemala was not adopted, and the moratorium on prospecting for gold in Ghana was only upheld for one year. In contrast, in Australia the both ways approach was successful in securing the conservation of sacred natural sites because it was embedded in an enabling policy environment with established rights for Indigenous peoples.

In Guatemala, the role of advocacy has been central to pressing Indigenous peoples' claims to the governance and management of sacred sites with the national government. On occasion, this took the form of activism but there was always a careful consideration not to jeopardise diplomatic efforts to get the proposal for a national law on sacred sites adopted. The role of Oxlajuj Ajpop was uniting the spiritual leaders and mobilising a grass-roots social movement with the law proposal as spearhead. Through the involvement of international aid and NGO's such as Sacred Natural Sites Initiative, Oxlajuj Ajpop was also able to present their work at international conferences and secure access for their own country's diplomats to act as representatives in the Convention on Biological Diversity (see Chapter 7). Using arguments of nature conservation and biodiversity protection created a legitimacy in the CBD to also show how the conservation of sacred natural sites is linked to social justice, community well-being, learning and the conservation of natural resources. These dynamics contributed to grassroots innovation and the development of a common ground through expanded forms of organisation and hence influence and power. CBOs and communities linking with NGOs, academia and international donors brought isolated efforts to protect sacred natural sites onto a common ground with national and international actors.

8.1.4 Universal elements to create a common ground for the conservation of Indigenous sacred natural sites

Research question 4 "*What elements are universal to the process of creating a common ground for the conservation of Indigenous sacred natural sites?*" is answered through the results from my research in Australia (Chapter 5), Guatemala and Ghana (Chapters 6 & 7). This shows that Indigenous people assume different roles and responsibilities and enrol different strategies for creating common ground at the local, national and international level. In moving from the local to the international level the emphasis seems to shift from working together on the ground (Chapter 5) to advocacy, rights-based approaches and diplomatic efforts to create change in the policy arena at the national (Chapter 6) and international (Chapter 7) levels. Although it is clear from the various case studies that each process of creating common ground is context-specific, several elements could be considered universal:

Willingness to learn about other worldviews: Learning about Indigenous people's culture and spirituality by participating in community activities and through working closely together on conservation issues can help create understanding and appreciation of one another. The 'both ways approach' (Chapter 5) is a good example of this as it offers an opportunity for Indigenous people to learn from conservationists and other ways of knowing.

Participatory approaches and applied research: Applying endogenous and participatory approaches and action research methodologies such as with CIKOD and Tancharra community in Ghana helps to bring out ontological differences and opens communication about worldviews on the common ground (Chapter 6). In Australia, this led the way to co-creating research methods together with Yolŋu.

Cultural brokers: In some cases, a cultural broker can help translate concepts and meanings across worldviews. In Australia, this was the role of the Yolŋu Senior Cultural ranger, who explained the cultural context of sacred natural sites to me and other outsiders; in Guatemala, the individual members of Oxlajuj Ajpop translated the wishes of the *Ajq Ijab* to politicians.

Stakeholder engagement: In Australia, Ghana and Guatemala Indigenous peoples were involved in conservation efforts through stakeholder consultation and engagement processes. Being engaged in the process allows Indigenous peoples to start building a common ground for setting shared objectives and developing a way forward.

Rights-based approaches: In all three case study areas rights-based approaches have proven key to enabling the creation of a common ground (Chapters 5 and 6). Consultation processes, FPIC and processes of stakeholder engagement can follow from these rights (Chapter 6).

Governance arrangements: In all cases, non-humans (e.g. spirits) played a large role in who gets to take decisions about Indigenous sacred natural sites and how their management is framed (Chapters 5 and 6). Yet this type of spiritual governance was proven vulnerable to neoliberal conservation and development approaches (Chapter 6).

Ontological equity: Equal recognition of multiple ontologies by all actors active in the common ground has proven problematic. In Ghana and Guatemala neoliberal

market forces ran counter to these developments (Chapter 6) while in Australia the both ways approach proved that ontological equity can be achieved (Chapter 5).

8.2 Conclusions & discussion on the significance of the research

Four important conclusions can be drawn from this study:

1. *Biocultural conservation approaches can enable the creation of a common ground, but they may also constrain Indigenous ontologies.*
2. *Conservationists should learn from other worldviews and ontologies in order to improve the conservation of Indigenous sacred natural sites.*
3. *Non-human agency and spiritual governance are under-recognised in the conservation of spiritscapes and sacred natural sites.*
4. *Combining an ethnographic approach with an engaged and participatory research strategy is useful for considering multiple ontologies.*

In this section I discuss these conclusions in the context of the academic debates that I engaged with throughout this thesis. I also draw on reflections on my research process, and link these to some of the conceptual areas foregrounded in the theoretical framework.

8.2.1 *Biocultural conservation approaches can enable the creation of a common ground, but they may also constrain Indigenous ontologies*

This thesis shows that while conservationists often see sacred natural sites as biodiverse stepping stones in ecological networks (Verschuuren et al. 2010) much can be gained by understanding them as social networks representing the different worldviews and realities of Indigenous peoples (Verschuuren, 2016). For this purpose, I suggest that biocultural conservation approaches be deployed (see Chapters 3 and 4). I show that while the attempts to bring nature and culture closer together the paradigm of biocultural diversity is still in Kuhnian terms a shifting paradigm (see Kuhn, 2012). In a western, multi-cultural ontology (which forms the basis of most conventional conservation approaches), this type of thinking is progressive but, as Blaser (2012) argues, in many Indigenous ontologies nature and culture do not exist or at least not as dualities. Biocultural conservation approaches are different from conventional conservation approaches and offer the potential to construct a common ground, conceptually and in practice, but they also maintain this ontological paradox.

Historically, conservation approaches have been developed to set nature aside from development in order to protect it from human impact and for natural

processes to prevail (Stevens, 2014b). To meet this end, local and Indigenous people were often evicted from their ancestral landscapes (Brockington, 2002; Dowie, 2009). Wilshusen et al (2011) have debunked some of the attempts to revive such protectionists approaches. However, the recent 'Half Earth' debate – see Buscher et al (2016) and Cafaro et al (2017) – shows that the uptake of community conservation and biocultural conservation approaches still remains under-developed.

Scientific insights about biocultural diversity do support alternatives to protectionist conservation approaches as these build on the realisation that nature and culture are inextricably linked and often mutually interdependent (Harmon, 2007; Maffi, 2008; Martin & Mincyte, 2012). While biocultural conservation approaches are believed to have the potential to transgress the western philosophical dichotomy of nature and culture (Maffi, 2008; Pilgrim, 2009), I do warn against the danger to become trapped within the bounds of this dichotomy, see Kopnina (2016) and West (2016). I propose that when conservationists aim to take Indigenous ontologies seriously, they should be mindful that biocultural conservation approaches can also be perceived as coercing Indigenous ontologies into dominant or conventional conservation paradigms. Based on Chapters 3 and 4, my research aligns with that of Sasaoka and Laumonier (2012) who found that the collaboration between Indigenous people and conservationists is troubled because of the difficulties of reaching a deeper understanding of non-human agency and Indigenous worldviews. Including multiple ontologies in biocultural conservation approaches could perhaps change this but has not yet been accounted for in the literature on biocultural diversity and conservation (Cuerrier et al. 2015; Loh, 2005; Loh, 2010).

However, simply incorporating Indigenous ontologies in biocultural conservation approaches I believe would do insufficient justice to Indigenous peoples and their abilities to advance conservation. Therefore, I concur with Lorimer (2012) to call such framings a form of neo-colonialism - but I also acknowledge their potential for improving current conservation practice, management and policy. In my view, the partial recognition of Indigenous peoples' worldviews points to an ontological inequity that inhibits a better understanding of these Indigenous worldviews. Conservation strategies should account for this and take Indigenous ontologies seriously by applying a principle that I define as "ontological equity", a principle I deduced from biocultural rights (Bavikatte, 2014) and biocultural community protocols (Jonas, 2010), and which calls for the need to give equal consideration to multiple ontologies in conservation, also beyond rights based approaches. This principle, I argue, requires a common ground where the ontological building blocks of conservation and development interventions can be reconsidered (Howitt and Suchet-Pearson, 2006; Coombes et al. 2014)

8.2.2 Conservation and development actors can learn from other worldviews and ontologies in order to improve the conservation of Indigenous sacred natural sites

This thesis emphasised people's relationships with nature, be it 'saltwater people' in Australia's northern marine environment or the 'people of the land' living in the arid conditions of northern Ghana. Understanding people's relationships with nature should be of primary concern to the field of conservation and much can therefore be gained from improving our understanding of the relational ontologies of Indigenous peoples (Pauwelussen, 2016). I have come to conclude that the failure to recognize different Indigenous worldviews and ontologies on a par with dominant scientific knowledge has, in certain cases, exacerbated political, economic, religious, educational inequalities and ultimately frustrated conservation outcomes (Caillon, 2017; Howitt, 2001; Medin & Atran, 2004). Instead, I suggest to look at what Indigenous worldviews and sciences have to offer that could help improve conservation efforts and outcomes.

Especially when it comes to the conservation of their sacred natural sites the non-human agency is important, and I agree with Lorimer (2007) that not recognising this will likely result in unnecessary maintenance of contested situations and possibly contribute to the continuation of protectionist conservation approaches. Considering multiple ontologies can possibly result in new bio-cultural conservation approaches that transcend the schism between nature and culture. Multiculturalism may however present a deep-seated obstacle to treat Indigenous ontologies seriously (Law, 2011). It is one thing to create a common ground where everyone can speak together and exchange ideas about the same nature; it is quite another thing to introduce multinaturalism, or the idea that multiple ontologies lead to the enactment of different worlds and therefore different or multiple 'natures', which is far more challenging (Latour, 2011). Take for example the various kinds of non-human actors in sacred natural sites and their surrounding territories. These trees, lakes, springs, rocks, sharks, mythical beings, ancestors and spirits are seen to have power and agency that is efficacious in the human world and hence in conservation (Byrne, 2010a). Because non-human agency and its role in different ontologies are not often recognised in conservation, making them count in conservation can be something that we can learn from. Thus, an engagement with the Other is required in order to move beyond the historic legacy of scientific and western ontologies dominating over Indigenous ones (Howitt, 2001).

I recognise that the notion of Indigenous peoples as world-makers who enact different 'realities', as Mol (2014) calls it, is one that will be difficult to comprehend for many conservationists as it challenges the underlying foundations on which mainstream conservation and other scientific fields have been based (Lorimer, 2007).

Yet, the critical self-reflection required to consider the different natures lived and enacted by Indigenous peoples will be crucial to the conservation of Indigenous sacred natural sites as, without it, we may conserve sacred mountains, trees and rocks in a western image of the sacred - but the spirits that imbue them and the spiritscapes they belong to will disappear, along with the world(view)s and care of their Indigenous custodians.

8.2.3 Non-human agency and spiritual governance are under-recognised in the conservation of spiritscapes and sacred natural sites

In conservation, the western notion of the sacred often dominates Indigenous significance of sacred natural sites. As Howitt and Suchet-Pearson (2006) argue, this ontological preconception causes contestation of Indigenous peoples' values, beliefs, rights and worldviews as these relate to land, sea and natural resources. Moreover, it denies Indigenous peoples' relationships with nature, and which have contributed to the creation of biodiverse land- and seascapes and their conservation, often for many generations (Verschuuren, 2016a). Only very few studies have looked at the cultural meaning of the numinous character of Indigenous sacred natural sites, also explained as supernatural agency (Byrne, 2010a). I conclude that for conservation and development purposes, Indigenous sacred natural sites require rapprochement and recognition of their agency. In conservation and development interventions this means that Indigenous ontologies have to be taken seriously so that the management and governance of sacred natural sites and spiritscapes can be re-designed in a way that includes Indigenous ontologies.

My research shows that the spiritual dimension of sacred natural sites is closely linked to community management and governance of natural resources, nature and the land. This spiritual dimension extends to what McNiven (2004) identifies as the wider spiritscape that is ontologically different from the landscape that conservation and development actors perceive. Because of the longevity of many spiritual and cultural conservation approaches, I argue that they form viable alternatives to neoliberal conservation ones. They may gain support from those who critique neoliberal conservation and identify ideological disjunctures of capitalism and conservation such as Büscher et al (2016).

A practical way to include multiple ontologies, their spiritscapes and sacred natural sites in conservation is through recognising spiritual management and governance arrangements. Together with Study I have recently developed the concept of spiritual governance and introduced it in conservation literature (Studley, 2016; Verschuuren, 2016b). While Studley (2010, 2016) argues that spiritual governance is restricted to the role of spirits and angels that occupy sacred natural

sites, I also recognise the role of humans such as shamans and religious actors (Verschuuren (2016b)). This can be done by integrating spiritual governance in the IUCN management and governance matrix for protected areas which will make it easier for conservationists and development actors to take the concept seriously and gain discursive terrain in official conservation narratives dominated by western ontologies.

8.2.4 Combining an ethnographic approach with an engaged and participatory research strategy is useful for considering multiple ontologies

According to Redford (2011) conservationists are pragmatic and have learned to take into account the interests of local people in order to conserve nature. However, based on my research I concur with Lele (2011) and argue this notion is based on a compartmentalised and pragmatic understanding of scientific disciplines which does not sufficiently take into account peoples' worldviews and Indigenous ways of knowing. I argue that many conservation issues in the Anthropocene, are in fact social issues and subsequently require social research to be understood (Bennett, 2016). Therefore, I conclude that we should explore a fundamentally different approach to conservation science; one that accepts a diversity of situated realities represented by Indigenous worldviews. In Mace's (2014) terms this could be called a new, future phase of conservation entitled "natures by peoples". I argue that including notions of multiple ontologies in research can help in moving away from multicultural conceptualisations and framings of conservation issues and research methods. Doing applied ethnographic research on multiple ontologies can help shape new lines of inquiry into an inter- and transdisciplinary ways of doing conservation science that would have their bearing on traditional practices of ecologists, biologists and geologists.

As an engaged scientist I learned that me and my research had become part of the process of developing solutions to conservation issues and was as such "co-defined" (Rasch, 2016). As an engaged researcher, I had to recognise that I was also part of the fabric, i.e. the programmes and the Indigenous organisations that I worked with. Rather than being an objective outsider I had a role to play in these projects that formed the context of my research. This role also challenged me to reconsider my understanding of objectivity and impartiality. Much of this challenge came to the fore when I encountered the different worldviews and ontologies of Yolŋu, Dagara and Maya people. Initially my own worldview and western ontology were guiding the research, but I had to develop a participatory way of doing research and learn from the Other and eventually to try and 'think like' or 'become like' them in order to

experience a sense of equity. This process has also been described as a form of de-colonisation of research (Kendall, 2011); others, such as Hart (2010) and Hunt (2013) propose Indigenous research methods should be guiding research altogether. As I opted to work on the basis of the co-creation of research and research methods I had to find an appropriate level of engagement and representation.

8.3 Possible social impact of the study: moving towards a new paradigm of conservation requires a common ground

Despite mounting evidence, a revival of protectionist approaches to biodiversity conservation (largely based on incomplete arguments) continues to launch arguments against community-based conservation (Wilshusen, 2011). At the same time, we see an upsurge of Indigenous peoples and local communities that are claiming legal recognition for their role in conserving biodiversity. This upsurge is driven by developments such as the coming into effect of the United Nations Declaration on the Rights of Indigenous peoples (UNDRIP, 2007) and the development of the Consortium of Indigenous Peoples' and Community Conserved Territories and Areas (ICCA), founded at the World Conservation Congress in 2008. As such a common ground is being created which I argue should accommodate all types of governance including spiritual governance (Verschuuren, 2016b). As the latter gains ground and recognition, Stevens (2014b) speaks of the creation of a new paradigm for protected areas.

However, as rights are gained slowly, and as mounting social movements, practical evidence and increasingly also "science" favour community conservation, we see that vested powers and interests (governments, banks and enterprises) prefer to stimulate state- and market-controlled conservation measures (Howitt, 2006) that may impede the conservation efforts of Indigenous peoples that have proven so effective to date - for example implementing REDD⁺ at the expense of spiritual governance over forests. It is therefore surprising that Indigenous beliefs, cultures, and knowledges are only rarely taken into account by institutions responsible for managing landscapes and conserving nature.

Research on creating common ground is a good way to describe how sacred natural sites could help to radically reconceptualise conservation. Common grounds are not 'middle grounds' that comes into being when each party has made equal compromises (White, 1991). These are neither a common ground in the sense that all parties consent to adopt a set of shared views and values. Rather, a common ground is constructed from different aspects of different worldviews and ontologies that

come together and inform the knowledge and behaviour of Indigenous people as well as that of conservation and development actors. It supports processes of learning about other realities and helps construct new relationships between the realities of different actors, and as such it is often constructed through rights, diplomacy, politics and compassion (Deloria, 2006). The common ground therefore consists of pragmatic, political and mutually constructed accommodations that do not fit a simple rubric of domination, subordination, and acculturation (Conklin et al. 2016). This common ground holds a promise to the future in which the most valuable elements of each worldview, spirituality and ontology are recognised and maintained as valuable to the development of new conservation approaches for Indigenous sacred natural sites.

Howitt and Suchet-Pearson (2006, p. 2) argue that researching the ontological building blocks of conservation helps to examine: *“the hidden cultural specificity of management, planning, institutional strengthening and capacity building as well as their implicit silencing of alternative narratives of the economic, environmental and cultural dimensions of social life.”* I argue that taking plurality and ontological equity as a starting point for constructing a common ground contributes to developing new conceptual approaches for improving our understanding of the conservation practices, management and governance of Indigenous sacred natural sites.

The common ground is a context-specific phenomenon, maintained as an ongoing process as it inhabits different realities as well as different social and institutional spaces from the local to the international level. It can also serve as a platform and process to redress social inequity in past conservation and development approaches, and help create a new and more sustainable paradigm for nature conservation. Reconciliation, negotiation, advocacy and diplomacy are required to achieve a situation in which ontologies are weighed equally (Woolgar, 2013). As such, the general characteristics of common grounds appear increasingly valuable in that they can help conservationists and development actors align with a new paradigm for conservation that is far more just, socially equitable and sustainable.

8.4 Reflections on the study, identification of weaknesses and their significance for my research results

Throughout this study, I have reflected on the weaknesses in the results, my role as a researcher, and the methodological and conceptual underpinnings of this thesis. Here I identify how these affect the conclusions.

The conclusions encompass and reflect on my own lived experience as an applied researcher with roots in environmental sciences. When I started this thesis,

the first three of its Chapters had already been written before I became more affected by anthropological and sociological theories of multiple ontologies. Certainly, social sciences are rapidly gaining ground in conservation practice and its related scholarly and academic spheres. This trend is also reflected in Chapters 5, 6 and to some extent also Chapter 7 showing the iterative character of my own progressions as a scholar and conservation practitioner moving more and more into the into the domain of the social sciences.

The heuristic experience of developing this PhD thesis resulted into a gradual proliferation of my interest in multiple ontologies. Although I have not been in a position to develop my research methodology in order to focus on multiple ontologies, I have, towards the end of my thesis, been analysing my data and field experiences with this interest in mind. As a result of this my research has led me to specific insights to improve the way Indigenous sacred natural sites are conserved in the field. Although I feel that I could have yielded more specific results should I have been able to design my research methodology from the start with a focus on ontology, some of the insights which I gained from the study also opened up new lines of inquiry for applied ethnographic research in this field. For example, the concept of ontological equity in creating common grounds and the role of spiritual governance in the conservation of Indigenous sacred natural sites (see Chapter 6).

The empirical data was gathered through applied ethnographic research on practical conservation projects mostly before having designed the conceptual framework of this thesis. As a result, the conceptual framework had to be retrofitted in terms of addressing all the elements that required attention in conservation-oriented research, e.g. scaling from local to global, taking into account practices, management, governance and policy making (see figure 1.5). The research dimensions on rights based-approaches, ontologies and multinaturalism could have been better elaborated if the conceptual framework could have been followed from the start of the research. It turns out that during the analysis of my empirical data, my interest in these fields grew considerably. They became important areas of inquiry that required me to revisit my data. Admittedly, in several instances these expanding research ambitions reached beyond my data, and would have justified more fieldwork, i.e. revisiting field sites, in order to generate more significant results, however this was for practical, time and financial reasons impossible to achieve.

If I would have been able to develop the research questions and methods more systematically before going into the field, I could have better elicited the roles of different ontologies in conservation practice, management and policy as well as the disjunctures that arise when different ontologies meet in practice. To achieve this I would recommend that a methodological focus on these conceptual areas of research be developed. The research has also shown that the spiritual dimension is

key to many sacred geographies that embody sacred natural sites (Chapters 4 and 5, this thesis). Much less is known however about their enactment and the role of spirituality, which would arguably have led to a better understanding of Indigenous ontologies. Part of this may be because of a 'spirit-phobia' within academia which, if overcome, may well lead to the development of new, "embodied" methodologies for conservation that might contribute to ontological equity, see Pauwelussen (2017, pp. 28, 40).

8.5 Recommendations

This section offers specific recommendations for doing applied, participatory ethnographic research on Indigenous sacred natural sites.

The examples of Indigenous sacred natural sites provided in this thesis hint to the fact that biocultural conservation approaches can be more equitable and effective than protectionists conservation approaches, even though more systematic research on this would be desirable. I believe that new research, applying for example interspecies ethnography or political ontology to the analysis of the conservation of Indigenous sacred natural sites, can improve our understanding of the dichotomy between nature and culture and possibly help to overcome this. A recent publication that I co-authored shows this is possible, for example by devising biocultural indicators that take into account Indigenous worldviews and ontologies (Caillon, 2017).

In conservation, a shift towards ontologies (some of which include non-human agency) will require substantial, systematic and holistic efforts. These efforts should be informed by more in-depth studies focusing on relational ontologies, or values associated with relationships between humans and nature, both interpersonal and interspecies. Such research has to depart from the theorem that values are not present in things (or nature, for that matter), but derived from relationships (Wildman, 1984).

To conservationists this implies that caring for these values (often the primary focus of management) means caring for relationships and taking (Indigenous) ontologies seriously. This requires the construction of a common ground in which the ontological elements of conservation can be rearranged. The success of such applied conservation research will likely depend on researchers' and conservationists' ability to consider different realities based on ontological plurality and equity.

Indigenous peoples offer alternative ways of seeing and ordering the world that lead to very different ways of interacting with the environment, e.g. through spiritscapes and sacred natural sites. Learning about these other ontologies could radically change the future of conservation in unexpected ways. Conservationists and conservation scientists should therefore engage with Indigenous people's worlds and consider the role that humans and non-humans have in creating Indigenous worlds and alternative versions of nature.

Creating common ground should not only be based on rights and rights-based approaches, but also on the notion of ontological pluralism and ontological equity. Ontological equity should guide the creation of a fair and socially equitable common ground, and should be enshrined in conservation approaches and processes of policy-making related to Indigenous people and the conservation of nature and culture. Ultimately, conservation decisions based on a common ground that applies the principle of ontological equity are likely to have a higher chance of success because they would be considered acceptable to people that hold different worldviews. The research focus should therefore be on the diversity of approaches to creating common grounds to distil from them a generic common ground - although the latter might be an illusion given the highly contextualised and iterative character of the process of creating common grounds. A common ground is not simply an arena for scientific study and debate, although it is said to function as a platform for creating these (Woolgar, 2013). For example, actor-network theory could be used to better understand Indigenous people's relational ontologies - including the role of humans, non-humans and their relation with Indigenous concepts of sacredness.

8.6 Final remarks: from common grounds to common ground?

Clearly, the conservation of Indigenous sacred natural sites should be about more than maintaining mountains, forests and waters. It should be about engaging the Other and learning about how different worlds are being cared for in order for these different worlds to mutually exist and play a role in conservation practice, management and policy. While rights are won and policies are increasingly influenced by Indigenous peoples from the local to the international level, the consideration of multiple ontologies in the creation of common grounds is not yet a common practice. In this respect, I see a role for the applied and engaged ethnographic researchers in working with Indigenous peoples and conservationists alike in order to investigate Indigenous ontologies and their practices of world-making in relation to conservation narratives of Indigenous sacred natural sites and conservation in general.

When we consider that common grounds are created out of multiple ontologies, we are tied to relational and semiotic approaches; this implies that we could avoid having to explain what is true and what is real in a singular manner, and rather resort to describing a multiplicity of realities and natures. This also means that the nature-culture dichotomy possibly does not hold up as a stand-alone reality that Indigenous people would have to conform to in order to make their voices heard in conservation management and policy debates. In fact, what could be the common denominator of the construction of a common ground could be the ability of its participants to move between worlds and learn the etiquette that go with situations in which worlds meet.

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Glossary

Animism: Animism relates to spirits that imbue animals, plants, rocks, and geographic features such as mountains or rivers, natural phenomena such as thunder and other entities of the natural environment. Animism is the most common belief system of indigenous people around the world (O'Brien, 2007; Sponsel, 2012).

Conservationist: in this thesis refers to a person or actor that is involved in the protection, preservation or restoration of nature through practice, management or policy, from the local to the global level. Conservationists can be employed in various sectors and disciplines, including scientific, e.g. conservation biologist, conservation anthropologists.

Cosmology: in this thesis refers to what is also known as *religious or mythological cosmology* as a way of explaining the origin, the history and the evolution of the cosmos a specific spiritual or religious tradition usually creator deities or a larger pantheon.

Custodians: Individuals or groups of people, usually within traditional institutions, who have the responsibility to take care of a specific sacred natural site or sites. Custodians may reside either close to or at considerable distance from the sacred natural sites to which they are linked through history, culture, self-identification and spiritual practice (Verschuuren, et al. 2010; Wild, 2008).

Intangible Heritage: Intangible Cultural Heritage means the practices, representations, expressions, knowledge, skills – as well as the instruments, objects, artifacts and cultural spaces associated therewith – that communities, groups and, in some cases, individuals recognize as part of their cultural heritage.

Knowledges: In this thesis, I use the word knowledges as means of expressing that knowledge is not singular and that different knowledges exist in different cultures that are different from Western scientifically proven knowledge. In literature, we find other examples of the use of the word knowledges that are also related to differentiating "types of" knowledges such as are "indigenous knowledges", "situated knowledges" and "subjugated knowledges". Most of this stems from Foucault's statement that knowledge is not absolute but it is instead conditioned by different ideas and discourses that constitute reality.

Multinaturalism: Dubbed perspectivism by Vivieros de Castro; it is the possibility that different natures, and hence different worlds, exist.

Ontology: The philosophy of the nature of being, becoming, existence or reality as well as the basic categories of being and their relations.

Ontological pluralism: The plurality, multiplicity of coexistent ontologies representing the philosophies of being and nature of things.

Ontological equity/equality: the principle of treating each ontology as equally important.

Sacred natural site: natural features in or areas of land or water having special spiritual significance to peoples and communities (adapted from (Wild, 2008)) This is a working definition that is broad and in this thesis has been used as a basis for more specific articulations. Whilst “sacred natural sites” is the main term used, for reasons of variety and readability, other terms are used interchangeably, including sacred site, sacred place and sacred area.

Spirituality: A wide range of definitions of spirituality exist ranging from personal beliefs in a supernatural realm to broader concepts such as a transcendent sacred meaning of life involving a sense of awe and reverence toward the universe. Rather than the material aspects of life, spirituality involves the mental aspects of life such as the purity of motives, affections, intentions, inner dispositions, the psychology of the inner life and the analysis of feelings. In this thesis spirituality of indigenous peoples is often linked to animism.

Spiritscape: A spiritscapes is a landscape animated with ancestors, spirits, creator beings and other mythological or symbolic figures that imbue it with spiritual energies, life and sentience. According to Callicott et al (2007) the spiritscape paradigm is characterised by psycho-spiritual connections of humans with plants, animals and other natural formations of the landscape that can be seen as expressions of spiritual significance and are often also as sacred natural sites.

Worldview: A worldview is the fundamental cognitive orientation, affective, and evaluative presuppositions a group of people make about the nature of things, and which they use to order their lives (Hiebert, 2008). This includes knowledge of natural philosophy; fundamental, existential, and normative positions, themes, values, emotions, and ethics.

Abbreviations

BCP	Biocultural Community Protocol
CBD	Convention on Biological Diversity
CSVPA	IUCN World Commission on Protected Areas' Specialist Group on Cultural and Spiritual Values of Protected Area: International
IUCN	International Union for the Conservation of Nature
NGO	Non-Governmental Organisation
SNSI	Sacred Natural Sites Initiative
UNESCO	United Nations Educational, Scientific and Cultural Organization
WCPA	IUCN World Commission on Protected Areas

Summary

In this thesis, I hold a plea for the recognition and integration of Indigenous people's realities in conservation practice, management and policy related to their sacred natural sites. Sacred natural sites can be mountains, rivers, forests, trees and rocks that have special spiritual significance to indigenous peoples. To Indigenous peoples these places are not just part of their environment, culture and spirituality but they also form their worldviews and ethnicities.

Based on my research on sacred natural sites, I look at how Indigenous people's realities can be integrated into conservation approaches and how they lead to the co-creation of new forms of nature conservation. In doing so I focus on how a common ground is being created by Indigenous peoples and development and conservation actors. I argue that this common ground has the capacity to transform conservation practice, management and policy if different worldviews, including those of Indigenous peoples, are equally considered.

The **structure of this thesis** represents my personal learning curve. It starts off with my earlier work developed as a conservationist with a natural sciences background and with many years of working experience in the field of international nature conservation. The Chapters gradually take on a sociological and anthropological angle, applying ethnographic research to conservation issues. As a result, the thesis represents the experience of a social conservation scientist doing applied and socially engaged research.

The **first part of the thesis** is built upon conservation literature and draws on a multitude of case studies and previously published work. It presents an overview of the overall importance that indigenous sacred natural sites have to the current field of nature conservation and the main challenges and opportunities that these sites pose to conservationists.

The **second part of the thesis** builds on case studies and applied ethnographic field research undertaken on conservation projects in North East Arnhem Land in Australia, Santa Cruz del Quiché in Guatemala and the Upper North-West Region in Ghana. In these locations, I have built up working relationships with local indigenous groups and the organisations that support them; respectively these are Yolŋu (since 2007), Maya (since 2012) and Dagara (since 2011).

The qualitative **research methods** used throughout my research are based on ethnography, participatory research, observational research, co-creation of research, semi-structured interviews, focus groups, freelistig but also the field of social policy analysis, discourse analysis and literature research. They are particularly useful in

situations where the research process contributes to finding solutions for concrete conservation problems with all parties involved.

The **conceptual framework** brings together empirical studies and critical analyses of Indigenous sacred natural sites in different geographical, ecological, cultural and spiritual contexts. As these contexts vary across different places I studied the development of different common grounds between indigenous and non-indigenous actors in the specific locations. Eventually, I brought these studies together in an effort to distil common elements for the construction of a generic common ground.

In the **conceptual framework**, worldviews and spirituality meet with conceptual areas such as ontological pluralism, biocultural diversity and rights-based approaches across geographical scales and governance levels. I argue that were they meet a common ground is created. I provide further analysis of the process of creating a common ground on the basis of the conceptual areas mentioned above, and draw conclusions that are relevant to furthering scientific debate in these areas as well to the field of conservation.

Chapter 2 concludes that sacred natural sites are important to the conservation of nature and biodiversity because they form an informal network managed and governed by local Indigenous people. This network goes largely unrecognized by the international conservation community and local protected area managers and planners. The chapter presents ten challenges that sacred natural sites pose to the field of conservation and restoration of biological and cultural diversity.

Chapter 3 takes examples of Indigenous worldviews and conservation practices from around the world to demonstrate that these form part of approaches that integrate biocultural values in nature conservation. I argue that in order to be effective and sustainable, nature conservation requires to be based on both science and culture, and combine scientific data on the natural world with experiential knowledge about nature of the social-cultural groups involved. The chapter concludes that, for management to be truly adaptive, it needs to respond to societal and cultural changes which can be achieved by enabling Indigenous people and local communities to guide conservation efforts.

Chapter 4 addresses how the modern conservation movement can use biocultural conservation approaches to overcome disparities between the management and governance of nature and culture. In this discourse about biocultural conservation approaches, the spiritual and the sacred are essential to the conservation of an interconnected network of biocultural hotspots – sacred natural sites.

Chapter 5 demonstrates the importance of Indigenous ontologies in cross-cultural coastal conservation management, particularly the development of locally relevant guidelines for fishers in North East Arnhem Land, Australia. I explore the ‘both ways’ approach adopted by the Dhimurru Aboriginal Corporation, and that guides collaboration between Yolŋu and non-Yolŋu. Disjunctures and synergies between the two ontologies are identified and I offer reflection on the role of the researcher in the cross-cultural co-production of guidelines for fishers and boaters.

Chapter 6 analyses how spiritual leaders build common ground for community conservation of sacred natural sites in the face of neoliberalism in Ghana and Guatemala. The research demonstrates that, beyond rights-based approaches, a common ground is essential to developing feasible and acceptable solutions for the protection and conservation of sacred natural sites. I identify ‘ontological equity’ as an important principle for establishing this common ground. I then argue that neoliberal approaches to conservation and resource development are prejudiced because they ignore the principle of ontological equity and suppress lived realities of sacred natural sites and the existence of the wider spiritscape.

Chapter 7 describes the emerging spaces in international policy and conservation practices as they manifest themselves in a series of conferences, the development of guidelines for protected area managers, and how these have worked to sensitize conservationists to sacred natural sites and their custodians. In connecting different conservation approaches from the local to the international level the chapter shows how a common ground is being created.

The **key findings of this thesis** include several universal elements to the creation of a common ground: willingness to learn about other worldviews; application of participatory approaches and applied research; the use of cultural brokers; active processes of stakeholder engagement; agreement on governance arrangements and the adoption of ontological equity.

I draw **four conclusions derived from the main research** results:

- 1) Biocultural conservation approaches can enable the creation of a common ground, but they may also constrain Indigenous ontologies;
- 2) Conservationists should learn from other worldviews and ontologies in order to improve the conservation of Indigenous sacred natural sites;
- 3) Non-human agency and spiritual governance are under-recognised in the conservation of spiritscapes and sacred natural sites;
- 4) Combining an ethnographic approach with an engaged and participatory research strategy is useful for considering multiple ontologies.

The **recommendations** of this thesis could form part of a future research agenda for the development of a common ground between Indigenous people, conservationists, and development actors in relation to the conservation of Indigenous sacred natural sites. The main recommendation is that conservation and development actors should consider multiple ontologies when creating a common ground for the development of biocultural conservation approaches.

Samenvatting

Dit proefschrift behelst een pleidooi voor de erkenning en integratie van de realiteiten van inheemse mensen binnen praktijk, beheer en beleid van de natuurbescherming, en wel specifiek in relatie tot heilige plaatsen. Heilige plaatsen in de natuur kunnen bergen, meren, bomen, rivieren en andere natuurlijke elementen zijn waaraan inheemse mensen een spirituele en sacrale waarde toekennen. Voor inheemse mensen zijn deze plaatsen niet alleen onderdeel van hun omgeving, cultuur en spiritualiteit maar ze vormen ook een wezenlijk onderdeel van hun wereldbeeld en hun etniciteit. Aan de hand van deze heilige plaatsen benadert dit proefschrift hoe inheemse realiteiten en wereldbeelden beter vertegenwoordigd kunnen worden binnen de reguliere natuurbescherming en hoe dit kan leiden tot de ontwikkeling van nieuwe benaderingen van natuurbescherming. De nadruk is hierbij gelegd op hoe inheemse mensen en actoren werkzaam binnen internationaal natuurbeleid en (marktgeleide) internationale ontwikkeling een gemeenschappelijk draagvlak (*common ground*) kunnen creëren. Ik bepleit dat dit gedeelde draagvlak het mogelijk maakt om praktijk, beheer en beleid binnen de natuurbescherming te transformeren, mits verschillende wereldbeelden, inclusief die van inheemse mensen, als gelijkwaardig worden beschouwd.

De structuur van dit proefschrift vertegenwoordigt tevens het persoonlijke leertraject van de auteur. De eerste hoofdstukken zijn gebaseerd op werkzaamheden uitgevoerd binnen de internationale natuurbescherming, gezien vanuit een achtergrond in de natuurwetenschappen. Gaandeweg laten de hoofdstukken een meer antropologische en sociologische benadering zien waarbij etnografisch onderzoek de hoofdtoon voert. Bij gevolg behelst dit proefschrift niet alleen de ervaringen van de auteur als natuurbeschermmer maar vooral ook als die van een sociaal wetenschapper in het toegepast en participatief onderzoek.

In **het eerste deel (hoofdstukken 1 t/m 4)** wordt een overzicht gepresenteerd van de rol die heilige plaatsen in de natuur spelen binnen de natuurbescherming. De concrete bijdragen en kansen die deze plaatsen bieden voor natuurbescherming komen overzichtelijk aan bod. De hoofdstukken zijn gebaseerd op een rijke hoeveelheid aan casussen waarbij de auteur betrokken is geweest en op reeds gepubliceerd werk van de auteur.

Het tweede deel (hoofdstukken 5, 6 en 7) bouwt voort op etnografisch onderzoek uitgevoerd in noordoost Arnhem Land in Australië, in Santa Cruz del Quiché in Guatemala en in de Upper North-West Region in Ghana. Hier heeft de auteur goede relaties met de lokale inheemse bevolking en hun organisaties

ontwikkeld, respectievelijk met de Yolŋu (sinds 2007), de Maya (sinds 2012) en de Dagara (sinds 2011).

Aangezien de **etnografische onderzoeksmethoden** participatief en collaboratief van aard zijn, en niet louter observerend of beschrijvend konden zij uitstekend worden toegepast in situaties waar de vraag naar informatie voortkwam uit de praktijk. Als zodanig droeg niet alleen deze informatie, maar ook het proces waarin het onderzoek plaats vond zijn bij aan het creëren van oplossingen voor concrete problemen binnen het natuurbeheer met betrokkenheid van de verschillende belanghebbende. Semigestructureerde interviews, focus groep discussies en *free listing* zijn toegepast naast literatuuronderzoek, en de analyse van discourses en sociaal beleid.

Het conceptueel raamwerk gepresenteerd in Hoofdstuk 1, verbindt empirische studie en kritische analyse van inheemse heilige plaatsen met verschillende geografische, ecologische, culturele en spirituele achtergronden. Deze achtergronden waren minstens zo verschillend als de onderzoek locaties waar het gemeenschappelijke draagvlak tussen inheemse en niet-inheemse mensen werd bestudeerd. Uiteindelijk zijn deze studies bijeengebracht om de overkoepelende kenmerken van het proces te achterhalen dat bijdraagt aan de creatie van een gemeenschappelijk draagvlak. Het conceptuele raamwerk helpt wereldbeelden en spiritualiteit te beschouwen door een lens van verschillende benaderingen (de conceptuele domeinen), namelijk die van ontologische pluraliteit, bio-culturele diversiteit en een rechtsgebonden benadering. Dit wordt gedaan met een focus op inheemse heilige plaatsen en op verschillende geografische en bestuurlijke niveaus. Ik betoog dat er een gemeenschappelijk draagvlak gecreëerd wordt wanneer deze elementen samen komen, en analyseer dit proces aan de hand van de hier genoemde conceptuele domeinen. Hieruit trek ik vervolgens conclusies die relevant zijn voor de voortzetting van het academisch debat alsmede voor de internationale natuurbescherming.

In **Hoofdstuk 2** concludeer ik dat heilige plaatsen in de natuur belangrijk zijn voor natuurbescherming en biodiversiteit omdat zij een netwerk vormen dat wordt beheerd en bestuurd door lokale inheemse mensen. Dit netwerk wordt zelden erkend door internationale natuurbeschermingsorganisaties en ontwikkelaars, beheerders en bestuurders van natuurgebieden op lokaal niveau. Ik presenteer tien belangrijke aspecten van heilige plaatsen in de natuur die de bescherming en het herstel van culturele diversiteit en biodiversiteit kunnen bevorderen.

In **hoofdstuk 3** worden inheemse wereldbeelden en natuurbeschermingspraktijken van over de gehele wereld aangehaald om zo het belang te tonen van de integratie van biologische en culturele diversiteit binnen de natuurbescherming. Ik betoog dat natuurbescherming moet worden gebaseerd op

zowel wetenschap als culturele en spirituele zienswijzen om effectief en duurzaam te kunnen zijn. Hiervoor zullen wetenschappelijke en lokale, cultuurgebonden kennis en kennissystemen moeten worden gecombineerd. Om werkelijk adaptief natuurbeheer in de praktijk te brengen zal er ook continu een bijstelling moeten plaatsvinden vanwege veranderende maatschappelijke en culturele waarden. Dit kan worden gerealiseerd door lokale en inheemse mensen in de gelegenheid te stellen het natuurbeheer en -beleid vorm te geven.

Hoofdstuk 4 laat zien hoe de hedendaagse natuurbescherming bioculturele benaderingen kan gebruiken om de kloof tussen natuur en cultuur te dichten binnen natuurbeheer en -beleid. Binnen deze bioculturele benaderingen zijn spiritualiteit en sacraliteit essentieel voor de bescherming van een netwerk aan “bioculturele hotspots” of heilige plaatsen in de natuur.

Hoofdstuk 5 geeft het belang aan van inheemse ontologieën in marine natuurbescherming. Het hoofdstuk beschrijft de ontwikkeling van richtlijnen voor de visserij en scheepsvaart in North East Arnhem Land, Australië. Ik verken de zogenaamde twee richtingen ("*both ways*") benadering van Dhimurru Aboriginal Corporation. Deze benadering geeft richting aan de gelijkwaardige samenwerking tussen de Yolŋu en niet-inheemse mensen in de regio. Ik identificeer de synergiën, discrepanties en tegenstellingen tussen beide ontologieën, wat de gelegenheid biedt tot reflectie op mijn rol als onderzoeker binnen de interculturele coproductie van richtlijnen voor de visserij en scheepsvaart in North East Arnhem Land.

Hoofdstuk 6 toont een analyse van hoe spirituele leiders in Ghana en Guatemala, ondanks neoliberale ontwikkelingen, een gemeenschappelijk draagvlak creëren voor de bescherming van heilige plaatsen in de natuur. Het onderzoek toont aan dat niet alleen een rechtsgebonden benadering, maar ook het creëren van een gezamenlijk draagvlak essentieel is voor het ontwikkelen van haalbare en acceptabele oplossingen voor de bescherming van heilige plaatsen in de natuur. Ik definieer het principe van ontologische gelijkwaardigheid en stel dit als essentiële voorwaarde aan het creëren van een gemeenschappelijk draagvlak. Vervolgens laat ik zien dat neoliberale benaderingen van natuurbescherming en de ontwikkeling van natuurlijke hulpbronnen dit principe volstrekt negeren. Een dergelijke ontkenning van inheemse werkelijkheden, waarin heilige plaatsen in de natuur en het bredere spirituele landschap worden ervaren, leidt tot onderdrukking en discriminatie van inheemse mensen.

Hoofdstuk 7 beschrijft het aanzienlijke belang van heilige plaatsen in de natuur binnen de internationale natuurbescherming en - in toenemende mate - ook in het internationale natuurbeleid. Dit gebeurt aan de hand van de analyse van een serie conferenties die de ontwikkeling van internationale richtlijnen voor natuurbeheerders tot doel hadden. Ik beschrijf hoe deze richtlijnen hebben

bijgedragen tot het onder de aandacht brengen van de heilige plaatsen van inheemse mensen bij reguliere natuurbeschermers. Het hoofdstuk laat zien hoe een gemeenschappelijk draagvlak wordt gecreëerd door de benaderingen van de verschillende betrokken partijen bij elkaar te brengen. Hierbij wordt tevens gebruik gemaakt van de conceptuele domeinen uit het conceptuele model.

De belangrijkste bijdrage van dit proefschrift is de beschrijving van de processen en universele aspecten die leiden tot het ontstaan van een gemeenschappelijk draagvlak, namelijk de wil om te leren over andere wereldbeelden; de toepassing van participatieve benaderingen en toegepast etnografisch onderzoek; het gebruik van culturele bemiddelaars; activiteiten en processen ter bevordering van de deelname van alle belanghebbenden; overeenstemming over de bestuurlijke arrangementen en de adoptie van het principe van ontologische gelijkheid.

Gebaseerd op het hier gepresenteerde onderzoek worden **vier belangrijke conclusies** getrokken:

1. Bioculturele benaderingen voor natuurbescherming kunnen het ontwikkelen van een gemeenschappelijk draagvlak bevorderen, maar kunnen ook de rol van inheemse ontologieën beperken;

2. De bereidheid van natuurbeschermers om te willen leren van andere ontologieën bevordert de bescherming van inheemse heilige plaatsen in de natuur;

3. Niet-menselijke entiteiten en spiritueel bestuur worden onvoldoende internationaal erkend en zijn ondergewaardeerd in de bescherming van heilige plaatsen in de natuur en het onderliggende spirituele landschap;

4. Het combineren van een etnografische benadering met collaboratieve en participatieve onderzoeksstrategieën is van belang voor de erkenning van verschillende ontologieën voornamelijk door de niet-inheemse omgeving.

De aanbevelingen die aan de hand van dit proefschrift worden gedaan kunnen bijdragen tot het formuleren van een toekomstige onderzoek agenda. De belangrijkste aanbeveling luidt dat natuurbeschermers en actoren binnen markgeleide ontwikkelingen een diversiteit aan ontologieën in acht dienen te nemen als ze gaan werken aan een gemeenschappelijk draagvlak ter bevordering van bioculturele benaderingen voor natuurbescherming.

Resumen

En esta tesis realizo un pedido para el reconocimiento y la integración de las realidades de los pueblos Indígenas en las prácticas de conservación, gestión y políticas relacionadas con sus sitios naturales sagrados. También examino cómo las realidades de los pueblos Indígenas pueden ser integradas en los enfoques de conservación, y cómo estos conducen a la co-creación de nuevos estilos para conservar la naturaleza. Al hacerlo, me concentro en cómo se instaura un espacio en común entre los pueblos indígenas y los actores del desarrollo y la conservación. Planteo que este espacio en común tiene la capacidad de transformar la práctica, la gestión y la política de conservación si se consideran igualitariamente las diferentes visiones del mundo, incluidas aquellas de los pueblos Indígenas.

La **estructura de esta tesis** representa mi proceso de aprendizaje personal. Inicia con el trabajo realizado como conservacionista, el cual tiene un antecedente de ciencias naturales y muchos años de experiencia en la conservación internacional de la naturaleza. Los Capítulos adoptan gradualmente un ángulo sociológico y antropológico, aplicando la investigación etnográfica en temas de conservación. Por lo tanto, la tesis constituye la experiencia de un científico de conservación social, realizando investigación de manera comprometida en el área aplicada y de involucramiento social.

La **primera parte de la tesis** se fundamenta en la literatura de conservación, basándose en múltiples estudios de casos y trabajos publicados anteriormente. Presenta una visión general de la importancia global que los sitios naturales sagrados indígenas tienen para el espacio actual de conservación de la naturaleza, enfatizando los principales desafíos y oportunidades que estos sitios representan para los conservacionistas.

La **segunda parte de la tesis** se fundamenta en estudios de casos, así como en investigaciones etnográficas de campo aplicadas, emprendidas en proyectos de conservación en la región de “North East Arnhem Land” en Australia, Santa Cruz del Quiché en Guatemala y la región superior del Noroeste de Ghana. En estos lugares he construido relaciones de trabajo con los grupos indígenas locales y las organizaciones que los apoyan: Yolngu (desde 2007), Maya (desde 2012) y Dagara (desde 2011).

Los **métodos de investigación** cualitativa utilizados a lo largo de mi investigación se basan en la etnografía, investigación participativa, investigación observacional, co-creación de investigación, entrevistas semiestructuradas, grupos focales, elaboración de listas aleatorias, pero también en el área de análisis de políticas sociales como son el análisis de discurso y la investigación bibliográfica.

El **marco conceptual** reúne estudios empíricos y análisis críticos de los sitios naturales sagrados Indígenas en diferentes contextos geográficos, ecológicos, culturales y espirituales. Dado que los contextos varían según los diferentes lugares, he estudiado específicamente para cada lugar el desarrollo de los diferentes espacios en común entre actores indígenas y no indígenas. Según fuera necesario, agrupé estos estudios, con el objetivo de extraer elementos comunes para la construcción genérica de un espacio en común.

En el **marco conceptual**, la cosmovisión y la espiritualidad se juntan con áreas conceptuales como son el pluralismo ontológico, la diversidad biocultural y los enfoques basados en los derechos; así mismo cómo estas atraviesan escalas geográficas y niveles de gobernanza. En donde estas se juntan, se crea, según mi parecer, un espacio común. Proporciono un análisis más profundo sobre el proceso de creación de un espacio en común, basándome en las áreas conceptuales mencionadas anteriormente y extraigo conclusiones que son relevantes para promover el debate científico en estas áreas, así como en el área de la conservación.

El **capítulo 2** concluye que los sitios naturales sagrados son importantes para la conservación de la naturaleza y la biodiversidad, porque forman una red informal administrada y gobernada por los indígenas locales. Esta red en gran parte no es reconocida por la comunidad internacional de conservación como tampoco por los administradores y planificadores locales de las áreas protegidas. El capítulo presenta diez desafíos para el área de la conservación y restauración de la diversidad biológica y cultural, planteados por los sitios naturales sagrados.

El **capítulo 3** toma ejemplos de cosmovisiones y prácticas de conservación indígenas de todo el mundo para demostrar que éstas forman parte de enfoques que integran los valores bioculturales en la conservación de la naturaleza. En mi opinión, para ser eficaz y sostenible, la conservación de la naturaleza requiere estar basada tanto en la ciencia como en la cultura y de esta manera combinar datos científicos sobre el mundo natural con conocimiento experiencial sobre la naturaleza de los grupos socioculturales involucrados. El capítulo concluye que, para que el manejo sea verdaderamente adaptativo, este debe responder a los cambios sociales y culturales que se pueden alcanzar, si se permite a los pueblos indígenas y a las comunidades locales guiar los esfuerzos de conservación.

El **capítulo 4** trata acerca de cómo el movimiento de conservación moderno puede utilizar enfoques de conservación biocultural para superar las discrepancias entre la gestión y gobernanza, tanto de la naturaleza como de la cultura. En este análisis sobre los enfoques de conservación biocultural, lo espiritual y lo sagrado son esenciales para la conservación de una red que se encuentra interconectada con puntos de interés bioculturales, sitios naturales sagrados.

El **capítulo 5** demuestra la importancia de las ontologías indígenas en la gestión de la conservación de las zonas costeras, en particular el desarrollo de directrices pertinentes a nivel local para los pescadores en el noreste de Arnhem Land, Australia. Realizo una exploración del enfoque de "ambos caminos" adoptado por la Corporación Aborigen Dhimurru, la cual guía la colaboración entre Yolŋu y no-Yolŋu. Se identifican las brechas y sinergias entre las dos ontologías, proporcionando una reflexión sobre el papel del investigador en la coproducción intercultural de directrices para pescadores y navegantes.

El **capítulo 6** analiza, cómo los líderes espirituales construyen un espacio en común para la conservación comunitaria de sitios naturales sagrados frente al neoliberalismo en Ghana y Guatemala. La investigación demuestra que, más allá de los enfoques basados en los derechos, un espacio en común es esencial para desarrollar soluciones viables y aceptables para la protección y conservación de los sitios naturales sagrados. Realizo una identificación de la "equidad ontológica", como un principio importante para establecer este espacio en común. A continuación, pongo de relieve que los enfoques neoliberales para la conservación y el desarrollo de los recursos se ven perjudicados porque ignoran el principio de la equidad ontológica; y suprimen las realidades vivas de los sitios naturales sagrados y la existencia de un contexto espiritual ampliado.

El **capítulo 7** describe los espacios emergentes en las políticas internacionales, y las prácticas de conservación que se manifiestan en una serie de conferencias, el desarrollo de directrices para los administradores de áreas protegidas y cómo estas han trabajado para sensibilizar a los conservacionistas en sitios naturales sagrados como también a sus custodios. Al conectar diferentes enfoques de conservación desde el nivel local al internacional, el capítulo muestra cómo se está creando un espacio en común.

Las **principales conclusiones de esta tesis** incluyen varios elementos universales para la creación de un espacio en común: la voluntad para aprender sobre otras cosmovisiones; la aplicación de enfoques participativos y la investigación aplicada; el uso de intermediarios culturales; procesos activos para la participación de las partes interesadas; acuerdo sobre los arreglos de gobernanza, y la adopción de la equidad ontológica.

Extraigo **cuatro conclusiones derivadas de los principales resultados de la investigación**: 1) Los enfoques de conservación bioculturales pueden permitir la creación de un espacio en común, pero también pueden restringir las ontologías indígenas; 2) Los conservacionistas deben aprender de otras cosmovisiones y ontologías, para mejorar la conservación de los sitios naturales sagrados indígenas; 3) La agencia no-humana y la gobernanza espiritual, son sub-reconocidos en la conservación de contextos espirituales y sitios naturales sagrados; 4) Combinar un

enfoque etnográfico con una estrategia de investigación comprometida y participativa es útil para considerar múltiples ontologías.

Las **recomendaciones** realizadas en esta tesis podrían formar parte de una futura agenda de investigación para el desarrollo de un espacio en común entre los pueblos indígenas, los conservacionistas y los actores para el desarrollo; en relación con la conservación de los sitios naturales sagrados indígenas. La principal recomendación es que los actores para la conservación y el desarrollo deben considerar varias ontologías en la creación de un espacio en común, el cual es utilizado para el desarrollo de enfoques bioculturales de conservación.

About the Author

Bas Verschuuren was born in Geldrop, the Netherlands in 1975. After a technical degree in Environmental Management he completed a BSc in Tropical Forestry and Nature Conservation at the International Agricultural College Larenstein (2000) during which international experience was obtained by internships in Australia, the USA, Guyana and Mongolia.

Bas worked in the forestry sector in Scotland and Iceland for three years, after which he returned to the Netherlands to pursue an MSc in Environmental Systems Analysis at Wageningen University & Research (2005). During his Masters studies, he carried out field research in Northern Australia and worked with the Foundation for Sustainable Development, WUR and EarthCollective.

After graduating he built a project portfolio as co-Chair of the IUCN World Commission on Protected Areas' Specialist Group on Cultural and Spiritual Values of Protected Areas (CSVPA) and worked on conservation projects in South Africa, Australia and Mexico with shorter missions to several other places. He also obtained several research grants which enabled him to do applied ethnographic research on the conservation projects that he was involved with.

In 2010, he found employment with the ETC-COMPAS and coordinated endogenous development programs in Africa, Latin America and Asia. Over the same period, he co-founded the Sacred Natural Sites Initiative (SNSI), a global conservation program supporting the custodians of sacred natural sites developing projects in Ghana and Guatemala, Zanzibar and Nepal.

After publishing his first edited volume on sacred natural sites with Routledge and IUCN (Verschuuren et al. 2010), he started putting more emphasis on applied ethnographic research which contributed to this thesis. The writing of this PhD at the Department of Sociology of Development and Change (SDC) at Wageningen University (WUR) commenced part-time in 2013. At SDC he participated in teaching a methodology course for BSc and MSc students (2014-2015). He also co-organized a film festival entitled "Mining Sacred Worlds", and published a second edited volume on community well-being in biocultural landscapes (Verschuuren et al. 2014).

After marrying Madelon in 2015, they moved to Kenya where Bas completed his third book on Asian Sacred Natural Sites (Verschuuren & Furuta 2016). Meanwhile, he initiated a new project with IUCN, developing best practice guidelines, training modules and co-editing a volume on the cultural and spiritual significance of nature in the governance and management of protected areas (Verschuuren & Brown, undated).

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