

This file is part of the following work:

Roberts, Nicholas (2019) *Bridging the divide in heritage? Managing caves as heritage places within the Sepon Gold and Copper Mine, Lao PDR*. PhD Thesis, James Cook University.

Access to this file is available from:

<https://doi.org/10.25903/5df2eb8633faf>

Copyright © 2019 Nicholas Roberts.

The author has certified to JCU that they have made a reasonable effort to gain permission and acknowledge the owners of any third party copyright material included in this document. If you believe that this is not the case, please email

researchonline@jcu.edu.au

Bridging the Divide in Heritage?
Managing Caves as Heritage Places within the
Sepon Gold & Copper Mine, Lao PDR

By

Nicholas Roberts



Bridging the Divide in Heritage?
Managing Caves as Heritage Places within the Sepon Gold
& Copper Mine, Lao PDR

by

Nicholas Roberts

This thesis is submitted in fulfilment of the requirements for the
degree of the Doctor of Philosophy, College of Arts, Society and
Education, James Cook University, May 2019.

Cover Image: Entrance to Tham Bing Cave. (Photo: The Author)

Frontmatter

Statement on Sources

Declaration

I declare that this thesis is my own work and has not been submitted in any form for another degree or diploma at any university or institution of tertiary education. Information derived from the published or unpublished work of others has been acknowledged in the text and a list of references is given.

Name: Nicholas Roberts

Signature:

Date:

Note: Every reasonable effort has been made to obtain permission and obtain permission of the owners of copy write material.

Acknowledgements

This thesis could not have been completed without the love and devotion of my family. To my wife Jane, and sons Joshua, Xy, and Azure, your patience, understanding, and support has allowed me to see this thesis through from idea to actuality. To my parents for instilling the love of learning, my mother-in law for constant positivity, and my uncle for assurance and guidance, I thank you. To all other members of my family, and also the friends out there, your support and encouragement has always helped deepen my understanding of my research, whilst helping to keep the flame burning bright. You know who you are.

To my supervisors, Dr Nigel Chang and Dr Robin Rodd, your encouragement and support over the years is greatly appreciated. Special thanks also to Professor Rosita Henry also for guidance and advice. Thanks to all my colleagues over the years, at Townsville and Cairns - the AMP team, the Learning Centre team, the Cairns Institute staff - and all the amazing post-grad students I shared my PhD experience with. I have been fortunate to work and think with so many great people, to have the opportunity to develop and refine my skills, drafts of my thesis, and to share so many great experiences. You too know who you are.

To all my Lao colleagues, *kup jai lai*. At the DNH, Thongsa, Viengkeo, Thonglith, Samlane, Phimasang; Mailo, Bonyourd, Ampai; at the NUoL, Amphon and Samai; at the National Museum, Marian, Bong; and others who I have not mentioned - all your collegiality and friendship has made research in Lao PDR wonderful and enriching experience. To the managers and staff at IUCN, Lao PDR; SEAMEO SPAFA, Thailand; UNESCO, Thailand; and Silapakorn University, Thailand, thank you for opening up you offices to me and allowing me to research and work in your spaces, or ask questions persistently. To MMG-LXML, and my colleagues at Sepon, Warren, Sengmany, Amphon, Viengkham, Bourphan, Mr A, and so many

more – your support and friendship on the ground at the Sepon Mine was invaluable and memorable.

A final thank you to the people of Vilabouly District, Lao PRD, in particular the village of Ban Namalou for your time and support in the research of this thesis, and your support for the archaeological and heritage program at the Sepon Mine. I hope this research goes some way to helping promote effective management practices at the Sepon Mine, and more broadly in the Lao PDR, in such a dramatic time of change and flux.

Statement on the Contribution of Others

Nature of Assistance	Contribution
Initial Design and Resources	Archaeology and Cultural Heritage Program, Sepon Mine, Lao PDR
Supervision	Dr Nigel Chang (JCU) Dr Robin Rodd (JCU)
Research Collaboration	Lao Department of National Heritage MMG-LXML Ltd. James Cook University
Data Collection	Lao Department of National Heritage MMG-LXML Ltd. James Cook University IUCN, Lao PDR UNESCO, Thailand SEAMEO SPAFA, Thailand People of Vilabouly District
Stipend	Australian Postgraduate Award (2014-2015)
Financial Support	MMG-LXML Ltd. College of Arts, Society, and Education (JCU) Graduate Research School (JCU)

Abstract

This thesis applies a Critical Heritage Studies Framework to examine the effectiveness of applying international ‘best practice’ to identify and manage heritage as part of operations within the Sepon Gold & Copper Mine, Lao PDR. The management of caves as ‘heritage places’ is applied as a case study to highlight and discuss general heritage management issues as well as issues specific to caves. In particular, this examination will critique the way international ‘best practice’ applies a ‘divided’ heritage - the constructed *nature-culture* dichotomisation, and categorisation of cultural heritage as *tangible*, *intangible*, or *historical* heritage – and will critique the outcomes of applying the ‘divide’ in practice.

Findings from this thesis indicate that caves located within the Sepon Mine support a range of natural and cultural uses and values that often overlap or are interdependent. Caves are also identified to hold past, present and future uses and values and remain significant to local community groups. From this perspective, caves can be managed for a range of ‘living’, ‘plural’, and ‘sacred’ heritage significance. Heritage management practices at the Sepon Gold & Copper Mine are guided by international regulatory processes, with Archaeological Heritage Management predominately applied to identify and manage heritage in operations. Following international ‘best practice’ and Lao heritage legislation, caves remain generally managed for natural or cultural tangible, intangible and historical heritage values independently, rather than as integrated ‘living’, ‘plural’, and ‘sacred’ places, that support a range of cross-cutting past, present, and future uses and values.

Mining activity is also found to have increased the threat of damage and destruction to caves and other locally significant natural and cultural heritage. Unmitigated mining activity and application of a ‘divided’ heritage increase the risk to the sustainability of natural places

like caves and their associated local heritage knowledge and practices. Overall, mining is a transnational commercial context that has arguably supported the alteration, and in some cases destruction, of aspects of local community heritage and the knowledge and practices associated with them. Mining and heritage together act as agents of change that together engender a process of ‘reterritorialization’ of the physical natural environment and associated local cultural knowledge and practices. The current context however represents a new phase in an ongoing process of change and interaction between human society and natural landscapes/places in the region in the Lao ‘frontier’ uplands as a result of social, economic or political interactions and influences.

Managing present interactions and change sustainably will require stronger national regulation advocating for heritage management and protection within mining operations and after operations cease to support longer-term and sustainable management practices. To alleviate impacts and produce sustainable and longer-term management practices the application of local ‘heritage’ values in conjunction with regional and international ‘best practice’ approaches for heritage management is required. To meet local management needs in the present and future this will involve moving beyond application of international ‘best practice’ outright. Further, applying multi-lateral heritage management practices that integrate community knowledge and participation with international ‘best practice’ approached within mining operations can embrace a broader interpretation and management of caves as ‘living’ places, with ‘plural’ uses and values, and ‘sacred’ qualities. Community-based control of heritage can support efforts to localise identification and management of heritage, supporting effort to ‘bridge the divide’ in how heritage is defined, managed, and lived with.

Table of Contents

Frontmatter	ii
Abstract	6
Table of Contents	8
List of Figures	12
List of Tables	14
Preface	17
1. Introduction	28
The ‘Divide’ in Heritage	30
Research Questions	33
A Critical Heritage Studies Framework to ‘Bridge the Divide in Heritage’	34
Critical Heritage Studies as Applied in this Thesis	34
Major Themes in this Thesis	37
Heritage as History	37
Globalisation, Heritage, and Economic Development	38
Nature-Culture Links, Sacred Heritage, and Caves	42
The Fieldwork Setting	44
The Sepon Gold & Copper Mine and Vilabouly District	44
Localising Research within the Lao PDR & Southeast Asia	47
Organisation of the Thesis	50
2. The Divide in Heritage: Historical Background, Development, and Current Context	53
The ‘Divide’ in Heritage: A (Brief) Historical Review	54
The Renaissance Period	54
The Enlightenment Period	56
The Colonial Era	60
World Heritage in the Post-WII Era	65
The Creation of a ‘Universal’ Heritage	66
Broadening the Scope and Definition of Heritage	70
Critiques of a ‘Universalised’ Heritage: Emerging ‘Cultural Relativist’ Views of Heritage	71
Cultural Landscapes, Tangible-Intangible Heritage, and Nature-Culture Links	74
Nature in World Heritage	77
Natural Heritage, Sustainability, and Collaborative Management	78
Conventions Recognising Sustainability in World Heritage and Protected Area Management	81
Recognising the ‘Sacred’ and ‘Living’ in World Heritage	84
Heritage within the Context of Globalisation and Socio-Economic Development	88
Globalisation, Tourism, and Transnational Heritage	88

Relationships between Heritage Protection, Economic Development, and Extractive Industries	91
Extractive Industries, World Heritage and Transnationalism	97
Summary and Conclusions	101
3. Methodological Framework.....	105
Overview of Methodology	106
Multi-Sited Ethnography.....	106
Ethnography of Archaeology and Heritage Management: ‘Archaeological Ethnography’	111
The Framework for the Conservation of Sacred Natural Sites	114
Application of Methods in this Thesis.....	115
Ethnographic Research:	116
Cave-specific Research.....	122
Archival Research and Review of ‘Grey Literature’	131
Fieldwork Opportunities, Challenges, and Limitations to the Thesis	134
Performing Research in Lao PDR.....	134
Performing Consultancy-based Research or Applied Anthropological Research	136
Language Proficiency in the Research Setting.....	139
Dissemination of Research Findings	140
Conclusions	140
4. Background to Savannakhet Province, Vilabouly District, and the Sepon Gold & Copper Mine	142
Regional Geography and the Natural Environment.....	143
Historical Background to Savannakhet Province and Vilabouly District.....	144
Regional Prehistory	144
Historical Period.....	147
Culture, Society, and Economy	153
Ethnicity, Population, and Residential Patterns	153
Religion and Spirituality	157
Economy and Livelihoods	160
Discussion and Conclusions	164
5. The Place of Archaeology and Heritage Management Practices at the MMG-LXML Sepon Gold & Copper Mine	169
Background to the MMG-LXML Sepon Gold & Copper Mine	170
Managing Heritage within Operations at the Sepon Gold & Copper Mine	175
Environmental and Social Impact Assessment (ESIA) Process.....	175
Cultural Heritage as part of the ESIA Process	176
Social and Community Sustainability.....	179

Cultural Heritage Management in Mining Operations	184
Evidence-based Implications for a Cultural Heritage Program and Archaeological Research ...	184
The Cultural Heritage Management Plan (CHMP)	185
The Cultural Heritage Unit (CHU) and Cultural Heritage Workshop (CHW)	187
International Collaboration in Archaeological Research and Cultural Heritage Management	189
Formalising International Partnerships and Management of Heritage through a MoU	189
Research Collaboration, Field Schools, and Training Programs.....	191
Mining, Heritage, and the Community	193
Support for Village Festivals and Cultural Events	193
Community Involvement in Archaeological Research and Heritage Management.....	195
Cultural Tourism and Vilabouly Culture Hall.....	196
Heritage ‘in the News’	199
Discussion & Conclusions.....	199
6. Identifying Local Uses and Value in Caves.....	205
Background to Caves in Vilabouly District	206
Identified Uses and Values of the Past	207
Prehistoric Occupation.....	207
Ancient Copper Mining	208
Historical Buddhist Use of Caves	210
Vietnam War and Post-Revolutionary Period.....	216
Identified Uses and Values in the Present	221
Geohertiage and Biodiversity Value	221
The Village Landscape and Sacred Caves.....	223
Contemporary Subsistence and Economic Uses and Values	234
Discussion & Conclusions.....	239
7. Managing Caves as Heritage Places	242
Heritage Management Procedures for Caves.....	243
Heritage Management and Mitigation processes for Caves	246
Managing a ‘Sacred Natural Site’ through Community Consultation at Tham Pakou.....	246
Management of Cultural Heritage through ‘Exclusion Zones’: The Case of Tham Bing	250
Managing Broader Impacts to Caves from Mining Activity	255
Impacts on Land Tenure and Land Use Management	258
Impact from In-Migration	262
Illegal Logging and Wildlife Consumption.....	264
Discussion.....	269
Conclusions	275

8. 'Bridging the Divide' in Heritage? Opportunities, Challenges, and Implications.....	276
Broadening the Scope of Heritage: From 'Dichotomies' and 'Categories' to 'Uses' and 'Values'..	277
Role of the Community in Heritage Management.....	277
Caves as 'Living', 'Plural', and 'Sacred' Heritage.....	278
Relationships between Uses for and Values in Caves.....	280
Continuity & Change in Uses of and Value identified in Caves.....	282
The Challenges to Managing Caves as 'Living', 'Plural' and 'Sacred' Heritage within Mining Operations	285
Relationships between Mining and Heritage.....	287
Lao Heritage Discourses and Practices in the Context of Mining	296
Mining and Heritage: Territorialisation and New Frontiers.....	318
Sepon Mine as a 'Frontier'	318
Conclusions	326
9. Conclusion.....	327
Research Questions	328
'Bridging the Divide': The Way Forward	336
Localising Heritage Management Practices, Incorporating Regional Heritage Management Frameworks, and a focus on 'Traditional Heritage Knowledge' (THK)	336
The Next Generation for Heritage in the Lao PDR.....	343
References.....	347
Appendix 1. Ethics Approval Form 1.....	379
Appendix 2. Ethics Approval Form 2.....	380
Appendix 3. Three Party MoU (2010)	381
Appendix 4. Three Party MoU (2013)	382
Appendix 5. MMG-LXML Approval Letter	383

List of Figures.

Figure 1. Vilabouly District and Mining Officials viewing 'the boat' at TKSD, 2012 (Photo: The Author).	19
Figure 2. 'The boat': excavated and after the spirit ceremony (Photo: The Author).	25
Figure 3. Lao PDR, and Location of the Study Area (https://mapcruzin.com/free-laos-maps.htm)	46
Figure 4. Caves in the MMG-LXML Sepon Mine and Vilabouly District chosen for this study	128
Figure 5. Phou Thay residential house and Spirit House (top row); Brou residential House and offering to local spirits (<i>phi</i>) (bottom row). (Photos: The Author).	156
Figure 6. Phou Thay wet Rice Paddy (above); Brou Swidden field and Dry Rice on slopes (below). (Photos: The Author).....	163
Figure 7. The Sepon Gold & Copper Mine tenement, showing the SPDA and GDPA, and local villages situated within the mine tenement (Photo: Oxiana Resources).	174
Figure 8. Human burials and associated grave goods at the Peun Boalo site (above); Cultural materials recovered from archaeological excavations in the Sepon Mining Tenement between 2008-2011 (below) (Images: The Author).	178
Figure 9. The Houy An Training Centre, Vilabouly District, a mining-sponsored local economic development invites. Traditional silk production and silk weaving. (Photo: The Author).	181
Figure 10. Organizational Chart showing units and responsibilities for management of cultural heritage at the Sepon Mine.	188
Figure 11. Vilabouly 'Culture Hall' and the internal displays - 2013. (Photo: The Author).	198
Figure 12. Example of a Neolithic Stone Adze found within the Sepon Mining Tenement (Photo: Nigel Chang).	207
Figure 13. Archaeological Excavation of Tham Hi Kiaw. Radiometric date of 465+/- 25 years BP was recovered from the charcoal and indicate this cave may have been used for mining associated activity (Photo: The Author).....	209
Figure 14. Remains of Buddhist Culture in Tham Pakou. Above: Buddhist murals on cave wall; Below: Old Buddhist Alms Bowl hidden inside Tham Pakou by local Villagers (Photos: The Author).....	214
Figure 15. From Top Left: Potential <i>Lingha</i> Shrine in Tham Pakou, containing burnt wooden Statues of Lord Buddha (bottom left) and animal bones and Blue Bead (below right). (Photos: The Author).	215
Figure 16. Material culture left from the Vietnam War Era, found in Tham Pakou (photo: The Author).	220
Figure 17. Example of animal species found in and around caves. Elephant tracks and dung, Tham Pakou (top left & right); Bat species at Tham Hin Kiaw (below). (Photos: The Author).	224
Figure 18. Variety of Karst at Tham Bing (above) and Tham Pakou (below). (Photo: The Author)....	225
Figure 19. Old Growth Trees and Vines on or surrounding cave sites. Tham Pakou (above left and right); Tham Bing (below left); Hin Som Sao (below right). (Photos: The Author).	226
Figure 20. Worshipping Ancestral Spirits and Nature Spirits at Tham Bing (above) and Tham Pakou (below). (Photos: The Author).	231
Figure 21. Edible Forest Products (1 st and 2 nd rows); Food/ meals made from locally collected forest foods (3 rd row); Firesticks and mist nets (4 th and bottom row). (Photo: The Author).	238
Figure 22. Impacts and Threats to Tham Bing. Graffiti at the lower cave entrance (Top); rubbish left at the main cave entrance (Bottom). (Photos: The Author).	253
Figure 23. Tham Bing is contained with the forested 'buffer zone' of mining haul roads (Above); Aquifer associated with Tham Bing (Centre); Forest inside the 'buffer zone' (Below). (Photos: The Author).	254

Figure 24. Mining Impacts on the Thengkham Range at TKSD (Above), and at the Puen Baolo archaeological site, also on the Thengkham Range (Below). (Photos: The Author).....	257
Figure 25. <i>Dtin Hai</i> boundary or land ownership Marker - Thengkham Range (Above); Offering of excavated wood to local spirits left at Thengkham South D mining pit (Below). (Photos: The Author).	261
Figure 26. Illegal Logging Camp on forest track between Peun Baolo and Tham Hin Kiaw (Top); Illegal Logging close to Tham Pakou and trucks transporting logs out of the forest near Tham Pakou (Bottom). (Photos: The Author).	265
Figure 27. Threats to Tham Pakou. Logging has increased and the impact has become more pronounced between 2011 (above) and 2013 (below). (Photos: The Author).	268
Figure 28. Identified Relationships between uses and values found in Caves in the Sepon Mine and Vilabouly District (Image: The Author).	279
Figure 29. A Schematic Represenatioan of the Identified Influences on the Development of Modern Lao Heritage Ideology and Practice	298
Figure 30. Entrance to the MMG-LXML Mining Camp and Processing Centre. The use of Elephants in the current context of mining at Sepon emphasize a connection to the Buddhist Kingdom of Lang Xang. (Photo: The Author).	309
Figure 31. Statue depicting the three ethnic groups fighting together, outside the new Keysone Phomvihane Museum, Vientiane Lao PDR. (Photo: The Author).	314
Figure 32. Lao architectural style and symbolism applied to museums. The Keysone Phomvihane National Museum, Vientiane (above) and Vilabouly 'Culture Centre', Vilabouly District (below). (Photos: The Author).....	317

List of Tables.

Table 1. Major International Conventions and Charters for Cultural and Natural Heritage Management.....	69
Table 2. List of Fieldwork Contributing to this Thesis.	118
Table 3. Key International and National Policy and Regulation have informed development of the Sepon CHMP and Cultural Heritage Practices.	187
Table 4. Archaeological excavation of Tham Kin Kiaw.....	209
Table 5. Caves within the Sepon Mine identified for Significance, Threats, and Management Practices.	245
Table 6. Identified Heritage Values and Significance of the Three Caves Surveyed from the perspective of International ‘best practice’ methodology.	270

List of Acronyms

ADB	Asian Development Bank
AHD	Authorised Heritage Discourse
AHM	Archaeological Heritage Management
CHMP	Cultural Heritage Management Plan
CHU	Cultural Heritage Unit
CHU	Cultural Heritage Workshop
CM	Collaborative Management
CR	Community Relations Department
CHM	Cultural Heritage Management
CHM Program	Cultural Heritage Program
CHW	Cultural Heritage Workshop
CRM	Cultural Resource Management
CSR	Corporate Social Responsibility
EMP	Sepon Environmental Management Plan
ESIA	Environmental and Social Impact Assessment
FAO	Food and Agriculture Organisation
GFC	Global Financial Crisis
GPDA	Sepon Greater Project Expansion Area
ICOM	International Council on Museums
ICOMOS	International Council for Monuments and Sites
ICCROM	International Centre for the Preservation and Restoration of Cultural Property
ICMM	International Council on Mining and Minerals
IFC	International Finance Corporation
IMF	International Monetary Fund
IUCN	International Union for the Conservation of Nature
JCU	James Cook University
Lao DNH	Department of National Heritage
Lao PDR	Lao People's Democratic Republic
LLS	Livelihoods and Landscapes
Lao MICT	Lao Ministry of Information, Culture & Tourism
MCA	Minerals Council of Australia
MEPA	Mineral Exploration and Production Agreement
MMG-LXML	
MoU	Memorandum of Understanding
NEM	New Economic Mechanism
NTFP	Non-Timber Forest Products
NUoL	National University of Laos
RAMSAR	
SDTF	Sepon Development Trust Fund
SEAMEO-SPAFA	Southeast Asian Ministers of Education Organization Regional Centre for Archaeology and Fine Arts
SEDA	Sepon Expanded Development Area
SSSS	Sepon Social Sustainability Strategy
SoSu	Department of Social Sustainability
SPDA	Sepon Project Development Area

TEC	Traditional Ecological Knowledge
THK	Traditional Heritage Knowledge
TKSD	Thengkham South D Archaeological Site
UN	United Nations
UNEP	United Nations Environment Program
UNESCO	United Nations Education & Scientific Organisation
UNWTO	United National World Tourism Organisation
VDFP	Village Development Funds Program
WB	World Bank
WCPA	World Commission for Protected Areas
WTMA	Wet Tropics World Heritage Area
WTO	World Trade Organisation
WWII	World War II
WWF	World Wildlife Fund

Preface

"Locals" and "local communities" are not passive constituencies there for our intellectual mining, nor are they there awaiting our theoretical insights into their situations or histories. They are directly enmeshed in their own critical reformulations, political negotiations, and constitutions of theory and interpretation.

(Meskell, 2005, p.82)

“*Neung, song, saam*” went the unified count from the ten or more people who had banded together to lift ‘the boat’ - a sodden piece of ancient wood, anthropomorphically modified, origins and use unknown, but possibly a two thousand or more year old burial coffin. Metal poles from shade-tents had been lashed together with aging lengths of nylon rope bought from the local market, and were placed under the wooden object, now excavated and ready to be removed from the excavation pit. At about three metres long, 30 centimetres wide, and weighing at least 50 or more kilograms, painstaking effort had gone into excavating and manoeuvring the wooden object from the soil. The object had now become almost celebrity amongst the team, mining company staff, and Vilabouly District Officials. In the days after ‘the boat’ was first discovered, and during its week-long excavation, a stream of visitors to our excavation were constant, with senior mining staff and Vilabouly District Officials all very interested in viewing and capturing images of ‘the boat’ (see Figure 1). Word had also been sent to Vientiane, the Lao capital, to inform the senior staff at the Ministry of Information, Culture & Tourism (Lao MICT) that a very significant discovery had been made deep inside a mountain in the Thengkham South range; a mountain that was once forested and farmed by the local ethnic *Brou*, a local Mon-Khmer speaking people; a mountain now shorn almost in half by the mining process, a process which had inadvertently revealed more of the locations ancient cultural past.

It was mid-October 2012. The summer monsoon persisted very late this year, and temperatures and humidity were stifling inside the open cut mining pit. This archaeological excavation was the fourth season at the Thengkham Range since 2008, but it was the first excavation at this site, now known as Thengkham South D (TKSD). The site where ‘the boat’ was discovered was the current gold-bearing mining pit and recent mining activity there had unearthed wooden objects in the north-west section of pit. Initial discovery of wooden objects at TKSD had been reported a week prior through various ‘word of mouth’ channels, eventually making it to on-site Lao MICT staff who were working within the Cultural Heritage Unit (CHU). The CHU was a section of the Community Relations Department (CR) at the mine responsible for cultural heritage management. A detailed inspection by Lao and international archaeologists followed and confirmed reports that several potentially significant wooden objects has been unearthed at TKSD. The team quickly organised a rapid response investigation to identify, excavate, and map the extent of a series of what were later identified as ancient wooden and rattan mining shafts used for mining copper ore.

The process of archaeology had never been more intense at the Sepon Mine – this was the definition of rescue archaeology in practice. Adding to the frenetic energy and need for high level diplomacy, TKSD was the only gold producing pit at the Sepon Mine at the time, and the discovery of the ancient wood and mining shafts in the 24 hour-a-day gold-producing pit caused a halt to gold mining operations. Every day meant significant economic losses to the mine, a factor that was part of regular negotiations over the site. Senior officials from the Department of National Heritage (Lao DNH) in Vientiane, and the local Vilabouly District Governor, had lobbied or voiced in their own way a desire to have this area and its contents either excavated or preserved. The Cultural Heritage Management Plan (CHMP), developed to provide a mechanism to manage and mitigate impacts to heritage at the Sepon Mine, and the Lao 2005 *Law on National Heritage* was called into action. Negotiations between the DNH

and MMG-LXML confirmed the original expectations that *in-situ* preservation would not be an option here - salvaging what materials could be salvaged and undertaking a detailed excavation and mapping of the site now for later interpretation. Plans were also being constructed among the group to house excavated materials at the CHU or the new MMG-LXML sponsored 'Vilabouly Cultural Centre' that was in the process of being built in Vilabouly township.



Figure 1. Vilabouly District and Mining Officials viewing 'the boat' at TKSD, 2012 (Photo: The Author).

The discovery of ‘the boat’ and other wooden and metal objects during the excavations at TKSD led to growing speculation at the mining camp and in the surrounding villages about the meaning and past use of this location. What was this wooden object? What was it used for? How was it made? How old could it be? Which cultural group would have made use of this object? In the days that followed two more wooden ‘boat’ like features were exposed *in-situ* at TKSD. This increased team member’s speculation about the wooden objects towards theorisation about them. Were these objects used in pre-historic copper or gold mining? Were they sluicing devices for mining? Were they used as burials coffins? By this time local interest had also begun to develop into theories, enticing the team to hypothesize further. A myth emerged from a local Vilabouly *Phou Thay* employee, explaining a time set in the past when *Muang Angkham*, the ‘City of the Golden Bowl’ that reportedly flourished in this region. As the local legend recounted, boats were used to ferry gold across rivers by a Prince of the Kingdom of Muang Angkham. The theory of the wooden object as a ‘boat’ became hard to challenge, particularly given the standing of the *Phou Thay* locally, who as a *Lao* speaking people enjoyed a central role in the management of heritage at the Sepon mine, and in local politics and governance.

Providing a mythological basis or significance for objects considered old or ancient like the ‘boat’ was not unusual in the Lao PDR. Throughout Vilabouly District without question every village household has a collection of objects from the past, including stone adzes, pots, brass bowls, and iron implements. Objects were found while found while digging in the field or in the village, and where passed down from generation to generations. These objects were generally believed to hold supernatural or curative powers, with some believed to have come from ancestors, from the sky, or created through other preternatural actions. Conjecture about an object’s meaning was also not out of the ordinary for archaeologist’s, and was a regular part of the process of excavation and analysis. Considering the origins of excavated materials, their

potential uses and value in the past, and how ancient objects and past societies share a relationship to modern Lao society are important questions to decipher or explain. The discovery of the 'boat(s)' was broadening knowledge of the history of Vilabouly and of the present day Lao PDR. At the same time the process was eliciting divergent views of the same objects, their histories, and uses or value, views that challenged and complimented theory and evidence-based methods in archaeology.

The discipline of archaeology, performing archaeological surveys, excavations and heritage management was not a new practice for the senior Lao archaeologists. Archaeology and archaeological 'science' was introduced to Indochina by the French during their time as colonial powers in the region. Many Lao archaeologist (and ethnographers) were trained in Vietnam, and others had worked with UNESCO and International archaeological teams at World Heritage sites within the Lao PDR. Several graduate student archaeologists at the Lao DNH, staff and students from the National University of Laos (NUoL), and Savannakhet and Vilabouly officials were benefiting from opportunities to refine their archaeological skills 'on the job'. But for the general public, particularly in rural Laos, archaeology and heritage management were new practices with new ways of understanding and interpreting the past. Of all groups to newly encounter this practice and logic behind its performance were local *Phou Thay* and *Brou* villagers, who had become increasingly engaged in the process of archaeology and heritage management through the presence of the Sepon Mine on their land and in the local district. Local community members had provided important physical and structural support for archaeological excavation and heritage management activities. Local villagers also supported the discovery of archaeological sites in the District through their local knowledge of history and places in the region. The archaeological excavations too became an economic opportunity for local villagers, who in turn provided an invaluable source of support to the excavations, mostly as 'day-labour', as they were termed at the mine.

The recent application of archaeology and heritage management had combined with local history after 'the boat' was exposed *in-situ*, and by then it had become a priority to monitor the excavation of the wooden object and manage the impact on it by people and environmental conditions. A certain amount of reverence and responsibility had obviously been building regarding this object. When it came time to move 'the boat' the group of lifters strained and groaned under its waterlogged weight. Last minute debate for the process of transporting 'the boat', including where it would finally rest, quickly dissolved once 'the boat' was lifted. Decision-making about the best methods or approach to move 'the boat' happened as part of the process of the event happening. So, after momentary discussion and a mandatory countdown to confirm the process, the team was soon racing as fast as they could up the steep incline of spoil that was previously excavated from the pit. The straining and groaning at the physical and psychological weight of 'the boat' diminished as the encouragement of the crowd that had gathered in both spectacle and in admiration to witness the event increased. That this was happening, that 'the boat' was out of the ground and was moving - in one piece - towards a temporary resting place was a great achievement. Stuck between what seemed a moment and a timeless passage, the process ensued until 'the boat' was successfully transported to the top of the spoil mound adjacent to the mining haul road. Cheers and whooping rang out by all present for the event; there was great cause for celebration and relief. Removing and safeguarding the 'boat' had become both a professional responsibility and personal burden for both foreign and Lao staff.

Feelings of responsibility and relief not yet subsided, and unbeknown to most of those present, a flurry of separate activity had begun amongst some workers: a spontaneous spirit ceremony was being enacted. Candles and incense were promptly lit and anyone within range of 'the boat' was invited to join the ceremony. Government, University, Provincial and District staff including local Phou Thay and Brou workers and international archaeologists were soon

gathered around ‘the boat’ to participate in the spontaneous ceremony. People were urged to make offering and prayers with the incense and candles. Some began placing the offerings of candles, resting on paper plates, on ‘the boat’, or forming the prayer posture with incense in their hands, before gesturing to the object down on bended knees. Some more enthusiastic persons even stuck the bases of incense sticks into ‘the boat’ penetrating its soggy waterlogged surface (see Figure 2).

I was intrigued by this process. Why was this ceremony taking place now? Why had it not been necessary to perform a ceremony like this during a past excavation? At no other time during any excavation in Vilabouly since 2008 had a public ceremony like this been undertaken whether publicly planned or spontaneously produced. I had taken part in ceremonies like this in Thailand to ask permission from the spirits (*phi*) before the ‘ground is broken’. I understood the broader significance of the ceremonial process but they could not understand why it just seemed to be important that we conduct the ceremony now. I enquired with my Lao colleagues and Lao MMG-LXML staff about the purpose and meaning of the ceremony, but they could not articulate to me the meaning and purpose of ceremony. It required some persistence on my behalf to get an answer to my question, which involved ‘asking around’ the crowd. The first answer I received that day was from a Lao MMG-LXML employee who stated that ‘*we are Lao people, and this is what we do in Lao culture*’. That answer did not satisfy my curiosity, and only made me more interested about this ritual process, the meaning behind it, and why it was happening now. Lao culture and society is more diverse than that. Taking into consideration the geographic location we were working in and the multi-ethnic and multi-linguistic groups we were working with, the logic behind its sudden presence was deeper than that answer.

My persistence did pay off that day. I was eventually informed that the ceremonial offering and prayers were for the wooden object, to thank it for coming out the ground, and to give thanks to those people who put the wooden object there in the first place. In effect, I was told this ritual was to propitiate the ancestral spirits and avoid any malevolence because we were disturbing the land and forest through our excavation, disturbing the spirits in the process. According to Brou and Phou Thay culture, disturbing the sub-soil and taking objects out of the ground usually requires permission from the local guardian spirits. I was also informed the ceremony for ‘the boat’ was not the first ceremony to take place at TKSD, with a similar ceremony performed in the same location prior to the archaeological excavation beginning a week prior. This ceremony was to ask permission of the spirits in advance to excavate a small area. Again, both ceremonies were intended to receive permission and prevent any malevolence from the local spirits. It was alleged that during this earlier ceremony one local employee became possessed by the spirit of an old man named *Uncle Pouan*.¹ The spirit, using the staff member as its medium, explained he used to live in an ancient village located nearby, and that he was angered by the work at TKSD and that work had not stopped immediately once the first wooden objects were uncovered by mining operations.

This would not be the only act of spirit possession in the Thengkhram South Range that year. Three weeks later another possession occurred at *Peun Baolo* (Crucible Terrace), the location of an ongoing archaeological excavation a few kilometres west from TKDS along the Thengkhram Range. During that incident, a local female Brou worker became possessed by a spirit one morning before work began. She fell into a trance-like state she rocked her body, crying and wailing. When another female employee went to her aid, that person also became possessed. At Peun Baolo, the father of the possessed Brou woman was summoned to Peun

¹ Personal communication with Warren Mayes (2012). See also Mayes & Chang (2014).

Baolo to call the spirit out of his daughter; he was a local healer, or *Mo Yau*. The spirits demanded cigarettes and the women began smoking, and slowly the Mo Yau persuaded the spirits to identify themselves. The spirits again identified himself as *Uncle Pouan* and his son, and explained to the Mo Yau they wanted to know why his father had left him there at that location. After about another 15 or 20 minutes the Mo Yau convinced the spirits to leave the women, their behaviour slowly returned to normal. Eventually it was declared that the spirits had left their host bodies.



Figure 2. 'The boat': excavated and after the spirit ceremony (Photo: The Author).

Understanding why the spirit ceremony was conducted after excavating ‘the boat’ became clearer when I considered the role of spirits in Brou and Phou Thay belief. While surveying caves in the Brou lands of Ban Namalou village the year previously, I had learned from villagers about spirits and the importance of spirits to local communities. Spirits play an important role within local cosmology, and customary laws prohibit angering spirits and provide practical and ritual means to respectfully engage with spirits and the dwelling places of spirits. Places like forests, cemeteries and caves were the residence of territorial guardian spirits, and to disturb the spirits home generally annoyed them, leading to illness or misfortune for villagers or the entire village. I had not known that the same rules applied to digging the ground and talking objects out of the ground without prior permission. Again, while this belief and ritual process was common in archaeological excavations in Thailand, it had not been a regular activity during our excavations in - Vilabouly District.

Coincidentally or not, the spate of spirit possessions was occurring within a time of unprecedented change in Vilabouly District. Generally, the year 2012 brought in sweeping modifications to the District. Implementation of internationalised organizational culture at the Sepon Mine initiated an emphasis on safety through applying a universalized organizational culture, which in several ways diminished the feeling of ‘Laoness’ that previously infused the mine. Large-scale mining expansion plans were also being discussed, having the potential to resettle mostly Brou villages and move mountains to the ground in the process. Visible changes to the local environment and talk of local job losses had become more prominent and were being discussed more readily in day-to-day conversations. All of this was leading to what could be described as increasing anxiety and worry among employees and local villagers. A noticeable change in behaviour and attitude of mining staff was perceived as being ‘out-of-culture’ for Lao people.

Archaeology and heritage management are often situated as ‘middlemen’ in the relationship between of communities and resource companies. Negotiating this space in the midst of a rapidly developing society, where archaeology and heritage are emerging as increasingly political practices for communities, governments, and companies, made the Sepon Mine a locally unique but at the same time internationally ubiquitous context. It was increasingly clear this was a location for ‘transcultural entanglements’ between the global, the national, and the local. I considered this as I turned and made one last glance at ‘the boat’; left to sit in the spoil pit in the blazing tropical sun, adjacent to the mining haul road while it waited for the truck to take it back to the CHU. Candles on paper plates still sat on ‘the boat’, and incense sticks stuck into it were slowly burning away, sending the prayers and wishes of the team to the spirits of this place and to its past. The ceremony had concluded as fast as it had begun. Staff, students and local workers had slowly returned to excavations. Interest now turned towards excavating the emerging hexagonal wooden structures proposed to be ancient mining shafts, with intrepid plans being plotted to move them *in-situ* to the Cultural Heritage Workshop in one piece, to be exhibited in the local cultural centre in Vilabouly, or even the National Museum of Laos in Vientiane, or both.

1. Introduction

“There is a burgeoning impatience with the lingering culture–nature binary and the fiction it promotes that “cultural sites” are discontinuous with environmental phenomena”

(Byrne & Ween, 2015, p.105)

“Not all cultures in the world share the same dominant Western view of a secularized, utilitarian, depersonalized nature. The existence of alternative views of the natural environment is important an part of the cultural heritage of humankind”

(Berkes, 2008, p.96)

The events described in the preface took place during the excavation season at the MMG-LXML Sepon Gold & Copper Mine², Lao PDR, between October and December of 2012. This chapter will provide provided a background to the thesis, outlining the research questions this thesis will seek to answer, and introduce the location for research. As the preface detailed, in Vilabouly District people, culture, and nature share an intimate connection. The natural environment, natural places, and anthropomorphic objects and features of past societies have specific cultural uses and meanings, informed by cosmology, and supported by religious practices and customary laws. Pre-existing local socio-cultural, economic, and spiritual relationships are built on interaction and active participation with a range of local histories and significant places within the natural landscape. Here, natural and historical places are imbued with meaning and use and management of places and objects include engagement with ancestor spirits and nature spirits. Beliefs, practices, and values cross-cut; the cultural and natural are often interdependent; and traditional cultural belief and practices are plural and living, rather than singular and inanimate.

² From here I will refer to as the Sepon Mine

The events in the preface also illustrate the increasingly central role of mining within local livelihoods for residents of Vilabouly District. The process of mining and associated economic development activities have introduced new people and ideas, systems and process, and practices and performances. Mining-based economic development activity has initiated new engagements, interpretations, and understandings of local natural resources and cultural sites and objects, including the cultural beliefs and practices local ethnic groups have imbued into the local natural landscape. Arguably, this process will present several challenges for communities in Vilabouly District to maintain their pre-existing use and management of natural resources and cultural heritage. Furthermore, and as the preface highlighted, challenges are centred on change or alteration to the local natural resource base, economic activity, and political practice, wrought through the introduction and application of new concepts and practices centred on new interpretation, use, and management of the locally significant natural resource base as 'heritage'.

Engagement between the international, the national, and the local can be located in a variety of articulations that are enacted as part of engaging with, and responding to, the mining process. Critically, for the purpose of this thesis, it is engaging with the introduction and application of new and introduced concepts and practices of heritage management as part of mining operations. At the Sepon Mine and within Vilabouly District, international 'best practice' principles of cultural heritage management have been applied as part of regulatory processes to identify and manage 'heritage' from damage or destruction as part of mining operations. It will be argued that internationally developed discourse and practices of heritage create several complexities for non-Western, local, and 'plural' cultural contexts. In particular, a central problem with application of international 'best practice' is the ongoing application of the 'divide in heritage' – the dichotomy between *nature* and *culture*. Nature is often defined as being separate from man and culture, and containing beauty and aesthetic qualities, whereas

culture is often defined as being a ‘work of man’ and generally a tangible, built structure or feature of society. Cultural heritage is also categorised further as *intangible*, *tangible*, and *historical* heritage. The central focus in this thesis will be to critically examine the dichotomous and categorical construction and application of heritage. In particular, this thesis will critically examine what mechanisms have led to the construction of a ‘divided’ heritage management practice internationally, what supports the ongoing spread and application of the ‘divide’ from the international to the local setting, and consider the effectiveness of applying a ‘divided’ heritage within operations at the Sepon Mine and Vilabouly District.

The ‘Divide’ in Heritage

In the past few decades increasing debate and discussion has focused on the ‘divide’ in heritage and the ‘real world’ implication that result from applying a discourse and practice of heritage that is considered ‘divided’. The ‘divide’ in heritage is defined as the dichotomy of ‘heritage’ as either *natural* or *cultural* heritage. Cultural heritage is also further divided into *historical*, *tangible*, *intangible* categories. Byrne & Ween (2015) describe the nature-culture duality a “dualistic, or binary, view of the world as consisting of distinct realms of man and nature” arguing that the ‘divide’ remains “[o]ne of the hallmarks of Western modernity” (p.94). Critically, the ‘divide’ - the separation of nature and culture and tangible and intangible cultural heritage - remains imbedded as a central component of current international definitions and ‘best practice’ approaches to heritage management and heritage conservation. Today, the ongoing application of a ‘divided’ heritage is considered to limit how heritage is defined, governed, and managed and conserved internationally.

The problems, and the implications, identified with defining and managing heritage as dichotomous and in categories is best articulated by Brockwell, O’Connor, and Byrne (2013):

Culture-nature dualism has been found to be a major impediment to breaking out of the silos represented by nature conservation and heritage conservation. This, of course, is the view from the position of the experts. The view from the ground includes that of Indigenous people who find that in the struggle to maintain their land there are willing allies to be found among environmental and heritage conservation organisations but that these alliances mean having to internalise the culture-nature dichotomy, at least for the purposes of dealing with these experts, accessing their funding, and participating in their conservation programs. In other words such alliances entail an internalisation of an alien ontology (p.1).

Central to Brockwell, O'Connor, and Byrne's (2013) observations are that "real world ramifications" (p.1) remain today from application of heritage definitions and management practice centred on a dichotomous and categorical definition of heritage. Ramifications identified from application of a 'divided' heritage include restrictions on broadening the definition and scope of heritage internationally and in non-Western contexts; reduced innovation in the design of, or inclusive and collaborative heritage management practices, based on localised interpretations of heritage; and marginalization of local communities, ethnic groups and indigenous people from their histories, sacred places, cultural landscapes, and from local management of heritage places and objects.

Amongst academics, researchers, and applied heritage managers "burgeoning impatience with the lingering culture-nature binary and the fiction it promotes that "cultural sites" are discontinuous with environmental phenomena" (Byrne & Ween, 2015, p.36). Kiernan (2015) argues that "(a)ppropriate initiatives remain seriously undeveloped" (p.190) to balance competing management ideologies and heritage regimes in the goal of interconnecting or jointly managing natural heritage values with intersecting cultural heritage values. Movement

to reconcile the dichotomous thinking about nature and culture have required a reconceptualization, a 'counter-trend' and transcendence of what Byrne and Ween (2015) state are historical power relations between the 'north' and 'south'. Decolonising the process of archaeology and heritage management will require a paradigm shift, a movement away from uncritical application of the 'divide' in practice, and a relinquishment of the control of heritage internationally to nations and local communities to promote plural and emic interpretations of heritage within international heritage frameworks and management practices.

Promoting a deeper comprehension of heritage as 'plural', that may be 'living', and which may have the potential to hold 'sacred' qualities can promote non-binary connections between nature and culture and tangible and intangible heritage. As Layton (2008) states, this movement would require a rethink of heritage management practices from within the industry and by practitioners themselves:

...[c]o-operation with archaeologists from the Third World and minority groups will frequently mean that Western archaeologists must modify their goals, or rethink their ideas. It is no longer possible to make comfortable assumptions that non-Western people live in a timeless present that their cultures are inherently unchanging or that such people have willingly assimilated to Western ideas and practices (p.269).

'Bridging the divide' in heritage management practices internationally will therefore require a challenge to how heritage has been defined and managed historically; the premise of archaeological theory as the basis for heritage management; and the need to renew emphasis on the centrality of community participation within international heritage management, identified in 'development studies' since the 1970s-80s.

Research Questions

The following are the main questions guiding this research:

1. What factors (historical, cultural, political, and/or economic) have supported the construction and ongoing application of a ‘divide in heritage’ in international ‘best practice’ approaches to heritage management and conservation?
2. To what extent have international ‘best practice’ heritage management approaches interacted with national heritage definitions, policies, and practices in the Lao PDR, and has this interaction influenced the management of heritage nationally and within a commercial mining context?
3. What opportunities and challenges are identified to ‘bridge the divide’ in heritage by examining the use and value of caves as heritage locations at the Sepon Mine, and are these findings transferrable as heritage management practice in the Lao PDR and internationally?

In this thesis I critically consider the ‘divide’ from three standpoints. First, I examine the nature-culture dichotomy as an historical and European construction; and second, the predilection to material or objective phenomena as heritage to be represented as the categorization of the tangible and intangible heritage as separate; and third, the diffusion of a European heritage discourse and practice within national and localized heritage discourses and management practices. I argue that each ‘divide’ should be considered as part of a ‘push-pull’ or dialectical scenario, resulting from the legacy of European constructions of heritage and the global diffusion of European discourses and practices of heritage into non-Western nations, and the process of non-Western nations developing national ‘heritage identities’ as part of the creation of post-colonial states from the mid-to-late 20th century. As a problem, I argue that the three ‘divides’ are collectively responsible for predicaments found in applying international

and ‘Western’ definitions of heritage and models of heritage management practices into non-Western localities. Notably, the ongoing legacy of the past in the present; the internationalisation and the internalisation of a ‘universal’ heritage discourse and practice in the post-colonial era; and the complex interaction between Western and non-Western nations and community groups to apply or reject international ‘best practice’ definitions of heritage and models of heritage management practices as part of nation-building and socio-economic development practices and processes.

A Critical Heritage Studies Framework to ‘Bridge the Divide in Heritage’ Critical Heritage Studies as Applied in this Thesis

To examine ‘the divide in heritage’ and answer the research questions proposed in this thesis, I apply a Critical Heritage studies framework. Winter (2014) has identified the importance role critical heritage studies have to examine several current issues in heritage, issues that are central to this thesis. These issues include a growing recognition to move beyond long-held concepts and definitions of heritage generated within Europe, and to embrace heritage diversity, and in particular, heritage ‘plurality’. Any critical consideration of the use and application of heritage today must account for the historical and predominately Eurocentric legacy for present internationalised heritage discourse and practices, and further, the ways in which globalisation and politicisation of heritage have more recently increased the threat of damage or destruction of heritage places, objects, and their concomitant beliefs, practices, and traditions. Winter (2014) explains:

It is important we begin to seriously address the heterogeneous nature of heritage, for both the West and non-West, and explore the conceptualisation of multiple heritages. The impetus for this comes from the need to both address

previous imbalances, and better position the academic study of heritage in relation to the rapid geo-political and geo-cultural shifts that are now taking place (p.556).

It has not been until recent decades, and perhaps even recent years, that the concept of a ‘heritage plurality’ has become an accepted notion in the theoretical study of heritage and practical application of heritage management practices. Post-processual archaeology and the emergence of ‘multivocality’ acknowledged how consideration of subjectivity and ‘other heritages’ would provide benefit to understanding the past (Hodder, 1999). This ‘turn’ renewed a focus or consideration on emic discourses and practices in heritage management and was seen as an essential step to move beyond heritage as ‘imposed’ by European or Western nations; as a movement towards examination of the way heritage is constructed, lived, and made meaningful by non-Western nations, cultures, and communities (Smith, 2004; 2006). Critical heritage studies recognition of the need to broaden the scope and definition of heritage has therefore advocated for the need to move away from a reliance on a purely ‘Westernised’ set of heritage discourses and practices. The movement away from European control of heritage could provide non-Western nations with recognition and local control of their history and heritage.

Heritage has however traditionally relied on what Winter (2014) has described as “understandings and a body of knowledge that strongly privileges Europe in its geographical scope” (p.561). Recognising the role of the past and overcoming impacts of history in the present will require what Kallen and Karlstrom (2010) consider as a “broader critical focus on the foundations and consequences of scientific archaeology” (p.309). Moving beyond a purely scientific basis for heritage that has created dichotomies and categories will require critique of several key areas. These include the ongoing application of archaeology as the basis to many

internationally cultural heritage policies and practices; the subjective nature of archaeology that is generally focused on materiality; and ultimately recognising archaeology as part of the broader suite of influential factors implicit in the ongoing application of the ‘divide’ in heritage internationally. There are clear ramifications for an ongoing uncritical application of scientific and archaeologically-based heritage if practitioners want to adequately address plurality or multivocality, to conserve heritage diversity, and manage ‘living’ heritage based on the interdependence of nature and culture, or tangible and intangible heritage. Overcoming these challenges will require what Winter (2014) argues is a need to “pluralise the scope of... historicisation in ways that better reflect events and processes that occurred elsewhere in the world” (p.559).

Critical Heritage Studies applied in this thesis will provide a framework to examine the present-centred impact from legacies of the past, and the different histories and the way these can promote new constructs of heritage, uses of heritage, and present management of heritage cross-culturally. Following Baird (2009), applying a Critical Heritage Studies framework I will bring together “diverse disciplinary perspectives that have potential to produce new ways of thinking about heritage” (p.40). In doing so, this examination will allow for consideration of “the ways in which knowledge about heritage is constituted and to ask questions beyond the scope of traditional archaeological studies” (Baird, 2009, p.42). Following Brockwell, O’Connor, and Byrne (2013), the examination of ‘real world’ ramifications resulting from application of a ‘divided’ heritage in practice is central to this thesis. Assessing actual problems will require a multidisciplinary approach built around anthropological analysis that enables a “productive pathway for eliciting non-Western traditions of heritage governance, conservation and curatorial practice” (Winter, 2014, p.564). Detailed explicitly in Chapter 3, in this thesis I draw together several methods including archaeology, ethnography, and literary analysis as part of a multi-sited and multi-disciplinary approach. This approach, I argue, can elicit how

heritage has developed historically; how heritage is currently managed and practiced by various stakeholders across international, national and local boundaries; what outcomes develop from applying and managing a 'divided' heritage in a non-Western location; and the context for managing heritage within global socio-economic, cultural, and environmental change.

Major Themes in this Thesis

Heritage as History

Heritage is said to have been 'made' across time, space, and within culture. The idea of history, and historical processes themselves, are seen as a central factor in how heritage has been defined, used, and valued for centuries, including in the modern era. Analysis of the historical construction of heritage, and the evolving reasons for its construction and application over time, highlights how history and value placed in historical products and culture is a factor that must be considered in any critical analysis of heritage in present. Smith, Messenger, and Soderland (2010) consider that "(h)eritage is important" because "local, regional, and national identities are defined by our legacies from the past" (p.15). Heritage therefore is not considered to be "an innate or primordial phenomenon" but something that "people have to be taught" (Harvey, 2001, p.337). Harvey (2001) also argues that "heritage has always been with us" he also considers that heritage "has always been produced by people according to their contemporary concerns and experiences" (p.320). As a process then, heritage is constructed by cultural groups and through social consensus to define and validate what is considered valuable or meaningful. A central tenant to the construction of heritage has been the embodiment of sentiment, emotion, and value placed in historical 'things'.

Any critical examination of the 'divide' in heritage in the present requires reconciling how heritage remains a construction 'of the past' applied in the present. While the dichotomy of nature-culture and categorisation of tangible-intangible in heritage remains inherent in

contemporary international discourses of heritage, this is largely the result of ongoing application of historical European cultural and philosophical traditions in present heritage-making (Pockock, 1997; Smith, 2004). Chapter 2 will illustrate how the dichotomy or ‘divide’ in heritage is understood as an historical construction, and that this process of construction has developed over several phases of European history from the Renaissance Era (Byrne & Ween, 2015; Lowenthal, 2005), the Enlightenment Period (Lowenthal & Binney, 1981; Smith, 2006), the Colonial Era (Chapman, 2013; Kallen & Karlstrom, 20109; Nodoro 2001), and the post-WWII period (Smith 2006). Each phase has been recognised to play a unique and critical role in the creation, development, and legitimation of the ‘divide’ in heritage, and each remain implicit in the ongoing discourse and practice of heritage promoted by international heritage agencies. Today, particular historical factors continue to influence the way heritage is used, valued, and made significant by embodying not only the historical factors that produced heritage, but indicate that these antecedents to modern heritage continue to interact with new uses and values of heritage in contemporary society.

Globalisation, Heritage, and Economic Development

Harrison (2013) has argued for a “broader critical agenda for heritage studies...that is more attuned to the affective qualities of heritage, the ways in which it is caught up in local and global processes, and the distribution of power within the various administrative and government networks surrounding it” (p.10). Modern processes of globalisation, including socio-economic development initiatives, corporate transnationalism, and the spread of democratic values continue to embed largely ‘Eurocentric’ definitions of heritage and principles and practices of heritage management in non-Western contexts. This is a view also shared by Winter (2014) who argues that the field of heritage needs to “account for its relationship to today’s regional and global transformations (p.559). Winter (2014) locates

heritage in a relationship with a suite of “rapid geo-political and geo-cultural shifts” (p.556) stating there is an “urgent need to develop analytical frameworks capable of interpreting the major global social and cultural shifts of today” (p.559). The concept of power and the structural inequalities that have developed between the ‘north’ and ‘south’ as a result of history and politics have arguably limited equitable management of heritage between the global, the national, and the local.

In this thesis I locate the globalisation of heritage within two distinct but interrelated phases of Europe’s encounter with other cultures. First, during the colonial era, and secondly, in the post-WII era. As it will be discussed in more detail in Chapter 2, each of these phases are shown to have influenced the development of heritage practices and process, and remain influential today. In the colonial era European nations applied a concept of heritage, introduced relationships between heritage and identity, and use of heritage in support of effort to legitimate European authority in non-European regions through Asia, India, and Africa (Harvey 2001; Smith, 2006). The application of scientific archaeology and a focus on material culture and restoration of monuments introduced concepts like preservation, objective materialism, and relationships between ‘heritage’ and ‘identity’ (Chapman, 2013; Falser & Junega, 2013; Tunprawat, 2009). The concept of nature as a ‘resource’ was also introduced to colonised regions, resulting in large-scale transformations to natural ecological systems and the livelihoods of indigenous peoples who lived in these locations (Greenough & Tsing, 2003). In Southeast Asia, many nations are today resource-dependent economies, viewed largely as a result of natural resource use in the colonial period, a factor that has influenced modern management of ‘nature’ as ‘heritage’ (Parnwell & Bryant, 1996). Today, socio-economic development focused on nature continues, but carries with it discourses of sustainable development that ironically continue to place natural resources, livelihoods, and associated cultural and natural heritage values at risk (Barney, 2009; Tsing, 2003; 2005). Concepts of

‘nature’ and ‘nature conservation’ were also considered “integral to the project of colonialism” (Byrne, 2013, p.160) and remain influential today in guiding the philosophy and practice of modern conservation ideology and practices.

Since the post-WWII era international heritage agencies have played a central role in a process of ‘heritage globalisation’. The United Nations (UN), the United Nations Education & Scientific Organisation (UNESCO), the International Union for the Conservation of Nature (IUCN), and International Council for Monuments and Other Sites (ICOMOS) are argued to have legitimated and spread an ‘authorised heritage discourse’ (AHD) of ‘universal’ principles and definitions of heritage built from historical and European foundations (Smith, 2006). As Logan (2001, p.51) established, “many commentators see these organizations as key agencies of cultural and economic globalization”. Synot (2009) also argues that “the role of the UN is central to the process of globalisation” (p.111) and that international heritage agencies are responsible for promoting ‘Westernised’ discourse and practice of heritage in emerging economies and post-colonial states (see also Smith, 2006). International donor agencies including the World Bank (WB), the International Monetary Fund (IMF), the Asian Development Bank (ADB), the World Trade Organisation (WTO), and the International Council on Mining and Minerals (ICMM) are also argued to promote a particular discourse on ‘development’. Today, many of these organisations advocate for elements of ‘World Heritage’ as ‘best practice’ models for heritage management as part of international socio-economic within resource development contexts, and promote industry “[i]nternational social and environmental standards...created to minimise impacts on the environment and affected communities during mining operations” (Australian Government, 2011, p.6).

Most literature that discusses the ‘divide in heritage’ internationally has considered this from the perspective of World Heritage Management, Natural Protected Area Management,

and conservation of built heritage within the urban context (see Brockwell, O'Connor & Byrne, 2013; Byrne & Ween, 2015; IUCN, 1998; 2012; 2012a; 2014; UNESCO 2007; 2012; 2015). In this thesis, I focus my research away from the application of the 'divide' in heritage at the level of World Heritage and Protected Area Management towards the minerals and resources sector. The focus of this thesis is not a World Heritage Site, however it will interrogate the links between World Heritage and processes of resource extraction to consider how these interact and influence heritage management in a local non-Western context.

Understanding that a relationship between World Heritage and the minerals and resources sector exists makes it relevant to critically consider the construction, application, and impacts of this relationship outside of World Heritage contexts. Byrne (2015, p.230) considers that development of applied archaeological heritage management practices within commercial sectors are a poorly researched area, particularly given the volume of work the profession undertakes in the commercial sector. However, while this is not a traditional field of inquiry, it is a field which I argue has potential to identify the role globalisation and transnational organisations play in either spreading, legitimating, or 'bridging the divide' across international boundaries and into local contexts, and to highlight the relationship between heritage and economic development. Following Coombe and Baird (2015), I ascertain there is a need to consider if application of internationalised forms of heritage in the minerals and resources sector produce problems and challenges similar to those reported in the World Heritage sector and Protected Area Management. Further, research also provides opportunities to consider whether the identified challenges found with modern 'best practice' heritage discourses and practice result from application of dichotomous and categorical definitions of heritage.

A central argument in this thesis makes is that, for many societies, nature and culture are not considered separate, but rather are seen as highly interdependent and inseparable in belief and practice. Moran (2010) has argued that all societies have a philosophical or mythological explanation of the universe and their place in it, and that “it is through such explanations that members of a society articulate both their behaviour as individuals and understand the requirements of survival” (p.34). Cosmology is a central principle that binds people to nature and nature to people, generally through a set of beliefs and proscribed practices. For example, Arhem (1996) explains that in Amerindian culture “the notion of ‘nature’ is contiguous with that of society”, and together nature and society “constitute an integrated order, alternatively ordered as a grand society or a cosmic nature” (p.185). For the Brou-speaking ethnic groups within the Lao PDR, Chamberlain (2007) explains that there is an integral relationship between people and nature where “human ancestors of the Brou are paired with nature spirits in a grand cosmos that defines the relationship between people and nature” (p.87). This will be introduced in more detail in Chapter 4.

Social organisation is considered closely ordered on relationships between culture and nature. For the Mardu of central Australia, Tonkinson (2002) argues that their societies “mode of organisation can only be fully comprehended when set in the context of physical and ecological factors, and of the technologies and economic strategies that its members have developed over time” (p.26). Arhem (1996) also considers that in many non-Western and small-scale societies’ kinship systems, totemism, and animistic beliefs “imply a relationship of continuity between nature and society” (p.185). In this thesis, I position the relationship between culture, society, and nature as a structural and classificatory relationship that has evolved through the construction and regulation of behaviours, practices, and belief systems incorporated with nature and/or natural objects.

To consider the cultural construction of the natural world and the integration of nature within human society and culture in this thesis, I apply a case study to examine the synergetic relationship between caves and human society. Globally, caves (and also limestone karstic formations and rock shelters) are geological phenomena recognised to be highly integrated into human socio-cultural, spiritual, economic, and ritual practices (Waterton, Hamilton-Smith, Gillieson & Kiernan, 1997). Karst, and their associated caves, represent a large variety of the planet's geological diversity and are some of the oldest landforms on earth (Williams, 2008). They are also highly significant biologically ecosystems, supporting high levels of biodiversity and endemism, making them global biodiversity 'hotspots' (Clements, Sodhi, Schilthuizen & Ng, 2006; Culver & Skeet, 2000; Williams, 2008). Cave and rock shelter sites contain evidence for some of the earliest hominin and human habitation, and the remains of extinct animal species (Bekken, Schepartz, Miller-Antonio, Hou, 2004; Dirks & Berger, 2013). Caves and rock shelters are considered to have played a significant role in the development of human consciousness, art, religious and ritual culture, and mortuary practices (Lewis-Williams, 2002; Mauret, 2004, Tattersall, 1998). Caves and karst continue to support human activities, including as a location or source for human economic and subsistence-based activities and for religious and spiritual use (Waterton, Hamilton-Smith, Gillieson & Kiernan, 1997).

For the above-mentioned reason, caves in particular present an excellent opportunity to examine and identify the problems and solutions to the 'divide in heritage'. Following Kiernan (2015), caves often act as 'living' and 'sacred' places for human cultural and religious beliefs and practices, and as a result, generally have several overlapping and interdependent cultural and natural heritage values. While it is through recognition of the variety of human uses and values found in caves, and the long-term interaction between nature, society, and culture that make these geological locations a significant cultural feature, several challenges remain involved with managing caves (Sidisunthorn, Gardener & Smart, 2006). It remains a significant

and ongoing challenge to identify and manage caves for their full range of intersecting and cross-cutting uses and values, or as natural features that support past, present, and future cultural beliefs and practices.

To examine this challenges will support ways to ‘bridge the divide’ in heritage in this thesis I apply Verschuuren, Wild, McNeely, and Oviedo’s (2010) conceptual Framework for the Conservation of Sacred Natural Sites. Outlined in Chapter 3, this framework is considered to provide a potential mechanism to move beyond ‘the divide in heritage’. This framework provides the theoretical and methodological basis for management of natural places with intersecting cultural uses and values; is shown to effectively identify the broader cultural values of natural places; can identify issues found in management and conservation as ‘living’ heritage, ‘sacred’ heritage, and ‘plural’ uses and values; and can provide practical and sustainable measures that promote heritage management regimes based on the uses and values of local communities.

The Fieldwork Setting

The Sepon Gold & Copper Mine and Vilabouly District

The fieldwork setting for this thesis is the Sepon Gold & Copper Mine, Vilabouly District, located in the far northeast of Savannakhet Province, central-southern Lao PDR (see Figure 3). Savannakhet Province is located north of Saravan Province and south of Khammouan Province, bordering Quang Tri Province in Vietnam to the East, and Nakhon Phanom Provinces in Thailand to the West on the opposite bank of the Mekong River. As the preface alluded, like many regions of the Lao PDR, Vilabouly District is abundant in natural resources, and the natural landscape contains many places which are historically meaningful and culturally, spiritually, and economically valuable to current local populations. The

population of Vilabouly District is approximately 37,000 (Lao Statistical Yearbook, 2015) and is inhabited by two main ethno-linguistic groups - the Phou Thay who belong to the South-western branch of the Tai language family group, and the Brou who speak Mon-Khmer language, an Austroasiatic language family belonging to the Western kautic branch (Chamberlain, 2007). Introduced in more detail in Chapter 4, local historical records, oral history, and ethnographic and archaeological investigations illustrate Vilabouly District is a region of mainland Southeast Asia that has supported long-term human occupation and settlement, and which has undergone several periods of social, cultural and political change.

Vilabouly District is a rural and impoverished part of the Lao PDR. The introduction of mining and the cash economy from around 2003 have led to transformative social, economic, and ecological impacts. The Lao government brought the nation into the global market economy in the late 1980s through implementation of the New Economic Mechanism (NEM). This policy ‘opened up’ the nation through regional and international economical collaboration, accompanied by an ‘easing’ of national political (and economic) restrictions (Rigg, 2006; 2007a). Sub-regional integration of the Lao PDR led to what Stuart-Fox (1998) foresaw as “rapid development of the country’s natural resources, including agriculture, forestry, mining and hydro-electricity (p.225). The Lao economy has become “dominated by natural resources, with minerals, forestry, agriculture and hydropower comprising more than half the country’s total wealth. Its only two large-scale mines account for more than 90 per cent of total national mining production” (Kemp, Keenan, Dejevongsa & Schleger, 2012, p.5). Mining, hydropower, logging, and tourism industries have increased pressure on natural resources and associated livelihoods of rural regions of the Lao PDR, directly and indirectly impacting national heritage and biodiversity in the process (Long, 2002; Long & Sweet, 2006; Suntikul & Jachna, 2013).



Figure 3. Lao PDR, and Location of the Study Area (<https://mapcruzin.com/free-laos-maps.htm>)

Several impacts of regional and international integration have been identified in Vilabouly District. The introduction of new ideas, uses and values for the landscape are largely identified to challenge pre-existing socio-cultural, economic, and spiritual associations to natural places and landscapes (Chamberlain, 2007; Ovesen, 2003). In Vilabouly District, actual and potential impacts of the Sepon Mine are viewed to challenge local economies, political structures, cultural beliefs and practices (Chamberlain, 2007; Ovesen, 2003). Concepts of heritage, heritage legislation, and heritage management practices applied to support community needs for cultural and environmental management from mining-based impacts are also considered to generate impacts on local beliefs and practices, when applied in a mining context (Mayes & Chang, 2013). What remains to be understood locally at Sepon is whether international and national ideas and their supporting practices for heritage management are benefiting or challenging traditional *Phou Thay* and *Brou* beliefs and practices regarding the natural environment. More broadly, and at the centre of this thesis, is whether international (and national) heritage management practices enacted in Vilabouly District as a result of economic development processes apply a ‘divided’ heritage, and if so, are these effective in the identification, management, and protection of local beliefs and practices, and their associated natural places, as part of mining operations.

Localising Research within the Lao PDR & Southeast Asia

Examining the effectiveness of heritage management practices in a commercial mining context in Mainland Southeast Asia and the Lao PDR is considered an under-researched area. The scale of mining nationally within the Lao PDR, the relationship between heritage and national social and economic development policy (World Bank, 2010), and the known impacts that extractive industries have on local livelihoods and the environment, make this research

highly significant. Previous research undertaken at the Sepon Mine has highlighted that complex and contested interactions exist between international industries, the Lao state, and the local community that have the potential for a broad range of risks to local socio-natures and livelihoods (Chamberlain, 2007; High, 2010; Mayes & Chang, 2013; 2014; Ovesen, 2003). This research is also complimentary to findings from other investigations that have examined the relationships between mining and local culture within emerging and developed economies internationally (see Bainton, 2010; Coombe, & Baird, 2015; Martyn, Trigger, & Parmenter, 2014; Rumsey & Weiner, 2001). However, research on heritage management in the Lao PDR has not explored in depth the application of international archaeological and heritage management practices in a mining context; how this context provides the space for interaction between the international, national, and local heritage; and what outcomes result for local heritage within this context.

Within the Lao PDR studies have examined heritage from several important viewpoints that are considered in this thesis. These include the use of heritage in the cultural and geographical ‘construction’ or ‘creation’ of the Lao nation (Karlstrom, 2009; Kallen, 2004; Jerndal & Rigg, 1998; Ivarsson, 2007; Pholsena, 2010); local interactions with ‘World Heritage’ and the impacts on local Lao culture and society from applying global heritage values at World Heritage sites at Luang Prabang and Vat Phu Champasak (Suntikul 2011; 2013); the impacts of economic development, urban transformation, and the application of Lao heritage legislation to manage the historical built heritage in urban localities in Vientiane (Askew, Long & Logan, 2007; Long, 2002; Logan, Long & Hansen, 2002); the uses of archaeology and cultural heritage for the purpose of nationalism, legitimating political authority, the relationship between heritage and economic development (Goudineau, 2015; Stuart-Fox, 1993; Tappe, 2011; 2013); and the conflict and contradiction identified with applying ‘Western’ heritage management practices to manage ‘Lao’ built heritage (Karlstrom, 2009).

Taking a broader cultural, historical, and geographical viewpoint, the Southeast Asian region provides a suitable context to undertake this research. The region has a high cultural and natural diversity, and, it is undergoing rapid development resulting in wide-spread social, cultural, and physical change (Winter & Daly, 2012). Historically the region was home to the early dispersals of modern humans, the emergence of early foraging societies, the development of agricultural societies, and consolidation of large-scale State societies (Higham, 2002; 2004). The region retains a high level of ethnic and linguistic diversity, accompanied by a highly spiritual and religious syncretism, where local and polytheistic religious beliefs and practices remain 'living' and have 'sacred' connection to historical temples and structures, and the worship of natural places and landforms, nature spirits, and ancestors (Scott, 2009). The region has also undergone rapid social and economic development since the 1950s, while other nations like the Lao PDR are only recently emerging from regional isolation. This region makes for a highly diverse and pluralistic modern collective of nation states and ethnicities that maintain diverse concepts of heritage beliefs and practices for management of places, objects, and traditions (Byrne, 2014). Modern heritage management protection systems are now being applied across the region, and remain influenced by the colonial era of the 19th century (Tunprawat; 2009). The legacy of the colonial period has been the introduction of scientific archaeology, the development of modern heritage management practice and laws, and concepts of nationalism (Andersen; 1983; Chapman, 2013; Tunprawat; 2009). Today historical, international, and national concepts of heritage and heritage management practices are fused within policies, laws, and cultural practices. This reflects a historical and modern syncretic heritage embracing a discourse of tradition and modernity applied to interpret and manage heritage at national and regionally levels.

The Southeast Asian region and the Lao PDR therefore each provide an important context to consider the application of international 'best practice' approaches to heritage

management. This includes the dichotomous underpinnings of the international heritage discourse, their fusion into national discourses, and the outcomes of this in ‘real world’ contexts. This region has potential to examine what Byrne and Ween (2015) identify as the ‘constraining influences’ and the ‘resistance’ to applying a culture-nature dualism in heritage management practices within emerging nation-states. World Heritage, they argue, “intervenes in the lives of people and their landscapes” but “these spaces and peoples offer resistance” (Byrne & Ween, 2015, p.94) against passive acceptance of internationalised heritage discourses. Managing heritage in the context of Asian modernity is taken as a wrestle between the ‘constraining influence’ of World Heritage discourse and practices, and the location for ‘the focus of resistance and attack’ (Byrne & Ween, 2015, p.94) against the ‘universalising’ push of the World Heritage Industry. It is a location where applying ‘Western’ heritage concepts like ‘preservation’ find challenges in ideology and implementation (Karlstrom, 2005; 2009), and where the application of heritage as dichotomies or categories similarly encounters problems and challenges in their application (Munjeri, 2004). By examining the ‘push-pull’ factors between internationalized and nationalistic aims, objectives and uses for heritage in the Lao PDR, this thesis will add to current knowledge that examines how international and national heritage management discourses and practices interact, and the outcomes from their interaction and engagement in practice.

Organisation of the Thesis

The preface to this thesis was intended to provide a situational context. Chapter 1 has provided a background to the thesis, outlining the research questions this thesis will seek to answer, and introduces the location for research. Chapter 2 provides the literature review and thematic context to this thesis. It examines the concepts of a nature-culture dichotomy, tangible

and intangible heritage, and plural and living heritage. I situate these concepts within a longitudinal timeframe, to contextualise them within the development of heritage internationally and over time, and more recent engagement between heritage and economic development processes. Chapter 3 outlines the methods applied in this thesis. A multi-sited methodology was applied to examine the ‘divide’ in heritage across relational historical, cultural and geographical boundaries. Data is drawn from archaeological and ethnographic research, semi-structured interviews, participant observation, and archival research.

Chapter 4 outlines the background to the Savannakhet Province, Vilabouly District, and MMG-LXML Sepon Gold & Copper Mine. Regional and local environment and history are provided, followed by an introduction to the local socio-cultural, religious, and economic context. Chapter 5 is the beginning to the empirical chapters of this thesis. It introduces the context for Heritage Management at the Sepon Gold & Copper Mine, following a mostly chronological outline of the development of archaeology and heritage management practices activities that formed part of the Sepon Mining operation between 2001 and 2015. The relationship between the international regulatory environment and national heritage law and practice are outlined. A brief summary of the relationship between mining, archaeology, and heritage at the Sepon Mine concludes the chapter.

Chapter 6 provides an outline of the variety of uses and values found in three caves within the Sepon Mine. The chapter will illustrate in more detail how local communities interact with, and make culturally meaningful, the local natural landscape. Caves are identified to hold past, present, and future uses and values to local communities, and contain representations and material evidence of regional and nation historical continuity and changes. A conclusion briefly outlines how caves have become increasingly caught within new economic development processes. Chapter 7 will discuss the management of caves as heritage places more formally

within the Sepon Mine. It will provide a closer examination of the methods for heritage management in practice, illustrate the impacts and threats caves face from the process of mining, and discuss the ability of management practices to contend with impacts. Chapter 8 will discuss the main findings and novelty outlined in Chapters 4 to 7. The chapter will discuss the challenges and opportunities for managing ‘plural’, ‘living’, and ‘sacred’ heritage at the Sepon Mine, and to ‘bridge the divide’ in heritage within a mining context. Chapter 9 provides the concluding chapter and answers the research questions, summarises the main points in the thesis, and provides directions and consideration for future research.

2. The Divide in Heritage: Historical Background, Development, and Current Context

“Understandings of nature, whether we construct ‘it’ as a natural resource, a park, a reserve, a plantation, a forest product or wildlife, are always produced and historical”

(Peluso, 2012, p.84)

The preceding chapter introduced the problems and questions this thesis will address, and provides a general context for this research. It also introduced the field site, and the broader historical and political context the research is situated in. This chapter will now move to provide a review of the literature relevant to development of the ‘divide’ in heritage, its application in practice, and ‘real-world’ ramifications from applying it in practice. It will provide the platform for discussion in Chapter 9, at the end of the thesis, and be used to support the final arguments and conclusions drawn at the end of this thesis. This chapter will be delivered in main four sections. First, a brief summary of the historical development of the ‘divide’ is provided. Second, the post-WII construction of a ‘Universal’ Heritage and international heritage agencies are introduced and discussed. Third, the more recent trajectory for heritage as part of sustainable development initiatives and poverty reduction within Protected Area Management World Heritage programs as part of the movement to reconcile ‘the divide’ in practice are outlined. Fourth, managing heritage in commercial contexts and the relationship between heritage management and economic development is outlined to emphasise how international ‘best practice’ heritage management interacts within resource and extractive industries. A summary of the main points, opportunities and challenges identified will conclude the chapter.

The 'Divide' in Heritage: A (Brief) Historical Review

The literature that examines the development of modern heritage discourse and practices illustrates the relationship between European culture and a range of social, cultural, and political developments and shifts. As Peluso (2012) has stated “understanding how history is told or remains untold is an essential part of the politics of knowledge production, but also of human experience and mobilization for change” (p.80). Harvey (2001) also argues for a “content rich account of heritage as a process or a human condition rather than a single moment or personal condition” (p.320), warning against exploring a history of heritage which begins at an arbitrary date. To widen the ‘scope’ of understanding as to how heritage ‘as a process’ developed, and under what conditions, is considered essential to the study of modern manifestations of heritage (Harrison, 2013; Harvey 2001; Smith, 2006). Highlighting that historical factors continue to influence how heritage is used, valued, and made significant in the modern era can illustrate not only the ongoing application of a historically developed heritage, but also allow for critical understanding to the antecedents of the ‘divide’ in heritage, and its ongoing application today.

The Renaissance Period

The legacy for present-centred dichotomisation and categorisation of heritage are bound with a range of philosophical, social, cultural, religious and political factors inherent in the changes of European society and its engagement with the world since at least the 16th century (Byrne, 2014; Lowenthal, 2005; Pockock, 1997).³ The natural sciences emerged in

³ Several developments in history are understood to have supported the creation of a nature-culture dichotomy, and typological classification between tangible and intangible heritage. While there is also consideration that the precursors to the modern heritage discourse can be traced back further, principally, it has been recognised that development of science and empirical rationality in the 16th century that ushered in the separation of

Europe during the Renaissance Period, and involved a process of classifying phenomena into ontologically distinct categories (Byrne & Ween, 2015). This process “coalesced into a meta-categorization of cultural and natural phenomena that in the seventeenth century gained strength from the Cartesian dichotomy of mind and matter” (Byrne & Ween, 2015, pp.95-96). Fergusson (2009) states that it was Rene Descartes who made a “radical break from earlier philosophising” (p.233), by rejecting the authority of previous philosophical traditions. Husserl (in Fergusson, 2009) has also claimed Descartes to be the founder of modern phenomenology and considered Descartes as the founder of the human-nature dichotomy. Fergusson (2009) states:

Descartes’ determination to doubt everything and accept as certain only that to which he was led by the exercise of his own reason, freely reflecting on its own experience, is not simply the methodological principle but...the substantive content of the modern philosophised view of reality (p.233).

Descartes ‘subjective turn’, or the construction in thought of a dualism between subject and object, between mind and body, is considered by Fergusson (2009) to be foundational to modernity and modern philosophical thinking. The Cartesian worldview, born out of the Renaissance Period, led to establishment of the nature-culture dichotomy, and is therefore considered foundational to modern concept of nature-culture dualism in heritage discourse. As Lowenthal (2005) stated, the conception of nature as separate from culture, and their construction as separate ‘heritages’, were based on their ‘value’ as heritage, which informed their management, protection and promotion. Lowenthal (2005) went on to argue:

nature and culture in social thought and in human behaviour. Objective and reductionist construction of nature in European society are traced back to the Renaissance and later Enlightenment periods.

Before nature and antiquity could be treasured, they had first to be recognized as realms apart from the everyday present. That revolutionary perception had its origins in the Renaissance (p.82).

The idea of ‘preserving’ or ‘protecting’ nature, and early considerations to manage nature as a separate entity distinctly apart from human society, emerged during the Renaissance Era (Byrne, 2013). Increasing interest and value placed in material objects and antiquities began to grow during this era. Lowenthal & Binney (1981) also consider the Renaissance provided the “legacy” for an “esteem of classical antiquity” (p.18-19) and the development of a “well-informed curiosity about sites and buildings” (Hunter, 1981, p.25). This increased interest in historical material objects, and led to an increase in ‘value’ for individual and historical objects. The development of societies and laws to protect or preserve ‘antiquities’ also developed in response (Lowenthal & Binney, 1981; Prince, 1981, p.33-38). Pioneering codes for preservation of built heritage or ancient buildings and sites would emerge as a result during the 17th century, including the development of legislation for ‘heritage protection’ throughout Europe, notably in Italy and also Sweden.

The Enlightenment Period

The dualistic thinking developed by Descartes influenced the rationalism and empiricism that developed in the Enlightenment period during the 18th century, leading to further application of a dichotomous discourse and practice of heritage. Rundell (2009) explained that during the Enlightenment “modernity became identified with the development of objectified knowledge, that is, with the development of modern rationalist, scientific thinking” (p.15). It was in the Enlightenment, Rundell (2009) explains, that “epistemologically,

knowledge of the natural and social worlds is gleaned and explained through a methodology of empirical rationalism” (p.15). The natural world became viewed as neutral and contingent, shifting away from a nature where “human beings projected a cosmological, holistic meaning onto it”, where “nature, including internal nature or the soul, became simply constituted by properties and things, which themselves were viewed atomistically” (Rundell, 2009, p.15). According to Figlio (1996) a bifurcation or schism between the ‘material and mental’ influenced how humans came to experience the world as ‘external’ or ‘apart’ from them. Predicated on a scientific rationalism, this view is argued to have dominated the way people came to experience what was peripheral to them, including nature (Tambiah 1991). Rationalism was further entrenched by scientism in the Enlightenment era which arguably led towards a scientifically-technologically orientated society (Roy, 2005) where science became one of “the most authoritative of languages for describing nature” (Stepan, 2006, p.19).

Therefore, where the Renaissance Period is considered to have laid the foundation for dualism between *man* and *nature*, the substance to modern heritage theory and practice is said to have been considerably refined in 18th and 19th century Europe. Logan (2001) has argued that “the concept of ‘heritage’, or a concern for the past, advocating for largely material or tangible aspects representative of culture and history, emerged in the eighteenth and nineteenth centuries” (p.52). Smith (2006) also agreed, but was more firm in positioning the origins to modern day heritage management firmly within the 19th century, explaining:

The origins of the dominant heritage discourse are linked to the development of nineteenth-century nationalism and liberal modernity, and while competing discourses do occur, the dominant discourse is intrinsically embedded within a sense of the pastoral care of the material past (pp.16-17).

A ‘philosophy of care’ for the material residue of the past and the idea of ‘preservation’ of material or *tangible* objects developed within European society during the 19th century. This included a focus on ‘preservation’ of the physical remains of past civilisations and materials and built structures that represented past societies, or where considered representative of social or cultural ‘modification’ of the natural environment (Smith, 2006, p.23).

Enlightenment values, notably scientific rationality, are considered to have reinforced a nature-culture duality during this era. Arguments for ‘universal truths’ governing nature and society dominated the period, and would eventually upend the prevailing medieval religious views that governed Western European society (Barthel-Bouchier, 2013; Meyer, Frank, Hironaka, Schofer & Tuma, 1997; Smith, 2006). As Hunter (1981, p.25) explained “a particular sense of the past underlay the onset of systematic preservation” within 19th century Europe. On one hand, preservationist views that emerged during 19th century were a response to destruction of cultural properties and cultural materials of past Europe societies (Lowenthal & Binney, 1981). A ‘moral responsibility’ for heritage protection developed, and was promoted by governments and citizens who encouraged better protection of ‘historical’ buildings and structures. This movement coincided with the creation of institutions and new laws to promote the value of built structures, and also aimed to educate society on the value of the past as a rationale for preservation (Smith, 2006). The creation of National heritage laws and protocols, alike with the establishment of government and non-government agencies and civil heritage societies, albeit sporadically, were intended to manage and protect ‘heritage’ and to ‘preserve the past’ from modification or destruction (Cho, 2008, Sax, 1993; Smith, 2006).

Over time, Enlightenment and preservationist values morphed into a ‘philosophy of care’ for the past. This view is argued to have reinforced the nature-culture dualism that had evolved from a Cartesian worldview, and would lay the foundations for an ‘internationalised

heritage' to follow. Antiquarianism peaked during this time, reflected in the creation of museums, attentiveness to historiography, and public interest in historical relics. During the 19th century public museums and collections in Europe came to represent national achievement. Harvey (1981) contends that in the late 19th century tangible relics from past eras became valued for their 'authenticity' and were seen to enrich the present by symbolising both tradition and continuity, becoming "visible guarantors of historical identity" (p.27-28). Antiquities and other historical objects became socially enriched through popular notions of romanticism with the past and were also seen to provide tangible links to an historical identity during perceived times of change and uncertainty. Concepts of national identity and social responsibility related to heritage merged with the 'philosophy of care' for the past, with Governments in Europe increasingly promoting the place of the past in the present. As Smith (2006) explained, 19th century museums became important institutions that represented the "repository and manifestations of national identity and cultural achievement" (p.18). Archaeology also grew out of 19th century antiquarianism and became a strong ally for European nation, particularly during the colonial period, used by governments to link heritage with identity of the evolving nation-state (Smith, 2006). As a scientific discipline, the findings of archaeological research also legitimated concepts of identity and difference, and were applied by colonial nations to legitimate governance over their colonies and subjects, as will be discussed in the next section (Meskell & Pruecel, 2008, p.316).

Also synonymous with this period of European history and the Renaissance before it, is the concept of nature as 'wild' or 'wilderness' or 'pristine' and in need of protection from the 'ravages of man'. The conceptualisation of a 'wilderness' or a 'wild nature' as separate from man or society highlighted the ideological separation of nature and culture, and how it became embedded within natural history, scientism, and later discourses of nature conservation:

Renaissance humanism, the scientific revolution and the Enlightenment, all of which, not incidentally, comprised the cultural-intellectual environment within which the field of natural history emerged, natural history in turn being the generic field in which conservation biology has its antecedents (Byrne, 2013, p.158).

The view of nature and man as separate was encapsulated in various contrasts, between 'civilised' and 'wild', between 'order' and 'chaos', between 'known' and 'unknown'. Short (1991) explained the view of nature as 'wild' and to be feared emanated from within Europe, with these views transferred across the Atlantic during the British settlement of North America. In contrast, the Romantic Movement in Europe viewed 'wild landscapes' as 'pristine nature' beyond the ravages of human society. Alternate views of 'nature' and 'wilderness' could encompass spiritual and religious experiences and potentialities; as a nature created by God that emanated sacred and transformative qualities. They are places and locations of inspiration and renewal. The Lakes District in northern England and the Swiss Alps became 'wild' locations that would inspire literature and art and as culturally valued place and landscapes (Pilgrim & Pretty, 2010).

The Colonial Era

Heritage and associated scientific practices like archaeology were integral to the colonial period. Concepts of heritage and the methods applied to examine and interpret heritage legitimated colonial enterprises, supported and emerging nationalist views in Europe, and would later function as the foundation to creation of post-colonial nations. Harvey (2001) has argued that a 'heritage concept' was applied during the colonial period to legitimate colonial

enterprises (p.320-321). It is argued that theories of socio-cultural evolution, like Social Darwinism, were applied to reinforce a linear or chronological 'view' of time that was applied by colonial nations to support subjugation of 'less evolved' people or cultures for 'their own good'. As Smith (2006) explained, the European idea of progress, tied to the Darwinian Theory of Evolution "...both legitimized and reinforced European colonial and imperial expansion" (p.17). The project of colonialism is therefore considered responsible for facilitating "new dialogues about race...ethnic and cultural identity..." (Smith, 2006, p.17) in colonial nations.

The disciplines of anthropology and archaeology are each considered to be an 'outcome' of the colonial enterprise. Godsen (1999) argues:

Both archaeology and anthropology are the outcomes of colonialism, the academic reflex of physical attempts to understand and control. The early history of both disciplines is intimately bound up with colonial expansion and a mass of encounters between widely different cultures (p.16).

Byrne (1991) also explained how colonial narratives relied on the European archaeological research, arguing that the discipline was "exported as part of the baggage of colonialism" during the 19th century (p.269). Archaeology also supported nationalism in 19th century Europe, particularly during the colonial era, applied by governments to link heritage and identity to support the evolving nation-state (Byrne, 1991; Smith, 2006; Meskell & Pruecel, 2008). The development of each discipline also coincided with nation-building endeavour within Europe, and each discipline is linked to the idea of nationalism (Wolf, 1999). Archaeology in particular became supportive of European nations colonial expansion and development of their nation-state.

The scientific determination of 'nature' and the concept of nature as 'wilderness' were concepts applied through the colonial process as European nations expanded into new

international territories. Short (1991) argued the concept of ‘wilderness’ was applied as a commercial and political tool that served to sustain and legitimate the British Empire from the 17th century onwards. The history of scientific development in Europe and later colonial encounters with cultural groups of the non-Western world, notably within tropical regions, had lasting impacts on how nature would be perceived and governed. This included impact to local and regional biodiversity, the relationship between Indigenous and ethnic groups and nature, and between local groups and the State. Stepan (2006) argues that a type of ‘tropical determinism’ emerged during the 19th century through European explorers conceptualisation of the ‘tropics’ region. In the Amazonia region this resulted in “a view depicting the tropical world as one of natural biodiversity but of cultural and civilizational poverty” (p.19). Arnold (in Stepan, 2006, p.17) argued the tropics came to be perceived as ‘pure nature’, a view that was opposed to a one where nature was shared with culture and history. Byrne (2013), arguing that the application of European concepts of ‘nature’ and nature conservation were “integral to the project of colonialism” (p.160), highlighted how concepts of *nature* and *nature conservation* supported European colonisation and “consolidated its position...as part of the West’s imperial-colonial expansion following the Age of Discovery” (p.159).

Greenough and Tsing (2003) argued that colonial encounters with ‘nature’ initiated wide-scale destruction of forest habitat and fractured relations between local communities and the colonised regions. During the colonial era in Southeast Asia, colonialists viewed nature as devoid of ‘civilised’ society, and historical or cultural attachment to the environment. The view of nature as ‘depersonalised’ and people as ‘cultureless’ was perhaps most pronounced in the case of the colonisation of Australia, where the British colonial government viewed the country as *terra nullius*. The Indigenous inhabitants were considered ‘savages’, lacking civilised culture, and later considered them to be dying out as a ‘race’. Indigenous people were in most instances forcibly removed from their land, died from introduced disease, were massacred, and

became regulated within institutions and settlements run by the colony and various religious entities (Loos, 1982; Reynolds, 1978). But as Strang (1997) has shown the concept of *terra nullius* was a fabrication, with colonisers not taking into consideration Indigenous peoples pre-existing social, cultural, economic, political, and spiritual connection and historical interaction with the natural landscape. Similarly, and notwithstanding prevailing indigenous and ethnic historical and cultural association with the landscape, in Southeast Asia landscapes were said to be ‘remade’ during the 19th and early 20th centuries, with forests seen as capital and exploited for timber and other resources (Greenough & Tsing, 2003). This process resulted in removal or relocation of Indigenous people and communities. This process has continued into the modern era with the creation of natural resource development (Greenough & Tsing, 2003) and national natural protected areas by post-colonial governments (Verschuuren, 2010).

The concepts ‘preservation’ and practices of ‘heritage management’ that developed in Europe were also applied in colonial regions. This included the methods for study and preservation of ancient ruins, historical built structures, and relics. Jokhileto (1999) stated that from “mainly European foundations, the idea and motivations of heritage conservation have expanded world-wide” (p.16). During the 19th and early 20th centuries a practice of ‘preservation and presentation’ of ancient ruins as ‘archaeological monuments’ took place in colonised regions of Asia, Africa, and the Americas (Ndoro, 2001). Senguptra (2013) explains that in the Asian region colonialists applied “a philosophy of conservation and heritage management that had become dominant in Victorian England and large parts of Eastern Europe by the late 19th century” (p.26). This practice focused mostly on ancient ruins. Chapman (2013) explained that by the early 20th century ancient ruins and monuments in South and Southeast Asia were documented, classified and mapped following European definitions and technical standards. Chapman (2013) described this process as a “complex apparatus of scholarship and institutional support set upon the broader foundations of colonialism” (p.3). Falser and Juneja

(2013) termed this the ‘archaeologization’ of ruins (pp.4-5). This process was based on European values of preservation and conservation, and was considered to establish connection between race and identity and the cultural and technological advancement and superiority of European society (Smith, 2006).

The era of colonial expansion also coincided with ongoing development of policy and legislation for heritage management in Europe, the United States, and within colonised regions. Negri (2008) explains that heritage policy and legislation in many colonial nations was based on legal safeguards for the protection of heritage developed within Europe. Several international research institutes from England, the Netherlands and France established bases for national research within South and Southeast Asia. By establishing a physical presence regionally they promoted application of archaeological research and conservation projects, and applied legal concepts and legislative processes for heritage management (Negri, 2008; Smith, 2006). In colonial India for example, the British government legislated that buildings should be conserved “for their historical and architectural value” (Smith, 2006, p.21). Customary beliefs, practices and traditional management of built structures, objects, and the environment were often overlooked by colonialists in Southeast Asia and Africa, rather than being considered as practices that could be applied into current legislation or management practices (Chapman, 2013; Ndoro, 2001). A lasting legacy of the colonial era is that European concepts and practices for archaeology and heritage management are foundational to the development of heritage and archaeology regionally, and remain central to modern heritage management practices today.

In mainland Southeast Asia, Tunprawat (2009) has argued that the colonial era began “the establishment of modern heritage management protection systems” that were “influenced by...Western concepts of conservation by way of Modernization” (p.2). Chapman (2013)

argued that the research focus in Southeast Asia during the colonial-period was principally of ruins, which has profoundly impacted the way people interpret their own past. Concepts and practices of heritage deployed from Europe in colonial nations resulted in a reconceptualisation of ‘Indigenous’ concepts of heritage that emerged as part of a post-colonial identity (Falser & Junega, 2013). Localized methods for heritage management were built from European foundations, like the archaeology and conservation of built structures, and use of lineal and evolutionary theory and post-enlightenment values that promoted nationalism. In some colonies in Asia, Indigenous nationalists borrowed ‘Western-style rationality’, with some of this also attributed to influence from Christian missionaries, including rejection of superstition or religious beliefs about nature as counterproductive to social and cultural progress (Byrne, 2013, p.160). As Harvey (2001) has remarked, the ‘heritage concept’ supported the political control by governments emerging in post-colonial states, who applied similar concepts of national identity and nation-building strategies as those applied by colonialists before them (Anderson, 1983). Bohland and Hague (2009) considered that post-colonial nations underwent a movement towards “reinterpreting their pasts and articulating their identities” (p.109) as a result of the colonial era, and in response to emerging political control and broader social and economic engagement in the modern era (see also Anderson, 1999).

World Heritage in the Post-WII Era

The post-World War II (WWII) period is generally considered to be a “distinctive new chapter” (Logan, 2001, p.52) for ‘heritage’. The post-WWII period is recognised for creation of a World Heritage Industry and ‘Universal’ heritage philosophy, the internationalisation of a suite of ‘best practice’ methods for heritage management and conservation. Equally this era is criticised for contributing to the ongoing application of a ‘European’ heritage discourse and

practices into non-Western national and community contexts. In particular, this period formalised the dichotomy of *cultural-nature* and categorisation of *tangible-intangible* cultural heritage through development of a range of policies, protocols, and proclamations. This period saw development of what Smith (2006) termed an ‘Authorised Heritage Discourse’ (AHD), and the development of the role of ‘Authorising Institutions’ (UNESCO, IUCN, ICOMOS etc.) who were seen to control and manage what Logan (2001) termed a “cultural heritage bureaucracy at the international level” (p.52). This has a clear impact on the development and rationale of current heritage discourse and practice across the world, including in the Lao PDR.

The Creation of a ‘Universal’ Heritage

A formalised international process of heritage protection developed from the 1930s with the establishment of charters and protocols for heritage management and protection built on ‘universal’ standards and frameworks for heritage conservation (see Table 1) (Barthel-Bouchier, 2013; Smith, 2006; Tunprawat, 2009). New policies and charters were seen to maintain the ‘preservationist’ ethic and focus on material structures as heritage that developed from the 19th century. Promulgation of the 1931 *Athens Charter* and later the 1962 *Venice Charter* was “influential in shaping cultural heritage policy and legislation” (Baird, 2009, p.60), with both charters considered to “define and frame debates about conservation and heritage management practices” and “the nature and meaning of monuments” (Smith, 2006, p.21). The Athens Charter focused mainly on built monuments, including enhancing their aesthetic qualities, restoration, protection from deterioration, and techniques for their conservation that should be internationalised and the responsibility of nation states (ICOMOS, 2015). The Venice Charter made several advances the Athens Charter, including heritage management and conservation practices, emphasising the need for archaeological excavation

and analysis, and promoted the role of ‘experts’ in heritage management process (ICOMOS, 2006). Both charters advocate and advocated for conservation and restoration of monuments and works of art for their physical and aesthetic values.

Heritage management processes at that time coincided with post-war reconstruction period in Europe. This began with establishment of the United Nations (UN) in October 1945, and shortly after the United Nations Scientific and Education Organisation, or UNESCO. Alivizatou (2012) identified that UNESCO was tasked with the “legal measures and the implementation of programmes in the areas of education, science, culture and communication” (p.29). Martinsson-Wallin (2012) stated that the principal aims of UNESCO were to:

...contribute to peace and security by promoting international collaboration through education, science and culture in order to further universal respect for justice, the rule of law, and the human rights and fundamental freedoms proclaimed in the UN charter (p.7).

Several associated agencies were created to support the aims and objectives of the UN and UNESCO. For World Heritage, agencies were given a mandate to interpret and develop management strategies for heritage properties, provide training and programs to safeguard heritage sites, and provide technical or expert advice to UNESCO on matters relevant to the World Heritage Convention (Logan, 2001). The International Council on Museums (ICOM), established in 1946; the International Union for the Protection of Nature (IUPN) was established in 1948 (later becoming the International Union for the Conservation of Nature, or IUCN, in 1954); the International Centre for the study of the Preservation and Restoration of Cultural Property (ICCROM) was established in 1956; and the International Council on Monuments and Sites (ICOMOS) was established in 1964. Smith (2006) labelled these agencies ‘authorising institutions’, arguing they became ‘naturalised’ as the repository of

‘expert’ knowledge on ‘heritage’ and the practice and performance of heritage management world-wide.

Creation of UNESCO and other heritage agencies was followed by the creation and release of a suite of protocols, charters, declarations and programs for world and local heritage management (see Table 1). The most noteworthy was the 1972 UNESCO *Convention Concerning the Protection of the World Cultural and Natural Heritage*. The World Heritage Convention was considered a significant improvement in the way of heritage ‘is done’, now on an international scale. The World Heritage Convention introduced the concept of ‘universally’ significant heritage, emphasised a discourse of heritage as a ‘common value’, and the responsibility of all humans to protect heritage. Heritage was considered to be shared and should be preserved for all people to enjoy. UNESCO also advocating for the significance of local and nationally significant heritage. The protection and preservation of heritage was considered achievable largely through the education of people and through the identification and preservation of heritage sites that have ‘universal’ significance (UNESCO 1972). The World Heritage Convention was also the first ‘international instrument’ to incorporate defining heritage as either *cultural* or *natural* and in doing so reinforced and legitimated the nature-culture dichotomy (Gfeller, 2013, p.484). It also included the categorisation of World Heritage Sites as either *cultural*, *natural* or *mixed* heritage properties, and provided guidelines for member nations to preserve, protect or nominate World Heritage Sites.

Act, Protocol, Promulgation, or Initiative	Year	Origin
<i>Ancient Monuments Act</i> passed in 1882	1882	England
<i>National Trust for Places of Historic Interest or Natural Beauty</i>	1895	England
<i>American Antiquities Act</i>	1906	USA
<i>Athens Charter for the Restoration of Historic Monuments</i> (Athens Charter)	1931	Athens
<i>International Charter for the Conservation and Restoration of Monuments and Sites</i> (Venice Charter)	1964	Venice
<i>Convention for the Protection of Cultural Property in the Event of Armed Conflict</i>	1954	Europe
<i>Convention for the Means for Prohibiting and Preventing the Illicit Import, Export and Transfer of Ownership of Cultural Property</i>	1970	Europe
<i>Convention Concerning the Protection of the World Cultural and Natural Heritage</i>	1972	Europe
<i>Charter for the Conservation of Places of Cultural Significance</i> (ICOMOS Australia Charter Burra Charter)	1979	Australia
<i>The Mexico City Declaration of Cultural Policies</i>	1982	Mexico
<i>International Charter for the Protection and Management of Archaeological Sites</i>	1990	Europe
<i>Convention on Biological Diversity</i>	1992	Europe
<i>Proclamation of the Living Human Treasures</i>	1993	Europe
<i>Yamato Declaration on Integrated Approaches for Safeguarding Tangible and Intangible Cultural Heritage</i> (Nara Document on Authenticity)	1994	Japan
<i>Proclamation of the Masterpieces of Oral and Intangible Heritage of Humanity</i>	1998	Europe
<i>Declaration of Cultural Diversity</i>	2001	Europe
<i>Hoi An Protocols for Best Conservation Practice in Asia</i> (Hoi An Protocols)	2001	Vietnam
<i>Convention for the Safeguarding of the Intangible Cultural Heritage</i>	2003	Europe
<i>Convention on the Protection and Promotion of the Diversity of Cultural Expression</i>	2005	Europe

Table 1. Major International Conventions and Charters for Cultural and Natural Heritage Management.

Broadening the Scope and Definition of Heritage

Ahmad (2009, p.296) explained that “[d]uring the late 1970s and the 1980s the focus of international charters, recommendations, and resolutions was more towards the refinement of principles at national and regional levels”. The 1979 ICOMOS *Charter for the Conservation of Places of Cultural Significance*, otherwise known as the *Burra Charter*, was the first national heritage charter implemented in Australia. It was the first example of a heritage policy since the World Heritage Convention that was developed outside of Europe and that was suited to the heritage environment on a non- European context. The Burra Charter was adapted to the Australian heritage industry and values of heritage in Australia, and was the first example of a heritage policy being developed outside and that was suited to the heritage environment on a non- European context since the 1972 World Heritage Convention. The Burra Charter took into consideration and adopted elements of the World Heritage Convention, those promoted by Council of Europe in 1975, and a number of amendments and other charters that were introduced since 1972, including the Venice Charter (Ahmad, 2006).

The basic premise underscoring the Burra Charter was a focus “entirely on the fabric of a place or building” and argued that “significance is seen to be inherent in the fabric of a building” (Smith, 2006, p.23). The Burra Charter is considered to follow the ‘conservation ethic’ by focusing on the principles, processes, and practice of built-heritage conservation. However, preserving the value or heritage or a building’s fabric meant avoiding alteration from its original form. Importantly, the Burra Charter also introduced three new terms: place, cultural significance, and fabric, and in doing so widened the ‘scope of heritage’ to include cultural practice, values, and beliefs as ‘heritage values’ associated to ‘places’. The criteria for assigning significance were also expanded. Significance could now be defined on one or more of aesthetic, historic, scientific, or social values.

The Burra Charter was amended four times between 1981 and 2013 to reflect changing social, political and legal circumstances and concerns about heritage conservation practices within Australia. The Burra Charter drew continual attention to the concept of 'living culture' through recognising heritage value and significance in 'sites' and not simply 'monuments', emphasising the importance of 'place' and 'aesthetics'. The Burra Charter became a 'best practice' model for heritage management at national or in local cultural contexts outside of Europe. UNESCO (2009) promoted the Burra Charter as being "extremely important for the establishment of national conservation standards and which can serve as models for other countries of the region in the development of their own national standards" (p.10). UNESCO described the value of the Burra Charter being particularly important in "establishing guidelines for the preservation of a "sense of place" during the conservation process" (UNESCO, 2009, p.10). From the late 1970s and 1980s, the Burra Charter became influential as a foundational document for heritage policy, legislation and heritage management practices internationally, including in Canada, New Zealand, China, Indonesia and several other Southeast Asian Nations (Ahmad, 2006; UNESCO, 2009).

Critiques of a 'Universalised' Heritage: Emerging 'Cultural Relativist' Views of Heritage

Towards the end of the 20th century emerging 'cultural relativist' concepts from several international nations and drew into focus towards developing nationally-based definitions for heritage, heritage management practices, policies, and legislation. Logan (2001) cited this as a movement 'from the periphery', explaining that it challenged the cultural relevance of prevailing definitions, guidelines, and practices for heritage management, and criteria for evaluating heritage in non-Western countries. Schmitt (2008) explained that during the mid-1990s regions including Asia, Africa, and Latin-America protested to UNESCO arguing the

World Heritage List was “geographically unbalanced” (p.101) and lacking in representation of heritage from outside Europe. The emerging international focus also supported increased critical analysis of heritage and highlighted the complex and interdependent manifestations of heritage. These critics argued that a more comprehensive approach to understanding and managing heritage was required (Bouchenaki, 2003).

Effectively, this movement challenged the dominant discourse of World Heritage management. As Smith (2006) remarked, increasing non-Western conceptualisations of heritage values and practices entered the field questioning the material-cultural focus of prevailing UNESCO and ICOMOS heritage discourses.⁴ This included calls for greater recognition of *intangible* heritage and awareness of the interdependence between *tangible* and *intangible* heritage on the one hand (Bouchenaki, 2003; Condominas, 2004; Ito, 2003), and acknowledgement of the relationships between culture, society, and nature on the other (Baird, 2013; Byrne, 2013). Ultimately, this led to the revision of earlier conventions, including the World Heritage Convention, and the development of new culturally-relevant heritage and contextually-based charters and promulgations (Ahmad, 2006; Logan, 2001). The 1982 *Mexico City Declaration of Cultural Policies* and the 1989 *Recommendation on the Safeguarding of Traditional Culture and Folklore* were said to offer a ‘holistic’ approach to heritage that incorporated both *tangible* and *intangible* heritage values, and was considered the first legal instrument that recognised *intangible* cultural heritage (Lenzerini, 2011, p.104). The 1994 *Yamato Declaration on Integrated Approaches for Safeguarding Tangible and Intangible Cultural Heritage*, otherwise known as the *Nara Document on Authenticity*, promulgated in Japan was considered a powerful voice that recognised the relationship between tangible and intangible heritage, and between people, culture and nature. The 2001 *Hoi An Protocols for*

⁴ Table 1 provides a list of the major international conventions and charters for cultural and natural heritage management

Best Conservation Practice in Asia promoted preservation of the authenticity of heritage sites and associated belief and practices within the context of heritage conservation (UNESCO, 2009).

The significance of new charters and protocols outside of Europe was how these drew attention to diverse heritage management values and practices within non-Western nations, and melded them with long-standing internationalised European discourses and practices. Vecco (2010) viewed this process as a movement from objective criteria to subjective criteria in heritage policy, and in doing so, it forged a significant break in how heritage had been made since the 19th and mid-20th centuries. Regional protocols were designed on local cultural traditions, beliefs, incorporating living culture and its sacred association to material cultural and nature. The *Nara Document* also emphasises the place of the community within heritage management and heritage conservation practices:

Inhabitants and users of historic districts are key actors in conservation efforts. Their role should be recognized and welcomed in the planning, the implementation and the review phases of that process. Public awareness, information, consultation and participation help the inhabitants understand, share and care for both the heritage values of the historic district, and the necessary conservation measures including the restrictions they might impose on their daily life. Owners and users should be encouraged to use traditional knowledge and ingenuity to provide continuous care of historic buildings and neighborhoods. Voluntary and proactive participation of inhabitants and associations in cooperation of the government should be promoted and supported (ICOMOS, 2003, p.1).

Within Asia, Logan (2001) explained that “cultural values lead to a different heritage conservation approach – one in which greater importance is given to symbolic values, intangible heritage and traditional artisan skills” (p.55). Logan’s (2001) view also reflected the underlying philosophical or religious worldview in Asia, in which many countries reflect impermanence and material decay (Karlstrom, 2005; Tunprawat, 2009), and where heritage values include skills and knowledge, not just the value of physical ‘fabric’ of material culture alone (Logan, 2001, p.55).

Cultural Landscapes, Tangible-Intangible Heritage, and Nature-Culture Links

The emerging acceptance of aesthetics, relationships between culture and nature and tangible and intangible heritage became increasingly recognised in new heritage charters during the 1990s. Within UNESCO, the addition of a category of *cultural landscapes* to the World Heritage List in 1992 created an “additional category of property as part of its strategy to broaden the scope of World Heritage listings” (Aplin, 2007, p.427). Blake (1993) identified the importance of the cultural landscapes concept in international heritage policy:

Although still a physical element of the cultural heritage, cultural landscapes bring us closer to the intangible elements since their study often relates to ethnographic information about the way of life of people as well as the close links existing between certain topographical and landscape features and cultural identity (p.74).

Adopting the cultural landscape approach was considered to provide a ‘protective systems’ for heritage, based on pre-existing social, cultural, spiritual, and economic associations to land. This approach was considered to offer support for sustainable development at local and

regional levels, particularly where environments were considered to be vulnerable to impacts from social, economic and environmental change (Rossler, 2006).

The introduction of the cultural landscape category by UNESCO was followed by several international protocols, programs, and conferences that progressively focus on nature-culture and tangible-intangible linkages. From the mid-1990s several promulgations helped to drive a new agenda that would redefine how heritage was considered significant and developed management and conservation practices that included local community input. Emic accounts of heritage included recognition of *intangible* cultural and *ecological* heritage as unique and integral parts of cultural diversity (Moghadam & Bagheritari 2003). This included a re-emergence of public archaeology and community-based heritage management practices which challenged the “imposition of authorised accounts and understandings of heritage and archaeology onto Indigenous people” (Smith & Waterton, 2009, p.14). Marshall (2002) describes this as the most distinguishing characteristic of community archaeology - “relinquishing of at least partial control of a project to the local community” (p.211). Community inclusivity in heritage and archaeology promoted ‘bottom-up’ collaborative methodologies where communities and archaeologists or heritage professionals would engage in all aspects of the archaeological project, from research design, fieldwork, data collection and analysis, storage of artefacts and dissemination and public presentation of findings (Marshall, 2002, p.211).

Perhaps the most significant paradigm shift from UNESCO was the adoption of the 2003 UNESCO *Convention for the Safeguarding of the Intangible Cultural Heritage*. Blake (1993, p.74) explained that the 2003 Intangible Heritage Convention counter-balanced longstanding definitions of heritage as ‘material, ‘static’ or of ‘the past’, and included the need

to recognise and protected intangible cultural heritage in international law. The 2003 Intangible Heritage Convention defined *intangible cultural heritage* as:

...the practices, representations, expressions, knowledge, skills – as well as the instruments, objects, artefacts and cultural spaces associated there with – that communities, groups and, in some cases, individuals recognize as part of their cultural heritage. This intangible cultural heritage, transmitted from generation to generation, is constantly recreated by communities and groups in response to their environment, their interaction with nature and their history, and provides them with a sense of identity and continuity, thus promoting respect for cultural diversity and human creativity (UNESCO, 2003, p.2).

The Convention provided formal recognition of *intangible* heritage and provided it with international legal and institutional protection. The adoption of the 2003 Intangible Cultural Heritage Convention was described as “a significant intervention into international debate about the nature and value of cultural heritage” (Smith & Akagawa, 2009, p.1) and provided a “conceptual shift over the idea of heritage” (Smith & Akagawa, 2009, p.2). It has also been considered to represent “an important step forward in the context of international action for the safeguarding of cultural heritage” (Lenzerine, 2011, p.119).

The 2003 Intangible Cultural Heritage Convention was significant because it promoted international debate about the “nature and value of intangible heritage, but also the meaning and character of heritage more generally” (Smith & Akagawa, 2009, prologue). However, Smith & Akagawa (2009) argued that intangible heritage had remained as an unexplored concept for many Western countries several years after its promulgation, claiming that some Western countries felt apprehension and discomfort with the convention. This was represented by several ‘Western’ countries abstaining from voting for the Convention or had not ratified

the Conventions by 2008 (Smith & Akagawa, 2009). Nonetheless, European nations were more often signatories to the Intangible Heritage Convention, with the next highest representations from East Asia (Rudolff, 2010, p.105). Unfortunately, while the 2003 Intangible Cultural Heritage Convention had been adopted by several non-Western nations, this did not lead to improvements in management of intangible heritage within national and international programs across Asia, Africa, and South America (Ahmad, 2006, p.297).

Nature in World Heritage

The concept of ‘nature’ and ‘natural heritage’, and the practices that seek to promote and protect nature, have been caught up in historical developments that are manifest today. The result is that nature remaining largely separate from culture in heritage management discourse and practice. As outlined previously in this chapter, range of problems have resultantly developed from application of the nature-culture dichotomy within World Heritage. Arguably, current attempts to ‘bridge the divide’ between nature and culture are reflected in the need to overcome the dualistic categorisation developed in the Renaissance, Enlightenment, and later colonial era (Byrne, 2013; Latour, 1991). This issue is implicit also when cultural heritage management intersects with conservation of natural heritage, and where heritage increasingly became situated within concepts of sustainability and processes of social and economic development (Winter, 2008). Natural heritage, like cultural heritage, is still considered to be ‘at risk’ and in need of ‘safeguarding’ from change wrought by conflict, social and economic development, and natural disasters. Today there remains an evident struggle over ownership of forests and forest resources between communities, companies and the State, and an inability to reconcile the relationship between society, culture and nature in definition and management practices. Present-centred challenges to reconcile the ‘divide in heritage’ and make heritage

sustainable is well contextualised by Harmon (1994) who declares that “the management of all protected areas – whether classified as primarily “cultural” or “natural” – is necessarily the management of people” (p.59).

Natural Heritage, Sustainability, and Collaborative Management

The category of ‘nature’ was the second major pillar of the World Heritage Convention in 1972. As explained earlier in this chapter, the IUCN was created as the advisory body to UNESCO for environmental World Heritage matters, and remains responsible for conservation-based initiatives to manage World Heritage listed properties and protected areas since the 1960s. The importance of protecting significant environments globally was recognised at the first World National Parks Congress was held during 1962.⁵ Synott (2009) explained that concepts of natural environment conservation become “an increasingly important goal” (p.117) for the UN, actualised in the promulgation of the 1972 World Heritage Convention. During the 1980s the IUCN identified ‘nature conservation’ as a distinct shift from ‘nature protection’, and also made a conceptual link between nature conservation and peace, security, and the prosperity of ‘mankind’. The IUCN’s approach was promoted separately to the goals and values of World Heritage, but was at the same time fundamentally aligned with their overall goals (Christoffersen, 1997).

The adoption of sustainable development principles and community inclusivity in nature conservation from the 1970s and then from the 1990s coincided with global transitions in post-industrial economies. The intention was not only to bridge culture-nature dualism to

⁵ This does take into consideration the establishment of Yellowstone National Park in 1872 in North America as the world’s first national park (Sax, 1993, p.47; Smith, 2006, p.21) and establishment of the National Trust for Places of Historic Interest or Natural Beauty in England in 1895 (Smith, 2006, p.21).

counter the European and colonial foundation of heritage, but also to redress the poverty experienced by many post-colonial nations and to promote inclusive heritage-based socio-economic development. The IUCN (1994) promoted that “the use of biological resources is of paramount importance for developing countries in achieving development” (p.1). Ongoing dialogue at the international level increased emphasis on the relationship between biodiversity and heritage conservation, and community development and poverty reduction goals. Winter (2008) argued that social and economic transition produced new concepts of ‘human capital’ from within the culture sector, with humans increasingly considered “as a resource for economic development and wealth generation within programs of sustainable development” (Winter, 2008, p.2). Strategies for sustainable management that were built on co-management and natural-cultural heritage linkages in management have mostly applied tourism, with mixed results.

Harmon (1994) explained that in the early 1980s a “shift from the approach that parks should be protected *from* people, to the approach that they should be protected *for* people” took place (p.59). This shift highlighted the concept of sustainability and supported the reinvigoration of a relationship between people and nature. The IUCN released its *World Conservation Strategy* in 1980 in collaboration with UNESCO, the United Nations Environment Program (UNEP), the Food and Agriculture Organisation of the UN (FAO), and INGO the World Wildlife Fund (WWF). The central theme of the Strategy was ‘sustainable development’, through maintaining, preserving, and sustaining ecosystems, species, and genetic diversity. The Strategy emphasised that “conservation and sustainable development are not enemies, but are inseparably one”, highlighting that appropriate management can sustain the environment while assisting to alleviate poverty (IUCN, 1993, p.4).

By the late 1980s the term ‘sustainable development’ became synonymous in international conservation circles with further collaborative programs being implemented by UNESCO, the UNEP, and the WWF. During the 1990s UNESCO and the IUCN continued to draw on the concept of sustainability through as part of a new agenda for the environment. For World Heritage programs, promoting sustainable development of the environment and natural heritage conservation would increasingly incorporate local land-holders and communities. Over time, concepts of local community development, sustainability, and poverty reduction fell within the narrative of sustainable development. As Harmon (1994) affirmed, a focus on the “role of protected areas in sustaining society” (p.59) would govern the direction of heritage management and conservation programs for protected areas.

Throughout the 1990s international heritage agencies and INGOs also began to implement the practice of ‘Collaborative Management’ (CM). CM was defined as “a situation in which some or all of the relevant stakeholders in a protected area are involved in a substantial way in management activities” (Borrini-Feyerabend, 1996, p.12) and was promoted by the IUCN and several INGOs as a new policy for protected area management. This approach also applied the concept of sustainability and relied on the relationship between human society and nature to support management initiatives within World Heritage Areas and Protected Areas. Gill (1996) identified there were benefits to the underlying rationale for new community-based management programs. In particular, CM was applied to support “local people to be involved in preserving their own areas and resources” (Gill, 1996, n.p) through a process that could potentially preserve traditions whilst preserving nature. Gill (1996) identified several successful projects sponsored by the World Wildlife Fund for Nature (WWF), illustrating that community participation and traditional management practices could be applied successfully to the conservation of wetlands across Brazil, Kenya, North America, India, and Australia.

Findings from research supported the relationship between human society and nature conservation during the 1990s. A global review of the human use of World Heritage Natural Sites was undertaken in 1996 by Thorsell and Sigarty (1996) identified that 47 of 126 Natural World Heritage sites had resident human populations with “substantial differences in human uses of Natural World Heritage sites between OECD and non-OECD countries” (p.6). The authors recognised the need for increased attention paid to ‘human factor’ involved in conservation, identifying that greater acceptance of the ‘human factor’ is required within Natural World Heritage Site management (Thorsell & Sigarty, 1996). Yarrow’s (1996) review into Aboriginal involvement in management of the Wet Tropics World Heritage Area (WTMA) in Australia argued that Aboriginal cultural values and management practices should be incorporated to amend the original ‘natural heritage’ listing. Yarrow (1996) recommended that the World Heritage listings should be modified to make a ‘Mixed’ World Heritage Site, these finding highlighted the changing paradigm within World Heritage towards the contribution of indigenous values in natural places, and their role as stakeholders within the World Heritage processes. Findings from reviews would be instrumental in providing support for the creation and subsequent adoption of World Heritage Site categories including *cultural landscapes* and ‘Mixed’ World Heritage sites during the 1990s.

Conventions Recognising Sustainability in World Heritage and Protected Area Management

Several revisions of World Heritage protocols and process took place from the 1970s to reconcile the “Western bias in the World Heritage Convention” (Byrne and Ween, 2015, p.98). The 1971 *Man and Biosphere Model* was described by Byrne and Ween (2015) as a “significant change, seeking as it did to secure the co-existence of protected nature and the people who live in it” (p.98). The *Man and Biosphere Model* was considered to be a

‘postcolonial’ act, and aimed to move from then current interpretation of nature as “a place where human and non-human species can be bordered and moved according to scientifically derived understandings of the needs of particular places and species” (Byrne & Ween, 2015, p.98). The Model has been credited with conceptualising nature “in terms of the idea of ‘biodiversity’” (Pannell, 2013, p.55), and was cited as delivering several successful outcomes of collaborative and co-management initiative between indigenous people and the State.

Several other promulgations and conventions developed by the UN, the IUCN, ICCROM, INGOs and national governments followed on from the *Man and Biosphere Model*. The UN *World Commission on Environment and Development* was formed in the late 1980’s to sponsor several major international conferences on the environment (Synott, 2009, p117). Underscoring the new paradigm for natural heritage and the relationship between man, nature, and sustainability, the IUCN released a *World Conservation Strategy* in 1980, in collaboration with UNESCO, the United Nations Environment Program (UNEP), the Food and Agriculture Organisation of the UN (FAO) and INGO the World Wildlife Fund (WWF). The central theme of the *World Conservation Strategy* was the promotion of ‘sustainable development’ through maintaining, preserving and sustaining ecosystems, species and genetic diversity. It emphasised the ‘human component’ in this relationship, and the interplay between the conservation and poverty alleviation, by stating that “conservation and sustainable development are not enemies, but are inseparably one” (IUCN, 1993, p.4).

The 1992 Rio *Earth Summit* held in Rio di Janeiro, Brazil was considered the impetus for significant shifts in thinking towards natural heritage conservation by the international heritage agencies. A direct outcome of the Rio Summit was development of the *Convention on Biological Diversity*. Formally established in 1993, the objective of the Convention was encouraging activities towards creation of a sustainable ‘future for all’. The Convention

promoted an 'Ecosystems Approach' framework with three main goals: the conservation of biodiversity; the sustainable use of biodiversity; and the fair and equitable sharing of the benefits arising from the use of genetic resources (IUCN, 1994). A *Commission on Sustainable Development* was also established in 1993 to oversee the implementation of agreements reached at the Rio Earth Summit. The discourse of the UN remained focused on promoting heritage as "an instrument for the sustainable development of all societies" (Landorf, 2009, p.494).

During the late 1990s movements toward the formal recognition of the interrelationship between nature and culture in World Heritage listings crystallized in the form of international congress and conference meetings. Outlined earlier in the chapter, the integration of natural and cultural heritage categories was viewed by UNESCO as a "holistic approach to heritage identification and management"... that could..."encourage new nominations from under-represented regions and cultures of places in which natural and cultural values are inextricably linked" (UNESCO, 2007, p.42). The development and refinement of new principles for natural heritage followed in suite with refinement of principles for cultural heritage, as explained by Ahmad (2009, p.296). This process was driven by international nations and formed part of a process for 'democratization' of heritage management internationally (Byrne & Ween, 2015; Logan, 2001). Promoting nature-culture linkages in heritage management grew to include *intangible* and religious belief connected to nature. The IUCN's World Commission for Protected Areas (WCPA) *Cultural and Spiritual Values of Protected Areas* program was developed and supported acknowledgment of "the role religious beliefs and practices play in protecting "natural" landscapes" (Byrne & Ween, 2015, p.99). The *Man and Biosphere Program* and development of the concept of *Sacred Natural Sites* and *Living Heritage* the turn of the 21st century were considered critical to the reunification of culture-nature and tangible-

intangible links in the international heritage discourse (Byrne & Ween, 2015)., and will be discussed in more detail in the next section.

Recognising the 'Sacred' and 'Living' in World Heritage

Environmental protection and biodiversity conservation continued to incorporate elements of cultural heritage into the 21st century. Several partnership programs that incorporated linkages between *culture* and *nature* were promoted with the purpose to reconcile cultural heritage management with nature conservation. Biodiversity conservation, it was considered, would be improved by incorporating Indigenous people and local communities as part of natural and cultural heritage conservation and management. Introduced above, the IUCN began a *Sacred Natural Sites* program supported by a *Sacred Natural Sites: Guidelines for Protected Area Managers*, which in early 21st century guided the focus of sustainability measures that incorporated nature-culture links in management programs (Byrne, 2013; Rossler, 2006, p.202). The rationale for adopting the *sacred natural sites* initiative to support sustainability and biodiversity conservation was contextualised by Wild and McLeod (2008):

Most of these sites have survived environmental degradation because they are deeply embedded in local cultural values and belief systems. They often provide sanctuary to rare or endangered species. For a number of species, their survival is heavily dependent on sacred natural sites. These important places can, therefore, play a significant role in biodiversity conservation by preserving gene pools needed to restore degraded environments (p.5).

The rationale of promoting or protecting sacred natural sites was based on the long-standing sociocultural relationships people shared with nature. The rationale for adopting the

sacred natural sites program was to support sustainability and biodiversity conservation was contextualised by Wild & McLeod (2008):

...in recent years there has been increasing recognition that the diversity of human cultures, with its wealth of knowledge, practices, beliefs, worldviews, values and forms of social organization, is a fundamental component of sustainability (p.5).

The *sacred natural sites* model worked on the rationale that societies have already developed practices for managing the natural environment based on a range of cultural and religious methods. The model also considered that long-term spiritual values attributed to natural places had resulted in many natural places being undisturbed by human activity, and therefore ‘sacred natural’ places would “remain in a natural or near-natural condition” (Wild & McLeod, 2008, p.5). New concepts like ‘sacred ecology’ and ‘spiritual ecology’ also drew attention to the relationship between culture, spirituality, and nature conservation through the lens of traditional ecological knowledge (TEC), customary laws and practices, and the potential of integration between traditional and scientific knowledge (Berkes, 1999; Sponsel & Natadecha-Sponsel, 2015). Application of several programs and refinement of principles governing the program supported successful outcomes for indigenous people and community groups on one hand, and biodiversity conservation on the other (Verschuuren, Wild, McNeely & Oviedo, 2010).

In the early 2000s the concept of *living heritage* was developed by ICCROM and continued to apply cultural and natural values, and ethnic or religious cultural beliefs, practices, and spiritual values in site management. The *living heritage* management approach promoted sustainable development and the empowerment of local communities through heritage conservation. ICCROM recognised the *living heritage* program as “people centred approaches

to conservation” (ICCROM, 2014, p.15) based on a rationale of “safeguarding of heritage within the connection with the present community (continuity), by the present community and for the sake of the present community” (Poulis, 2014, p.23). Poulis (2014) explained that “the concept of living heritage is inextricably linked to the concept of continuity” (p.21). Cultural traditions, beliefs, customs and values (both tangible and intangible) ‘in place’ are used to protect and maintain material or ecological heritage considered significant the community. Change, and the promotion and acceptance of change, is central to the *living heritage* concept, and change is “embraced as part of continuity” according to Poulis (2014, p.21). ICCROM ran a number of *Living Heritage Sites* programs in the early 2000s, with a pilot program in Thailand, partnering with SEAMEO-SPAFA, the Thai Fine arts Departments, and the community in the district of Phrae. The program involved workshops, training, and conservation strategies in *living heritage* management (ICCROM, 2006, p.18; Poulis, 2014, p.23).

ICCROM also developed a *living religious heritage* conservation program. This program aimed to support linkages between tangible and intangible heritage in the conservation and management of religious objects and structures as part of promoting people-centred approaches to conservation (ICCROM, 2013). This concept was established at the 2003 ICCROM forum on *Living Religious Heritage: Conservation of the Sacred* in Rome. ICCROM (2004; 2005) applied a religious perspective to ‘conserve the sacred’ and religion and religious practice from what they viewed were increasing challenges from globalisation and modernity. The program also aimed to facilitate reconciliation of global faiths and also agreements on conservation requirements for living religious heritage places. As with living heritage, living religious heritage applied the concept of continuity as a primary goal of conservation. Continuity drew on the processes of renewal and revival of cultural meaning, religious symbolism and significance in religious places or properties. The concept also identified the

importance of identifying *intangible* heritage values within material heritage, and that the religious community must have a role in managing religious heritage sites, places or objects in coordination with heritage and other conservation professionals (Stovel, Stanley-Price & Killick, 2005).

The IUCN drew further on existing nature-culture linkages and customary laws and practices to promote and support ‘better livelihood strategies’ for communities reliant of forest-based livelihoods. The global *Livelihoods and Landscapes* (LLS) initiative was implemented between 2007 and 2011 across Africa, Asia and Latin America to “meet human needs and aspirations fairly, while conserving biological diversity and fulfilling the ecosystem functions necessary for all life on earth” (IUCN, 2012, p.8). The IUCN (2012) contextualized the goals and expected outcomes of the LLS initiative:

The ultimate goal of this learning strategy was to have policies in place that recognize – and make provisions for – local people’s forest use, while also ensuring forest conservation and sustainable use to meet national development objectives. At the same time, LLS was designed to strengthen the resilience of local livelihoods and forest landscapes in many different parts of the world, to bring lasting change to people’s lives and safeguard the resources on which they depend (p.2).

Through the promotion of sustainable local economic development initiatives, the LLS aimed to reduce both poverty in local communities and the destruction of forests. Program initiatives built on and promoted local livelihoods and non-timber forest products (NTFPs) use by providing local communities with access to broader markets, by building local capacity to develop economic industry through local-level governance and sustainable uses of forest resources for economic purposes by communities.

Heritage within the Context of Globalisation and Socio-Economic Development

Globalisation, Tourism, and Transnational Heritage

Globalisation as a process is not new for heritage, with the effects of globalisation on heritage pronounced in several ways. For heritage, processes of globalisation began in the colonial era, and have since continued to embed ‘Eurocentric’ definitions of heritage and heritage management practices in non-Western contexts. Outlined earlier in this chapter, this process has been ongoing for centuries, initially part of the process of colonialism, and later since the post-WWII period. During the mid-20th century processes of globalisation enabled the spread of transnational ideas and values to non-Western nations, including discourses and practices of ‘heritage’, via the UN and allied heritage agencies including ICOMOS, ICCROM, and the IUCN. Synot (2009) has argued that “the role of the UN is central to the process of globalisation” and the agency is “increasingly looked to by people around the world for leadership in global governance” (p.111). Logan (2001, p.51) has also declared that “many commentators see these organizations as key agencies of cultural and economic globalization”. Today, heritage discourse in emerging economies and post-colonial states remain dominated by internationalised and largely ‘Westernised’ discourse and practice of heritage (Smith, 2006). ‘World Heritage’ is constructed, produced, and renewed by UNESCO on an international scale, making UNESCO a transnational organization and a ‘globalising’ institution that promotes a specific and ethnocentric discourse of ‘heritage’ (Baird, 2015; Brumann, 2012; Logan, 2011; Synott, 2009; Turtien, 2000).

Natural resource and extractive industries, including mining, are also considered to be transnational and globalized entities that are central to the spread of ‘internationalised’ ideas and practices (Bridge, 2008; Gilberthorpe & Hilson, 2014; Willems, 2014). These industries are considered to be dominated by “processes of globalization” (Gilberthorpe & Hilson, 2014,

p.2), and are key agent in shaping and influencing “the social, political and economic fabric of many societies” (Gilberthorpe & Hilson, 2014, p.2). Godoy (1985) argued that on mining sites “new forms of cultural, political, and legal forms emerge, cross-cutting tribal and ethnic group boundaries” (p.207). As transnational organisations these companies have the power to supersede knowledge systems, customary law and land rights, environmental values, and general day-to-day livelihoods (Barney, 2009; Tsing, 2003). Several anthropologists maintain that the transnational and globalised nature of resource developments and extractive industries enable them to alter the physical structure, function and meaning of the environment and local communities and indigenous groups (Ballard & Banks, 2003).

‘Global’ discourses of heritage have also increasingly become entwined with the narrative of sustainability through socio-economic development through tourism. Tourism is not a new phenomenon by any measure. Outlined earlier in this chapter, the Renaissance Period was arguably witness to the ‘birth’ of tourism, albeit in a different form and function than in the modern era. Hunter (1981) explains that the Renaissance period produced the origins to tourism, or what he described as a “well-informed curiosity about sites and buildings” (p.25) Smith and Richards (2013) show that tourism evolved with greater interest through the 17th and 18th centuries, peaking in popularity in the 19th century. Since the post WWII period expansion of rail services and notably international aviation has facilitated access to international destinations (Barthel-Bouchier, 2013). Today tourism continues to be one of the world’s fastest growing economic sectors, with cultural tourism, utilising tangible and intangible heritage, accounting for up to 40% of global tourism revenues in 2012 (UNESCO, 2012).

From the late 1990s heritage tourism became part of broader economic development and poverty reduction goals, notably-pro-poor tourism. Programs to reduce poverty were

promoted by the UN, World Bank, Asian Development Bank, and INGOS. For the Developing World, tourism has been applied as a sustainable economic development as strategy aligned to targets of the UN Millennium Development Goals. Sustainable tourism was linked with economic development to balance the impacts from economic development activities on natural and cultural heritage (Barthel-Bouchier, 2013, p.162). More recent aims of the United National World Tourism Organisation indicate that there is an ongoing relationship between tourism to promote sustainability and poverty reduction. Mainstreaming tourism globally has been promoted to improve tourism competitiveness, promote sustainable tourism development, and advance tourism for sustainable development and poverty reduction (UNWTO, 2015). The discourse on sustainability through tourism has also shifted the onus of responsibility to the community so in an attempt to mitigate the risks associated with globalisation. This situation is identified in the revised version of the International Cultural Tourism Charter (1999):

At a time of increasing globalisation, the protection, conservation, interpretation and presentation of the heritage and cultural diversity of any particular place or region is an important challenge for people everywhere. However, management of that heritage, within a framework of internationally recognised and appropriately applied standards, is usually the responsibility of the particular community or custodian group (ICOMOS, 1999, p.1).

In the Lao PDR, cultural and eco-tourism were earmarked to have an important contribution to national “social and economic development” (Yamauchi & Lee, 1999, p.1). From the perspective of tourism, between 1995 and 2012 annual tourist numbers increased from 346,460 people to 3,330,072. By 2012, over half of all tourists visiting the Lao PDR were visiting ‘natural’ sites, and included ‘eco-tourism’ ventures with the remainder undertaking ‘cultural tourism’ ventures (Lao Statistics Bureau, 2012). Heritage also became integrated in

national socio-economic development policy, notably through applying pro-development, sustainability and poverty alleviation discourses, adopted from institutions including the UNESCO, the ADB, the IMF and UNDP, within the areas of eco-tourism and at World Heritage sites (Harrison & Schipani 2007; 2009; Logan, Long & Hansen, 2002; Lyttleton & Allcock, 2002; Rogers, 2009; Suntikul, 2008; 2011; Suntikul, Bauer & Song, 2011).

Relationships between Heritage Protection, Economic Development, and Extractive Industries

The relationship between civil development and heritage can be seen as complementary, as this relationship is largely built from the creation and later application of protective measures for heritage to mitigate impacts from civil development. Discussed earlier in this chapter, the development of laws and practices to manage impacts on built heritage developed from a ‘philosophy of care’ to protect heritage from the threat of damage or destruction (Lowenthal, 1985; Smith, 2004; 2006). National and State-based protective measures for heritage that began in Europe during the 16th century were founded on this rationale. However, it was not until during the 19th century in Europe and later the United States, that distinct laws were created with the interest of protecting and preserving buildings, monuments, and nature from damage due to urban development and industrialization. In the post-WWII era protective measures developed rapidly in the United States and Australia with modern heritage protection frameworks like Cultural Resource Management (CRM) and Archaeological Heritage Management (AHM). From the 1960s CRM and AHM became established at the state and national/federal level to uphold legislation and enforce mitigation of heritage from damage and destruction. CRM became the national “system for site and resource protection” in the United States (Jameson, 2008, p.42), defined as “the process and

procedures, often underpinned by public policy and legislation, used to protect, preserve and/or conserve cultural heritage items, sites, places and monuments” (Smith, 2004, p.1). AHM, also known as cultural heritage management (CHM) from the 1990s,⁶ was also created as a process of government in Australia to mitigate and manage development impacts on heritage properties (O’Faircheallaigh, 2008; Smith, 2008).

Cultural and environmental heritage assessment and management also became involved with resource and extractive industries to manage or mitigate impacts to the environment, livelihoods, and cultural heritage. Impacts in extractive industries were traditionally considered unavoidable due to the nature and location of operations. However, as Ballard and Banks (2003) highlight, the development of the ESIA process has provided support for Indigenous peoples and natural ecologies, by drawing on a growing human rights industry and bringing more attention to cultural and ecological impacts from large-scale mining operations. The ESIA process is said to have developed in the USA sometime in the 1960s and 1970s, and has since been adopted internationally on large-scale development projects (Li, 2008). The underlying tenant of EIAs contrasted with the previously employed environmental protection mechanisms, (generally cost-benefit analysis) instead applying “a systematic, holistic, and multidisciplinary assessment of the potential impacts of specific projects on the environment” to “inform development decisions by mandating a consideration of alternatives...and ways to prevent, mitigate, and control potential negative environmental and social impact” (Li, 2008, p.1). Mitigation measures recommended by ESIAs included alternate locations for projects, adjusting size and scale of projects, and general conditions for projects to operate under. Within commercial ESIAs, cultural heritage assessment generally occur as a separate process to social

⁶ Cultural Resource Management (CRM), Cultural Heritage Management (CHM), and Archaeological Resource Management (ARM) are used by authors to define the same practice (see Smith; 2004; 2008; Jameson; 2008). CHM will be used throughout this thesis unless CRM or AHM is applied by authors or in context dependent on history and national application

and environmental assessments, and are often carried out under the method of archaeological assessments.

Like other national heritage processes, the mining and extractive industry has developed international standards to promote and protect cultural and environmental heritage and minimise impacts on communities during mining and resource operations. Corporate Social Responsibility (CSR) was developed in the late 20th century as a process for companies to support and promote local communities affected by mining and resource operations. The CSR process provides mining and other industries with a ‘social license to operate’ and is regulated and enforced by international bodies and national governments where mining and resource extraction operations take place (AIM, 2011; Sharma, 2013). CSR is also regulated by donor and funding agencies that financing mining and resource projects. Regulatory measures aim to minimise impacts on communities and protect cultural and environmental heritage (Australian Government, 2011, p.6; Willems, 2014), but it is a requirement by donor organisations for corporations to implement as a condition of funding. ESIA and CSR has therefore become integral for resource and extractives industries to operate, and have increasingly been characterised as a benchmark for the success of an operations.

Notwithstanding the development of protective measures for cultural heritage within mining and other extractive industries, evidence suggests large-scale developments have a negative impact the cultural heritage and livelihoods of local communities and indigenous groups. Studies by Taussig (1980), Nash (1993) and Biersak (1999) respectively highlighted how mining impacted communities in various ways, and illustrated that communities respond differently to the presence of mining operations in their communities or territory. Local responses to mining impacted and were informed by a range of social, economic, cultural factors, and cosmological rationalities. The importance of these studies where they showed that

impacts of mining and extractive, and the outcomes from engagement with these industries, varied from location to location. These studies showed that mining can be both adverse and desirable for different groups, including for mining operations, and can differentiate between groups or communities, drawing on history, cosmology, cultural symbols and ritual action. They also highlight the complex relationship between wealth, status and power in mining contexts.

Along with researching the social and cultural impacts and responses to mining and extractive industries, researchers have also identified how these contexts also create environmental impacts. Because the environment is often relative to local community and indigenous cosmologies, economy, and cultural heritage, environmental impacts and social changes are shown to have a substantial bearing on cultural continuity, and the wellbeing and health of local communities and indigenous groups. At Lihir in Papua New Guinea, impacts to the landscape, including a sacred mountain located within the Lihir mining tenement area, highlight the impact mining has on local life-worlds, and the limited agency of local communities to preserve their natural and cultural heritage (Bainton, 2010; Bainton, Ballard and Gillespie (2012). Physical alteration to the sacred mountain on Lihir in turn induced a cultural response through a ‘re-imagining and reinterpretation’ of Lihirian myth and cosmology to maintain order in society.

Environmental and social impacts are often considered unavoidable, due to the nature and location of mining activities, and are linked to socio-cultural change. Godoy (1985) identified that mining often creates environmental and subsequent socio-cultural impacts because these developments are ‘given preference’ in national development policies. As Bryant & Parnwell (1996) identified, the development of a ‘resource-based identity’ in Southeast Asia was “intimately tied to large-scale environmental change” (p.5). Peluso’s (1992) research also

highlighted that environmental change in Kalimantan through the introduction of forest reserves coincided with promotion of industrial-scale extraction of rattan. Agricultural plantations slowly replaced the local forest, impacting local uses of forest resources including collection of non-timber resources, and resulting in the loss of traditional forest management systems. The example in Kalimantan echoed Godoy's (1985) argument that "national development policies traditionally give preference to mining enterprises...and mining codes are vague about indemnifying indigenous populations for ecological damages and land expropriation" (p. 208).

At the turn of the 21st century, the extent of mining operations had expanded globally and was having a more noticeable increasing impact on local communities and indigenous groups and the natural environment. As will be discussed in the next section, a trend towards corporations and donor bodies controlling international social and environmental protective measures developed, and initiated a movement away from traditionally local and state-based control of heritage. In Australia, Baird and Lyndon (2015) argue that transnational companies and international commodity prices largely control the Pilbara mining area, creating social and economic insecurity through reliance on resource economics on one hand, while facilitating the process of developing indigenous heritage sites as part of mining across north-west Australia on the other hand. Baird (2015a) also identifies that the mining process in the Pilbara region produced several 'ironies' in that case, particularly how mining engages with heritage. For example, heritage in the Pilbara region is largely promoted and celebrated by local, state and national levels of government, while at the same time, the government also supports mining and associated infrastructure development projects which ultimately impact, damage and at times destroy heritage sites 'celebrated' by them.

As with other nations in Southeast Asia, CHM in the Lao PDR has developed to manage national heritage and mitigate the impacts of economic development process on past and present cultural lifeways and the environment. Long (2002) has articulated that the Lao PDRs engagement with the ‘World Heritage system’ also supported its national integration into “global institutional and economic processes” (p.130). While this observation remarked on the role World Heritage Listing plays supporting the Lao economy in terms of tourism and regional trade and economic development, global economic integration in the early 21st century also led to a surge in greenfield rural and urban development in the Lao PDR. Agricultural expansion, a burgeoning natural resource sector, urban re-development, and expanding tourism industry were an outcome of the regional and global economic integration. Lintner (2008) explained that economic development projects in the Lao PDR were largely “massive foreign investment in the development of hydroelectric power and gold and copper mining as well as a rapidly expanding tourism industry”. In 2010, it was estimated that 132 mining companies were operating nationwide (High, 2010) and approximately 70 existing and planned hydropower projects nationwide (International Rivers, 2010). The increase in development projects nationwide, including mining, illegal land concessions, logging and donor sponsored hydropower projects were impacting, or had the potential to impact, livelihoods and the environment nationwide.

Archaeology and CHM, while supported and promoted by the EIA process, intriguingly has not become firmly integrated into the EIA process in the Lao PDR. There is as a result little reported information from CHM that assess or report on actual or potential impacts on cultural and natural heritage in economic development contexts. Archaeological research and CHM was applied to development associated with the Nam Thuen II (NT2) hydropower development project, in Khommuane Province. At the NT2 site, the Ministry for information and Culture was commissioned to undertake archaeological surveys as part of the EIA for the development.

Soutsavady (2014) explained that human skeletons dated to 6000 years old were discovered by archaeological excavations in a cave within the development area. However, no further excavations, nor a CHMP, was developed from the initial survey and excavations, even though this was advised in the EIA. The cave and its remains were flooded by the dam. Archaeological research and CHM began at the Sepon Mine since 2001 and has been ongoing since that time. However, as with NT2, heritage management at Sepon remains contested, indicating the complexity of performing heritage management in commercial contexts in the Lao PDR (Mayes & Chang, 2014). This situation will form the basis for much of the investigation and discussion in this thesis.

Extractive Industries, World Heritage and Transnationalism

In recent years there has been an increase in application of World Heritage Practices as regulatory measures for social and environmental protection in natural resource and extractive industries. This process had arguably allowed donor and funding agencies greater control in defining international social and environmental protective measures. Willems (2014) explains how “policies for cultural heritage assessments established by the World Bank and the International Finance Corporation” are applied to projects “to ensure that high quality assessments are undertaken for projects they finance, no matter where in the world these take place” (p.112). Today, international organisations and financial institutions have arguably become an additional layer that overlies national and international legislation, and thus influences national legislation and methods of heritage protection within operations (Willems, 2014; Baird, 2015a). Control by industry and industry bodies is considered a movement away from traditional state-based control of heritage management to private and corporate ownership. International industry peak bodies, development and donor organisations including

the International Finance Corporation, the World Bank, and the International Council on Mining and Minerals (ICMM) are today recognised to enforce a set of proscribed social and environmental standards for mining operations.

The need for strong safeguards for environmental and cultural protection is now recognised by natural resource and extractive industries. These are now part of an accepted discourse of sustainable development in mining and extractive industries. As Willems (2014) highlighted, this has led to the institutionalisation of generic and internationalised environmental and cultural protective measures. Regulatory processes that advise for international ‘best practice’ approaches to heritage management has increased the association of UNESCO and ICOMOS within mining and economic development projects. These agencies work in conjunction, albeit largely indirectly, with donor and funding agencies including the World Bank and the IFC. The IFCs *Sustainability Framework* (IFC, 2012) and its *Policy and Performance Standards on Environmental and Social Sustainability*” (p.2) include standards for cultural heritage management that are built off international charters and standards developed by the UN and UNESCO.

Coombe and Baird (2015, p.340) have argued that the relationship between mining and extractive industries and the World Heritage industry represents a ‘corporate heritage discourse’. Gilberthorpe and Hilson (2014) argue that a new “discourse of CSR and sustainable development” constituting an “environment of ‘best practice’” supports “multinational corporations...ambitions to ‘globalize’, helping them to ‘legitimize’ moves to develop untapped mineralized landscapes” (p.2). This discourse is considered to normalise approaches to heritage management in mining and resource contexts through the application of standardised international definitions and practices. As Willem’s (2014) articulated, World

Heritage discourses are applied to heritage management practices in mining contexts, and represent an increasing international industry-based trend:

In the globalizing world of today...the international private sector is becoming increasingly important and is supplementing such state-based national frameworks (that ultimately all go back to the European heritage regime) with what can be called *global and transnational heritage regimes* (p.112).

Today, ESIA, CSR, and national and state-based frameworks for environmental and cultural heritage regulate heritage management and provide the measures for protection in mining and industrial development contexts. Internationally governments still grappling with 'how to' successfully manage heritage and, livelihoods and natural ecologies from damage or destruction caused by mining and industrial development. This is a global issue, but is more pronounced in rapidly developing regions of the world, including Southeast Asia. As Willems (2014) explains the challenges facing heritage in developing countries internationally are based on exposure to high levels of risk from increased natural resource extraction to fuel growing national appetites for economic growth and personal consumption:

The result of this development is that the cultural heritage in these developing countries is in grave danger. Very large scale exploitation of resources, a real need for the income that those natural resources may provide for a country, and a lack of legislation concerning impact assessments and protection of sites may produce catastrophic results (p.110).

New corporate arrangements between heritage and mining and extractive industries are increasing, and appear to be controlling the type of heritage applied within natural resource and extractive industries internationally. Coombe and Baird (2015) consider

that “critical inquiries that more precisely explore the configurations of the terrain” (p.342) remain limited, and argue for increased examination of this area.

Issues also remain regarding the adequate definition of ‘cultural heritage’ in legislation, and the ability of Indigenous people and local communities to engage as party to development negotiations. As Smith (2004) explains, “it is through CRM that archaeology has established a role for itself in the ‘governance’ of material culture, and consequently influences claims about the nature of Indigenous cultural identity” (Smith, 2004, p.11). O’Faircheallaigh (2008) illustrates that in Australia, there is a “distinction between the ‘physical, historical’ and the ‘contemporary, spiritual’ aspects of cultural heritage often forms the basis for legislation and for negotiations between Aboriginal peoples and mining companies” (p.28). Martyn, Trigger & Parmenter (2014) also illustrate how statutory land rights and agreement making between mining companies and indigenous groups in Australia has created social and economic benefits from mining for indigenous groups, but procedural rights and mining agreements equally create tensions at the community level, often conflicting with cultural law and obligations for land and heritage management aspirations during mining operations.

Overwhelmingly, the most significant threat to the natural environment and cultural heritage in the Lao PDR is from emergent socio-economic development processes nationwide (Kiernan, 2011; 2013; Roberts, 2015). The need to balance competing pressures of socio-economic development while promoting national cultural heritage is a pressing matter in the 21st century. Logan, Long & Hansen (2002) situate this problem as a “modernization-versus-tradition policy dilemma” (p. 58). Heritage in the Lao PDR relies on a combination of national and international aims and objectives. Lao heritage is firmly embedded within the international heritage system, but is equally engaged with the national promotion and protection of heritage that is considered by the Lao government to be distinctly ‘Lao’. Cross-cutting these two

domains of heritage are the national focus on socio-economic development, which also aims to meet the goals of the international community and the Lao government respectively, and the promotion of a national narrative which aims to legitimate national identity and political control. Legislation to protect natural and cultural heritage is supportive of heritage being used as part of national socio-economic development policy and targets. Unregulated development nationally, combined with weak or ineffective heritage management law and practice, remain the greatest threat to heritage in the Lao PDR and Southeast Asian Region.

Summary and Conclusions

The dichotomy or ‘divide’ inherent in contemporary international discourses of heritage and models of CHM have developed over several phases through European history. Each phase is identified to play a unique and critical role in the creation, development and legitimization of the ‘divide’. The Renaissance is most strongly connected with the development of dualistic thinking between culture and nature, namely through the work of Descartes. Scientific rationalism in the Enlightenment Period set the conditions for a focus on materialism and rationality, emphasising ‘preservation’ and a ‘philosophy of care’ for the past. The colonial era was considered responsible for spreading the ‘divide’ globally wherever colonial nations went. The post-WWII period is perhaps the most significant period in legitimating the ‘divide’ and further embedding concepts of tangible and intangible heritage as separate domains, in a discourse and in practical methods and organisational structures promoted by UNESCO which promoted an ‘Authorised Heritage Discourse’ that supported ongoing application of a nature-culture dichotomy and focus on tangible heritage management.

The latter half of the 20th century into the 21st century has been marked by attempts to ‘bridge the divide’ between culture-nature and tangible-intangible heritage. Internationally, this process was exemplified by moves to restore balance between Western and non-Western heritage in World Heritage listings and heritage governance outside of Europe. This process also formed part of a broader level of “refinement of principles at national and regional levels” (Ahmad, 2009, p.296), including promulgation of cultural landscape, intangible heritage convention, and sacred natural sites programs. These initiatives have been broadly based on concepts of sustainability, and later biodiversity conservation, and socio-economic community development. This has seen the ‘living’ traditions of local communities and Indigenous peoples, and the relationship between social practices, cultural beliefs and the natural environment, become increasingly recognised in new heritage charters. Practical challenges remain for co-management of ‘mixed’ heritage sites, with principles of conservation biology underscoring rationale for natural heritage management. Archaeology and the ‘preservation ethic’ also underscore a focus on heritage as monuments, buildings, and material culture.

International heritage programs have drawn heavily on concepts of sustainability, integrated biodiversity conservation, and socio-economic development since the 1990s. The broader concept of ‘sustainability’ and ‘sustainable development’ remain considered as a “complex and contested issue” that have received “several decades of discussion and debate” largely because “universally agreed definition and practical implementation strategies remain elusive (Landorf, 2009, p.495). The concept of conservation and methods for conservation management are also considered to be a ‘Western’ approach, historically constructed on a culture-nature dichotomy, and applied in a top-down process from the international level (Byrne 2013; Macnaghten & Urry, 1998). Co-management of National Parks, Biodiversity Conservation Areas, and World Heritage Listed places that have overlapping or ‘mixed heritage’ values still grapple with tension “between the ‘scientific’ environmental nature of a

protected area and Aboriginal historical spiritual/cultural sensibilities and interests” (Carter, 2010, p.3). Linking biodiversity conservation and sustainability with natural heritage and cultural heritage management to promote economic development and poverty reduction initiatives are also problematic. Protecting and promoting heritage to provide economic and social development for local communities not skilled or resourced to manage heritage impact the heritage landscape without necessarily leading to a positive change in the livelihoods of local people and communities ‘living’ with heritage.

Heritage management has also become increasingly engaged within civil and mining development processes. CRM and AHM have developed based on the need of governments to manage and mitigate impacts to cultural heritage within civil and mining and resource-based development. Along with ESIA and CRS, protective measures have supported the rights of indigenous communities and provided safeguards for heritage within mining operations. However, impacts of the natural resource and extractive industries are deep; they can re-interpret the social, cultural, and economic landscape to “produce alterations of the surrounding landscape” that are “major, permanent, irreversible ecological transformations” (Godoy 1985, p208). It has also been identified that these industries tend to play a key role in driving social and environmental policy and practice in the nations where they operate. The relationship between environmental and cultural heritage management and mining and extractive industries has become focused on promotion of a discourse of management through sustainability (Coombe & Baird, 2015). Donor agencies and regulatory codes promote internationalised heritage management ‘best practice’ produced by UNESCO. Whether this discourse and its associated practices promote, sustain, or challenge the historical dualism between nature-culture and the tangible-intangible remains unclear, and applying a ‘divided’ heritage or efforts to ‘bridge the divide’ in practice are not concepts sufficiently reflected on during actual practice. Nonetheless, natural resource extraction, and elements of the history of constructions

of 'nature' and 'culture' that remain today are considered relevant to the understanding the impacts of applying transnational and globalised heritage practices within natural resource and extractive industries.

The next chapter outlines the methods applied in this thesis. A multi-sited methodology was drawn on to examine the 'divide' in heritage across relational historical, cultural and geographical boundaries. Methods applied to gather data included archaeological and ethnographic research, semi-structured interviews, participant observation, and archival research.

3. Methodological Framework

“...the challenge to ethnographic fieldwork...how to adequately account for the numerous interconnections that fan out across the world from hitherto more easily bounded research sites”
(Robben, 2012, p.369).

Chapter 2 provided a review of the literature relevant to the ‘divide in heritage’ illustrating the historical development of the ‘divide’ and its European foundations; how post-WWII the nature-culture and tangible-intangible divisions are reinforced and legitimated within a range of institutions and discourses; that heritage discourses to support cross-cultural definitions and practices in charters and programs and in national heritage frameworks, policy and legislation; and the relationship between heritage management, economic development, and transnational recourse industries. This chapter will outline the methodological framework and research methods applied to gather data and ultimately answer the question proposed in this thesis. The chapter begins with a brief overview of each research method and its relevance in this thesis. The chapter then moves to outline the field methods applied to collect the data and analyse data in this thesis, including Semi-structured interviews; Participant Observation; Cave-specific Research; Archival research and review of ‘grey’ literature and secondary sources. The limitations to the thesis are then discussed, including the opportunities and challenges of performing research in the Lao PDR, and the ethical and methodological considerations performing research. Finally, dissemination of research findings are outlined before a brief conclusion closes the chapter.

Overview of Methodology

Multi-Sited Ethnography

Marcus (1995) first proposed a ‘multi-sited ethnography’ during the 1990s. This period was underscored by what Marcus & Fischer (1986) considered a ‘crisis of representation’ within the human sciences. This ‘crisis’, they argued, led to a reassessment of prevailing and dominant ideas across the human sciences” (p.7) and its associated disciplines (see also Hodder, 1999; Gupta & Ferguson, 1992). Marcus (1995) argued that ethnography was at the heart of the ‘crisis’ for cultural anthropology. As a means to move away from what he considered ‘outdated’ paradigms, Marcus (1995; 1998) proposed the ‘multi-sited’ method to break with convention of the traditional ethnographic model: long term fieldwork in a single, defined site and with a specific people or group. He considered this as an innovative approach to re-imagine “ethnography’s way of making arguments and providing its own contexts of significance” (Marcus, 1995, p.14). Marcus (1995; 1998) proposed a focus on interdisciplinary research to meet specific methodological and practical problems of the modern era. Marcus (1995) argued that “the most interesting and specific manifestations of these reconfigurations of perspective in overlapping interdisciplinary arenas are in the modes of constructing multi-sited spaces of investigation within individual projects of research...” (p.105).

The World System and the Single Site

A central theme within the multi-sited approach was the concept of a ‘world-system’. At the time of its inception, Marcus (1995) argued that various ‘trends of ethnography’ had begun to accept the concept of a world-system, and the influence that the world-system had on local systems

and vice-versa. For instance, he argued that macro-forces of a predominately capitalist postmodern system could be found embedded within local settings and could be considered an influence on local agency and social practice. Marcus (1998) promoted the multi-sited methodology for the ethnographer “interested in contemporary local changes in culture and society” arguing that “single-sited research can no longer be easily located in a world system perspective” (p.82). Marcus (1995) also explained that applying this methodology would therefore allow the ‘ethnographic gaze’ to go further and outward from the local ‘site’ to its engagement with the ‘world-system’. Marcus (1998) outlined different ‘modes of study’ to apply the multi-sited methodology to, and identifies the need to define the objects of study through use of one or more of several techniques. The multi-sited method purports to trace and describe “the connections and relationships among sites previously thought incommensurate” (Marcus 1998, p.14). Marcus (1995) went on to explain:

...multi-sited research is designed around chains, paths, threads, conjunctions, or juxtapositions of locations in which the ethnographer establishes some form of literal, physical presence, with an explicit, posited, logic of association or connection among sites that in fact defines the argument of the ethnography (p.105).

Marcus (1998) does suggest that multi-sited ethnography, while seeking to explore the interrelatedness between contiguous sites, “should take the form of a site-specific, intensively investigated and inhabited scene of fieldwork but framed and partially investigated by a multi-sited imaginary that provides the special context of significance and argument for the ethnography”

(Marcus, 1998, p.14).⁷ The ‘strategically situated site’ remains positioned within the ‘world system’ where relationships between the global and local meet and interact.

Multi-Sited Methodology Examining World Heritage

To ground and provide context to Marcus’ (1995; 1998) methodology, this section will outline the application of multi-sited ethnography to examine issues in World Heritage. Following Marcus (1995), Samuels (2012) applied a ‘multi-sited heritage ethnography’ which provided an “observational and analytical framework” (n.p) to critically examine processes of ‘global and transnational’ heritage between North Africa, Europe and North America. Salazar (2012) applied a ‘translocal ethnography’ to examine the “the dynamic interplay between the externally imagined (represented) and locally imagined meaning and value of heritage in Indonesia and beyond” (n.d). Salazar (2012) identified that heritage is conceptualised in various ways, engendered by increasing and various actors involved in the process of heritage management and heritage tourism industries. Salazar (2010) also applied multi-sited ethnography field to study the relationship between local-global processes of tourism in Indonesia, highlighting the global nature of heritage, and that heritage is increasingly managed through ‘translocal’ processes, while heritage is increasingly characterized by a shifting ‘translocal pluriversality’.

Turtinen (2000) and Brumann (2012) have applied multi-sited ethnography to examine aspects of World Heritage and the workings of the lead international heritage agency, UNESCO. Turtien (2000) explained that “...multi-sited fieldwork is a fruitful approach for studying parts of

⁷ See also Marcus (1995, p. 110-114) where he discusses the *Strategically Situated Single-Site Ethnography*

the construction of World Heritage” (p.7). The method was applied to ‘track’ and ‘map’ discourses and practices of heritage as they develop at the international level and are applied locally. This research identified how ‘World Heritage’ is a transnational construction, created and maintained by international by agencies like UNESCO. Brumann (2012) applied a ‘multi-lateral’ ethnographic approach to examine the ‘World Heritage Arena’, a metaphor he applied to describe the assemblage of international heritage agencies that ‘manage’ heritage globally. Brumann (2012) attended meetings of the World Heritage Committee across five countries to identify how UNESCO promotes a ‘generic culture’ of ‘heritage’. He explained:

...although locations change, the meeting room is similarly arranged with organisations, ranks and functions similarly distributed, and the personnel and practices of this arena endure to a considerable degree. One could therefore also see my fieldwork as a fairly continuous presence at a single site, which just does not happen to be in the same place all the time but instead reconstitutes itself intermittently (Brumann, 2012, p.8).

[Multi-Sited Methodology Examining the Lao PDR and Extractive Industries](#)

The multi-sited method has also been applied in resource and extractive industries to identify transnational nature of these industries, and how globalisation has implications for local communities, natural environments, and cultural heritage beliefs and practices. Tsing (2005) examined the ‘global connection’ between a transitional resource company and the implication for local lifeworld’s in Kalimantan during the 1980s and 1990s. Applying post-colonial theory, Tsing’s (2005) study highlighted the positive and negative impacts of ‘resourcification’ on forest

systems, landscapes and local communities. Tsing's (2003; 2005) findings showed that international processes challenged local governance and land-tenure systems, processes which she argued traumatically dislocated people from socio-natures and established livelihoods, and identified that transnational companies introduced new forms of global (social and cultural) capital in the process of local 'resourcification' throughout Borneo. Tsing's (2003; 2005) concept of the 'frontier' features importantly in her discussion of 'global connections, and includes the role global capitalism and transnational companies play in processes of 'landscape-making' at the local level.

The multi-sited methodology has also been applied within the Lao PDR. Baird (2008) examined the implications of colonialism and national development policy on the Brao, an ethnic minority group living along the borders of the Lao PDR and Cambodia. Baird (2008) applied a multi-sited methodology to study "a large number of villages and all of the Brao sub-groups located in both Laos and Cambodia" (p.15). Baird (2008) examined "multiple spaces and places, theoretical questions associated with social and spatial changes, and their links with different forms of colonialism, changing identities and human-nature relations amongst the Brao" (p.7). Singh (2008) also applied multi-sited ethnography to investigate "local patterns and perspectives of wildlife trade" (p.2) in southern Lao PDR. While Singh (2008) explained that using a multi-sited methodology "was largely the result of delays in obtaining research clearances" (p.2), ultimately it allowed her to address 'important issues' through examining the perspectives of various 'actors' involved in trade networks. Singh (2008) explained that a multi-sited methodology "did enable discussion with a wide range of people across urban and rural locales" (p.2), enabling a deeper understanding of 'wildlife' as a social construction in the Lao PDR.

Within the social sciences, archaeology and cultural heritage have more recently become a focus of ethnographic study. Ethnographers and also archaeologists have begun to explore several aspects of the discipline. Inquiry has focused on archaeological theory, research methods, and data interpretation in plural and post-colonial contexts (Meskell, 2005); archaeological practice and heritage management in mining and resource contexts (Baird, 2015; 2015a); the modes by which archaeological knowledge is produced, the context that the local and global share through archaeological practice and projects; and how communities (and nations also) engage with archaeology and with formulating hypothesis and findings from archaeological research (Edgeworth, 2006; Meskell, 2005). Samuels (2011) argues that emergence of ethnographic interrogation of archaeological practice has enabled 'new intersections' between socio-cultural anthropology and archaeology. A 'merger' of the two disciplines is considered to "expound the contemporary relevance of the archaeological past" (Samuels, 2011, p.152), and in doing so, has highlighted the role of the community and indigenous and ethnic groups in the archaeological process, and further, enabled critique to the Euro-centric and at times politicised practice of archaeology and cultural heritage management.

Effort has been applied to develop a theoretical and practical ethnography of archaeology, or archaeological ethnography. Meskell (2005) defines archaeological ethnography as a "holistic anthropology that is improvisational and context dependant. It might encompass a mosaic of traditional forms including archaeological practice and museum or representational analysis, as well as long-term involvement, participant observation, interviewing, and archival work" (p.83). As a 'hybrid practice' combination of these approaches at the interdisciplinary level is viewed as "a traversing of two distinct, but necessarily enmeshed, subfields" (Meskell, 2005, p.83). Samuels

(2011) considered that “archaeological ethnography works best as assemblages of approaches, objects, texts, technologies and expert knowledge’s, gathering around the specific problem being addressed and studied, and always informed by an ethnographic sensibility” (p.156). This has included engaging with the archaeological process as a ‘site’ or ‘object’ of inquiry (Edgeworth, 2006).

Hamilakis and Anagnostopoulos (2009) explain that archaeological ethnography is situated within several “related but diverse processes” (p.66) which have taken place within the discipline of archaeology. Ethnography has been applied to evaluate or assess the way archaeology is practiced and how archaeological knowledge is produced. Ethnographic investigation has illustrated how archaeology, as a discipline, is situated within broader historical, social, and cultural praxis (Edgeworth, 2006). As Tilley (1999) has argued, archaeology is embedded within the “prevailing social and political climate” (p.307), and as a result, is a “clearly ideological” practice (Tilley, 1999, p.311). Archaeology has embodied political values within the aims and goals of the discipline, as both language and text. This embodiment is said to have influential on cultural and evolutionary theory. Edgeworth (2006) considered that ‘archaeological agendas’ underpin archaeological practice, as method or in reflexive technique, or in archaeology’s more recent movement away from ‘text’ towards ‘practice’. Edgeworth (2006) argued that ethnographers today seek to challenge “old practices and perceptions” (p.xiii), and increasingly recognise archaeology as being:

interwoven with other social and cultural systems - that it is increasingly a constitutive part of the politics, economics, and identities of people in even the most exotic and far-flung places of the world, especially in areas where archaeological sites and remains are prominent parts of local landscapes (p.xiii).

As a methodology, archaeological ethnography is applied in this thesis to access ‘local voices’ and examine whether these are applied in archaeological projects and heritage management programs, and whether the archaeological projects and heritage management programs support or empower local communities through these processes (see Lozny, 2011). This is a critical process to ‘bridge the divide’ in heritage. The development of reflexive methodologies and post-processualism in archaeology argued for greater acceptance of diversity within the discipline of archaeology theory and practice (Trigger, 1984), and supported critical engagement with living communities in the archaeological process and heritage management programs. Hodder (1999, p.6) has also explained that the introduction of ‘pluralism’ and ‘multivocality’ supported development of theoretical and methodological diversity within the discipline. The role of the community in archaeological projects remains a significant part of the decolonisation of archaeological practice. Smith & Waterton (2009) view the community as an important locus for research, highlighting the growth of community-based archaeological and community heritage programs as part of the growing interest in multivocality and ‘plural’ heritages. Archaeological ethnography can therefore provide a deeper understanding of how archaeology and heritage are engaged with processes of history and globalisation, and why the disciplines remain highly political (Edgeworth, 2006). By examining the historical, social, cultural and political context or nexus that they are situated, this approach can support the process of decolonisation; a movement from colonial, scientific-based theory and practice, towards inclusive emic interpretations and incorporation of communities in archaeology and heritage management.

The Framework for the Conservation of Sacred Natural Sites

Discussed in Chapter 2, the IUCN Sacred Natural Sites initiative was promoted by the IUCN and ICCROMM and has supported efforts to ‘bridge the divide’ in applied heritage management practice. Verschuuren, Wild, McNeely, and Oviedo (2010) explain that Sacred Natural Sites are considered “one of many domains where religious or belief systems interact with nature” (p.2). Further, that “sacred natural sites are part of a broader set of cultural values that different social groups, traditions, beliefs or value systems attach to places” (Verschuuren, Wild, McNeely & Oviedo (2010, p.2). The framework for conservation of sacred natural sites is based on three ‘human-value domains’ - the cultural, spiritual, and socio-economic. Together these domains are considered to “constitute human well-being as part of nature” (Verschuuren, Wild, McNeely & Oviedo, 2010, p.7), with Sacred Natural Sites considered to contribute to human well-being. The concept applies a multidisciplinary framework of analysis and recommends applying an “interdisciplinary, multi-level and multi-scale” (Verschuuren, Wild, McNeely & Oviedo, 2010, p.7) approach to examine the perspectives that constitute the ‘sacred in nature’. Implicit in the approach to reconcile the nature-culture divide is “a need to transcend traditional discipline boundaries” (Kiernan, 2015, p.191). This will mean a focus on the way forests, mountains, rivers, caves, trees, and rocks are conceptualised as sacred natural sites, and incorporated into belief systems and customary practices.

The framework for conservation of sacred natural sites provides a conceptual apparatus to ‘bridge the divide’ in theory, and more importantly, in practice. Importantly the framework acknowledges the existence of a prior relationship between society, culture, and nature, recognising that this relationship is valuable in the present and future, and emphasises that management practices for ‘sacred’ natural sites incorporate local knowledge, beliefs, and practices.

The framework has potential to determine local heritage values, to broaden the scope of inquiry into heritage beliefs and practices, and to identify methods and practices that support sacred natural sites in the practice of heritage management. Caution is taken to apply Verschuuren, Wild, McNeely, and Oviedo's (2010) conceptual framework without criticism. Byrne and Ween (2015) explain the Sacred Natural Sites initiative "remains framed substantially within the old nature-culture dualism" being developed and driven by conservation biology that shares a "foundation in the secular-rationalism of modernity's disenchanted ontology, effecting a critical separation between the human and non-human realm" (p.100). Dove, Sajise, and Doolittle (2011) agree with Byrne and Ween (2015), arguing that "much of the environmental thinking concerning sacred forests reproduces a Cartesian divide" (p.8). Following the authors above, critical consideration is also given to the sustainability of traditional forest management, focusing more broadly on the 'mundane' use of forests, the social and political dynamics in forests, and relationships between 'sacred' aspects and the broader natural landscape.

Application of Methods in this Thesis

The following methods were applied to collect field data and analyse data in this thesis (see Table 2):

- Semi-structured interviews
- Participant Observation
- Cave-specific Research
- Archival research and review of 'grey' literature and secondary sources

Ethnographic Research:

Semi-Structured Interviews

Semi-structured interviews were applied as the main method for gathering information in this thesis. Following the multi-sited methodology and in consideration of the place of heritage and mining within the ‘world system’, ethnographic research was applied to examine the construction, dissemination, and practical application of international ‘best practice’ heritage management. The majority of interviews were undertaken at the Sepon Mine between 2012 and 2014 as a student, I was a fieldworker on the archaeological research program at the Sepon Mine, as outlined in Chapter 5. Performing fieldwork at the Sepon mine over several years enabled me to develop strong relationships and provided access to a broad scope of international, national, and local persons involved in the mining operation. Persons interviewed on-site included academics and researchers from Australia, England, and New Zealand; Lao government archaeologists, Savannakhet Provincial Museum staff; Vilabouly District Officials; MMG-LXML Lao and international staff; and importantly, local villagers. The fieldwork context provided opportunities for semi-structured interviews or follow-up interviews and discussions to consider or clarify previous interviews. Through interviewing key staff and local community members I was able to gain a deeper understanding of how various persons were engaged with heritage at the Sepon Mine, their understanding of heritage and what informed this understanding, the role of heritage management within mining operations, and the ways in which the dichotomy of nature-culture and categorisation of tangible-intangible was applied in practice.

In 2015 and 2016 I conducted interviews at several international and national organisations known to play a central role in heritage management internationally, and within Southeast Asia and the Lao PDR. Organisations included the UNESCO Southeast Asia office in Bangkok

Thailand; the Southeast Asian Ministers of Education Organization Regional Centre for Archaeology and Fine Arts (SEAMEO SPAFA), Bangkok, Thailand; the International Union for the Conservation of Nature (IUCN) Country Office, Lao PDR; Silpakorn University, Bangkok, Thailand; the National University of Laos (NUoL), Vientiane; the Ministry for Information, Culture & Tourism, Vientiane, Lao PDR; and the MMG Ltd Office, Lao PDR, Vientiane. At each location I conducted semi-structured interviews with staff who were historically and actively engaged in World Heritage, Protected Area Management, conservation and education projects and programs with the Southeast Asian region, and specifically within the Lao PDR. Subjects of interviews were staff and persons with extensive knowledge and practical engagement with the international and national heritage sector, and who were involved with the day-to-day operations of heritage management programs. This included regional and country managers, heads of departments, members of government, academics, and heritage consultants. At each organisation I was able to collect qualitative information about the structure of make-up of international heritage organisations; the role and successes of the organisations in the Southeast Asian region; their relationship between European-based agencies/offices and regional agencies/offices in Southeast Asia; and the perceptions of the 'divide' and the implication for applying it in practice in the Southeast Asian and Lao context.

Year	Time	Location	Activities
2008	October/November (40 days)	Sepon Mine & Vilabouly District, Lao PDR	Reconnaissance Archaeological Excavation; Ethnographic (participant) observation
2011	November (21 days)	Sepon Mine & Vilabouly District, Lao PDR	Archaeological Excavation; Ethnographic (participant) observation; Interviews
2012	October/November-December (60 days)	Sepon Mine; Vilabouly District; Vientiane (Lao PDR)	Archaeological Excavation; Ethnographic (participant) observation; Interviews
2013	November/ December (21 days)	Sepon Mine & Vilabouly District, Lao PDR	Archaeological Excavation; Ethnographic (participant) observation; Interviews
2014	September (10 days)	UNESCO (Southeast Asia) – Bangkok Office	Interviews; Archival Research
	November (21 days)	Sepon Mine; Vilabouly District; Vientiane (Lao PDR)	Archaeological Excavation; Ethnographic (participant) observation; Interviews
	March (4 days)	Townsville & Cairns (Australia)	Interviews & Focus Groups
2015	July (21 days)	Lao PDR & Thailand	Interviews & Focus Groups
2016	July (5 days)	Thailand	SEAMEO SPAFA Conference on Southeast Asian Archaeology

Table 2. List of Fieldwork Contributing to this Thesis.

Between 2012 and 2016 I interviewed staff from national heritage departments and organisations within the Lao PDR. In 2012 and 2013 I interviewed members of the Lao Department of National Heritage and staff at the National Museum of Laos, Vientiane. I also interviewed several staff from the Lao Ministry of Information, Culture, and Tourism inquiring about their engagement in national heritage management and archaeology projects, and the Lao Government's role in management and protection of heritage nationally. I interviewed various people about their experiences working in archaeology and within the heritage industry in the Lao PDR, and on their knowledge of archaeology and cultural heritage management in the Lao PDR (both past and present). In 2015, I also visited MMG-LXML Head Office in Vientiane to meet with company representatives there who worked in the community and social sustainability section of the Sepon Mine. During 2015, I also conducted interviews with academics within Thailand and the Lao PDR who had long-standing research and engagement in heritage management, community archaeology, and archaeology and heritage management research in caves. I conducted interviews with Lao academics and students from National University of Laos, Vientiane, who performed archaeological fieldwork or were engaged with the cultural heritage program at the Sepon Mine. The interviews within Southeast Asia followed a similar interview process undertaken in Australia in 2013 with staff and students from James Cook University who had performed archaeological fieldwork or were engaged with the cultural heritage program at the Sepon Mine.

Participant Observation

The Sepon Mining operation was the principal 'single-site' or 'primary' fieldwork location for this research. I applied participant observation and ethnographic fieldwork to the archaeology

practice and heritage management process at the Sepon Mine - the location where the global and local converged. Following Meskell (2005; 2007) I applied 'archaeological ethnography' to examine archaeological practice and heritage management in a mining and resource context, to consider the modes by which archaeological knowledge is produced, the interplay between the local and global within the context of mining, and how communities engage with and respond to the process of performing archaeology and cultural heritage management. I undertook this practice by being engaged as part of the team undertaking archaeological survey, excavations and post-excavation analysis of excavated materials; attending management meetings and briefings; and providing support and training to Lao archaeology students. Longer-term engagement with the field site provided insight not only into the day-to-day workings of the archaeological and heritage management process at the mine, but also whether management outcomes were predicated on application of a 'divided' heritage, and how heritage and archaeology interacted with economic development processes within the Lao PDR. Introduced earlier in this chapter, this process identified how various stakeholders - including multi-national corporations, state governments, the private sector, heritage experts, and decision-makers - engage in the process of international heritage management in a local context.

Outside of 'work' I had regular 'social' interactions with Lao and International Archaeologists, Lao and international archaeology students, Vilabouly District Officials, and local Phou Thay and Brou villagers. As Baird (2008) has illustrated in the Lao PDR, social engagements provide important opportunities to build relationships with these occasions also facilitating for opportunities to get to know people in their domestic roles, and while interacting with their families and friends. Interaction included attending local festivals, village celebrations and ritual calendrical events, and sharing many regular social activities including playing sports, eating,

drinking, and playing music. I came to understand that eating, drinking, and playing music and singing were important components of Lao society and provided ways to experience Lao sociality. ‘Hosting’ the heritage team for a Lao BBQ was an important part of the heritage management process, and I was fortunate to be a part of many of these social engagements on our days off field work at the mine. These occasions supported more in-depth discussion to formulate a better understanding of the people’s motivations for engagement with archaeology and heritage management, including personal interpretations of heritage and heritage management at the Sepon Mine and within the Lao PDR.

Following the multi-sited methodology, where the Sepon Mine was the ‘single-site’ or ‘primary’ fieldwork location for this research, other sites considered contiguous to the Sepon Mine and the questions this thesis proposed were also a focus for participant observation. Following Marcus (1998) research at several other ‘contingent’ sites were undertaken to understand the development and spread of heritage internationally, regionally and locally. Other sites were not “treated by a uniform set of practices of the same intensity” (Marcus, 1998, p.84), and while they varied in intensity and quality, they shared a relationship in how heritage was defined and managed at the Sepon Mine. This process deepened my understanding of the mechanisms that make heritage ‘relational’ between international and local contexts. Therefore, participant observation at contingent sites outside of the Sepon Mine provided important understandings of the development and practical application of the ‘divide’ at the international level, and the means by which the ‘divide’ in heritage came to be configured within day-to-day operations at the Sepon Mine.

Participant observation was mostly undertaken with key organizations within the Lao PDR and Thailand in 2015 and 2016 (see Table 2). Locations including the IUCN Country Office in Vientiane, Lao PDR; the UNESCO Regional Southeast Asia Office in Bangkok, Thailand; the

SEAMEO SPAFA office in Bangkok, Thailand; and the National Museum of Lao, Vientiane, Lao PDR. In Vientiane, during 2012 and 2013 I worked with members of the Lao DNH and staff at the National Museum of Laos and other locations within the Vientiane municipality. I also worked with Lao DNH staff and staff at the National Museum of Laos, processing excavated archaeological material, and assisted in the construction of archaeological displays at *Lak Muang*, the City Pillar of the capital, Vientiane, constructed in 2012.⁸ I also spent time working with expatriate archaeologists and conservators at the National Museum of Laos. Working with Lao archaeologists allowed me to understand the *emic* approaches to heritage and challenges that exist at the national level with the practice of archaeology and management of heritage sites in Vientiane and nationally. This process deepened my understanding of the relationship between Lao and international heritage discourses, whether a ‘divide’ in heritage was being applied nationally within the Lao PDR and what factors supported its application, and what were the implication of the ‘translocal engagement’ between mining and heritage in the Lao PDR and Vilabouly District.

Cave-specific Research

Chapter 1 began to identify how caves are locations that often have multiple overlapping uses, interconnecting cultural and natural heritage values, and are often recognised as ‘living’ and ‘sacred’ natural sites. Caves and karst landscapes are highly significant landscapes and locations that support a range of unique and endemic geological, ecological, socio-cultural, spiritual, and economic uses and values which have developed across thousands of years (Waterton, Hamilton-Smith, Gillieson & Kiernan, 1997, pp.6-9). Verschuuren (2010) argues that “bridging the nature

⁸ This is also known as the *Ho Lak Muang*

culture divide in conservation” requires recognition that a place can contain multiple values, and therefore, must be managed for the multiple values they hold. Caves (and karst) therefore have the potential to provide an excellent opportunity to identify the challenges found with applying a ‘divided’ heritage, and to provide solutions to ‘bridge the divide’ in heritage and are therefore chosen as a focal point of research in this thesis. In this thesis three (3) caves were chosen to examine their uses and values as heritage locations, to consider whether these places are managed for their multiple and interconnected uses and values, and to examines the implications for caves when their overlapping uses and values are not recognised in management practices. To provide context for each of the three (3) caves chosen for examination, the survey methodology employed for each cave is outlined below, and their location within the Sepon Mine and Vilabouly District are identified in Figure 4.

Tham Hin Kiaw

Tham Hin Kiaw was selected as a case study in this thesis for three reasons. Firstly, Tham Hin Kiaw was not known to be used by any local Phou Thay or Brou villagers in Vilabouly District, and was not under villager ownership or control (even though the broader Thengkham Range was used by villagers for subsistence-based activities). Tham Hin Kiaw was discovered by chance by exploration geologists in 2010 when they were performing geological surveys along the southern slopes of the Thengkham Range. This cave was located close to top of the ridgeline along the centre of the Thengkham Range. The cave was reported to have a noticeable quantity of malachite (copper ore) in the cave walls and on the cave floor. The cave was reported to mining and local authorities by the geologists who located it, but as stated, no prior knowledge of the cave

could be found within the mine or within local communities. The cave was later called Tham Hin Kiaw, or Malachite Cave, in reference to the malachite found in the cave.

Secondly, the cave has a close geospatial proximity to known significant archaeological sites in the Thengkham Range, notably Peun Baolo. Archaeological reconnaissance surveys in 2008 led to the hypothesis that this cave may be related to the broader cultural landscape of ancient mining activity. This view was based on the cave containing malachite, and contained evidence of a past mining process. As more archaeological sites and cultural heritage were located as mining operations expanded into previously forested areas and village cultural landscape, it became clear that “essentially that whole tenement is an archaeological site” (Tucci et. al., 2014, p.16). Tham Hin Kiaw may have been related to other archaeological and cultural heritage sites within the Sepon Mine tenement and broader Vilabouly District, and could form part of a broader spatial landscape termed the ‘Vilabouly Complex’.

Thirdly, in 2010 Tham Hin Kiaw was earmarked for mining and mineral extraction processes as an ore bearing cave. Located in the Thengkham Range, the cave was in an area also scheduled for mining the following year. The fact that the cave was going to be mined meant the cave would most likely be destroyed in the process. The destruction of Tham Hin Kiaw raised a contentious issue about the conservation of known significant heritage sites in mining tenement areas, and the push-pull relationship between the objectives of mining and objective of archaeology to preserve the value of heritage and archaeological sites within mining contexts. This issue also raises important questions to the power of the mining company to override national legislation and local community desires for protection and management of natural and cultural places within Vilabouly District.

Targeted ethnographic and heritage surveys of Tham Hin Kiaw were performed over a two-week period during November 2011. This included undertaking an archaeological excavation at the entrance to the cave, and interviews and discussions with local Phou Thay and Brou people, MMG-LXML staff, and international and Lao Government archaeologists. Follow-up interviews and participant observations were undertaken over the course of the next archaeological excavations season at Peun Baolo and the Thengkham Range in 2012 and 2013, and through off-site interviews between 2014 and 2015. This included participant observation to support qualitative data collected about use and value in local ecology; cultural heritage value or significance of the cave and its surrounding environment; and to ascertain the role of the cave within mining operations. Survey and excavation processes were supported by staff members of the Lao Department of National Heritage; Lao Ministry of Information, Culture, and Tourism; internal staff from the MMG-LXML Cultural Heritage Unit; a Vilabouly District Local Government representative; and staff from James Cook University. MMG-LXML staff were also present to check the area for UXO throughout regular intervals of the excavation period. There was no appointed village guide or included in the survey and excavation process because no village was identified to be associated with cave.

Tham Pakou

Tham Pakou was selected as a case study for three main reason. Firstly, the cave has a range of identified uses and values for the village of Tham Pakou, and therefore has potential to provide understanding of caves as ‘living’ and ‘sacred’ places. It also provides an opportunity to assess village management practices and cultural significance in use of the cave. A relational context between the cave and community has the potential to provide a broader interpretation of

how caves, as natural places, are used and valued culturally, economically, and spiritually by current Brou populations in the Vilabouly District, and would provide a point of difference to discuss the context at Tham Hin Kiaw.

Secondly, Tham Pakou had been through a consultation process with OzMinerals Ltd. in 2008/09 when mining expansion plans in the area had potential to impact on the cave. During the consultation process with Ban Namalou, villagers explained to the mining company they were concerned that exploration drilling would impact the cave. Though consultation, Tham Pakou was recorded as being “the site of the village founders cult story in which the spirits of Loung Bo, Loung So, and Loung Daeng inhabit the cave and travel down to the village water source on holy days” (MMG-LXML, 2012). As a result of the mining process Tham Pakou was classified as a High Significance Cultural Heritage Site by MMG-LXML in 2012. This was based largely on the intangible cultural heritage values presented by villagers during the 2008/09 consultation process. Tham Pakou was a natural location with overlapping cultural and spiritual significance, and therefore had the potential to answer questions pertinent to management of a ‘mixed’ and ‘living’ ‘sacred’ site.

Third, and in consideration of both reasons above, Tham Pakou offers the potential to explore in more detail the management of caves between various stakeholders, notably between MMG-LXML Ltd. and the village of Ban Namalou. It provided a good example of community-company consultation processes, and also provided an opportunity to examine the effectiveness of management practices to mitigate impacts to the cave that held overlapping and interconnected cultural and natural values that were ‘living’ and ‘sacred’.

Targeted ethnographic and archaeological survey at Tham Pakou were undertaken on two separate field trips, the first over two days during November 2011 and second trip over 1 day during November 2013. For each survey official approval to access the cave was granted by MMG-LXML Ltd. and the headman of Ban Namalou village. For each survey of Tham Pakou, the headman of Ban Namalou appointed a guide from Ban Namalou. Survey processes were supported by staff members of the Lao Department of National Heritage; Lao Ministry of Information, Culture, and Tourism; internal staff from the MMG-LXML Cultural Heritage Unit; a Vilabouly District Local Government representative; and staff from James Cook University. No archaeological excavations were undertaken at Tham Pakou at the request of the village headman. Follow-up interviews and participant observations were undertaken over the course of 2012 and 2013, and through off-site interviews between 2014 and 2015 to support qualitative data collected about use and value in local ecology; cultural heritage value or significance of the cave and its surrounding environment; and to ascertain the role of the cave within mining operations. Follow-up interviews were undertaken with villagers, staff and professionals who were involved in village-level management, community consultation, or cultural and natural heritage management responsibilities at national and regional levels.

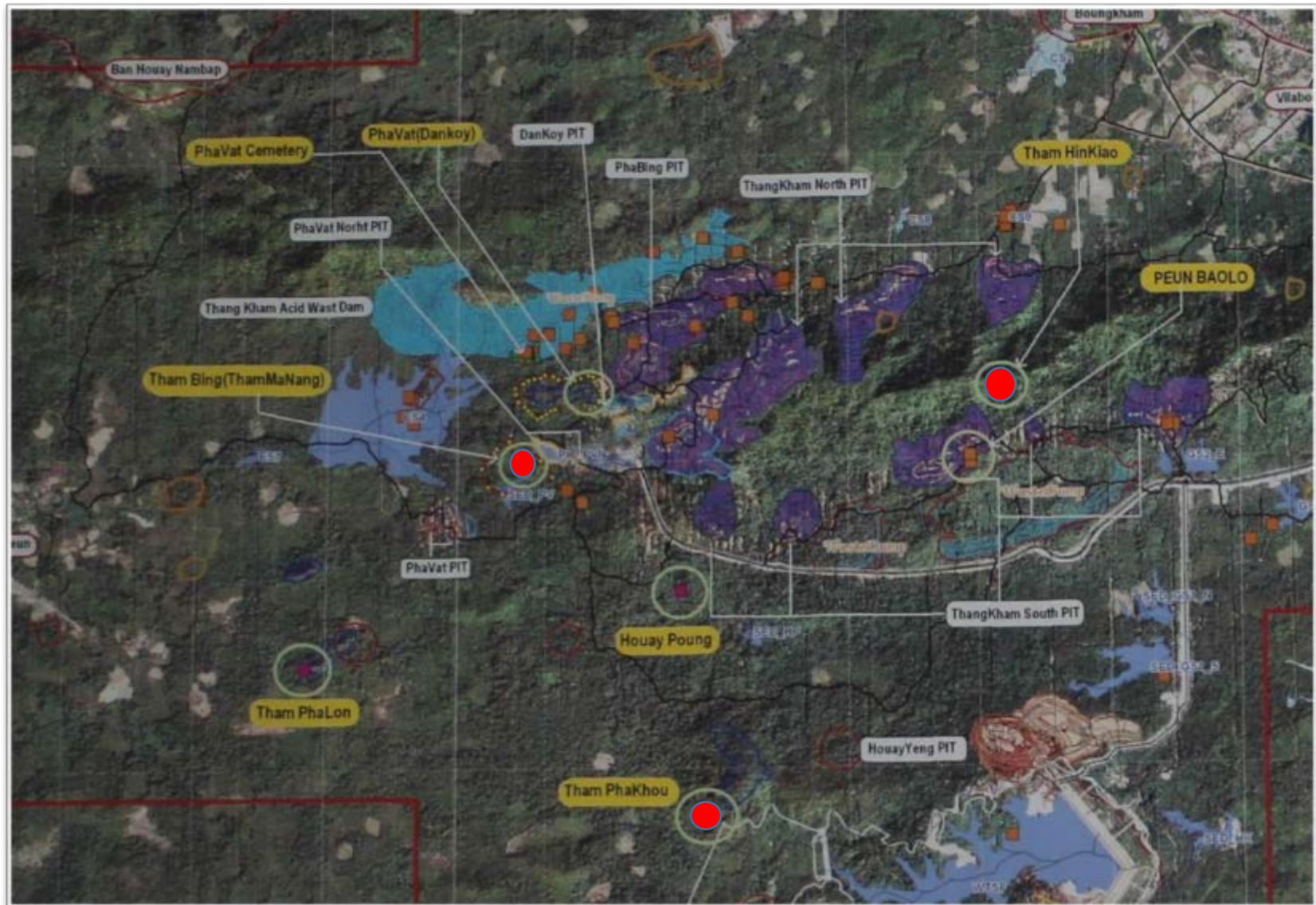


Figure 4. Caves in the MMG-LXML Sepon Mine and Vilabouly District chosen for this study

Tham Bing

Tham Bing was selected as a case study because the cave was identified as Highly Significant Cultural Heritage Site within the Sepon Mine. Tham Bing is located within a highly physically disturbed area within the mine tenement area, and has a specific management plan applied to protect the cave from impacts. MMG-LXML Ltd. recognised that exploration and mining activities could impact on the cave and a 50 metre ‘buffer zone’ was applied to protect the cave from mining-based impacts, including restricting access to all unauthorised persons. The cave therefore provides an important opportunity to examine the effectiveness of a specific type of management practices to mitigate impacts on the cave from mining activity.

Secondly, Tham Bing was first surveyed in 2006 by Lao DNH archaeologists and was one of several caves identified and recorded during surveys that later became listed as a High Significance Cultural Heritage Site (in 2012) valued for “telling the story of the Vietnam War” (MMG-LXML, 2012). It had been recommended that Tham Bing should be “immediately protected from the Phavat North gold mining and further exploration activities” (Sayavongkhamdy & Souksavatdy, 2011, p.9).

Lastly, Tham Bing was also located outside the Thengkham Range, broadly the locations of Tham Hin Kiaw and Tham Pakou. Tham Bing is also associated known to be associated with two villages - Ban Namkheun and Ban Boun - both Phou Thay villages, however no research has been undertaken to explore this relationship in detail. The cave, if it remained used and valued by the current populations of Ban Namkheun and Ban Boun, has the potential to be another ‘living place’, and provided potential to examine the overlap between cultural and natural heritage, and tangible, intangible, and historical heritage respectively.

Targeted ethnographic and archaeological surveys at Tham Bing were undertaken during the month of November 2013. The surveyed coincided with the regular monthly cultural heritage monitoring process for this site, undertaken by MMG-LXML staff of the CHU. Tham Bing is monitored once a month as part of CHPM activities at the mine. The survey of the cave accompanied staff with the monitoring process, and follow-up activities and actions for monitoring Tham Bing within mining operations. Environmental monitoring is also undertaken at Tham Bing, however undertaking surveys with the Environment Department was not permitted. Survey processes were supported by staff members of the Lao Department of National Heritage; Lao Ministry of Information, Culture, and Tourism; staff from the MMG-LXML Cultural Heritage Unit. Approval was sought from MMG-LXML officials before entering Tham Bing. A village guide was not appointed, and due to the timing of the survey, no representative from Ban Namkheun and Ban Boung village were present for the survey. Follow-up interviews were undertaken during 2013, and through off-site interviews between 2014 and 2015 and supported qualitative data collected about use and value in local ecology; cultural heritage value or significance of the cave and its surrounding environment; and to ascertain the role of the cave within mining operations. Follow-up interviews were undertaken with villagers, staff and professionals who were involved in village-level management, community consultation, or cultural and natural heritage management responsibilities at national and regional levels.

Archival research and analysis of secondary source material was a critical component in this thesis was applied to piece together information about historical processes otherwise unobtainable through interviews and participant observation. This has also supported 'triangulation' of interview data and observations from field sites. To understand the construction and ongoing application of the dichotomy of nature-culture and categorisation of tangible-intangible in the discourse and practice of international heritage management, and in national policy and legislation, it was necessary to examine 'grey literature' produced by organisations including UNESCO, IUCN, and ICCROM. Chapter 2 illustrated that European heritage values remain reproduced and promoted by international heritage agencies through production of literature, conventions and promulgations. Smith (2006) argued that international heritage agencies produce an 'Authorised Heritage Discourse' (AHD) which defines heritage and the process for heritage protection and managed internationally. Nielson (2011) also argued that UNESCO is responsible for the 'bureaucratic production' of specific heritage concepts that represent the culture and values of UNESCO into 'texts'. Texts include policies, charters, and conventions, including the UNESCO 1972 *World Heritage Convention* (Gfeller, 2013), and remain considered 'ethnocentric doctrines' that promote culturally-specific definitions, uses and values for heritage, and are used to 'legitimise' the place of UNESCO and their role within the process of international heritage management. The discourse remains reflected in the 'type of culture' reproduced in World Heritage Listings which historically favour Euro-American types of heritage (Brumann, 2012).

It has therefore been essential to examine literature produced by international heritage agencies, to review policy documents, decrees and reports from heritage agencies to track how the ‘divide’ in heritage has spread through ‘texts’ as a legitimate ‘type’ of heritage. This process also informed how heritage policies and laws heritage were, applied to the national context across East and Southeast Asia. This also included examining national heritage policy and legislation and the international influence on national heritage policy and legislation, to provide some understanding of the motives for legal and policy creation and application in practice. In 2015 I spent two weeks at the IUCN Country Office in Vientiane, Lao PDR where I was provided access to published and unpublished IUCN literature on the Lao PDR, annual program reviews, as well as operational documentation relevant to World Heritage, RAMSAR and Protected Areas run or managed by the IUCN. I made consecutive visit to the SEAMEO SPAFA office in Bangkok, Thailand in 2015 and 2016. There I conducted research in the organisation library on policy and legal literature of heritage in the Southeast Asia, and archival literature on archaeological and heritage research conducted within Southeast Asia from the colonial era to the present. In 2015 and 2016 I also resided at the UNESCO Regional Southeast Asia Office in Bangkok, Thailand. There I reviewed nomination literature for Natural and Cultural Heritage sites within Southeast Asia, and also within the Lao PDR.

[Heritage Policy and Legislation in the Lao PDR](#)

In this thesis it has been essential to review of heritage policy documents, heritage decrees and legislation, and heritage assessment reports in the Lao PDR to examine how heritage is constructed and applied there. The relationship between archaeology, heritage, and socio-

economic development, and heritage and identity, is recognised by several scholars. Kallen (2004) argues “that the explicit aim of cultural heritage management in Laos is to legitimate the current political rule” (p.211). Logan and Sweet (2006) have stated that “it is evident that Lao cultural heritage policy and practice are to a significant extent driven...by...the construction of the nation-state and national identity (Logan & Sweet, 2006, p.448). Tappe (2011) argues that national identity and political authority in the Lao PDR is supported by supported by museums, promotion of ‘key’ national heritage sites, historical figures, cultural performances, and authorised ‘texts’. The purposeful construction of a national Lao identity is said to be driven by an ideological focus on several national ‘goals’ and ‘struggles’ that provide legitimacy to the current government. Understanding the links between heritage and economic development have identified important political uses of heritage (Tappe, 2011; 2013). However, heritage policy and practice, and the links between them, are not often articulated directly in single documents, but are often found across several policy and legal documents or evaluation reports, and in literature produced by government agencies. Annual reports, media releases and public relations document or statements provide an important insight into the ways heritage has developed and engaged with historical encounters and relationships, including economic development. Examining publicly available literature has therefore highlighted the ‘mutually supportive’ relationship between heritage and identity, heritage and economic development, and how this relationship may be produced or maintained at the Sepon Mine.

Fieldwork Opportunities, Challenges, and Limitations to the Thesis

Performing Research in Lao PDR

Several opportunities, challenges, and limitations underscore this thesis and have been influential to its outcomes. Principally this has been referred to as ‘the dilemmas’ to performing research and fieldwork in a post-socialist, economically transforming society like the Lao PDR. There is a small but nonetheless insightful body of reflective literature that describes the challenges and opportunities associated with performing research and fieldwork within particular post-socialist countries in Europe, East and Southeast Asia. Clarke and Michailova (2004) contend that transforming societies present unique contexts to perform research, and as a result, offer methodological challenges and opportunities for the researcher. Methodological issues for conducting research in transforming societies involves understanding that the context of the research environment is transformational; that the researcher is a ‘subjective agent’; that respondents are considered as ‘social actors’; and consideration to ‘third party’ agents within the research environment is required (Clarke & Michailova, 2004, p8).

Knowing the context of the field is extremely important in Southeast Asia, notably in the Lao PDR, Vietnam, and Cambodia. War and civil unrest have dominated this region for decades, and contemporary society remains predicated on the outcomes of such conflict, with nations remaining socialist or still emerging from socialist governments. Governments are often underfunded and understaffed, processes are highly secretive, and political ‘agendas’ frame programs for research. Turner (2010) considers that political circumstance are the most pertinent concerns in China, Lao PDR and Vietnam, explaining that “socialist governments in all three countries have maintained a firm grip on centralised, political control and all remain single-party states” (p.122). The politically sensitive nature of transforming and post socialist nations makes

‘politically engaged research’ an often impracticable exercise. According to Bonnin (2010), in Vietnam, “politically engaged research...remain highly constrained by the state” (p.180), particularly research focused on ethnic minorities. This is also true of the Lao PDR where research can be considered political or is viewed by the Lao government to contradict or threaten the ruling party’s mandate. Complex politics of identity are the most tightly controlled space for researcher. Baird (2008) has described how in some provinces in the Lao PDR “the local government is still not open to foreigners, especially those interested in conducting ethnographic or geographical research related to ethnic minorities” (p.50). In Savannakhet Province and within the Sepon Mine I encountered was no resistance to obtaining permissions and performing research.

In my research I navigated some of these complexities by conducting research within a Memorandum of Understanding (MoU) between MMG-LXML Ltd; Department of National Heritage, Lao PDR; and James Cook University, Australia (see Appendix 1 & 2). Performing research for my dissertation within the MoU enabled me to officially perform research within the Lao PDR, supported by approval within the Sepon Mine (see Appendix 3). Obtaining formal research permission can complex and ambiguous process for a researcher new to the Lao PDR. As Bonnin (2010) encountered in Vietnam, while an ‘official route’ exists for foreign researchers the “actual implementation of regulatory procedures on the ground differs depending upon the host institute, location of field sites, subject matter of study and groups to be involved in the project” (p.181). I heard many similar stories in the Lao PDR where obtaining research permissions through approved government channels was complex, and in some instances representing the barrier for projects failing to get off the ground. Often it is the role of individuals within the government, not necessarily processes for obtaining research permission that will provide approvals and permissions. As Turner (2010) noted, the role of ‘gatekeepers’ – persons with significant political

power and authority – can potentially decline, limit, or take control of the research process, or redirect research in a way that will suit them or their political agenda. Being aware early on in the design of my thesis that I may encounter similar problems in obtaining research permissions, I refined my methodological approach to consider a topic that would be supported by activities approved for research within the MoU, while also providing support to improve the methods applied to identify and manage heritage as part of the mining process.

Performing Consultancy-based Research or Applied Anthropological Research

I took into consideration issues of conflict of interest, and ethical engagement, while performing research within a mining company. Resource industries, mining and oil companies, and locations for natural resource extraction have been said to have “largely escaped the scrutiny of academics” over the past four decades (Banks, 2014, p.191). These industries have generally not been sites of research within the social science. As the resources industries have increasingly become global, and their close connection to several ‘development challenges’ in the 21st century, a critical gaze has turned towards them. Traditionally, these industries have not particularly been ‘open’ to research for several reasons. For mining companies, there has been concern that research findings could result in negative outcomes and impact on the image of the company. For researchers, mining sites can be difficult location for research, being remote, isolated and in some cases unsafe or violent locations (Ballard & Banks, 2003). Anthropologists and archaeologists that do gain access to mining sites are generally engaged as a consultant or technical advisor, when legislation supports this. Commonly, the role of the anthropologist and archaeologist has been to meet specific legislative requirements of State parties and support the rights of traditional owners

or local landholding groups during mining or development operations. To this end, engagement as consultants, researchers, and advocates to local communities have situated anthropologists working in mining as ‘auxiliaries’ to what Ballard & Banks (2003) argue are ‘resource wars’ built around the ‘ethics of engagement’ with these industries.

The emergence of extractive industries has become a distinct field of research, particularly for anthropologists, with Banks (2014) claiming that the academic critique of extractive industries in the early 21st century. Ballard & Banks (2003) stated that “the scope for an anthropology of mining had been dramatically transformed” (p.287) by the early 2000s, when the mining industry and mining sites became increasingly considered “sites for critical anthropological research” (Ballard & Banks, 2003p. 288). Research in this field was considered to have the “potential to extend convention lines of anthropological inquiry and to pose further challenges to ethnographic reflexivity” beyond previous studies focused largely on mining capital and economic benefits of mining capital for host nations (Ballard & Banks, 2003, p.289). Anthropological studies of mining, they argued, could “address questions of considerable contemporary interest in anthropology such as globalization, indigenous rights, and new social movements” (Ballard & Banks, 2003, p.287). Ballard & Banks (2003) conceded however that these fields lacked detailed investigation, and as such, remained “largely under-researched and under-theorized” by the early 2000s (p.287). They also claimed anthropological studies of mining were “persistently parochial and regional in their scope” considering the transnational nature of mining as an industry. This period also witnessed uncertainty over what Ballard and Bank (2003) claim were that “the appropriate terms for the engagement” (p. 287) of anthropologists in the mining industry, a topic that became the subject of debate. Anthropologists, they argued, had become “engaged as auxiliaries to all parties in the resource wars that revolve around the global mining industry: as consultants to industry, state

agencies and local communities, and as advocates in debates both for and against mining” (Ballard & Banks, 2003, p.306).

The extractive industries, Banks (2014) shows, are now becoming central in debates surrounding development in the Asia-Pacific, Latin American, and African regions. Research has tended to focus on mining-based impacts, and has grown to include the relationship between mining and globalisation, resource industries as international intuitions, and the emergence of corporate social responsibility. Working as a consultant remains the core mechanism by which anthropologists and other researchers engage with mining and extractive industries. While ethical concerns remain a point of contention for objectivity in research, researchers have successfully worked as consultant without this role impacting on their research or results. Baird (2008) outlined that conducting research in southern Lao PDR relied on consultancy-based projects as the means to ‘access’ the people and sites for research. Permission for his research would not have been granted otherwise. Baird (2008) did however caution against what he viewed as “blurring of traditional boundaries between ‘fieldwork’ and other types of ‘work’” (p.50), identifying that there are potential disadvantages to this form of engagement. Baird (2008) considered that the ‘research agenda’ can be perceived by those being researched, and that this frames interaction and collegiality between researcher and those being researched. Baird (2008) did illustrate that what working with people when they are “engaged in an activity that is relevant to their real lives” (p, 50) can lead to better outcomes. I undertook research as an independent researcher at the MMG-LXML mine site, with some financial contribution from the mining company supporting accommodation and travel to and from the site for research. Importantly, as mentioned above, research undertaken for this thesis was under a MoU between MMG-LXML Ltd; Department of

National Heritage, Lao PDR; and James Cook University, Australia. All research was conducted in collaboration with MMG-LXML (and the Lao Government) as an industry ‘partner’.

Language Proficiency in the Research Setting.

The research for this thesis covered several international locations that required the knowledge of more than one language to communicate. While I could communicate in general conversations in Tai and Lao language, in-depth interviews required support from native speakers. English is only spoken by a limited few in rural areas of the Lao PDR. In Vilabouly District there are two main ethnolinguistic groups – the Phou Thay that speak a version of Tai or Lao - ‘Tay-Kadai’, and the Mon-Khmer who speak an older ‘Austroasiatic’ language. Baird (2008) has explained “[s]peaking local languages is critical for effectively communicating with people and understanding their circumstances” (p.47), and while he considers “[t]ranslators rarely provide the same sorts of nuanced understandings that direct contact offer” (Baird, 2008, p.47) he does consider “there are circumstances in which translation is either necessary or even preferable” (p.47). Translation was required for interviews with Mon-Khmer speakers, who I had little to no linguistic understanding. Fortunately most Mon-Khmer speaker also spoke Phou Thay, making translation more discernible. I made sure to cross-check any key terms or quotes recoded during interviews with more than one native speaker, to test the validity of the translation. For the most part however the majority of interviews were undertaken in English, and most non-native English speakers interviewed spoke English as a second language quite proficiently. English was also commonly spoken by employees at the Sepon Mine. This allowed me to conduct most interviews without translators and I was able to discern interview data without requiring further support.

Dissemination of Research Findings

Chen, Diaz, Lucas and Rosenthal (2010) stipulate that “dissemination of research findings beyond scientific publications, specifically to study participants and the general public, is an ethical responsibility of researchers” (p.1). The research design of this thesis aims to publish findings from this research, and also to make findings available to community group and other stakeholders engaged in heritage management activities at the Sepon Mine. Based on the participatory and community-based focus in this thesis, I plan to develop a report and further publications that provide ‘evidence-based’ findings from this research to community group and other stakeholders engaged in heritage management activities at the Sepon Mine. I consider this essential to provide support and practical solutions to enhance heritage management processes within the Sepon Mine, and potentially more broadly within the Lao PDR and other non-Western nations. It has been identified that there is a lack of reporting from archaeological research and of heritage management outcomes within the Lao PDR. Therefore, dissemination is a critical task to undertake, as a process of inclusivity and decolonisation, to support development of localised methodological and theoretical frameworks that could be more effective in heritage management practices locally, and potentially internationally.

Conclusions

This chapter has outlined the methodological framework and research methods that were applied to gather data and provide information to answer the question proposed in this thesis. I outlined the three (3) methods that are applied in this thesis, and provided the context for their

application in heritage studies and within the Lao PDR. Three main methods applied are 1). Multi-sited ethnography; 2). Archaeological ethnography, or ethnography of archaeological practice; and 3). The Framework for the Conservation of Sacred Natural Sites. This chapter has also provided a description of the field methods, and how each method was applied to gather information and analyse data in this thesis, including Semi-structured interviews; Participant Observation; Ethnography of Archaeological Practice; Caves-specific Research; Archival research: Review of 'grey' literature and secondary sources. I have provided considerations to the limitations to the thesis, notably performing research within developing and post-colonial states within Asia; performing research within mining and extractive industries; and language proficiency in the research setting. I have identified how these presented challenges to my fieldwork, data collection, and analysis of data. The chapter has closed by outlining and discussing the dissemination of findings from this research, and the importance of this process for this thesis.

The next chapter will provide an introduction to the field site - Savannakhet Province and Vilabouly District, as a background to the empirical chapters of this thesis that follow in Chapters 5, 6, and 7. The next chapter will outline the background to the Savannakhet Province, Vilabouly District, and MMG-LXML Sepon Gold & Copper Mine. The regional and district history, ecology, and socio-cultural information will be introduced to provide a context for understanding the current social, cultural, and political context to illustrate how these relationship are intertwined with heritage management practices at the Sepon Mine. The chapter will provide the foundation for Chapters 5, 6, and 7 that follow.

4. Background to Savannakhet Province, Vilabouly District, and the Sepon Gold & Copper Mine

“Because landscapes are simultaneously social and natural, to make landscapes a unit of scholarly analysis is to track the co-joined making of nature and culture”

(Greenough & Tsing, 2003, p.15)

The previous chapter described the methodology applied in this thesis. This chapter will introduce the main location of fieldwork - the MMG-LXML Sepon Gold & Copper Mine. The regional geography, natural environment, and regional history are introduced, including prehistoric copper mining, the Buddhist Kingdom of Lang Xang, the French Colonial period, and the Indochinese Wars. Regional and local history are important to describe because many aspects of history remain relevant in the present and provide the basis for present-centered heritage values and human-nature relationships. The chapter will then introduce the present day culture, society, and economy within Vilabouly District. Current livelihoods and belief systems and practices with the natural environment and cultural sites are outlined to provide a background and context for topics introduced and discussed in Chapters 6, 7 and 8 to follow. The chapter will conclude with a brief discussion of the impacts of modern mining and economic development in Vilabouly District.

Regional Geography and the Natural Environment

Savannakhet Province is abundant in natural resources, with minerals, forests, wild rivers, and wetlands supporting a high level of biodiversity and floral and faunal endemism. In 2011, total forest area in Savannakhet Province was estimated to be about 1.1 million hectares, covering approximately 52% of the province. Approximately 46% of the forest is considered conservation forest, with 40% of this protection forest and the remaining 14% considered production forest (IUCN-NERI, 2011). The province is mostly flat, with mountains reaching up to 300 metres above sea level on the eastern border ranges with Vietnam. Several rivers flow around and across Savannakhet Province, providing an important habitat for aquatic species. The most important rivers include the Mekong, Xe Banghiang, Xe Champone, and Xe Bangfai. Up to 500 different species of plant have been identified in Savannakhet (and Saravan Province). There are several rare and threatened wildlife species located in Savannakhet province, including the Siamese crocodile, Asian elephants, the Green Peafowl, the Giant Ibis, Eld's Deer, and the Douc langur (IUCN-NERI, 2011). Three National Protected Areas (NPA) are located within the Savannakhet Province – the Phou Xang Hae,⁹ Dong Phou Vieng and Xe Bang Noun - and an internationally renowned RAMSAR Site – the Xe Champhone Wetland (IUCN-NERI, 2011; IUCN, 2014). Conservation areas have been established to support biodiversity preservation within the provinces, and promote tourism and customary landholder management of natural areas and their resources.

⁹ The Phou Xang He NPA has 34 % of its total area located within Vilabouly District (Chanthavong, 2003).

Historical Background to Savannakhet Province and Vilabouly District

Regional Prehistory

Archaeological evidence has indicated that prehistoric cultures were active in the Savannakhet Province and Vilabouly District. Evidence for prehistoric activity is primarily based on the discovery of a large quantity of Neolithic stone adzes across the province, but with the highest density located in the east and northeast in Vilabouly District., where the largest amount of archaeological research has been undertaken (Sayavongkhamdy & Souksavatdy, 2011). Neolithic stone adzes in various states of production (from partially worked to complete) have been found throughout Vilabouly District, associated with open air sites and caves. Evidence indicates that production of Neolithic adzes may have occurred in this location, or nearby, and their use spread across the breadth of the east and northeast of the Province.

Evidence for prehistoric occupation in the region are found mostly in karst areas and caves in the east and northeast of Savannakhet Province. Davis (2000) argued that southeast Khammouan Province and northeast Savannakhet Provinces “may offer comparably significant data” (Davis, 2000, p.54) with other well-known caves in north-western Thailand, including Spirit Cave, Banyan Valley Cave and Tham Panchan Cave. Davis’ (2000) hypothesis was based on each location sharing “similar topographic positions” (p.54), and he suggested southeast Khammouan Province and northeast Savannakhet Province should hold evidence for occupation of the Hoabinian techno-complex (Davis, 2000). Findings from Vilabouly District by Sayavongkhamdy and Souksavatdy (2011) and the southeast Khammouan Province and northeast Savannakhet Provinces by Davis (2000) indicate the prehistoric use of this locality since at least 10,000 years ago and potentially earlier. This is significant given the findings from previous research in the Lao PDR and within greater Southeast Asian region (see Bacon. et al, 2011; Barker, 2005; Demeter, Sayavongkhamdy,

Patole-Edoumba, & Coupey, 20095; Glover & Price 2004; Higham, 2012; Shackelford & Demeter, 2011; Treerayapiwat, 2005).

Prehistoric Copper Mining

Archaeological evidence from the mountainous region in the east of Savannakhet Province, along the present-day Lao/Vietnamese border, illustrate that the region was occupied by copper mining cultures from at least 2,500 year ago. A range of prehistoric mining areas, settlement sites, and cemeteries have been discovered which together represent a larger complex or site based around copper mining, production and trade (Tucci, Sayavongkhamdy, Chang & Souksavatdy, 2014). Termed the ‘Vilabouly Complex’, the social complexity and scale of mining operations suggest external state-based control of local mining operations. However, evidence also suggests that a fluctuating local socio-political context existed between the Bronze Age to the Iron Age, where mining was most likely operated by tribal or small-scale family-based mining enterprises (Tucci, Sayavongkhamdy, Chang & Souksavatdy, 2014). Importantly, the ‘Vilabouly Complex’ is one of only three known prehistoric copper mining sites in Mainland Southeast Asia. The other two sites known for copper production in Southeast Asia are Lop Buri in Central Thailand, and at Phu Lon in Northeast Thailand on the Mekong River.

Evidence from Vilabouly also suggests that copper was traded to other regions throughout mainland Southeast Asia (Pryce, et al. 2011) making this location significant in the early trade and use of copper regionally during the Bronze and Iron Ages. Archaeometallurgical analysis by Price et al. (2011) highlighted that isotopic signatures from copper mined in the Sepon region are found in copper objects dispersed throughout Southeast Asia from the late prehistoric period. This

highlights the likelihood of trade of copper ore or copper products between societies in present day Cambodia, Thailand, Lao PDR, and probably to Dynastic China (see Higham, Higham, Ciarla, Douka, Kijngam & Rispoli, 2011). Isotopic analysis and C₁₄ dating also indicate correlation with other known regional historical events, including the expansion of the Chinese society and increasing interaction and relationships with present day Vietnam (Higham et al. 2011). The findings at the Sepon Mine have led to consideration of how these sites may figure in early development of pre-nation states in the Southeast Asian region, specifically interactions with State-societies including Angkor and its predecessors in present day Cambodia, the Dvaravati society in present day Thailand and Laos, and the Cham people and their predecessors in present day Southern Vietnam.¹⁰

Archaeological evidence however does explain the identity of the people who formed the pre-historic societies in the region. Present day Phou Thay and Mon-Khmer speaking groups are each considered to have migrated to the lowlands of this region from Vietnam, following the Nam Ou River Valley to the Mekong River prior to 500 years ago. It has been suggested the Phou Thay travelled further south, to present day Savannakhet, and eventually spread east, settling in the area of Muang Angkham, Vilabouly District, around the 16th century (Rosenbloom, 2010). In Vilabouly District today, both Phou Thay and Brou speakers each claim to have lived within the local area ‘since ancient times’, however exact dates for settlement within the area are unknown. Local myths and legends do offer one explanation to the peopling of the area, however, it is argued that “Mon-Khmer speakers have resided in Mainland Southeast Asia for a longer period than others” (Chamberlain, 2007, p.7). This suggests then that Vilabouly District would have been inhabited first by Mon-Khmer speaking groups, followed by the arrival of the Thai - Lao speaking

¹⁰ Personal communication with Dr Nigel Chang

groups.¹¹ It is not clear though which, if either group, were associated to the ancient mining societies and inhabitants or other archaeological sites located in Vilabouly District. As Chamberlain (2007) explained “the ethnolinguistic identity of the various archaeological sites in Vilabouly District is unknown” (p.8).

Historical Period

Buddhist and Hindu pre-Nation States

The historical period within present day Savannakhet District and surrounding provinces straddling the Mekong River is dominated by Buddhism and Hinduism. Social development and culture in the Savannakhet Province has been influenced by various Kingdoms: from the Cham Kingdom from the 7th to 10th centuries, the Khmer Empire to the 13th century, and later the Buddhism kingdom of Lang Xang, the ‘Kingdom of a Million Elephants’ (Evans, 1999; Stuart-Fox, 1997)). Lang Xang was founded by Prince Fa Ngum in 1354 century BCE, with its capital at modern day Luang Prabang. The empire stretched in the cardinal directions covering practically all of modern day Laos, bordering the east with Vietnam (then Annam in the north, and Champa in the south), in the south modern day Cambodia, and the Korat Plateau bordering then Kingdoms of Lan Na and Ayutthaya in the west (Hingham, 2002). Lang Xang was administered by a series of independent *muang*, or principalities, located at Luang Prabang, Vieng Chang and Champasaak, and that were unified by Fa Ngum under a *mandala* polity (Stuart-Fox, 1997).

¹¹ Chamberlain (2007) explains origins of each group in the region is based on linguistic evidence, stating: “In general the linguistic diversity of the Mon-Khmer groups, including the different dialects of Brou, such as Makong and Tri, is greater than that found within Phou Thay indicating earlier habitation. Likewise, the differences between Brou and other adjacent Mon-Khmer languages such as Pacoh and Katang are greater than the differences between Phou Thay and Lao, the only other Tai language found in Savannakhet Province” (p.7).

Ruins, temples and other religious structures present in the landscape today highlight the localised influence of pre-modern state societies in the past. Further, they also illustrate how this region had a role in the development of early state societies in mainland Southeast Asia. Present day Savannakhet City also served as a principal *meuang* for the Kingdom of Lang Xang Kingdom (Stuart-Fox, 2008). Buddhist structures and temples were built close to the current capital city of Savannakhet, including Wat Xayaphoum, Wat Lattanalansy, Ban That, That Phon, That Oumoung, That Nang Lao and Wat Taleo Kao (Tourism Laos, 2015). That Ing Hang is a Buddhist stupa was allegedly built by an Indian King Asaka in 215 BC to sanctify the Lord Buddha's visit and to mark he delivered a sermon. The stupa is also believed to house a bone of the Lord Buddha. A stupa was later erected in the same site by a Mon ruler 1500 years BP, and during the 16th century the area was extended by King Saysethatirath. Finally, in 1930, a stucco stupa in the shape of a lotus was installed there (Rosenbloom, 2010). Another Khmer structure Heun Hin, meaning 'Stone House', is alleged to have been constructed between mid-12th and 13th centuries by King Jayavarman VII, believed to function as a 'rest house' for the King along the road that connected the then Khmer empire of Angkor (Rosenbloom, 2010).

The Lang Xang Kingdom ruled for over three and a half centuries but weakened dramatically in the 1760s, when the Burmese invaded and overthrew Chiang Mai, the capital of Lan Na, and also Luang Prabang and Ayutthaya. During the late 18th century the Siamese took control of Vieng Chan and the three principalities of Lang Xang. Although under Siamese control, Lang Xang was separate of the Siamese hegemony until 1827 and after this time Lao society was subsumed under Siamese authority until the French came at the end of the 20th century (Stuart-Fox 1997). Local oral history from villagers living in Vilabouly District confirm recorded evidence for historical activity in the region. Genealogical lines of descent are traced to the Lang Xang

Period by several Phou Thay villages, who claim the origins to their village and lineages to the Kingdom over two centuries ago. In particular, the oral history of local Phou Thay villagers of Muang Angkham and Meuang Luang recount historical and genealogical connection to a 19th century Lang Xang King, and to one of its famous rulers Phra Chao Anuvoung (Chamberlain, 2007; MMG-LXML, 2011; Oxiana-LXML, 2009). Several Buddhist temples and stupas located in Vilabouly District at Ban That at Meaung Luang and at Ban Ang Kham are also claimed to be connected to the Lang Xang Kingdom (Chamberlain, 2007; MMG-LXML-2011). Local Phou Thay and Brou speaking groups also recount ancestors being forcibly removed from their villages at the fall of the Lang Xang Kingdom in the late 19th century. Local ancestors were taken to the northeast Thailand or *Isaan* region by the Siamese when they invaded the area in the later 19th century, most never to return again (MMG-LXML, 2011).

The French Colonial Period

Savannakhet City was also an important location during the French colonial period in the present-day Lao PDR. From the late 19th century until around 1945, Savannakhet served as a port along the Mekong River and a centre where the French planned to ‘unlock’ the region and integrate Indochina (Stuart-Fox, 1997). Various French explorations embarked from the Mekong River at Savannakhet, travelling east through present day Savannakhet Province and Vilabouly District into present day Vietnam. In one account, the explorer Joseph de Malglaive travelled through the east of present day Savannakhet Province and Vilabouly District in 1890, attempting to find an overland route between the Mekong River and Hue, on the coast of present day Vietnam (MMG-LXML, 2011).

Savannakhet city would later become a strategic centre for the French during their occupation of that territory as part of Indochina. Savannakhet was the centre of French Colonial administration for a short period of time, before the centre was moved to the present-day capital of the Lao PDR, Vientiane (Stuart-Fox, 2008). The city did later serve to support links with other parts of Indochina, and in the early 1890s, a route through the rugged Ai Lao pass joined it with Quang Tri, Hue and Danang in present day Vietnam. It was proposed that Savannakhet be part of the series of train lines to link with Vietnam, which were surveyed in 1898. This passage was one of six which the French envisioned would create a colonial road and rail network. From the 1930s Saigon did become connected to Savannakhet, Vientiane and Luang Phrabang, forming a vital transportation network within French Indochina (Stuart-Fox, 1995). However, in 1945 Savannakhet city was seized along with Vientiane and other towns by members of the *Lao Issara* marking the end of colonial rule in the city, and in time, of the nation (Stuart-Fox, 2008).

[Mining Mineral and exploration during the French Colonial Period](#)

French explorers were the first to record the presence of minerals and precious stones, including gold, silver, tin, iron, lead, antimony and also sapphires, within the present day Lao PDR. French explorers travelled across Indochina attempting to find navigable routes to China and present day Vietnam. The earliest reports of mineral-bearing potential in present day Vilabouly District came primarily from travel writings of French explorers. As part of the French *Pavie Mission* during 1890, explorer de Malglaive travelled through the valley of the Nam Kok River and villages of Muang An Kham and Muang Vang. de Malglaive reported that villagers in these locations were actively engaged in local small-scale mining and panning for gold, also traded gold

with Chinese merchants, and that villagers at Muang Vang were producing iron at the time of his party's visit. de Malglaive reported that gold mining and trade in gold in the region was severed when the Siamese invaded in the mid-19th century (MMG-LXML, 2011). 1928 was the next time another French geological exploration party surveyed the Nam Kok Valley, this time for gold. It was presumed that emphasis for the *Mission d'Emile* expedition was based on de Malglaive's 1890 *Pavie Mission* that reported the area to be gold-bearing. The first mines in present day Vilabouly District began developing from 1928, operated by several speculative companies. The first company, *Mines d'Or de Tcheone*, registered to mine for gold in the area in 1928. The second company, the *Societe Anonyme Mines d'Or de Nam Kok*, also established itself in 1929. Both of these mines were unsuccessful and the region was explored only once more by French government geologists in the late 1930s, on this occasion the regional geology of the area was mapped (MMG-LXML, 2011).

The Indochinese Wars

Savannakhet Province became absorbed within national administrative and political change through war and civil unrest from 1945 through to 1975. During the Vietnam War, Savannakhet acted as another important strategic position, this time for United States personnel, who were stationed there from the 1960s. The United States deployed its development organisation USAID in Savannakhet City, while it also used this location to counter Pathet Lao resistance within the province (Stuart-Fox, 1997). In 1973, Savannakhet City and USAID offices were overrun, and United States personnel were arrested and evicted as the Pathet Lao began to assert control of nation. Across the country the new guise of the Lao People's Revolutionary Party was developing

(Ivarsson, 2007; Stuart-Fox, 1997). Interestingly, a number of key figures in the Pathet Lao movement, post-revolutionary period, and formation of the Lao PDR were born in Savannakhet Province and Vilabouly District, making this a highly symbolic part of the Lao PDR today. Kaysone Phomvihane, who became the leader of the Lao Revolutionary Party from 1955, and the first prime minister of the Lao PDR from 1975 until his death in 1992, was born in Savannakhet in 1920 (Ivarsson, 2007; Rosenbloom, 2010; Stuart-Fox, 1997). The wife of the current president of the Lao PDR was born within Vilabouly District (MMG-LXML, 2011).

Vilabouly District received heavy bombing as part of the Vietnam War between 1965 and 1973. The war significantly affected villagers's mobility and residential patterns (Chamberlain 2007; Oxiana-LXML, 2008). Much of the focus on bombing in this part of the Lao PDR was due to the Ho Chi Minh Trail running north-south inside the Lao border within Vilabouly District. Planned and indiscriminate bombing along the Ho Chi Minh Trail and adjacent locations destroyed whole villages, forcing mass evacuations, and many people were forced to live in temporarily makeshift shelters and local caves (MMG-LXML, 2011; Oxiana-LXML, 2008). The legacy of the 'American War' is still present in the memories of people who survived the bombing, and represented physically as scars in the landscape (Pholsena, 20109). However, the most problematic legacy of the war are the millions of Unexploded Ordinances (UXO) from aerial bombing that continue to maim and kill people living in Vilabouly District and eastern regions of the province.

Culture, Society, and Economy

Ethnicity, Population, and Residential Patterns

Today, Savannakhet Province is the second most populous province in the Lao PDR. Savannakhet had an estimated population of approximately 974,000 people in 2014 (Lao Statistical Bureau, 2014). The province is divided into 15 separate districts, contained 1015 villages, and approximately 156,000 households. The population remains highly inverted, with the larger proportion of the population aged 29 and under (Lao Statistical Bureau, 2014). The province is considered to be ethnically and linguistically diverse, represented by up to up to 7 ethnic groups which fall within two main language families – Thai (Lao/Tai) and Mon-Khmer speakers (Tourism Laos, 2015). The population is dominated by lowland Lao speakers, or *Lao Loum*, who are associated with the lowland plains areas which dominate the west and central parts of the province. The eastern and more mountainous region of the province is inhabited by two main ethnolinguistic groups – the Phou Thai and the Brou.¹² Both the Phou Thai and the Brou are also divided in further subgroups, particularly the Makhong and Tri ethnic groups who are Mon-Khmer Speakers. There is no estimate given of the populations of each group across the province, but given the difference in land area (90% plains – 10% mountainous), lowland Lao dominate the population of Savannakhet Province (see Figure 5).

The most recent population estimate for Vilabouly District was approximately 37,000 people in 2015.¹³ The population was distributed throughout 99 villages, and a total of 1,768 households (Chamberlain, 2007, p.6; Lao Statistical Bureau, 2014; Oxiana-LXML, 2008). The

¹² Under earlier classification schemes, the Brou were known as *Lao Thueng*

¹³ Vilabouly District population was approximately 30 000 people in 2007 - the year of the last official census the District was made available. This was recorded during a socio-cultural survey of Vilabouly District by Chamberlain (2007).

population within Vilabouly District is classified ethno-linguistically, comprised of Thai (Lao/Tai) and Brou speakers. The *Phou Thay* speak a *Tai* language and belong to the South-western branch of the *Tai* family group. *Brou* on the other hand speak *Mon-Khmer* language and belong to the Western Kautic branch of that language group. The *Tai* and *Mon-Khmer* speakers in Vilabouly District and surrounding regions (including Vietnam) can be divided into several sub-groups, including the Vang, Ho, Katak and Kapong (*Phou Thay*) and the Thro, Tri, Makong and Chouy (*Brou*) *Phou Thay* speakers are the more populous of the two ethno- linguistic groups, with a population of 30,462 people, comprising approximately 70% of the population and reside in 58 villages in the area. *Brou* speakers on the other hand have a population of 9,254 people, comprise approximately 30% of the district population and reside in 41 villages in the district (Chamberlain 2007, p.6).

Residential patterns for both *Phou Thay* and *Brou* speaking groups in Vilabouly District are virtually exclusive, with *Phou Thay* villages exclusive for residence of *Phou Thay*, while *Brou* villages are exclusive to *Brou*, occasionally with other ethnic subgroups of the *Brou* (Oxiana-LXML, 2008, p.9). Due to historical circumstance, some assimilation between groups has taken place within villages over time. Generally each village is founded by a known ancestors, and primary residence is directed by marriage. The descent system for *Phou Thay* is characterized as patrilineal (contrasting the bilateralism of ethnic Lao), with residence patterns for the *Brou* favouring bilateralism (Chamberlain, 2007, p.7). Intermarriage does occur between the two groups, and this is commonly a male *Brou* marrying a female *Phou Thay* (but rarely vice versa). Because of this type of marriage, a new sub-group called Kaleung has also been created (Oxiana-LXML, 2008). *Phou Thay* and *Brou* villages each consider themselves to have been ‘founded’ by a common ancestor (commonly regarded as a ‘grandfather’), usually a relative of the village head,

and which can be traced back generally about four generations ago. Villages are usually named after a particular natural feature, or another use of the village, like the use of *kao* meaning rice, as a means to distinguish the village. Village lands are clearly demarcated and controlled between living areas, agricultural production for rice or swidden, cemeteries, and spirit forests (*Mahesak Paa*). However, village boundaries are known to be loosely delineated, with boundaries at times being fluid. Even so, villagers do consider they 'own' the village lands and what is contained within village lands (Chamberlain, 2007).

Phou Thay and Brou do have a history of living in close geographic proximity to each other. There is also a history of high local mobility in the area and based on several factors largely based on external social pressures, most notably the revolutionary period. Generally Mon-Khmer speaking groups are known to shift settlements more regularly than Phou Thay speakers based on their agricultural practices as shifting cultivators. Historical factors including the Siamese invasion, the French colonial period and Vietnam War era also contributed to disruptions in residential patterning (Chamberlain 2007, p.8). Heavy bombing of Vilabouly District as part of the Vietnam War between 1965 and 1973 is known to have contributed to village mobility and current residential patterning (Oxiana-LXML, 2008). Explained in the previous section, many villages were destroyed and people were forced to relocate from the District with some even living in caves to shelter from the bombardment. Many villages had to be rebuilt, or built anew, with some new villages containing combined Phou Thay and Mon-Khmer speaking groups (Oxiana-LXML, 2008). More recently, in-migration to Vilabouly District has occurred due to introduction of the Sepon Gold and Copper Mine from around 2001. Local Phou Thay people in particular have relocated closer to the mine for better access to employment, with a four-fold increase in residents taking place between 2001 and 2009/10 (MMG-LXML, 2011).



Figure 5. Phou Thay residential house and Spirit House (top row); Brou residential House and offering to local spirits (*phi*) (bottom row). (Photos: The Author).

Explained in the previous section of this chapter, people have lived in the vicinity of the current Sepon Mine for thousands of years. Religious beliefs in Savannakhet Province are predominately Buddhist for the majority lowland Lao speaking population, and can be traced back to the influence of Buddhism in the region. Most of the ancient Buddhist temples remain sites of spiritual significance and pilgrimage for Lao people living in Savannakhet and across the Lao PDR. Tat Ing Hang for example is considered one of Savannakhet's most sacred sites, with the stupa is registered as a 'National Treasure' of the Lao PDR. Another important site, the Khmer structure Heun Hin, is the location for annual festival (*Boun Heun Hin*) during March, where people perform a Buddhist ceremony in the morning followed by Lao dancing (*lamvong*) in the evening. Other annual national Buddhist events undertaken in Savannakhet Province include the Lao New Year (*Phi Mai Lao*), agricultural fertility festival, or The Rocket Festival (*Boun Bang Fai*), and the post-rice harvest Dragon Boat Racing Festival (*Boun Aak Phansaa*) (Rosenbloom, 2010). The *Baci* Ceremony is also commonly practiced throughout the Province year-round. This involves the ceremonial blessing and tying of white string around the wrist of visitors and family members, and usually takes place at an important point in a person's life (for example at birth or weddings), when people are sick, or when people are leaving on a journey.

The fusion of Buddhism and animistic faiths that involve belief in nature spirits (*phi*) ancestor worship is also common in Savannakhet Province. However, such beliefs and associated practices are more commonly found in the eastern Districts of the province, including Vilabouly District, where Mon Khmer speaking communities reside. While Chamberlain (2007) describes the Phou Thay of Vilabouly District as "nominal Buddhists" (p.44), their Buddhist belief is overlaid with a "deep and profound animism, grounded in ancestor worship" (p.87). Phou Thay

religion is syncretic, as Chamberlains (2007) explains “Phou Thay religious practices, depending on the location, include a diverse array of animism, Buddhism, Christianity, and even Brahmanism” (p.45). In most Phou Thay villages within Vilabouly District there is a Buddhist Monastery or *wat*, and Phou Thay continue to take part in Buddhist rituals. For example, at the *wat* of Ban Ang Kham, relics of the Lord Buddha are brought out and washed annually by villagers during the 5th lunar month, but may not be removed at any other time. That said, Phou Thay of Vilablouly District have not adopted Buddhism as completely as Phou Thay in other areas of Northeast Thailand. Chamberlain (2007) contends Vilabouly Phou Thay have “little community support for a full commitment to Buddhism” (p.44). There are few regular practicing monks in local *wats*, and most attention to Buddhism is in support of state-based Buddhist rituals or events (Chamberlain, 2007; see also Oveson, 2002).

The Brou on the other hand are largely animists and do not adhere to any Buddhist beliefs or ritual. In Brou cosmology there are ancestral spirits (*yang kaneaq*) and earth spirits (*yang su*), and these spirits inhabit different territories (either natural man-made environments) (Chamberlain, 2007; Vargyas, 1996). Outlined in Chapter 1, Chamberlain (2007) explains that “human ancestors of the Brou are paired with nature spirits in a grand cosmos that defines the relationship between people and nature” (p.87). In Brou cosmology, the soul on an ancestor will travel throughout history, and ancestors and their journeys are linked to the rights of persons or clans to use material resources within a specified communal territory. The Brou consider it essential to communicate with spirits, particularly of a person’s descent line, to access and attain ownership and use of specific resources in territories. Ancestral spirits can also mediate disputes, explain health, sickness and death, and outcome of the coming harvest. The Brou have several important ceremonies. These include the *Ra-peup* Ceremony and the annual ceremony for the

guardian spirit of the territory (*yang chamnak lak khoun*). Brou ceremonies, unlike the Phou Thay, generally involve sacrificing animals to the spirits, usually a chicken or buffalo, depending on the level of sacrifice required (Baird, 2008; Chamberlain, 2007, pp.42-43; Vargyas, 1996). A taboo by Brou people which prevents the discussion of funeral or death rites also makes it difficult to understand Brou religion in Vilabouly District (Chamberlain, 2007). Brou religion (and also Phou Thay) appears to have been affected by what Chamberlain (2007, p.37) termed ‘historical traumas’,¹⁴ which has impacted kinship and residence patters, and ultimately displaced clan links to specific territories in most instances.

Identified earlier in this section, like residence patterns, the belief systems of Phou Thay and Brou groups are syncretic and overlap in several ways. Chamberlain (2007) explains that the Brou use Phou Thay terminology to describe spirits in order to prevent offending the Phou Thay spirits. Phou Thay and Brou also have religious practitioners, often referred to as ‘spirit mediums’, locally known as either *Mo Yau* or *Thao Cham*. For each group, spirit mediums can be possessed by spirits in order to divine information or heal a sick person. There is also communal belief in spirits, and that spirits inhabit ‘natural’ features, including mountains, forests, trees, rivers, rocks and caves. However rites and rituals for communicating with these spirits differ. Chamberlain (2007) explains that a “cult of the *Mahesak Lak Meuang* or village pillar” is “the principle religious focus” for both Phou Thay and Brou groups (p.8). Chamberlain (2007) explains the *Mahesak* spirit in more detail, and describes the relevance of this spirit to each group:

¹⁴ “Both groups have experienced considerable upheaval from foreign invasions and wars, beginning with the Thai depopulation between 1827 and 1860, French colonization and the first Indochinese war, the Japanese occupation during World War II, and the American bombings of the Ho Chi Minh trail which transverses the district. During these times of crisis when they would go into hiding the two groups' interdependency increased in their struggle for survival” (Chamberlain, 2007, p.8).

The spirit of the village pillar is a tutelary or guardian spirit which must be provided with continual reverence and appeasement in the form of offerings in order to maintain harmony and balance in the village and in the lives of individuals (p.8).

Chamberlain (2007) also explains how the *mahesak* spirit “governs agricultural production and oversees the daily lives of the people” (p.8). The *mahesak* can protect people from accident and injury, at work, and when people are away from their village. For the Brou however, spirits also have the potential to be malevolent and must therefore be appeased regularly (Baird, 2008). Phou Thay ceremonies to venerate the *mahesak* are performed strictly on the new moon of the second lunar month, and offerings to the village *mahesak* can only be made by males. For the Brou, an annual ceremony is held in honour for the guardian spirit of the territory (*yang chamnak lak khoun*), usually taking place in January or February, after the harvested rice is placed in the barn (Chamberlain, 2007).

Economy and Livelihoods

Savannakhet Province has received significant flows of investment in the decade to 2008, accounting for at least 21.8% of total national investment. Investment has supported employment and income creation, leading to a higher economic development status in the Province than nationally in 2010 (IUCN-NERI, 2011). The province has good road infrastructure that links its socio-economic centres with other provinces in the Lao PDR, and to Thailand and Vietnam. After Vientiane Municipality, Savannakhet province has become the Lao PDR’s second most important centre for industry. Agriculture (including rice) has remained the highest contributing sector to the Province’s economy at 49% in 2010 (IUCN-NERI, 2011). The mining sector and electricity

production accounted for almost a quarter (23%) of foreign direct investment (FDI) in Savannakhet Province during the same period (IUCN-NERI, 2011). Importantly investment and economic development has led to a decrease in the incidence of poverty within the Province, with 10% of the population considered to be living in poverty in 2009 and the incidence of poverty declining annually (IUCN-NERI, 2011). This has been supported by a well-developed Provincial health care system, covering up to 88.5% of the province. Further, the education system in Savannakhet Province has been steadily enhancing, with increasing numbers of kindergartens, primary and secondary schools, and the opening of Savannakhet University in 2009 (IUCN-NERI, 2011).

There have been a several economic investments in Districts outside of Savannakhet City. Mining, plantations, hydropower and service industries (tourism mostly) industries also support socio-economic development (IUCN-NERI, 2011). The Sepon Gold and Copper Mine in Vilabouly District is the most noteworthy example of investment-led economic development outside of the capital city. The Sepon Mine has supported community development in Vilabouly District to ensure the community would benefit economically from mining operations. Community programs were aligned with national and international goals to reduce poverty¹⁵ and to comply with MMG-LXML's social license to operate. These will be explained in more detail in the next chapter. International heritage agencies and NGOs have development poverty reduction programs within the Savannakhet Province based on traditional livelihoods. The IUCN has promoted economic development programs the Xe Champhone Wetlands that forge links between conservation and traditional livelihoods. The IUCN worked with local communities to develop

¹⁵ Several authors note that the Lao Government was aligned with the Millennium Development Goals targets and aimed to move the Lao PDR from Least Developed Nations status by 2020, however this is looking less likely to occur at the time this thesis was finalised. See McGuire & Reimann (2013)

tourist industries based on cultural and spiritual beliefs and practices associated with the wetlands and their conservation (IUCN, 2011).

Local economy and livelihoods in the Savannakhet Province and Vilabouly District still continue to rely largely on subsistence strategies. For the most part, forests, wetlands and other natural areas in Savannakhet province are recognised to support local livelihoods (IUCN-NERI, 2011). In many instances the subsistence and economic life of most of the provinces inhabitants are reliant on rice agriculture, swidden production and animal husbandry, with forest products providing an important addition to regular diets (Chamberlain, 2007, p.55) (see Figure 6). In Vilabouly District, Chamberlain (2007) explains how a relationship between people, belief, and the natural landscape are central to agricultural production:

Respect for nature that is at once both spiritual and aesthetic binds the groups, each in their own way to livelihoods in respective ecologies. These might be defined as a relation of human transcendence for the Phou Thay, but one of immersion and inseparability for the Brou. The Phou Thay plough their paddies with buffaloes hoping to avoid scraping the back of the naga that lies just below the surface. The Brou select, clear and burn their swiddens with great care and only with the concurrence of the forest spirit, an indivisibility of spiritual and technical knowledge (p.87).



Figure 6. Phou Thay wet Rice Paddy (above); Brou Swidden field and Dry Rice on slopes (below). (Photos: The Author).

Chamberlain (2007) describes that a local system of ‘agro-ecology’. For example, rice is the principal agricultural crop and staple part of the local diet for both Phou Thay and Brou. Rice is also considered to be “imbued with a spiritual life of its own, hence possessing both an economic and spiritual value” (p.56). Phou Thay and Brou each grow a large variety of vegetables either in small plots or mixed in rice plots, and each group cultivates other crops including banana, cassava, peas and green vegetables. Phou Thay and Brou have livestock holdings, with the Brou relying less on livestock than the Phou Thay. Wild food is an important source of nutrition and income for both Phou Thay and Brou. The Brou are considered to rely more on wild food – meat and vegetables, however, both groups as use a wide variety of forest products, mostly when these are accessible and in season. Each group sell forest products (NTFPs), with the Brou selling direct to the Phou Thay, and the Phou Thay often on-selling these products at the market in Vilabouly. Other products of the informal cash economy include trade of scrap metal from UXOs, gold panning and illegal logging (Chamberlain, 2007, p.20).

Discussion and Conclusions

The Savannakhet Province and Vilabouly District have significant heritage values. The region supports a high level of biodiversity and floral and faunal endemism, is abundant in natural resources, and home to several ethnolinguistic communities. The region is also the location for ancient cultures that spanned from around 10,000 years before present through to modern times, ranging from hunting and gather communities, to metallurgical societies, to early state societies. The region has also been the location for a series of violent wars and political conflicts, leading to mass dislocation of people from their villages and communities, and casualties from indiscriminate

bombing raid, and social and political upheaval in the post-revolutionary era. The modern era has brought with it increased standards of living and economic development, but the region remains highly impoverished and the natural and cultural heritage values are also at risk from unmitigated development.

In Savannakhet Province and Vilabouly District socio-economic development and livelihood development is associated with several negative economic, social and environmental impacts. Overall, implementation of investment funding and projects and infrastructure development have been uneven and unregulated leading to disparities across the province and environmental degradation (IUCN-NERI, 2011). Savannakhet City has benefited from an investment boom, while Districts in the centre and east of the province has seen less access to employment and services, and are as a result considerably poorer. Vilabouly District had the third highest incidence of poverty in the province in 2009, with 28% of the population considered to live in poverty (IUCN-NERI, 2011). Economic development in Savannakhet Province is considered insufficient to meet the demands of the growing population. Many residents have been forced to migrate to Thailand in search of secure, better payed employment to meet higher costs of living (IUCN-NERI, 2011). Health problems have also resulted from economic development, with Savannakhet Province reporting the highest incidence of HIV nationally in 2008, with over half of the national HIV cases occurring in the Province. Literacy rates also remain higher and school attendance rates remain lower than the national average, and gender parity in education remained in 2006, with less girls reported to be attending school than boys (IUCN-NERI, 2011).

From the perspective of cultural heritage and livelihood, expansion of industry into public and village-owned forests and wetland has impacted heritage values and practices, biodiversity and subsistence strategies, with industrialisation weakening “traditional patterns of production and

livelihoods” (IUCN-NERI, 2011, p.61; see also IUCN, 2011). Increased industrialisation has reduced localised livestock production, collection/utilisation of NTFPs and drinking water. A more industrialised and ‘cash centred’ economy has been linked with diminishing traditional sources of income and diet for many villagers in the eastern districts of the province. This has placed a burden on household income for purchasing food and drinking water, and has forced people to migrate or relocate in search of income and employment (IUCN-NERI, 2011).

Relocation of villagers due to industrial and commercial development activities has led to increased competition for natural resources and agricultural land between uplanders and lowlanders. In Vilabouly District, Chamberlain (2007, pp.82-86) argues there are also concerns that increased bureaucratisation of day-to-day traditional livelihoods may result because of the presence the Sepon Mine, and that could impact access to forest products and have implication on local food security:

Vilabouly District, perhaps because of its relatively naive administration, has so far avoided strict imposition of government policies that have elsewhere caused considerable poverty and hardship. As a result the natural abundance of resources remains high and has allowed the people living in the district to select and chose without coercion those aspects of the developing and modernizing Lao state that they perceive as relevant to their daily lives. How long this situation will last is not known, but for the time being it has worked to the advantage of both the Brou and the Phou Thay (Chamberlain, 2007, p.87).

The impacts on cultural heritage – both built and intangible, are not well known, and certainly not well documented. Mayes and Chang (2013; 2014) provide the only substantial account of how economic development activity – mining - is engaging with the process of heritage in the Vilabouly District. From their accounts, the process is attempting to work with communities and mitigate impacts to heritage, but in the same process, brings with it significant risk to alteration or destruction of material and intangible cultural and natural heritage. Their accounts include what Chamberlain (2007) has also identified locally as an increasingly localised bureaucracy overseeing and managing cultural heritage locally. It can be presumed though that rapid development in this part of the Lao PDR is having similar impacts on natural and cultural heritage values. From the perspective of built heritage protection, it is likely that Buddhist temples, ancient infrastructure, and French colonial architecture are not well protected, given this area lies outside of Vientiane and Luang Prabang (Logan, Long & Hansen, 2002; Long, 2002; 2014). The same could be said for natural environments and localities like caves that are offer little in the way of direct protection and adequate management regimes at either the national, provincial, or district level (Roberts, 2015).

Therefore, while it can be said that regional economic development, including mining, has brought benefits, but equally changes that are impacting on livelihoods, the natural resource base, biodiversity, and heritage values. Again, the Sepon Mine in particular is reported to have supported significant economic gains for the national and local economy, and creation of more local businesses and infrastructure, including housing, schools, roads, and transport. However increased cash economy has supported improved livelihoods for many within the ‘footprint’ of the Sepon Mine, notably to those with direct access to employment at the mine. Local changes have also induced new changes, and in some instances, placing an increased burden on local communities

and the natural environment. Chamberlain (2007) has shown there is unequal representation between ethnolinguistic groups, highlighting that benefits of mining are not being shared equally. . Mining has introduced and increased levels of international, national, and district bureaucracy and governance, placing pressure on existing political structures and hierarchies, livelihoods, and beliefs and practice (Chamberlain, 2007, p.87).

To consider the relationship between the benefits and impacts for the local community of the Sepon Mine, with a direct focus on heritage management, the following chapters will begin to consider how heritage has developed within the context of managing and mitigating local heritage from mining-based impacts, and the outcome of this on local community heritage and environmental values. The process for establishment of heritage as a discreet management practice at the Sepon Mine will be described next, to highlight how heritage has evolved to form part of the structure of mining operations, and will provide a baseline for discussion in the following chapters.

5. The Place of Archaeology and Heritage Management Practices at the MMG-LXML Sepon Gold & Copper Mine

“Heritage is not an innate or primordial phenomenon; people have to be taught it”

(Harvey, 2001, p.337)

The previous chapter provided an introduction to the Savannakhet Province and Vilabouly District. It presented the history of the region, before moving to introduce the current culture, society, and economy. Impacts of modern mining and socio-economic development activity were introduced and briefly discussed before concluding. Regional history plays a contingent role in understanding present human-nature relationships, local and national concepts of identity, present-centered heritage values, and the complexities and challenges implementing heritage management practices in a mining context. This chapter will proceed to document the development of heritage management activities and archaeological research processes as part of mining operations at the Sepon Mine. This outline will be presented chronologically between 2001 and 2015, with a background to Sepon Mine first introduced, before outlining the role of regularity process and heritage within mining operations, international collaboration for archaeological research heritage management, and the relationship between mining, heritage, and the community. The chapter concludes by providing a brief summary of the relationship between mining, archaeology, and heritage at the Sepon Mine, and provides a context for identification and management of caves in Chapter 6 and Chapter 7.

Background to the MMG-LXML Sepon Gold & Copper Mine

Mining-based activity within the present day Lao PDR did not develop strongly until the late 20th century, deterred by the advent of the Indochinese wars and the national politics context after 1975. Modern surveying for alluvial deposits of gold in Vilabouly District began from around 1983. At that time exploration of a 400 square kilometre area in the Ang Kham and Nam Kok valleys was conducted (MMG-LXML, 2011). Mining operations commenced in neighbouring Nam Pa Valley, but with only small amounts of gold recovered, further exploration was cancelled. In 1989, a Russian-trained Lao geologist, Saman Aneka, working for Canadian company Hanuman Resources explored the Angkham valley, this time around the headwaters of the Nam Xe Ngi river. This expedition was also deemed unsuccessful, with little evidence of profitable ore being discovered, and the project was subsequently scrapped. Undeterred, Saman and another Lao colleague continued to search the area for gold independently, eventually discovering rocks in the Nam Kok River were considered to displayed sufficient quantities of gold that warranted further more extensive exploration (MMG-LXML, 2011).

Several other international companies began to look towards the Lao PDR for investment during the late 1980s. These companies were encouraged by the Lao Government's new policy on international and private sector investment, and general invitations to invest in a nation now 'open for business' was issued by the Lao Government to international mining companies. A company called CRAE, considered to be a 'breakaway' company of Rio Tinto Australia, took interest in the opportunities the Lao PDR could offer for mineral prospecting. In particular, CRAE became interested in the Angkham and Nam Kok valleys, based on discoveries reported by Saman Aneka, and the prior reporting from France, Russia, and Hanuman Resources. CRAE geologists visited

the region in early 1990 to inspect the location for themselves (MMG-LXML, 2011). In 1991 CRAE made an offer to the Lao Government for a minerals exploration permit over the Angkham and Nam Kok valleys, but it took a further two years of ‘pioneering negotiations’ (Cromie, 2010, p.4; Manini & Alberts, 2003) with the Lao Government to secure the rights for mineral exploration. Finally, in 1993 a Mineral Exploration and Production Agreement (MEPA) was signed between the Lao Government and CRAE/Rio Tinto to explore for minerals in a 5000 km² area converting parts of Savannakhet Province and Khammouan Province, centred in Vilabouly District. Manini and Alberts (2003) explained that this agreement provided “the exclusive right to explore, mine, process, transport and market all minerals from the MEPA area and clearly defines the life of project commercial and fiscal framework” (n.p).

An intensive process of exploration by CRAE/Rio Tinto followed the granting of exploration rights to the Sepon MEPA. Beginning in 1993 and proceeding until 1999. The exploration process identified significant mineral deposits with approximately four million ounces of gold and 1.2 million kilograms of copper discovered across six main sites (Manini & Alberts, 2003). However, the size of the deposits was not considered large enough for Rio Tinto to pursue, and the company chose to divest the Sepon MEPA in 1999. Oxiana Resources, an Australian-based mining and exploration company, won the tender process in August 2000, buying an 80% stake in the Sepon Mine. Rio Tinto retained a 20% shareholding in the mine, and maintained ongoing support for Oxiana Resources development of the mining operations. At that time Lane Xang Minerals Limited (LXML), became the Lao cooperating company at the Sepon Mine as a subsidiary of Oxiana Resources (Manini & Alberts, 2003).¹⁶ Oxiana Resources took control of the

¹⁶ Little records exist pertaining to LXML. In particular, it is unclear when LXML began operating in the Lao PDR. No primary sources could adequately identify a date when the company was created, while two secondary sources provide different dates for its creation – either 1993 (see

MEPA, with a mining lifetime of up to 56 years (Oxiana Resources, 2000, p.4). Start-up funding for the Sepon Mine was also supported by a US\$30 million loan from the International Finance Corporation (IFC), the private-sector arm of the World Bank (WB), in the interest of supporting nationwide poverty alleviation (McGuire & Reimann, 2011). The IFC considered that “investment in the Project will help to increase confidence of the investment community in mining and other sectors of the economy” (World Rainforest Movement, 2002, n.p).

Construction work began on the Sepon mine through 2001 and 2002. Gold production began at the end of 2002, and copper production began in 2005. Oxiana Resources would later purchase the remaining 20% shareholding of the Sepon Project from RioTinto, granting Oxiana Ltd 100% ownership and control of the Sepon Mine (Cromie, 2004).¹⁷ Lane Xang Minerals Ltd still retained a 20% stake in the mining company and ongoing operational interest in the Sepon project. The company went through a major international restructure in early 2008 and merged with Zinifex Limited, leading to the creation of a new company – Oz Minerals. This merger created “Australia’s third largest diversified mining company and the world’s second largest producer of zinc as well as a substantial producer of copper, lead, gold and silver” (OZ Minerals, 2008, p.2). Oxiana Resources continued to manage operations at Sepon, and headquarters remaining in Melbourne, Australia.

The Global Financial Crisis (GFC) impacted Oxiana Resources international operations in the second half of 2008, including the Sepon operation that was not considered profitable during this period. The GFC impacted mining production, with suspension of the Sepon copper expansion

<http://www.gmsbizforum.com/index.php?r=site/content&id=161>) or 2002
(<http://www.bloomberg.com/research/stocks/private/snapshot.asp?privcapId=21793842>).

¹⁷ See also Fairfax Media Report (2004)

project late in 2008. Ongoing losses in stock price and commodity prices led to declining profits increasing company debt in some aspects of Oxiana Resources operations. Losses led Oz Minerals to a global sell-off of company assets, including the Sepon Gold & Copper Mine, which was eventually acquired by Chinese state-owned company Min Metals (High, 2010). The Min Metals Group Ltd. (MMG), a Chinese owned and Australian operated company, took a 90% interest in the mine by 2011, with the Lao Government remaining a 10% interest. MMG continued to run operations at Sepon, with its headquarters based in Melbourne, Australia. MMG projected copper reserves would be exhausted by 2020, with gold reserves are expected to be exhausted by 2012. Falling copper price continued to slow production into 2013, and by early 2014 the gold plant ceased operation, leading to a significant reduction in the operations workforce. It was estimated that 360 Laotian, mostly from Vilabouly, and more that 60 expatriate staff (over 30% of the total expatriate staff) had their positions terminated (Vientiane Times, 2014). MMG-LXML Ltd remained operational but announced the mine is expected to cease operations by 2020 (The Laotian Times, 2018).

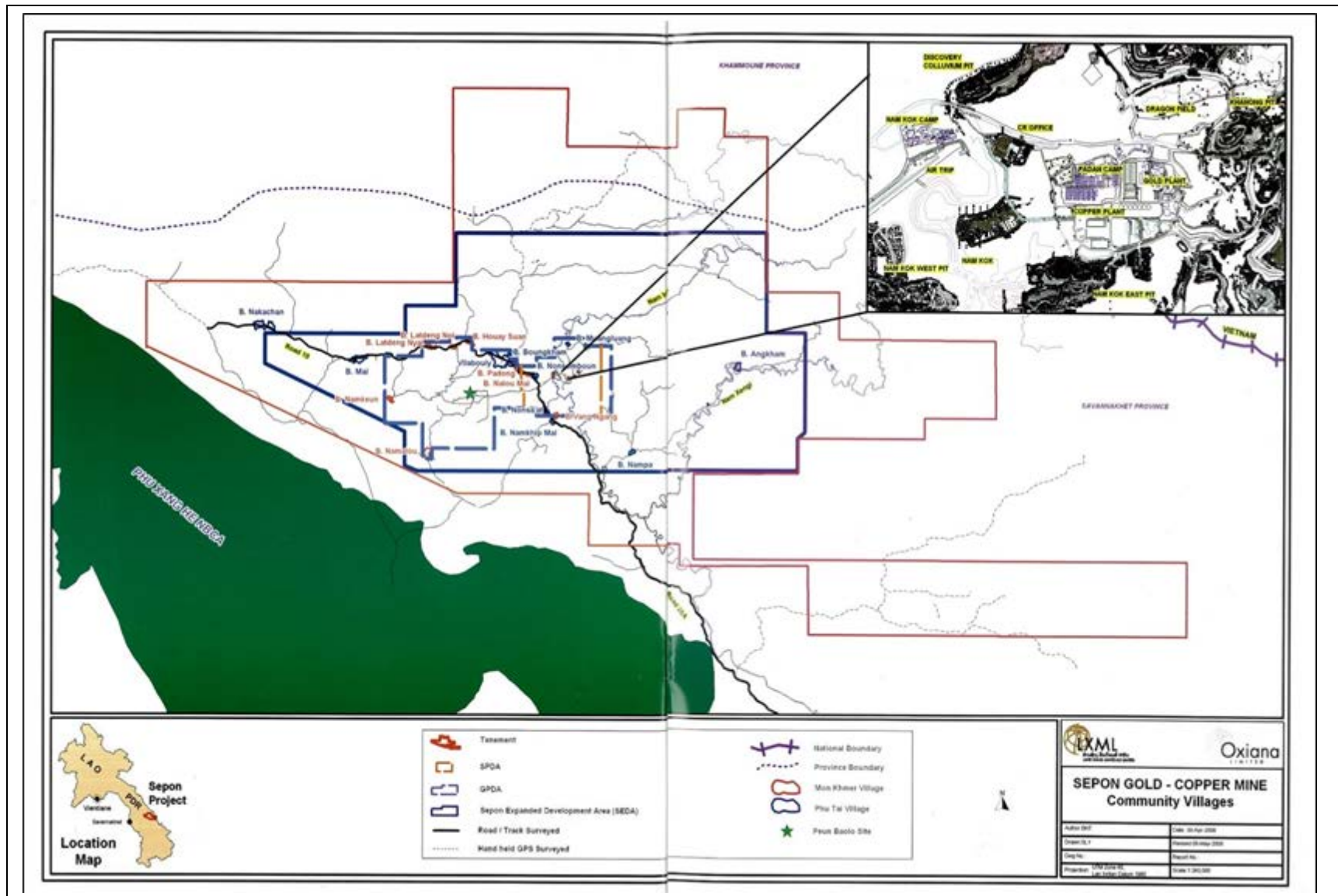


Figure 7. The Sepon Gold & Copper Mine tenement, showing the SPDA and GDPA, and local villages situated within the mine tenement (Photo: Oxiana Resources).

Managing Heritage within Operations at the Sepon Gold & Copper Mine

Environmental and Social Impact Assessment (ESIA) Process

The Sepon Gold & Copper Mine has from its inception applied international regulations and standards of 'best practice' for environmental and social management. Initially this came in the form of applying an environmental and social impact assessment (ESIA) as part of the company's due diligence processes, which included cultural heritage assessments. ESIA studies at the Sepon Mine were required so that Oxiana Resources could receive a license for mineral exploration and mining expansion.¹⁸ Oxiana Resources received support from the International Finance Corporation (IFC), the investment division of the World Bank, who advocated that implementation of regularly processes and ESIA's were essential to the Sepon Project being approved (McGuire & Reimann, 2011). ESIA studies, creation of an Environmental Management Plan, and cultural heritage assessments were initially established between 2000 and 2001. ESIA frameworks at the Sepon Mine applied international frameworks and baseline studies that included preliminary surveys to determine the cultural and historical significance located within the Sepon Mine, and the actual and potential social and environmental impacts of the mine. McGuire & Reimann (2011) state that six ESIA's were undertaken at the Sepon Mine between 2001 and 2011, including one socio-cultural survey and a survey of local intangible heritage values and practices by Chamberlain (2007).

¹⁸ At that time, Oxiana Resources had a projected life-time of the Sepon Mine considered to be approximately 10 years.

Cultural Heritage as part of the ESIA Process

Initial feasibility studies for environmental and cultural heritage took place between 2001 and 2002 in the Sepon Project Development Area (SPDA) (see Figure 7). Prior to this there had been no official heritage assessment or archaeological surveys performed by the Lao Government in Vilabouly District. Cultural heritage assessments, as part of the ESIA process, were undertaken by Lao Government archaeologists from the Department of Museums and Archaeology. Surveys involved walking (pedestrian) surveys, with a focus in and around local communities that would be impacted by future mining activity. Initial cultural heritage assessments identified the location was rich in history, with a large quantity of cultural materials (or artifacts) identified, including 41 stone tools, 28 bronze axes, five iron spear and arrow heads, two fishing hooks, and several copper ingots. The surveys also included a location called the Dragon Field, or *thon na ngiak*, grassy marsh known locally as located at the west of the Khanong Gold Pit near the central mining camp. The Dragon Field was also known to exploration geologists who in the 1990s thought this location may represent an older copper mining site. The location also contained a series of stones aligned in a distinctive pattern that resembled a settlement potentially associated with ancient copper mining.

Interestingly, most of the material culture and information about discovered items, including the location and context of their discovery, came from the local communities. Lao archaeologists also identified how community members considered ‘archaeological items’ significant from the perspective of localised beliefs. For example, stone adzes were described as objects that fell from the sky, were evidence of the presence of ancestors, and were imbued with magical powers. Local community members also considered ‘artefacts’ heirlooms, handed between family members over generations. Lao archaeologists, while also considering many of

the objects held by local community members to be significant, described them as ‘masterpieces’ of Lao heritage (Sayavongkhamdy & Souksavatdy, 2006; 2011). Local community members also identified the Dragon Field, or *thon na ngiak*, as a sacred site. For those local communities, this *thon na ngiak* formed part of an import myth where a dragon (*naga*) was slayed in the past. Locals believe the red soil at the site represented the blood of the slayed dragon, and annual ceremonies were held each year to mark this important local myth.

A further round of mining expansion plans in 2006 initiated successive cultural heritage assessments, this time in the Sepon Greater Project Expansion Area (GPDA) (see Figure 7). Cultural heritage assessments were again undertaken by Lao Government archaeologists from the Department of Museums and Archaeology (Sayavongkhamdy & Souksavatdy. 2006). The 2006 assessment process led to discovery of *Peun Baolo* – or ‘terrace of the crucible’ again through support of a local community member who informed mining staff that numerous ceramic bowls of different sizes were found along a ridge at that site. The survey of the area identified the presence of crucible pieces and slag, a metal residue of the copper smelting processes, and together with local knowledge of the area, supported the hypothesis that this could be an older copper production site, potentially like Dragon Field.



Figure 8. Human burials and associated grave goods at the Peun Boalo site (above); Cultural materials recovered from archaeological excavations in the Sepon Mining Tenement between 2008-2011 (below) (Images: The Author).

Another round of surveys were undertaken in the Sepon Expanded Development Area (SEDA) in 2010. This time Lao Government archaeologists were supported by Australian archaeologists, and the survey provided an opportunity to revisit previously surveyed locations in 2001 and 2006, and to extend knowledge of the areas prehistory (Sayavongkhamdy & Souksavatdy. 2011). The survey investigated 63 locations that included 22 villages and 41 archaeological sites within the Sepon SEDA, mostly in the Thengkham Range and adjacent southern foothills. Surveys again identified a range of material culture, including the ubiquitous presence of stone adzes across most villages surveyed. Other materials included Chinese 'blue ware' bowls and vessels; pottery vessels; ancient copper money bars; bronze and iron swords and smoking pipes, statues of the Lord Buddha; 20th century Indochinese silver coins; and wreckage and debris from the Vietnam War. Several abandoned historical Buddhist structures associated with the Lang Xang Kingdom were also identified in the survey. These included abandoned temples and stupas, and caves used for meditation and Buddhist worship. Archaeologists identified that the sites were connected to the Lang Xang Period, when Muang Vang-Ankham was considered a local polity in the region (see Figure 8).

Social and Community Sustainability

The ESIA process also supported studies of the socio-economic benefits and impacts from the Sepon Mine on local communities living within the mining footprint. From the outset, Oxiana Resources aimed to minimise impacts on the local communities within mining areas. Social assessments were undertaken by international anthropologists with assistance from members of a Lao Socio-economic Survey Team, based at the NUoL. The impact of mining operations on the

natural environment, including rehabilitation and mining closure planning, were also conducted by international consultants.¹⁹ One of Oxiana's aims were to reduce economic independence of local communities on the mine through implementing several benefit-sharing channels, particularly for those communities in Vilabouly District there was a need to minimise social impacts on the local community after mine closure (Neilson, 2002). To promote local economic independence, a Community/Indigenous Peoples Development Plan (C-IPDP) was developed. Later, support local economic independence from mining operations was aided by creation of the Sepon Development Trust Fund (SDTF). Established in 2005, the SDTF was administered by the Sepon Mine and the Board of Vilabouly District government. It would provide the community with economic opportunities to develop basic infrastructure and promote invest in industries that would support local social enterprise and sustainable socio-economic development (see Figure 9).

¹⁹ It is not possible to outline the ESIA process in more detail here. For a more detailed account of these processes, see: Jackson, 2011; Neilson, 2002; Ovesen, 2002; McGuire & Reimann, 2011.



Figure 9. The Houy An Training Centre, Vilabouly District, a mining-sponsored local economic development invites. Traditional silk production and silk weaving. (Photo: The Author).

Mining expansion plans coincided with creation of the Department of Social Sustainability (SoSu) to provide further support for local communities affected by mining expansion over the ensuing years. Established in 2008, SoSu was a merger of the previous Community Relation Department (CR) into one unit. Creation of SOSU was also supported by release of the *Sepon Social Sustainability Strategy (SSSS)* in December 2008, a strategy for meeting the ‘social license to operate’ while also preparing for future impacts of mine closure (McGuire & Reimann, 2011). The SSSS had four main goals: 1) a shared understanding of social sustainability; 2) shared benefits of mining operations with impacted communities; 3) partnerships with government; and 4) respect for local communities. The SSSS supported the ESIA process that was established at the Sepon Mine in 2001. It also worked in accordance with the Lao Government socio-economic development policy, and guidelines for social responsibility in mining prepared by the IFC, the World Bank, the ICMM, and the Minerals Council of Australia (MCA). Community development programs were also aligned with national and international goals to reduce poverty, including the Millennium Development Goals.²⁰ International ‘best practice’ and licensing conditions were applied to the environmental management system at the Sepon Mine, which received international ISO14001 standard certification in 2008.

SoSu became involved in several Participatory Planning Processes (PPP) to support villages affected by mining operations to. The aim of ongoing community-centred planning was to enable communities within the Sepon Mine to plan for their own local community development while complying with MMG-LXML’s social license to operate. An outcome of the PPP was creation of a Village Development Funds Program (VDFP), a “village-based programme designed

²⁰ Several authors note that the GoL was aligned with the Millennium Development Goals targets and aimed to move the Lao PDR from Least Developed Nations status by 2020. See McGuire & Reimann, 2013; Rigg, 2006)

and implemented by each village in accordance with agreed development needs, and funded by the company” (McGuire & Reimann, 2011, p.6). The VDFP would operate separately to the SDTF, however each fund supported infrastructure and livelihoods development programs. To maintain relationship with the community, and as part of requirements for local employment at the Sepon Mine, SoSu recruited and employed local community members and district representatives. Local community members who spoke minority dialects were employed as CR Officers to support the process of recruitment and to foster relationships between the mining company and the local community. This included mitigating community expectation about employment and receiving economic benefits from the mine.

SoSu would also retain responsibility for research and management of community relations within the Sepon Mine, including research to promote awareness and preservation of livelihoods and intangible cultural heritage. Intangible heritage was recognised as an important component of local cultural heritage and livelihoods. Between 2001 and 2015 there were six anthropological studies commissioned by the mining company to examine intangible heritage of local communities within the Sepon Mine tenement area. Initially, these studies examined socio-cultural, economic, and subsistence activities of local communities, and impacts from the mine on villager livelihoods.²¹ In 2011, an intangible cultural heritage survey was undertaken to acknowledge the value and contribution of local intangible heritage, aiming to capture oral history, music and songs, and religious expression of several local villages.²² Following the process outline in the CHMP, a consultant anthropologist was engaged to undertake the intangible heritage survey. The survey was recorded on video and targeted 10 Brou (Mon-Khmer-speaking ethnic *Makong* and *Tri* groups)

²¹ See: Chamberlain (2007; 2010); Ovesen (2002).

²² The studies were undertaken by James Chamberlain in conjunction with MMG-LXML SoSu staff, however, no materials were published as an outcome of the surveys

and 11 Phou Thay (localised Lao-speaking ethnic group) villages. Approximately 232 local villagers were recorded performing traditional music and songs. The consultant categorized a number of ‘oral genres’, labeled as singing and music; stories and tales; ethno-history; and legends of place. MMG-LXML (2011) had noted that undertaking intangible heritage surveys were important “initiatives to understand community customs, beliefs and traditions and preserve local cultural heritage” (p.50).

Cultural Heritage Management in Mining Operations

Evidence-based Implications for a Cultural Heritage Program and Archaeological Research

The previous sections have illustrated that Vilabouly District contains a rich cultural heritage. Findings from surveys and a growing awareness of the value of local history led to stronger on-site identification of heritage, namely through creation of formalized policies and procedures to manage heritage as part of day-to-day mining operations. Alike with SoSu, findings from archaeological surveys from the ESIA process, and results from archaeological excavations during 2008, raised awareness of the potentially significant value of archaeological and cultural heritage within the Sepon Mine tenement. Archaeological sites and objects within the Sepon Mine indicated a timeline of human occupation, albeit broken,²³ that extending from the Neolithic period (possibly 6000 years ago), though to the Lang Xang Period (after 14th century), and the Indochinese Wars in the 20th century. Two focal archaeological sites - Peun Baolo and the Dragon Field - were considered nationally significant heritage sites by Lao government archaeologists. Peun Baolo and the Dragon Field indicated ancient copper mining, trade, and exchange links, and suggested the

²³ See Tucci, Sayavongkhamdy, Chang & Souksavatdy (2014).

location could have formed part of a regional pre-historic metallurgical culture. However, the discovery of a 2000-year-old *Dong Son* drum in 2008 was considered by OzMinerals (2008) to have “heightened archaeological interest in the area” (p.57). The drum was regarded as ‘nationally significant’ by Lao archaeologists, and also held local significance, with villagers using the drum to make merit (*bun*) after it was excavated. The Lao Prime Minister visited the drum and an official ceremony was held before it was moved to Vientiane. Along with Peun Baolo and the Dragon Field research, a cultural heritage and archaeological research program was created.

The Cultural Heritage Management Plan (CHMP)

Formal development of a Cultural Heritage Program (CHM Program) began at the Sepon Mine during 2008. Creating a CHM Program required an upgrade of the current cultural heritage management system to provide “codes of practices and standard operating procedures for the location, recording and protection of cultural heritage” (Oz Minerals, 2008, p.57). The heritage management system became centered on a new Cultural Heritage Management Plan (CHMP) in 2010. The CHMP enhanced heritage protection and promotion at the Sepon Mine by outlining procedures and guidelines for archaeology and cultural heritage management practices within the mining tenement area. Procedures and guidelines were based on international industry ‘best practice’ approaches, notably the ICOMOS Australia *Burra Charter*, the Lao 2005 *Law on National Heritage*, and national heritage policy (see Table 3). The CHMP defined heritage as either natural or cultural, and tangible or intangible. The value of cultural heritage was based on a tiered system of local, national and international significance. The CHMP also outlined the processes and guidelines for monitoring and managing identified cultural heritage sites, including a regular monthly monitoring process, reporting procedure associated with the findings or

outcomes of monitoring activities, and the process for registering archaeological and cultural heritage sites in a database. The CHMP also initiated a company-wide training and awareness program for all MMG-LXML staff, consultants, and contractors about local cultural heritage and appropriate management of cultural heritage (MMG-LXML, 2010).

Within mining operations natural heritage and biodiversity conservation were managed separately from cultural heritage and community relations. The Sepon CHMP recognized that management of biodiversity and nature heritage fell within the LXML Sepon Environmental Management Plan (EMP). As with the CHMP, the EMP is founded on and guided by several national and international laws, guidelines and industry ‘best practice’ approaches. In particular, the EMP is developed to meet the IFC Performance Standards on Biodiversity Conservation and Natural Resource Management, outlined earlier in the chapter, based on ISO14001 standard certification. While there was clear separation of responsibility for managed of natural and cultural heritage within the Sepon Mine, the CHMP did recognize the potential that natural heritage may have overlapping cultural heritage values. The CHMP also identified the potential for collaboration between departments for managing heritage:

The CHMP lends it support to these efforts when an element of the natural environment becomes recognized for its high cultural heritage significance making it a form of natural heritage in line with the Law on National Heritage of the Lao PDR (LXML Sepon CHMP, 2010, p.44).

Year	International Policy or Recommendation	Agency
1964	<i>Venice Charter - International Charter for the Conservation and Restoration of Monuments and Sites</i>	ICOMOS
1972	<i>Convention Concerning the Protection of the World Cultural and Natural Heritage</i>	UN
1979	<i>ICOMOS Australia Charter, or Burra Charter - Charter for the Conservation of Places of Cultural Significance,</i>	ICOMOS Australia
1990	<i>Charter for the protection and management of the archaeological Heritage</i>	ICOMOS
1993	<i>Guidelines for Education and Training in the Conservation of Monuments, Ensembles an Sites</i>	ICOMOS
1995	<i>Convention on Stolen or Illegally Exported Cultural Objects</i>	UNESCO UNIDROIT
2003	<i>Sustainable Development Framework</i>	ICMM
2006	<i>IFC Performance Standards</i>	World Bank

Table 3. Key International and National Policy and Regulation have informed development of the Sepon CHMP and Cultural Heritage Practices.

The Cultural Heritage Unit (CHU) and Cultural Heritage Workshop (CHW)

To support the implementation of the CHMP and ongoing CHM Program and archaeological research at the Sepon Mine a Cultural Heritage Unit (CHU) and Cultural Heritage Workshop (CHW) was created in 2011. The CHU operated from within SoSu and was responsible for all work related to mining-based heritage management. The CHU was managed by a designated superintendent and two cultural heritage officers and was designed to be an integrated network of organizational departments, community heritage groups, Lao government heritage agencies, and external consultants (see Figure 10). An onsite Lao Government cultural heritage officer was also employed to work with the CHU heritage officers and to uphold the Lao 2005 *Law of National Heritage*. Critically, the creation of the CHU supported expansion of the CHM Program and included establishment of a Cultural Heritage Workshop (CHW) in 2011 within the premises previously occupied by the Environment Department. The CHW provided a designated space for

day-to-day operations of the archaeology and CHM Program to operate, providing a place where artefacts recovered from archaeological excavations and chance finds could be cleaned, processed stored, and displayed. The CHW would be also double as a location for providing displays to visiting MMG management officials and Lao dignitaries who would take the opportunity to view artefacts recovered from archaeological excavations, surveys, or found through a ‘Chance Finds Procedure’.



Figure 10. Organizational Chart showing units and responsibilities for management of cultural heritage at the Sepon Mine.

International Collaboration in Archaeological Research and Cultural Heritage Management

The ESIA program undertaken at the Sepon Mine increased recognition of the significance of archaeological objects and sites within the mining tenement. Regulatory processes and consultants engaged with the ESIAAs considered it was essential that heritage protection be expanded to manage onsite cultural heritage as the mining project was expanded. During the start-up stage of the Sepon Mine there were no on-site employees or contractors to manage cultural heritage. It was also recognised at that time that the workload for the Lao government archaeologist was increasingly becoming overbearing, preventing them from maintain a constant presence at the Sepon Mine. In response to this issue, in 2006 archaeologists from James Cook University (JCU) in Australia were invited by the Lao Government to join the cultural heritage and archaeological research program at the Sepon Mine. JCU were “brought on board to expand capacity in order to tackle the extensive archaeological work required on the Sepon tenement” (CSR Asia, 2015, p.3). Initially the inclusion of JCU archaeologists at the Sepon Mine would provide support for Lao Government archaeologists to continue cultural heritage assessments as part of the ESIA process. Over time, this partnership would become more formalized through creation of a Memorandum of Understanding (MoU) that would support jointly-run CHM Program, archaeological research projects, and training for national staff and students in heritage management practices archaeological research within the Sepon Mine.

Formalising International Partnerships and Management of Heritage through a MoU

The MoU process formalised an ongoing collaborative approach to managing heritage at the Sepon Mine between three parties: Oxiana Recourses, the Lao Department of National

Heritage, and James Cook University. The first MoU in 2007 was designed to support a coordinated and cooperative program of regular heritage management activities and archaeological research projects alongside day-to-day mining operations. The MoU stipulated several objectives and responsibilities for each party. Primary objectives of the MoU parties were to support capacity-building Lao government archaeologists, Vilabouly District Government cultural heritage staff, and MMG-LXML staff. Specific activities included heritage management activities and ongoing archaeological survey, excavation, and monitoring across the Sepon mining tenement, and appropriate recoding and storage of heritage objects. Development of the Sepon CHMP and reporting and dissemination of findings from archaeological research and associated cultural heritage management activities remained ongoing. This included supporting the publication and further research of findings from archaeological research. The MoU stipulated that, in accordance with the Lao 2005 *Law on National Heritage*, the use of any data or materials associated with Lao cultural heritage also require permission of the Lao Ministry of Information and Culture. Oxiana Ltd would retain intellectual property over all data, images, and materials.

Three-party MoUs were re-signed in 2010 and again in 2013, this time with MMG Ltd (not Oxiana) party to the agreement. The MoU confirmed MMG-LXMLs commitment to maintain cultural heritage management activities and the identification and promotion of heritage within its operations at the Sepon Mine. The 2013 MoU further increased support for protection of archaeological sites, archaeological research, and the CHM Program. A clearer formalization of archaeological research, a cultural heritage management program, and a Cultural Heritage Unit as the recognised entity to perform cultural heritage management in operations resulted. The MoU formalised partner roles more officially, and provided an overall structure to the governance of the CHM Program.

The role and responsibilities of each party as part of the CHM Program changed only lightly from the prior 2007 MoU. The Lao Department of National Heritage would provide official government oversight for any archaeological research and CHM Program within operations at Sepon. Increased oversight included on-site Government staff and responsibility for training for local Vilabouly non-government staff in archaeology and cultural heritage management. JCU would also provide a co-director role for any projects at the Sepon Mine carried out under the MoU, providing ongoing technical assistance and training. As part of the regulatory process for cultural heritage management, MMG-LXML provided financial and logistical support to the archaeological and CHM Program, and also assisted with storage of materials recovered from archaeological excavations and those found during mining activities or by local community members. The MoU also included initial stages in the planning for a local museum in Vilabouly, proposed as a future storage point for all cultural materials recovered during mining operations.

Research Collaboration, Field Schools, and Training Programs

The MoU supported the development of international partnerships, training, and archaeological research at the Sepon Mine. In doing so MMG-LXML provided essential support for capacity developing for Lao heritage staff and institutions, and led to a significant expansion of the team engaged in archaeological research and the CHM Program. Capacity building processes were supported through engaging with international archaeologists and heritage experts from 2008. Regular archaeological survey, excavations, and analysis would be used as a platform for training, capacity development, and broadening research partnerships. From 2011, archaeological excavations and aspects of the CHM Program at the Sepon Mine grew to include

international, national, provincial, and district personnel and researchers. Personnel represented a range of specialist fields and appeared on behalf of various sectors of the Lao government departments including archaeology, museums, and tourism. The project also expanded to include staff from the Savannakhet Provincial Museum and local Vilabouly District Officials.

Archaeological excavations became an important training ground for student archaeologist from the Lao PDR and Australia, and also local Vilabouly District Government, with the responsibilities for cultural heritage management. JCU staff would provide the technical assistance and training for Lao national archaeologists, MMG-LXML employees, and Vilabouly District officials. Field-based training coincided with introduction of the Bachelor's Degree in Archaeology and Cultural Resource Management from the National University of Laos (NUoL) from 2009. The archaeological excavation season in 2011 provided the first generation of NUoL students with a fieldwork experience. Through 2012 and 2013, the number of staff and students from the DNH and the NUoL increased. Staff and students from the NUoL Archaeology and History Department became a regular component of the annual excavation seasons after that, with archaeological fieldwork at Sepon Mine eventually becoming integrated into the Bachelor course program for undergraduate students from 2012.

Expansion of the team engaged with the CHM Program at the Sepon Mine highlighted the increasing amount of work required to manage heritage at the Sepon Mine. International experts continued to work at the Sepon Mine to support management of increasing amounts of materials recovered from excavations and chance finds in 2012 and 2013. Experts in artefact conservation worked with wooden and ceramic materials, and experts in metallurgy focused on isotopic analysis. Findings from research were published in international academic journals adding vital information to a region of the Lao PDR and Southeast Asia considered critically under examined

(see Tucci, Chang & Souksavatdy, 2014; Price et. al, 2015). During 2013, international experts provided training to staff in conservation methods, artefact analysis, data management techniques, and a workshop on international heritage management ‘best practice’, including contextualizing the 2005 *Lao Law on National Heritage* within the national legal context.

Mining, Heritage, and the Community

Support for Village Festivals and Cultural Events

The Sepon Mine has actively supported local community development programs, events, and festivals in Vilabouly District. Mining-sponsored support was aimed at advocating for local community activities, economic development, and formed part of the Sepon Mine’s part of the social license to operate. Initially, Oxiana Resources supported the revitalization a several cultural events and festivals within Vilabouly District. This included for the annual Dragon Boat Racing Festival (*Bun Song Heua*) held to mark the end of Buddhist Lent across the Lao PDR at the end of October, and which coincided with the end of the rice harvesting season. Other annual Buddhist festivals, including the Lao New Year Festival (*Pee Mai Lao*), held annually in April, and the festival of *Loy Kratong*, held annually in October, were also supported and promoted by the mine. Up until 2009 the two festivals were held on the Nam Kok River that runs through the Sepon Mine. Each year. Lao National Day was also celebrated in the mining camp on December 2nd. Oxiana Resources also supported the local community festival when the first *Dong Son* drum was found during at the *Nam Kok* mining camp in 2008. The company and Vilabouly District government temporarily stored the drum for display at the temple (*wat*) in Ban Muang Luang village. This allowed local community members to make merit (*boon*) and pay respects to the local spirits for

removing the drum from the earth. The drum and the merit making festival drew in villagers from around Vilabouly District.

The Sepon Mine provided financial and material support for several temples and statues. Oxiana Resources also supported another Buddhist ceremony (*Bun Som Pod Phra*) to inaugurate a new Buddha image at the village of Ban Sepon Kao in 2009. MMG-LXML Ltd. provided financial assistance for the construction of a Buddhist temple (*wat*) in the Namchalo Village in the same year. The company also contributed 3 tonnes, or US\$21,000 worth of copper cathode from the Sepon operations for the casting of an image of the Lord Buddha for the temple. A ceremony at Namchalo Village dedicated to lifting the temple top, a sacred part of the *wat*, was attended by the Standing Deputy Prime Minister of the Lao PDR - H.E. Somsavat Lengsavad. Other attendees included senior government officials from Savannakhet Province and Vilabouly District, senior management from MMG-LXML Ltd, and staff and subcontractors from the Sepon Mine. This ceremony highlighted to importance the mining company placed on supporting local heritage within Vilabouly District, and illustrated the multi-lateral relationships being generated by the Sepon Mine.

Other initiatives raised awareness of local cultural heritage was the ‘Chance Finds Procedure’ created and managed by SoSu from 2010. Heritage surveys identified that local community members found and retained ‘unusual’ objects they while working in the fields or forest. Unusual objects were like stone adzes, old Chinese bowls, pipes and copper ingots, were sold, if not kept, by community members, particularly if they were metal items.²⁴ The program offered ‘rewards’ like T-Shirts to any MMG-LXML staff and community members who reported

²⁴ Vilabouly District is one of the poorest in the Lao PDR. Metal objects were sold to traders regularly, including scrap metal from planes and ordinances from the Indochinese Wars, to supplement household incomes.

finds or brought in objects that may be of heritage value. This need for this program was emphasized during 2010, when a local *Makong* boy found a second *Dong Son* drum while searching for scrap metal outside the mining tenement. The boy's family had tried to melt the drum down and had arranged sell the object to a Vietnamese trader as scrap metal. Vilabouly District Officials were notified of the drums existence and prevented the item from being sold by compensating the finders with a t-shirt. The drum was kept in the local district Governor's office. The 'Chance Finds Procedure' proved successful in recovering heritage objects and provided valuable archeological and geographic information of the nature and extent or distribution of heritage objects within the Sepon GPDA and the broader Vilabouly District. Information was built into a database that supported the management of archaeological sites and cultural objects within the Sepon GPDA.

Community Involvement in Archaeological Research and Heritage Management

MMG-LXML supported community development in Vilabouly District to ensure the community would benefit from mining operations and that heritage values were recorded and preserved. The CHM and archaeology program also aimed to support the needs of the community, while fulfilling expectations of the mining company and Lao Government. Vilabouly community had played a part supporting archaeological surveys from the beginning of operations at the Sepon Mine since 2001, and over time have become more integrated into the CHM program, particularly those living within the Sepon Mining tenement. Outlined earlier in this Chapter, and in Chapter 4, local community oral history of Vilabouly District has provided information leading to discovery of significant archaeological sites and objects within the mining area. Local Phou Thay and Mon-

Khmer villagers have been actively employed as ‘day-laborers’ on archaeological excavations since 2008, providing seasonal support for heritage management operations. Archaeological excavations supported training and development of new skills for local villagers and Vilabouly District Officials said to facilitate for “discussions about procedure with senior government officials and specialists planning the work. The excavations became a classroom as specialists explained how archaeology worked and what the significance of the finds was” (Mayes & Chang, 2014, p.245). Overall, community involvement supported the expansion of known cultural sites, objects and practices within the Sepon Mine.

Cultural Tourism and Vilabouly Culture Hall

The potential for tourism as a sustainable local economic development initiative has remained a point of discussion at the Sepon Mine since the ESIA process in 2001. Tourism was considered as an economic option for Vilabouly District as a mining closure planning objective, to support development of local businesses and economic independence after the mine. Since the inception of the Sepon Mine, a cultural heritage center in Vilabouly District was considered amenable to working as a mechanism to provide economic independence after mine closure, while also promoting the cultural heritage and history of the local area. A local heritage center or museum could also illustrate how the local community was integrated with the CHM program, particularly those living within the Sepon Mine tenement, and could promote the local culture of Vilabouly District. Through support of regional tourism by the Lao central government, there was also potential to promote the location as a destination for domestic religious tourism and for families

visiting ancestors who were forcibly removed by the Siamese in the late 19th century (Mayes & Chang, 2014).

Developing a district ‘Cultural Heritage Centre’ to focus on promoting and protecting the heritage from the local Vilabouly District was an outcome of the heritage assessment in 2010. Lao government archaeologist had also considered the benefit of a District museum since 2006. The idea of a ‘keeping place’ for materials recovered from archaeological excavations, surveys and the chance finds procedure had also been raised by Lao government archaeologist several years previously. Lao government archaeologists were also concerned that known and unknown objects and artefacts held by local communities were at risk of sale and looting, and suggested storing and displaying locally held ‘heritage items’ within a ‘Cultural Heritage Centre’ in the central Vilabouly community could mitigate this risk. As outlined previously, it was the case of a local Makong boy attempting to sell a *Dong Song* drum to scrap metal traders that provided an example of the potential risks heritage objects faced in an impoverished local community environment.

In 2012, MMG-LXML committed to funding construction of a ‘Vilabouly Cultural Centre’, to support the aspirations of the local community, and to promote the findings of archaeological research and the local cultures of Vilabouly District (see Figure 11). In 2013, Vilabouly ‘Culture Hall’ was officially opened to the public. It housed archeological materials recovered from excavations and chance finds within the Sepon Mine, photos of the local cultural groups, and recordings of local songs and stories from the local intangible heritage study. A replica wooden mining shaft was also built at the center of the hall. The ‘Culture Hall’ supported aims of MMG-LXML to develop local cultural tourism resources and local led economic development. It also supported the aims of both Lao and International archaeologist as a “showcase one of the most valuable archaeological collections in Laos” (CSR Asia, 2014, p.4).



Figure 11. Vilabouly 'Culture Hall' and the internal displays - 2013. (Photo: The Author).

Heritage ‘in the News’

Heritage has without doubt been a success for MMG-LXML within the wider public. From the perspective of the CHM Program, at the forefront has been the relationship between actions and activities in the past, and those being performed in the present, notably copper mining. Mayes and Chang (2014) articulate that “...at Sepon a fortunate coincidence of interests has emerged. Mining and archaeology both share an interest in geology and when it comes to ancient mining they also share an interest in the craft of utilising this resource” (p.246). The relational context between mining in the past and present led to the creation of slogans like ‘Ancient Miners-Modern Miners’ and promotion of a narrative linking the activities of past cultures to those in the present. MMG Ltd. regularly promotes the CHM Program and its role in supporting Lao history in media releases (MMG, 2016) and in their annual Sustainability Reports.²⁵ MMG has also promoted significant events relevant to the CHM Program at the Sepon Mine, including the signing ceremony for the revised MoU in 2010 (MMG, 2010), announcing the review of a review of its grievance mechanisms with the local community (MMG, 2011), and the donation of Sepon copper in the casting of several Buddha images and national emblems in Vilabouly District and in Vientiane city (MMG, 2013). Media promotions are seen to increase successful corporate-community relations and meet industry-specific standards for corporate social responsibility.

Discussion & Conclusions

This section will begin to consider the complexities and issues that developed from the creation of a cultural heritage management program at the Sepon Mine. The Sepon Mine is

²⁵ Web page with link to MMG Sustainability Reports: <http://www.mmg.com/en/Sustainability-and-Community/Sustainability-Reports.aspx>

considered by the World Bank (2006) to apply “a strict regime of environmental standards, procedures and practices (p.18)” to reduce the risk of social, cultural and environmental impacts from mining. While regulatory procedures were applied, the risk of impact to heritage from mining activities has remained high since the establishment of the mine (Chamberlain, 2007, pp.82-86; Mayes & Chang, 2014; Neilson, 2002). Implementation and enforcement of environmental and heritage legislation that was largely developed internationally, and in applying principles of corporate social responsibility as an industry practice within the Lao PDR (GIZ & BGR, 2012; Neilson, 2002). Neilson (2002) identified early on in the establishment of the Sepon Mine that “existing environmental legislation and enforcement in Lao PDR is essentially still extremely weak, resulting in fundamental issues of accountability and difficulties in ensuring an objective monitoring regime is undertaken” (p.3).

The risk of limited management of environmental impacts has remained high since establishment of mining operations. Environmental issues were consistent with water pollution and loss of fish and wildlife that villagers relied on for consumption and trade (Chamberlain 2007). The limited development of CSR and its application in the Lao PDR, influenced by the political and legislative context within the Lao PDR, has increased the risk of environmental and social impacts over the lifetime of the mine. Much of the risk to heritage remains that little is known about the local heritage in Vilabouly District or Lao PDR, and mining activity is considered to increase the level of risk to known and unknown cultural heritage. This issue was identified in the 2010 Sepon CHMP, which explained that “there is as yet limited knowledge about cultural heritage in Lao and its relationship within the country and as well as across the Asian Region” (MMG-LXML, 2010, p.31), making effective identification and management of heritage sites essential.

Several identified challenges to managing and protecting local livelihoods, the environment, and heritage sites at the Sepon Mine have been ongoing since the mine's initial exploration and construction phase. From the perspective of community relations, while the mine has provided several opportunities for benefit sharing, the Sepon mine is found to be the cause of community disputes among those living in and adjacent to the project boundary, and who are engaged with activities of the mine (Hilson & Nyame 2005). This was explained further by Chamberlain (2007) through direct engagement of villagers in the mine vicinity, identifying that social problems including jealousy and disagreements over employment, wages, village development, and compensation were not uncommon. Ovesen (2002) identified how the Brou have been politically and economically subjugated by the Phou Tay, due to the Phou Tay begin 'politically and culturally related to the ethnic Lao' (p.87). This has been an historical process, due to the movement of the Phou Tai into the area centuries ago, and later by the French colonials, who applied the term 'Bru/Brou' to the ethnic minority group as a derogatory term. The three tiered classification system, also developed by French colonials, was later adopted by the Lao Government, who continued subjugation of the Brou as an ethnic minority group. Therefore while intangible cultural heritage assessments have been undertaken, there has been no major shift in the status of local ethnic Brou, including their engagement with the heritage process or employment within the mine.

From the perspective of heritage management, the establishment of ESIA processes, incorporating cultural heritage assessment, and the later establishment of the Sepon CHMP, provided support for known archaeological and cultural heritage sites within the Sepon Mine tenement area. However, heritage has been largely defined and managed based on being cultural or natural heritage. The definition and level of significance is based on definition within the

ICOMOS Burra Charter and the *2005 Lao Law on National Heritage*. The Lao PDR has been engaged with the ‘world heritage system’ and agencies including UNESCO, IUCN and ICOMOS since the early 1980s. The Lao PDR has looked towards the international community to support the capacity of national heritage management since that time, including the subsequent creation of heritage management plans, heritage management practices, and heritage legislation. As a result, the Lao PDR has arguably adopted the international discourse and practice of heritage, whilst also aiming to meet national socio-economic development aims.

International discourses and practices of heritage are applied to activities that identify and manage cultural heritage sites. Protective measures and mitigation strategies from mining-based impacts are also largely based on international protocols and procedures. This includes the structure and function of the Sepon CHMP, the method for recording registered archaeological and cultural heritage sites in a database, and management and monitoring activities. While the use of international ‘best practice’ is recommended and more often regulated within resource developments, in the case of the Sepon CHM Program there has been a tendency to apply ‘best practice’ in a form and function more specified to the context of mining than the local community. For example, the significance of heritage is identified based on distinctly international categories; with heritage categorised as either tangible, intangible or natural; and significance defined as either low, medium, or high. The monitoring process and guidelines for monitoring and management identified for cultural heritage sites, determined by the specific needs and threats associated with each site or location, are also distinctly internationalist. This includes the process of monitoring and protecting heritage sites considered high significant cultural heritage sites. As it will be identified in Chapter 6, it is questionable how efficacious the implementation of international

heritage management practices have been in the identification and safeguarding of heritage from mining-based impacts.

Increased bureaucratisation in the Vilabouly District because of the presence the Sepon Mine is also identified by Ovesen (2002), Chamberlain (2007, pp.82-86), and Mayes and Chang (2014) to extend to the field of heritage management and representation. Overarching discourse about the benefits of mining to the local community by the Sepon Mine is highlighted through the public relations component for cultural heritage and archaeology. The representation publically of the heritage and archaeological research program at the Sepon Mine promotes the mine as a good ‘corporate citizen’. The mine has obviously provided significant structural and financial support for heritage management, but heritage is always political and identity-based. For example, heritage management activities and findings of archaeological surveys and excavations are largely controlled by Lao government and Vilabouly District Officials, with Brou representation highly limited. Support for village festivals and cultural heritage follows a type of ‘mine-sponsored heritage’ that is more often than not focused on Buddhist cultural heritage than ‘animist’ Brou heritage. This extends to the construction and control of the ‘Vilabouly Culture Hall’ which will be discussed in more detail in Chapter 7 and 8, where local heritage objects and narratives are controlled by Lao and Phou Tay Vilabouly persons. The focus on tourism as an aspect of ‘mine-closure’ planning would centre on the Culture Hall, and again, would likely provide more benefit to the local Phou Tay than Brou people.

Establishment of the CHM Program as part of mining operations to manage heritage and mitigate known heritage from risks associated with the expanding mining footprint. The CHM Program was formalized through development of a MoU, which also outlined the responsibilities between MMG-LXML, Lao DNH, and JCU. The development of the CHU and CHM Program

was a result of the MoU and provided capacity development for Lao national archaeologists from the DHN and NUoL, providing them with ‘on-the-job’ training and exposure to international archaeologists and heritage experts. Overall, archeological research and CHM Program has illustrated the local, national, and international significance of the archaeological and cultural heritage sites and objects in Vilabouly District. MMG-LXML also provided financial and material support for archaeological research, local and national community development programs, and cultural traditions, festivals, and religious ceremonies. The company has also actively promoted the CHM Program in operations in the media, and supported development of a local ‘Culture Hall’ to house and showcase local cultural traditions.

Before moving to critically examine these issue in more detail in Chapters 7 and 8, the next chapter will illustrate in more detail how local communities interact with, and make culturally meaningful, the local natural landscape. It will be shown how caves hold past, present, and future uses and values to local communities, and contain representations and material evidence illustrating regional and nation historical continuity and changes. Importantly, the next chapter will illustrate how heritage management practices at the Sepon Mine need to broaden the scope for identification of heritage places and objects, and implement management planning and practices that can accommodate for ‘mixed’ living, sacred, and often plural heritage. The limitations of applying international ‘best practice’, the need to follow regulatory processes in mining operations, and the place of heritage within the Lao PDR will become more focused point for discussion.

6. Identifying Local Uses and Value in Caves

“...concepts of heritage have always developed and changed according to the contemporary societal context of transforming power relationships and emerging nascent national (and other) identities”

(Harvey, 2001, p.335).

This chapter introduces the uses and values of three caves located within the Sepon Mining tenement area: Tham Hin Kiaw, Tham Pakou, and Tham Bing. The chapter presents the findings based on survey of the three caves to illustrate how caves and their surrounding environments hold multiple use and values that are related to past, present, and future-intended events for local Phou Thay and Brou speaking villagers. Uses and values are found to overlap and are generally identified to have interdependence between the cultural and *natural*, and *tangible*, *intangible*, and *historical* cultural heritage values. The chapter begins by outlining the uses and values identified in each cave in a lineal timeframe, from the prehistoric through to the contemporary era. Findings are considered against national and international research to contextualise caves in the Sepon Mine and Vilabouly District within broader regional trends and value ecologically and culturally, and to highlight the need to consider ‘mixed’ values in heritage management practices at the Sepon Mine. The chapter will conclude by providing a brief summary of the way caves have been used and valued by different cultures and societies over time. As a prelude to Chapter 7, it will be highlighted that mining and economic development are increasingly introducing new uses and value of caves, increasing pressure on caves, their associated environments, and socio-cultural knowledge, beliefs, and practices.

Background to Caves in Vilabouly District

Tham Hin Kiaw, Tham Pakou, and Tham Bing were chosen as a case study in this thesis.²⁶ Each of the caves are located within the Sepon Mining tenement area (see Figure 4, in Chapter 3). Vilabouly District is located east of the Annamite Caldera, and is at the southernmost geological extremity of the carbonite belt that runs north and west through Khammouan Province in the Lao PDR, and Quang Tri Province in western Vietnam. Caves and karst landscapes are not numerous within Savannakhet Province. Most caves and limestone karst are located within the northeast and eastern region, including Vilabouly District, adjacent to or along the ridges and borderlands with Vietnam, and the ranges and mountain peaks reach over 300 metres above sea level. Only minor archaeological (Davis, 2000; Sayavongkhamdy & Souksavatdy, 2006; 2011) and anthropological (Chamberlain, 2007; Pholsena, 2010) studies have been undertaken that have directly or indirectly confirmed the presence of caves and limestone karst in Vilabouly District, and identified they have actual or potential past human uses and present human values associated to them. A total of 20 caves have been identified within the Sepon Mine concession areas and are managed by the mine to prevent impacts to identified ecological and cultural heritage values. Mining-based ecological, archaeological, and anthropological surveys and research programs provide the most up-to-date information on caves in the mining tenement and the greater Vilabouly District. The ESIA process, monitoring activities, and other research projects have identified a broad range of human uses and values in caves. Importantly, caves and their associated ecological and cultural values are identified to be at risk of impact associated with modern mining activity.

²⁶ A rationale for selecting the three caves as a case study in this thesis was outlined in Chapter 3.



Figure 12. Example of a Neolithic Stone Adze found within the Sepon Mining Tenement (Photo: Nigel Chang).

Identified Uses and Values of the Past

Prehistoric Occupation

Caves in the Sepon Mine and Vilabouly District broadly show strong evidence for prehistoric use and occupation.

Outlined in Chapter 5, stone adzes are found within caves across the Sepon Mine and Vilabouly District (see Figure 12). No stone adzes were identified in either of the caves

surveyed, however, it was agreed among archaeologists that Tham Pakou displayed high potential for occupation during the prehistoric period. Tham Pakou was considered to support past human activity because the cave contained evidence for ongoing human activity and occupation over several centuries. No surface materials indicating prehistoric occupation were evident, however there was consensus that the cave displayed high potential for occupation during the prehistoric period. The hypothesis for prehistoric occupation was also based on the broader prehistoric use of caves within the Sepon Mine and Vilabouly District; and the evidence for long-term use of the cave, identifiable from material culture, oral history detailing human residue within the cave over at least five centuries, and that the cave is used as a dry shelter and for hunting today; and the large size of the cave and it has good ventilation.

Importantly, findings validate the hypothesis of Davis (2000) that the southeast Khammouan Province and northeast Savannakhet Provinces “may offer comparably significant data” (Davis, 2000, p.54) with other well-known caves in north-western Thailand, including Spirit Cave, Banyan Valley Cave, and Tham Panchan in North-West Thailand. Davis (2000) had

hypothesised that based on the locations having “similar topographic positions” (p.54) to those cave and rock shelter sites in north-western Thailand this location should have supported occupation of societies of the Hoabinian techno-complex (Davis, 2000). Therefore, while physical evidence for prehistoric occupation was not identified in either cave surveyed, findings from other caves and open air sites in Vilabouly District in conjunction with local landscape and topographic features within the Southeast Asian region indicate local use of caves since the late Holocene, but potentially earlier. This is significant when considered in context with results from other cave-based research in the Lao PDR and greater Southeast Asia (see Bacon. et al, 2011; Barker, 2005; Demeter et al, 2009; Glover & Price 2004; Higham, 2004; Shackelford & Demeter, 2011; Treerayapiwat, 2005). Findings within the Vilabouly District not only extend the distribution of karst south of Khammouan Province (see Kiernan, 2009), they extend the known prehistoric use of caves into the southern the Lao PDR.

Ancient Copper Mining

Chapter 4 and 5 each identified that Vilabouly District was the location of an ancient mining culture. Survey and archaeological excavations at Tham Hin Kiaw indicated the cave may have been used as part of this mining activity. Archaeological excavations at the entrance to the cave recovered from charcoal located *in situ* with a feature of stones near the base of an excavation pit (see Figure 13). A series of C¹⁴ radiometric date provided a range of 465+/- 25 years BP, with the dates falling within known occupation ranges within the broader region. The physical features of the cave also support the prospect that the cave was modified by humans in the past through a process of malachite mining. There is the potential that the entire cave could be an anthropogenic creation as part of the development and/or maintenance of human society in the recent past through

mining activity. It is also possible that past mining activity has resulted in, or contributed to, the collapse of the roof or overhang of the cave. However, there was also no clear indication from the archaeological survey that the cave or its use in the past was directly associated with the site of Peun Baolo. Large piles of malachite were found at the entrance floor to the cave, and malachite remains visible in the cave walls, may indicate ongoing mining or extraction of malachite. However, the absence of local oral history or knowledge associated with use of the cave in the past or present make it problematic to make a definitive conclusion about its past and current use.



Figure 13. Archaeological Excavation of Tham Hi Kiaw. Radiometric date of 465+ / 25 years BP was recovered from the charcoal and indicate this cave may have been used for mining associated activity (Photo: The Author).

Further support for historical use of the caves surveyed was the identification of one small blue bead located within a natural stone shrine inside Tham Pakou (Figure 15). The blue bead reportedly shows a similar style and composition to Chinese lead-potash glass beads that have been

excavated from log coffin and jar burials in the Cardamon Mountain, Cambodia, and from looted Iron Age sites in Tak Province, Thailand, on the Burmese Border.²⁷ While this bead may not be associated with the cave in the Iron Age, given the trade in copper from Vilabouly District in the past, as highlighted in Chapter 4 and 5, there is reason to consider that Chinese-made beads were circulating widely in this region of upland Mainland Southeast Asia in association with Iron Age societies.

Historical Buddhist Use of Caves

There is strong evidence for historical Buddhist-use of caves in the Sepon Mine and Vilabouly District. This evidence indicates the practice of Buddhism was locally widespread in this region the past. Buddhist material culture is identified in up to 10 caves in Vilabouly District through remnants of cave temples and remains of Buddhist paraphernalia. At Tham Pakou, one large bronze Buddhist monk's alms bowl remains and was used by a monk previously living in the cave. Other evidence for Buddhist uses of this cave were a series of small mural or painting on the southern wall of the inner cave (see Figure 14). This painting appears to be depicting two figures in meditation posture, most likely monks or hermits. Village guides did not describe the meaning of the mural or painting, however these paintings were identified to be representative of other Buddhist cave murals found throughout the Lao PDR and Thailand.²⁸ A small natural shrine which had a natural bowl-shaped platform was located in the back corner of the second chamber. This shrine was considered to be a natural stone *lingha*, and the platform contained the remains of three

²⁷ Personal communication with Dr Alison Carter

²⁸ Personal communication with Dr Noel Hidalgo Tan

brunt small wooden Lord Buddha statues, small animal bones, and the one blue bead introduced, in the previous section (see Figure 15).

The presence of wooden Buddha statues, and the murals, provide important tangible dimension of the Buddhist-use of caves corroborated by the oral history of village guides. Qualitative explanations of the Buddhist use of the cave by local villagers supported the use and value of material remains within Tham Pakou. One local guide recounted that Buddhist monks had previously inhabited the cave, at that time there were many more statues of the Lord Buddha situated within the cave:

Tham Pakou was occupied by Buddhist monks before about the 1960's. At that time and before then there were also many Buddha statues made of bronze and iron in the cave. I can also remember there was also one large wooden Buddha statue here during that time.²⁹

Importantly the Buddhist use of caves has been an ongoing tradition until very recent times. Local oral history, including at Tham Pakou, recount the use of caves by Buddhist monks in the region until the mid-to-late 20th century, when the practice was disturbed by the Vietnam War and ensuing Revolutionary Period. A village guide recounted that the Lao Revolutionary Army came to the area during the mid-1970s and the army began to remove the monks and statues of the Lord Buddha from the caves:

²⁹ Interview with Senior Villager (Ban Namalou), September 2011

At approximately 30 or so years ago, after the bombing, the Lao Army came to the local area. During this time the Army Officers removed the monks and the Buddha statues from the cave. This was about in 1976.³⁰

The local use of the area by a previous Buddhist culture was validated by local oral history in two other villages in Vilabouly District – Muang Ang Kham and Meuang Luang – where local stories highlight the historical and genealogical connection to a 19th century Lang Xang King, and to its famous ruler, Phra Chao Anuvoung (MMG-LXML, 2011; Oxiana-LXML, 2009). Reported in Chapter 4, these accounts reportedly connect local people by lineage to the Lang Xang Kingdom that ruled from around the 16th century. Local knowledge also relates the origin and use of Buddhist temples and stupas located in Vilabouly District at Ban That at Meaung Luang (MMG-LXML-2011) and the temple at Ban Ang Kham (Chamberlain, 2007, p.44) to that Kingdom.

The earliest identifiable evidence for the use of Tham Pakou by human populations was from the Buddhist period, based on the material culture and oral history. Going by the earliest recorded dates for the Buddhist influence in early state societies in the region, this type of cave use may be up to 500 years or more old. The arrival of Buddhism is estimated to be from the 14th century, but the use of caves at Luang Phrabang by Lao royalty, monks, and lay people is reported from the 16th century BC onwards (Stuart-Fox 1986), Buddhist use of caves was widespread in Central and Eastern part of what is today the Lao PDR, notably at Tham Theung (Pac Ou Caves) which contained hundreds of Buddha statues and a large stupa inside the upper cave chamber (Egloff 1998; 2003). However, in Southern Lao PDR sandstone rock shelters and overhangs on the slopes of *Phou Kao* (Kao Mountain) were reported to have been used during the 7th and 8th

³⁰ Interview with Senior Villager (Ban Namalou), September 2011

century in conjunction with, and within, the broader functions of the Khmer society at Vat Phou Champasaak (Government of Lao PDR, 1999).

The style of the Buddhist cave temples in other caves in Vilabouly District represent structural and symbolic similarity to Buddhist cave temples and rock shelters in other parts of the Lao PDR and Thailand. Traditionally, caves and rock shelter were used and regularly modified to provide a location for the application of Buddhist cosmology, religious beliefs, and ritual practices (Kiernan, 2004; Mauret, 2004a). The practice of applying Buddhist cosmology to cave architecture is considered to have begun in Western India from around 100BC (Dehejia, 1972). The transformation of caves and rock shelters into Buddhist temples and sanctuaries extended along the old Silk Road, through Mainland and Peninsular Southeast Asia as far as Malaysia (Mouret 2004a; Munier, 1998; Sidisunthorn, Gardner & Smart, 2006). The Buddhist use of caves in Vilabouly District, and local construction of cave temples, and oral history reporting genealogical and historical local association to the Lan Xang Kingdom, may therefore indicate that this location was part of a regional trend in Buddhist practice associated with either the Lang Xang Kingdom or possibly within the earlier various phases of the Khmer Kingdom prior to the 16th century.



Figure 14. Remains of Buddhist Culture in Tham Pakou. Above: Buddhist murals on cave wall; Below: Old Buddhist Alms Bowl hidden inside Tham Pakou by local Villagers (Photos: The Author).



Figure 15. From Top Left: Potential *Lingha* Shrine in Tham Pakou, containing burnt wooden Statues of Lord Buddha (bottom left) and animal bones and Blue Bead (below right). (Photos: The Author).

Vietnam War and Post-Revolutionary Period

The Indochinese Wars, including the Vietnam War (otherwise known as the American War), and later Cultural Revolutionary period, provide a notable change in the use and value of caves in Vilabouly District. This is demonstrated in wide-scale disruption of previous use of caves and replacement with new uses and values for caves for subsequent generations, as part of the changing national and regional social and political landscape. Severe impacts to caves structure and geohertiage values resulted from the war and post-revolutionary periods in Southeast Asia. While Kiernan (2010a; 2010b; 2012) has discussed that during the Vietnam War era caves in the Lao PDR and Cambodia were damaged or destroyed by bombing and human occupation. While there were reports of caves being destroyed by bombing raids, these were not visibly recorded, and of the caves surveyed there was no recognizable physical damage from the war. That said, the Vietnam War and Cultural Revolutionary period did impact the previous Buddhist use of caves. The outcome of these periods in Lao history was that the associated practices and material culture of Buddhism do appear to have been largely phased out. Jenkins (1974) declaration that “the political, economic, and social fabric of the country had been all but torn apart by more than two decades of fighting and killing” (p.5) is an indicative statement to the impacts felt by people as a result of this historical period. Vilabouly District was one of the most heavily bombed regional of the Lao PDR, and the impact of Indochinese Wars periods in general are clearly evident in the social, cultural and physical landscape, including caves.

Today, the legacy of Vietnam War and post-Revolutionary period are in many ways the most obvious remnant of the past in Vilabouly District. In caves, this is based on the material culture left behind, and in the practices and memories of persons residing in Vilabouly District today who lived though that era. Of the caves surveyed, Tham Pakou provides strong tangible evidence for

the use of the cave during the Vietnam War and post-Revolutionary Period, with paraphernalia left over from the war period littered across the floor of the cave (see Figure 16). Items found within the cave included glass syringes, bullet casings, tobacco tins, tin food cans, thongs, buttons, and nails. Interestingly, materials left behind in the cave from the Vietnam War era appeared to lack significance to local villagers, however these items were not removed from the cave. Items from the Vietnam War and post-Revolutionary Period were also identified as being important to the Lao Government archaeologists who were very interested in how these caves highlighted this history.

The Vietnam War and post-Revolutionary Period were found to have a lasting impact in the memories and practices of Tham Pakou villagers, and has influenced the way caves remain used and valued today. Importantly, Tham Pakou and Tham Bing remain sites of memory for local villagers, where deceased family members are memorialised in ritual practices, and shrines have been built dedicated to the spirits of ancestors killed during those periods. This will be discussed in more detail later in this chapter. Local villagers' explanation to the use of the cave during the Vietnam War and post-Revolutionary Period supported the material remains from that era which remain within caves today. For example, local guides explained that items left behind from that era were from the Lao Army when they moved into the area:

I remember that the cave was used as a prison or re-education camp by the Lao Army. There was also some use of the place as a hospital. You can see the glass syringes here still today.³¹

Local guides also explained that the cave was used by Ban Namalou villagers during the Vietnam War period and afterwards by the Lao Army:

³¹ Interview with Senior Villager (Ban Namalou), September 2011

The cave was used during the years of the war when there was bombing by some villagers to escape the bombing.³²

While an exact time-period for this use of the cave could not be given by the village guides, occupation by villagers and the Lao Revolutionary Army was reported to be over several years. Presumably this would have been between 1965 and 1972,³³ and during the post-Revolutionary Period after 1975. Another nearby cave, Tham Palon, was also reportedly utilised by a Vietnamese anti-aircraft unit from 1970 to 1973 (MMG-LXML, 2012).

At Tham Bing historical uses of the cave also relate to the Vietnam War and post-Revolutionary Period. The cave, it was explained, was used by Ban Namkheun and Ban Boung villagers to shelter during bombing and air raids during this time:

The history of the cave is about the Vietnam War period. During this time the cave was used by local people to shelter during the bombing raids.³⁴

As with Tham Pakou, an exact time-period for the use of the cave as shelter during the Vietnam War could not be provided, and was stated to be over several years. Presumably it would have taken place between 1965 and 1972. During the survey it was not possible to receive reports of the actual fatalities from the village people who perished during bombing raids here. It was explained however that cultural uses and meanings of the cave prior to the Vietnam War and post-Revolutionary Period were not recorded, and may have been forgotten, based on the amount of change in the local area over the past 50 years.

³² Interview with Senior Villager (Ban Namalou), September 2013

³³ 1965-1972 marks the period of aerial bombing in Laos by the American Army.

³⁴ Interview with Lao MMG-LXML employee (SoSu), November 2013

Overwhelmingly local people's experiences of during the Vietnam War and post-Revolutionary Period have transformed into a local desire to manage and protect the cave from damage or destruction from mining-based activities. One villager from Ban Namalou explained:

I think the cave is an important place for Ban Namalou because it is useful to us. We may need to take shelter in here again. For that reason I would like to see more protection of the cave and its environment³⁵

The perceived value of the cave for future use is based on practical uses and personal memories of the past, each identified to play an important role in considering why caves serve as important places locally, how caves are made meaningful today, and more broadly, the role of caves in the evolution of human consciousness, religion, and society.

³⁵ Interview with Senior Villager (Ban Namalou), November, 2013



Figure 16. Material culture left from the Vietnam War Era, found in Tham Pakou (photo: The Author).

Identified Uses and Values in the Present

Geohertiage and Biodiversity Value

Caves should firstly be considered as significant geohertiage which act as a ‘natural’ vessel for conservation of natural heritage, and which support past and present, and perceived future cultural heritage uses and values. Caves in Vilabouly District were identified as important geological features within the local environment that provide several important ecosystem services. Caves and karst as geohertiage have obviously played an evolutionary role supporting local biodiversity (see Figure 17). Bats were identified to have lived at each cave surveyed in the past and in the present. At Tham Pakou, Asian Elephant tracks and dung were identified at the creek running below the cave and Phou Pakou. The location of elephant tracks and dung were almost identical over a two year period, indicating that the elephants were common in the region and that they follow similar patterns of movement. Another cave not surveyed, *Tham Sua*, or Tiger Cave, has been reported by locals to have once been the home of tigers. While tigers are animals are no longer found in the area, the name of the cave indicates their presence in the past, the southern range of the species, and importantly that they relied on caves as part of their habitat.

According to the IUCN (1999) “the integrity of any karst system depends on an interactive relationship between land, water and air” (p.43). All caves surveyed were found to provide a role in unison with local biodiversity and provided broader ecosystem services. Tham Hin Kiaw, Tham Pakou, and Tham Bing were each found to be in conjunction with a hydrological system. Karst and water systems were found to have a symbiotic relationship, and worked to provide essential ecosystem services within catchment areas to support populations of local flora, fauna, and local communities. A variety of karst types were also identified in Vilabouly District (see Figure 18).

Tham Pakou for example is situated within a small karst mountain, Phu Pakou, and provides an important geological example of local karst system, examples of stalagmites and flow karst. Tham Bing also provides several examples of flow karst. At Tham Bing the underground water system was associated with the cave and establishment of a 'Buffer Zone' in management planning was applied to protect the aquifer system associated with the cave.

A phenomenon of caves and karst areas supporting large old growth trees and vines was also identified (see Figure 19). The immediate forest areas surrounding Tham Pakou and Tham Bing in particular contained old growth trees and old growth vines, not regularly seen in other areas of forest in Vilabouly District. The phenomena of old growth trees in conjunction with other local geological sites with cultural values also occurred at other sites. A natural standing stone arrangement named *Hin Som Sao* also supported old growth trees that stand in context with large granite staffing stones. Caves and other geological sites potentially provided a supporting role for local biodiversity in the past, and appear to play a supportive role in the present. It is also worth considering whether the cultural, spiritual, and economic associations and relationships between human society and caves and other geological places like *Hin Som Sao* play a role in conservation. This subject will be discussed in more detail later in this chapter. At Tham Bing, the relationship between old-growth fig trees and cave geology raised the prospect of World Heritage listings. An MMG-LXML staff member considered the aesthetics of the cave comparable to other World Heritage sites in Vietnam and raised the question why more was not being done to recognise these places in the Lao PDR:

In Vietnam these places are world heritage - why not here. The trees and rocks and their association to each other at the cave is an important thing to this area, and a part of why these places should be protected.³⁶

The Village Landscape and Sacred Caves

A range of cultural and spiritual values were found to be projected into, or fused with, natural organic and inorganic objects and sites. Natural sites with spiritual values were considered part of the village landscape. At Tham Pakou for example, the meaning of the cave formed part of a broader process of place-making through historical process and cultural demarcation of the natural environment and man-made places. Human uses and spiritual values of the caves examined were largely administered by village customary law and directed by local cosmology. As Baird (2008) has argued, places are produced by several processes, in particular they are socially constructed, are meaningful based on events that have transpired there, are meaningful in relation to other places, and they cannot exist without boundaries. Chamberlain's (2007, p.13) research in Vilabouly District support this standing, identifying that villages in Vilabouly District are founded on a mytho-historical basis, usually through a specific event or by an ancestral 'hero'. Village landscapes are constructed around the mytho-historical context and are constituted by several demarcated 'places' within the village landscape. Places within the landscape will generally include sacred sites or forests (*mahesak paa*), rice paddies and/or swidden fields, residential areas, and cemeteries. Caves provided an important function to house spirits so that they can be called on ritually, or propitiated for veneration.

³⁶ Interview with Lao MMG-LXML employee (SoSu), November 2013



Figure 17. Example of animal species found in and around caves. Elephant tracks and dung, Tham Pakou (top left & right); Bat species at Tham Hin Kiaw (below). (Photos: The Author).



Figure 18. Variety of Karst at Tham Bing (above) and Tham Pakou (below). (Photo: The Author).

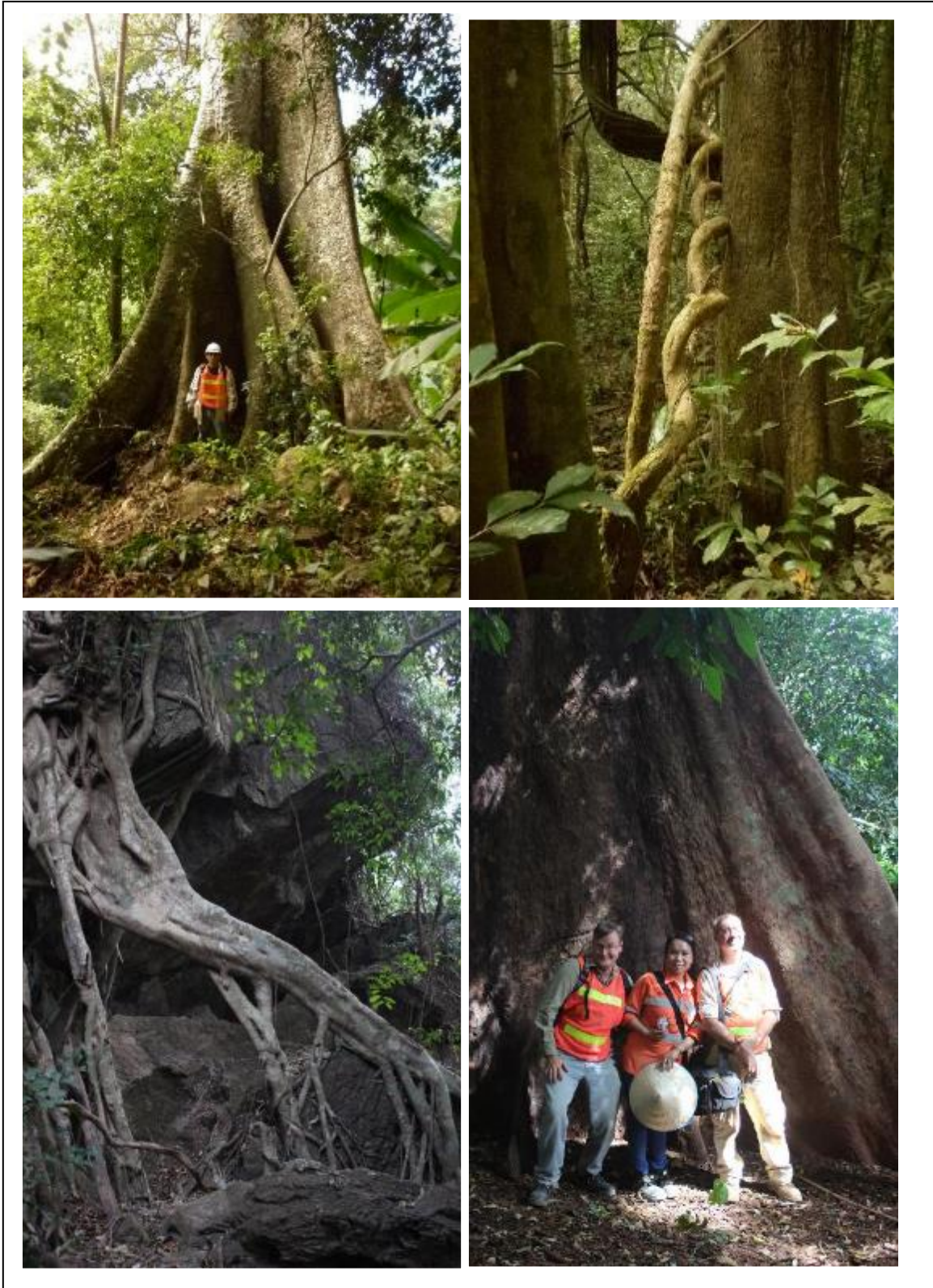


Figure 19. Old Growth Trees and Vines on or surrounding cave sites. Tham Pakou (above left and right); Tham Bing (below left); Hin Som Sao (below right). (Photos: The Author).

Tham Pakou is recognised by Ban Namalou as a focal place within local belief as the site of the village founder's story. While it was not possible to receive the full story of the village origins, it can be ascertained based on knowledge of the story that residential patterns within Vilabouly District generally that the age of Ban Namalou would be at least 3 generations old. It has also been possible to ascertain that Tham Pakou remains the residence of the ancestor associated with the foundation of the village, and today the cave in provides a residence to the spirits, which in turn support villagers now and into the future:

There are two spirits who reside in this cave. Their names are Laung Bang and Laung so (or su). These spirits are male. They protect the village and other places within the village boundary, places that are contained within it.³⁷

The role of the two ancestral spirits, one of which is considered an 'earth spirit', is to protect the village, the forest, and agricultural land that the village relied on for food, water and other forest products. Spirits were also said to be called upon during specific ceremonies and annual calendrical events or events the lifecycle of village residents:

The spirits are called upon in ceremony – when building new houses, at the beginning or during the rice season, or when a villager is ill for example...ceremonies are not held at the cave, people do not usually come to the cave. The spirits are called from the cave during ceremony wherever the ceremony is held and spirits are called to the village or site of the ceremony.³⁸

³⁷ Interview with Senior Village member (Ban Namalou), September 2011

³⁸ Interview with Senior Village member (Ban Namalou), September 2011

Ban Namalou villagers explicitly made the link between the spirits *laung bang* and *laung so* (or *su*) being a source of sustainability of the village, villager's health and wellbeing, both in the present and into the future. It was their belief, and that generally reflected in Brou cosmology, that angering the spirits might make the spirits behave unfavourably towards the village and its residents - generating misfortune on the village, crops, or it may generate personal ill health. From the perspective of villagers, preventing angering the spirits will reduce negative impacts on the livelihoods of the villagers now and in the future:

Because disturbing this cave, where the spirits live, might anger or upset the spirits. They might cause harm to Ban Namalou or people in our village, cause the rice crops to fail, or make people sick.³⁹

Villagers would make offerings to the spirits at Tham Pakou during other non-ceremonial occasions like when visiting the cave, although this is rarely done. Non-local visitors to the cave who are hunting and when sleeping in the cave also make offering to the 'spirit' or the cave, but it was not ascertainable whether this is to ancestral spirits of Ban Namalou, or nature spirits known as *phi*. The ongoing propitiation of ancestral and/or nature spirits at Tham Pakou was evident by offerings of rice balls (*kao neow*) placed on the top of stalagmites within the cave (see Figure 20).

The sacred and mythological association to natural geology and forests in Vilabouly District correlate with use and management other 'sacred' natural places within the Lao PDR and internationally. Kiernan (2015) states that spiritual and religious belief systems in nature include "numerous landforms, including some islands, water bodies, rocks, mountains and caves" and that these locations are "regarded as sacred sites, thereby adding a cultural dimension to their potential

³⁹ Interview with Senior Village member (Ban Namalou), September 2011 ;

natural geohertiage status” (p.177). Trees are recognised as sacred by animistic and monotheistic religions, including Buddhism, and sacred natural sites remain a prominent feature in religious faiths today, including in caves the Sepon Mine and Vilabouly District. Locally, the association of old growth trees, old growth vines, and large and iconic/symbolic faunal species with cave ecosystems infers a long-term system of use, management, or protection of these places. The age of the trees in some locations would indicate that cultural or spiritual association of these locations were applied by local populations over preceding centuries. Verschuuren, Wild, McNeely & Oviedo (2010) outline that “sacred sites associated with living cultures always have institutions and rules associated with them (p.2). Further, that “sacred site institutions are closely integrated within society with little distinction between the sacred and the secular, the religious and the civil” (Verschuuren, Wild, McNeely & Oviedo, 2010, p.2). The desire by local communities to protect and preserve caves, the cultural materials in caves, and environmental surroundings from damage or destruction appear loosely grounded in management practices and customary laws. This forms part of the broader management practices that will be discussed further in the next section that considers management of caves.

Several other mythical stories recounted in the Sepon Mine and Vilabouly District that illustrate the relationship between natural sites and cultural uses and values within what could be described as a spatial sacred topography. One myth is the story of the Dragon Field, or *Thong Na Nguok* and *Hin Som Sao*, two natural sites within Vilabouly landscape used and valued culturally by Phou Tai and Brou. The story recount that a dragon was slayed in the distant past at *Thong Na Nguok*. The site has red oxide rich soil, which according to local myth, is believed to represent the blood of the dragon slayed there in the past. The myth also links the *Thong Na Nguok* and *Hin Som Sao*. As the myth explains, the standing stones of *Hin Som Sao* were used to hold a pot that was

used by giants to boil the dragon when it was brought there after being captured and killed at *Thong Na Nguok*. These two locations remain the location for annual cultural rituals where villagers hold a ceremony to propitiate the dragon spirit and its death at the hands of the giant. The sites and the myth constitute part of the broader cultural landscape within Vilabouly District which reside inside and outside the boundary of the Sepon Mine. This clearly illustrates that a cultural spatial topography exists within Vilabouly District, associated between natural places and cultural beliefs and practices.

Caves within the Sepon Mine and Vilabouly District are also identified to hold values as sites of memory for deceased ancestors. Explained earlier in this chapter, for villagers of Ban Namkheun and Ban Boun, there is a strong belief that the spirits of dead relatives killed by bombing raids during the Vietnam War still reside at Tham Bing. Villagers engage in regular ritual processes associated with the belief in spirits and deceased ancestors, practices which connect the village to the spirits and deceased ancestors at specific times throughout the calendar year. Today, the cave remains an important place for villagers to remember that time and remember those who died in the cave during the bombing:

People here pay respect to the dead here. Even when you sleep (there) the person will come to them in a dream. This is good for people as they can see their ancestors in a dream. If they do something disrespectful to that person (even when they are deceased) they might hear you. They might make you sick or not well. So you go to the cave to respect them.⁴⁰

⁴⁰ Interview with Lao IUCN employee, August 2015



Figure 20. Worshipping Ancestral Spirits and Nature Spirits at Tham Bing (above) and Tham Pakou (below). (Photos: The Author).

At Tham Bing, shrines are constructed by villagers and offerings are provided to the deceased spirits at the shrines (see Figure 20). A medium sized Buddhist shrine had been constructed to the south of the upper cave entrance nestled, into a nook in the outer wall of the cave. The shrine was explained to be used for prayer, offerings and thanks to villager's ancestors, and it was explained that this process would bring blessings and good luck/fortune on the people who make the offerings:

You can see the shrines here at the cave entrance; these are used by the people here to offer respect to the dead ancestors who died here, mostly during the Vietnam War. People believe respecting in this way will bring blessings and good luck or fortune on the people who make the offerings.⁴¹

Another smaller shrine, with incense sticks and candles, was constructed at the foot of a large root of the fig tree (see Figure 20). Offerings at the shrine include incense, candles, and food. Both shrines were basic but resembled shrines you would see at temples or in natural places throughout the Lao PDR, and looked like they had been used or maintained regularly. It was explained that the main shrine at Tham Bing was used for propitiation of local spirits (*phi*) and for making merit. However, the main shrine held no pictures or statues of a deity or monk. It was identified that there were no annual ceremonies or festivals performed at Tham Bing but that older uses and meanings are not recorded and may have been forgotten based on the amount of change in the local area over the past 50 years.

Clearly the relationship between caves and the Vietnam War and later revolutionary period in Vilabouly District are shared with other regions of the Lao PDR who lived through these periods

⁴¹ Interview with Lao MMG-LXML employee (SoSu), December 2013

of time. There are also there are several types of historical experiences that have led to how caves are perceived and used today throughout the Lao PDR Caves became refuge for local people escaping the conflict (High, 2007), with some caves becoming memorials to deceased from the Vietnam War period. The Lao Government for example, holds an annual ceremony to commemorate the bombing and loss of life during the Vietnam War period, at Tham Piew, a cave located in Xieng Khuang province (AsiaOne, 2014). Pholsena (2010) and Tappe (2013) have shown that cave sites associated with the Vietnam War and Revolutionary Period remain important to the identity of the Lao people and society, even becoming highly politicized places. The Vieng Xai region of Houaphan Province, northeast Lao PDR, is often remarked as the ‘Birthplace of the Lao PDR’, because it was the location for the Revolutionary Party headquarters during the Vietnam War, prior to the creation of the Lao PDR in 1975. Caves in the Lao PDR were utilised for a variety of reasons to support activities of the revolutionary government. Like the Vieng Xai region, certain caves in Vilabouly District remain important places as sites of memory and memorial practice today as a result of impact of the war period. There is minimal recorded use of caves as memorials to deceased from the Vietnam War period outside of that reported from the Vieng Xai region of Houaphan Province, making this type of cave use in the Sepon Mine and Vilabouly District significant at the local and national level.

Interestingly at Tham Bing students from the NUoL made offerings and gestures of prayer with their hands together in the *wai* posture at the Buddhist shrine erected to the ancestors and spirits residing at the cave. At Tham Pakou as similar process happened when and Lao archaeologists and NUoL staff and students used the Buddhist monk’s alms bowl in a spontaneous ritual, where each person held the alms bowl individually and prayed, also making the *wai* posture. The students described their motivation for performing the ritual propitiation as respecting the

spirits that reside in the caves. Neither Ban Namalou villager's guides or MMG-LXML nor Lao DNH staff showed interest in the burned Buddha statues, nor did they clarify questions asked about the natural shrine containing the burnt Buddha statues as being a natural *lingha*. Marwick, Schoocongdej, Thongcharoenchaikit, Chaisuwan, Khowkhiew and Kwak (2013) identify this practice is common across archaeological sites in Thailand. The authors cite Byrne (in Marwick et al., 2013) who also considers that “these types of religious activities are common at archaeological sites in most Asian countries and represent an important dimension of local cultural engagement with archaeological sites and objects” (p.135). Alternately, this ritual practice could be associated with the resurgence of Buddhism in Vilabouly District, and nationally, of beliefs and practices once banned during the post-revolutionary Period.

Contemporary Subsistence and Economic Uses and Values

Caves are identified to remain valuable to local Phou Thay and Brou communities for a range of subsistence and economic purposes. In the present, all three caves and their surrounding environments were being used or occupied for shelter or a variety of subsistence and economic activities. As in other part often Lao PDR, caves and karst ecosystems are incorporated into land-tenure systems, used as part of subsistence and agricultural practices, and in traditional fisheries management (Baird 2006; Kiernan 2009; 2013; Uhlig 1980). While populations are subsistence rice farmers and farm swidden plots, caves and their surrounding environments provide important resources that supplement local diets, for use as building and construction materials, and for augmenting income.

'Wild' forest products were identified as important to Lao and local Phou Thay and Brou villagers:

Here the forest is an important resource for Lao speaking Phou Tai and Mon-Khmer people. Most of the vegetables and including bamboo shoots, mushrooms and fungi, and peas come from the forest where we work (*indicating Peun Baolo*). Mon-Khmer and Phou Tai each rely on these (*forests for*) foods, and even prefer them to be wild in comparison to commercially grown or farmed (*food*).⁴²

Chamberlain (2007, p.58) explains that in Vilabouly District, the consumption of wild foods, notably 'bush meats', and are some of highest per capita nationwide. Overall, this indicates the important role of forest products in local diets, and the TEK that local people and Lao nationals retain and apply today. Edible forest products were said to be an addition to regular foods bought at markets, and were preferable to commercially grown foods (see Figure 24). Wild plants and plant products, and wild meats, as described above, are recognised as a valuable contribution to diets in local foraging economies.

Throughout the excavation seasons in 2011 - 2013 local villagers working on the archaeological excavations were regularly observed collecting forest products to take home as a food. A wide variety of vegetables like edible greens, mushrooms, bamboo shoots, wild fruits, and faunal species including crab, lizard and frogs are collected or harvested on a seasonal basis. Several edible and medicinal plant species including wild banana, edible palms, medicinal roots and vines, and green plants or vegetables were collected near Tham Hin Kiaw and Tham Pakou while surveying (see Figure 21). Wild foods are actively collected by Ban Namalou villagers from

⁴² Interview with Lao MMG-LXML employee (SoSu), December 2013

forests surrounding Phou Pakou Mountain. Wood products, particularly bamboo, were utilised for building, construction, and day-to-day needs.

Other evidence of hunting in Tham Pakou cave was evident with several mist nets used for catching bats installed in Tham Pakou. Several fire sticks were found at the entrance to the cave and several fire places were also identified in a deeper chamber. Bat *guano* covered the cave floor of a small chamber of the cave, but no live bats were identified and there was no clear indication of the size of the population of bats in the cave. The presence of large amounts of guano indicated a large colony of bats resided there in the past, or the cave was used either intermittently or continuously by bats over a longer period. Tham Bing and Tham Hin Kiaw were also used to hunt resident bat colonies. Tham Bing (*bing* translated in English to mean ‘bat’) was reportedly a location for hunting bats in the past, as it was explained there were no bats located there presently. The small colony of bats at Tham Hin Kiaw were collected by local Phou Thay over the course of the excavation. It was explained at a later time that bats are a prized food in Vilabouly District, likely an indication as to why there are so few of them remaining in caves.

The geological make-up of Tham Pakou also acted as a good shelter for human populations in the present. As a dry cave with large inner chambers it provided space, lighting and ventilation. Tham Bing did not appear to support reliable long-term shelter, as there was only a small natural overhang of the cave roof, but, and how this cave would support human habitation in the wet season is not known. Mining staff were known to use the cave for lunch or while on break from work. Large amount of rubbish at the cave entrance and adjacent to the entrance of the upper cave supported reports the cave was being used for intermittent visits, or even short-term shelter.

Ban Namalou villagers did not collect food or forest product within a few hundred metres surrounding Tham Pakou or within Tham Pakou. It was not clearly identified by Ban Namalou villagers where demarcated areas within the village landscape where ‘wild’ resources and other natural products were collected or gathered, and where *mahasaak paa* or ‘spirit forests’ were located, but people were prohibited from collecting forest resources in ‘spirit forests’. It was clear, as discussed in the previous section that Tham Pakou was off limits for hunting and habitation. Villagers interviewed reaffirmed that hunting and sheltering in the cave was generally forbidden by Ban Namalou headman, however hunting activities continued unabated, highlighted by the mist-nets in Tham Pakou. Caves remained actively used as a temporary shelter and for hunting and collecting resources by persons travelling through the area. This situation was explained by a villager of Tham Pakou:

People come and go from the cave, using it to collect food like bats, and also for shelter. People do not stay long here; they do not stay for long at any one time period. The people who used the caves had ancestors from the village, so they might not live here in the village now, but their ancestors did.⁴³

⁴³ Interview with Senior Villager (Ban Namalou), November 2013



Figure 21. Edible Forest Products (1st and 2nd rows); Food/ meals made from locally collected forest foods (3rd row); Firesticks and mist nets (4th and bottom row). (Photo: The Author).

Over time, a process of in-migration was occurring, with persons from outside Vilabouly District increasingly moving into the area to access economic benefits from mining. Discussed in more detail in Chapter 7, new ‘economic migrants’ were exploiting natural resources in the area for food, shelter, and to supplement the formal economy. At Ban Namalou, it was explained that many Lao persons entering the District from outside the village were related to village residents, complicating the management of the cave from overuse and impacts.

Discussion & Conclusions

Findings presented in this chapter have illustrated that caves and their surrounding environments within the Sepon Mine and Vilabouly District hold multiple uses and values, with these often overlapping and interdependent between past, present, and future-intended uses and values for local Phou Thay and Brou people. Caves must also be considered as part of broader ecosystems and situated within cultural landscapes. Findings also illustrate caves in Vilabouly District have undergone periods of continuity and change in how they are used and valued by human populations and cultural groups. Caves have been incorporated within regional social, cultural, and economic activities for at least 5 centuries, but theoretically have undergone continuity and change since the prehistoric period. Buddhist-use for and value in caves may be over 200 years old, and while Buddhist practices and material culture were largely phased out during the Vietnam War (or American War) and Cultural Revolution periods..

Continuity and change in uses and values in caves reflect transitions in local and regional social and cultural beliefs and over time. This is represented in the way natural places and object in Vilabouly District have sacred and mythological association placed on them by local villagers.

Caves and their surrounding environments could be described as ‘living’ cultural places, set amidst a ‘sacred’ topography, and managed for these values through spiritual or cultural practices and customary laws over the preceding centuries. Change in use and values of caves in the district highlights the important role caves play supporting local human adaptation to new and disruptive social and circumstances. The Vietnam War (or American War) and Cultural Revolutionary periods have had the most notable change to caves in the area, generating new uses and values for caves in the district. This was not found to impact cave geoheritage substantially, but was most impactful on the lives of people living in the district throughout those periods. This period in history is still obvious in the material culture left behind in Tham Pakou, and in the memory of villagers who lived through those periods for their ancestors killed during the war. At Tham Bing, memories of the past and deceased family members remain memorialised in ritual propitiation and shrines dedicated to the spirits of them in the present era. Tham Pakou also remains the residence of ancestral spirits for Ban Namalou. Community members remain actively engaged in maintaining this belief through ritual processes which connect the village with the spirits during specific events throughout the calendar year.

Caves also remain relevant for present and future-orientated activities including hunting, gathering, subsistence and economic activities, and including sheltering in caves. Importantly, caves could be considered as a type of *refugia*, or location where human society or local populations to use during times of significant social, political or ecological stress or incursion. The findings illustrates how the recent advent of mining and associated economic development activity in the district has introduced new uses and values for caves. It can be said that the Sepon Mine has supported a new and distinct types of change to Vilabouly District. In particular, is the increased use of caves for hunting, gathering, and sheltering, the increased damage or destruction to cave

environments through littering, and logging of forests in close proximity to caves. What is apparent is that there are several limitations to identification of the full range of uses and values of caves from the perspective of mining-based heritage management frameworks, and that as a result, there are implications for the sustainable management and protection of caves and their surrounding environments as a result. This predicament also includes the way caves are interpreted from a cultural viewpoint, and managed by villages under local customary practices and laws.

To explore some of the issues identified in management of caves, the next chapter will move to illustrate how caves are managed as part of the mining process and to manage or mitigate the impacts and changes introduced from mining-based activity. It will present in more detail how the mining process has introduced new uses and values locally through implementing new heritage management regimes to manage or mitigate impacts and threats to caves and their surrounding environments. It will also consider how these factors are part of new and competing interests that challenge traditional Phou Thay and Brou uses and values of caves and associated environments. It is argued that the presence of the mine and mining-based economic development activity in the region challenge local management of natural resources, including caves, in Vilabouly District, placing increased pressure on natural resources, cave geoheritage, associated biodiversity, and local heritage values.

7. Managing Caves as Heritage Places

‘The management of all protected areas – whether classified as primarily “cultural” or “natural” – is necessarily the management of people’

(Harmon, 1994, p.59)

The previous chapter illustrated that caves and their surrounding environments have multiple uses and values, with these often overlapping and interdependent between cultural and natural heritage, and tangible, intangible, and historical heritage. The previous chapter also highlighted how mining and economic development activities have placed increased pressure on caves and karst environments, and have introduced new uses and value of caves. This chapter will proceed to examine the effectiveness of managing cave sites within the Sepon Mine tenement as heritage places from mining-based impacts and threats on caves and their surrounding environments as a result of increased pressure on caves and karst environments, and new uses and value of caves. This chapter will illustrate in more detail the heritage management processes at the Sepon Mine, outlined in Chapter 5, which apply international ‘best practice’ in heritage management. Issues that affect heritage uses and values as a result of mining-based activity will be discussed. It is argued that sustainable use and management of caves and their cultural values, uses, and meaning for caves by Phou Thay and Brou communities are challenged by new economic development activity and the introduction of new people and ideas, systems and process; and practices and performances. New uses and values are identified to challenge local management of caves and natural resources in Vilabouly District, while placing increased pressure on existing cave geohertiage, biodiversity, and cultural knowledge, beliefs, and practices.

Heritage Management Procedures for Caves

It has been shown in this thesis that caves meet many unique human needs as a natural component of local ecology (Kiernan, 2011). In Vilabouly District, caves and their surrounding environments are identified to hold multiple use and values to local communities, with these often overlapping and interdependent. As part of the ESIA process, heritage assessments, archaeological surveys, and ethnographic research were undertaken and identified that caves and rock shelters hold a variety of natural and cultural heritage values. As part of the formalisation of the CHM Program at the Sepon Mine, caves and rock shelters were listed as cultural heritage sites and were managed with the Sepon CHMP. From the perspective of heritage management then, caves, rock shelters, and karst areas in Vilabouly District and the Sepon Mine are recognised among “a wide variety of archaeological and other heritage sites...within the project area” (Sayavongkhamdy & Souksavatdy, 2011, p.1). In 2013, caves made up 20 of the 38 sites that were recognised as Cultural Heritage Sites, with 10 caves listed as Highly Significant Cultural Heritage Sites, and 6 caves considered Significant Cultural Heritage Sites (see Table 5). Heritage values in caves and rock shelters are varied and included prehistorical occupation, Buddhist era occupation, and use during the Indochinese Wars, notably the Vietnam War and post-Revolutionary Period that followed. Heritage assessments also identified that some caves are important ecological locations, mostly for their *aesthetic* qualities, and that caves share association with other water and hydrological systems. In many instances, it was been identified that some caves contained more than one value, with these values usually defined as either natural or cultural.

Name of Cave	Government of Lao PDR (2011) - Identified Heritage Values	MMG-LXML Heritage Significance Management Classification (2012)	Identified Impacts (MMG-LXML 2012)	Identified Mitigation Strategy (MMG-LXML 2012)
Tiger -Cave Mountain	-	-	-	Cave has been fenced off by village for preservation
Tham Pha (Pha Ong Saen)	Historical Significance (Buddhism)	High Significance	-	-
Tham Nam	Natural Scenic Beauty	Significant Heritage Site (Natural Scenic Beauty)	-	-
Tham Phra	Natural Scenic Beauty	Natural Significance; Historical Significance; Cultural Significance (present use)	-	-
Tham Ke	Natural Scenic Beauty	Natural Significance; Historical Significance	-	-
Tham Phra (Keng-Lek)	Cultural Significance	Significant Heritage Site	-	-
Tham Kek	Legacy of the Indochinese War	Significant Heritage Site	-	-
Tham Posaenphanh	Legacy of the Indochinese War	Significant Heritage Site	Looting and Unauthorized archaeological excavation	Proposed Monitoring by DNH and Vilabouly District Government
Tham Phra (Nagachahn)	Natural Scenic Beauty	Significant Heritage Site	-	-
Tham Seua	Legacy of the Indochinese War	-	-	-
Tham Bing	-	High Significance Cultural Heritage Site	The cave is likely to face issues relating to artificially lowering the water table as the Phavat North mine digging continues	50 metre buffer-zone around the cave and water MMG CHMP)
Tham Pakou	-	High Significance Cultural Heritage Site	Possible impacts from exploration and mining activities in the area of the Houay Yang and the WTSF which is now only 500 metres east of the cave site. The area of the cave has been opened up to outsiders due to mining exploration tracks and roads	Site-Specific Management Plan

Name of Cave	Government of Lao PDR (2011) - Identified Heritage Values	MMG-LXML Heritage Significance Management Classification (2012)	Identified Impacts (MMG-LXML 2012)	Identified Mitigation Strategy (MMG-LXML 2012)
Tham Palon	-	High Significance Cultural Heritage Site	It is located in the GDPA there is risk of future LXML geological exploration impacts on the site. The cave site is located approximately 2 km southwest of the Thengkhram project expansion area (TKN South Pit A)	Site-Specific Management Plan
Tham Bing Payaeng	-	High Significance Cultural Heritage Site	The cave site is located approximately 2 km south-west of the Thengkhram project expansion area (TKN South Pit A)	Site-Specific Management Plan
Tham Latsan	-	High Significance Cultural Heritage Site	The cave is located in the SEDA and there is risk of future LXML geological exploration impacts on the site. The cave is located approximately 2 km north west of the Greater Project Development Area (GPDA)	Site-Specific Management Plan
Tham Phapoun	-	High Significance Cultural Heritage Site	The cave is located in the SEDA and there is risk of future LXML geological exploration impacts on the site.	Site-Specific Management Plan
Tham Hin Keo	-	High Significance Cultural Heritage Site	Planned exploration drilling along the top of Thengkhram outcrop will increase access to the site and potentially damage related, thus so far unrecorded sites	Site-Specific Management Plan
Unknown (cave name)	-	Cultural Significance	-	-
Tham Khama	Legacy of the Indochinese War	-	-	-
Tham Pha Phong	Legacy of the Indochinese War	-	-	-

Table 5. Caves within the Sepon Mine identified for Significance, Threats, and Management Practices.

Heritage Management and Mitigation processes for Caves

To consider the management of heritage from mining-based impacts in more detail, this chapter will now present two examples of management procedures and practices at Tham Pakou and Tham Bing respectively, to consider the outcomes of management of these caves. Managing the natural and cultural heritage values of caves from mining-based impact will then be discussed.

Managing a 'Sacred Natural Site' through Community Consultation at Tham Pakou

The management process at Tham Pakou provides a good example of the complexities found in managing overlapping and interconnected heritage values, and use of a multi-lateral management process coordinated between MMG-LXML (SoSu), Vilabouly District Government, and the village authority of Ban Namalou. Tham Pakou is situated within the village landscape of Ban Namalou, a majority Makong group (Mon-Khmer speaking) at the southern foothills of the Thengkham Range. Identified in Chapter 6, Tham Pakou is highly valued by Ban Namalou villagers based on a range of cultural, spiritual, and ecological uses and values. This included local desires to preserve memories of past activities that occurred in the cave. From the perspective of heritage management, Tham Pakou holds a variety of cultural and natural heritage uses and values, which are interdependent, and are important to the wellbeing and longevity of the village as a sacred natural heritage location. It was also outlined in Chapter 6 that several risks of impacts to the cave were identified as a result of mining.

Tham Pakou has been the locus for community consultation as part of the ESIA process at the Sepon Mine. During 2009, Ban Namalou villagers were consulted over mining expansion plans and planned test drilling for copper ore close to Tham Pakou (and another cave, Tham Palon). A

community consultation process was established to discuss potential future mining near these caves and to gauge community consensus on future mining activity. Through the consultation process, villagers explained to mining company representatives they were concerned that exploration drilling near the caves would impact the cave. Impacting the cave, they argued, would upset ancestral spirits *laung bang* and *laung so* that villagers believed resided in the cave. This context was articulated by a Ban Namalou villager:

In about 2009, the mining company was planning to perform test drilling here at the location of Tham Pakou. There was a consultation process between village representatives of Ban Namalou and the mine. The village people expressed concern to the mine that we did not want the mining here, that it would disturb the spirits of this cave⁴⁴

At the request of Ban Namalou villagers exploration drilling and mining activity near the cave was postponed. The consultation process between village representatives and MMG-LXML led to an indefinite postponement of the exploration drilling at Tham Pakou. The mining company representatives took into consideration that the villager's cultural cosmology, beliefs, and ritual practices associated with Tham Pakou were of high cultural importance, and intended to apply them into management planning of the cave. The postponement of drilling was also likely to be related to declining global commodity prices, which did reduce exploration activity across the mine tenement. Notwithstanding, as Chapter 6 outlined, the cave remains a significant location a village cultural landscape for Ban Namalou, who continue to believe that damage or destruction

⁴⁴ Interview with villager (Ban Namalou), December 2011

of the cave would potentially anger the spirits, leading to negative impacting on the livelihoods of villagers in the present and into the future.

It was notable that the community consultation process involved Ban Namalou villagers in consultation about mining activity at the mine. Local community and their aspirations for the protection and preservation of the cave and its surrounding environment were recorded to be applied as part of management planning for Tham Pakou. Villager perspectives and aspiration for management of the cave were based on customary rules and obligations around use of natural resources and locations that were forbidden, like the home of *mahasak paa* or ‘spirit forests’. As one villager explained:

...you need to respect the owners of the area [you are working in] and the past people [who used to live there]. Spirits come to other people not just yourself and they can make you sick or even die. This is not in the scientific way, but in the local beliefs.⁴⁵

In consultation, it was revealed that the desire to protect the cave from damage or destruction in the present was borne out of the desire to protect the material remains and memories and experiences associated with past and future uses of the cave. One other desire to manage and protect the cave from impacts to protect the cave, its past uses, and acknowledge the memory of local community who died during the Vietnam War. This was explained by a villager:

We may need to take shelter in here again. For that reason I would like to see more protection of the cave and its environment, and that one reason for this was to remember the war period and those who died during that time.⁴⁶

⁴⁵ Interview with Lao IUCN employee, August 2015

⁴⁶ Interview with villager (Ban Namalou), November 2013

The consultation process allowed for local villagers to voice their concerns and to provide protective measures for Tham Pakou. SoSu staff who were involved in the consultation process, and later Lao and International archaeologists, also considered the cave held significant cultural heritage values. In 2012, support from these groups led to the development of heritage protection status for the cave as a High Significance Cultural Heritage Site. Significance was classified based on the villager's cultural association to the cave as the residence of ancestral spirits *laung bang* and *laung so* (MMG-LXML, 2012). Importantly, Tham Pakou was recognised to hold both tangible and intangible cultural heritage significance.

As an outcome to the consultation process, no mining expansion activity has taken place in the vicinity of Ban Namalou and Tham Pakou since 2009. However, the cave and the associated ecological and cultural values are identified to remain at risks from mining-based activity and indirectly from the movement of peoples into the mining tenement areas. MMG-LXML (2012) identified the threats that had potential to impact the cave as result of increasing human activity in the area as a result of the mining process:

Possible impacts from exploration and mining activities in the area...which is now only 500 metres east of the cave site. The area of the cave has been opened up to outsiders due to mining exploration tracks and road (n.p).

Impacts from in-migration that were identified in Chapter 6 will be discussed later in this chapter, in relation to impacts of unsustainable natural resource use, and the outcome this has on local environment and cultural heritage. While the cave is protected for its cultural heritage values, these values rely on the natural environment remaining intact. Impacts or destruction of the natural environment and Tham Pakou and Phu Pakou Mountain would be broadly impactful to the

livelihoods and wellbeing of Ban Namalou villagers. This situation highlights that even though there is management plan in place at Tham Pakou, unregulated human activity in the surrounding environment can impact the values of Tham Pakou. The context for managing impacts to registered heritage sites in the mining tenement will be considered in more detail later in this chapter.

Management of Cultural Heritage through ‘Exclusion Zones’: The Case of Tham Bing

Caves within the Sepon Mine recognised as ‘Highly Significant Cultural Heritage Sites’ have site-specific management plans applied to them. Tham Bing is listed as a High Significance Cultural Heritage Site and is managed separately for natural and cultural heritage values the Department of Environment the by CHU respectively. Management of the cave is multi-lateral, coordinated between MMG-LXML (SoSu, CHU and Department of Environment) and the village authorities of Ban Namkheun and Ban Boun. However, the site-specific management plan for Tham Bing is unique for its use of an ‘exclusion zone’ to mitigate the impacts from mining activity. The Site Management Plan for Tham Bing has recommended that a 50 metre exclusion or ‘buffer-zone’ been declared around the cave to protect it from mining-based impacts. MMG-LXML (2012, n.p) reported that “the cave is likely to face issues relating to artificially lowering the water table as the Phavat North mine digging continues”. The exclusion zone was therefore applied to provide a protective perimeter to the cave as a geo-structure, and also to the aquifer associated with the cave. The overall ‘environmental health’ of the cave was assessed by aquifer water levels, which have over time remained generally stable.

Outlined in Chapter 6, Tham Bing has natural heritage values and cultural heritage values for the villagers of Ban Namkheun and Ban Boun. The ‘exclusion zone’ consists of a pocket of

remnant forest that buffer and conceals the cave from the outside. The exclusion zone is made up of tall mature trees and other mixed rainforest vegetation. The forest also contained several edible species including wild banana, cassava, and other vegetables (or *pac*) that are reportedly eaten by local villagers. The cultural value placed in Tham Bing is largely associated with the Vietnam War Period where the cave was reported to provide shelter for local villagers during bombing raids, Today, the cave is a site of memory for residents of Ban Namkheun and Ban Boun, whose ancestors were killed at Tham Bing as a result of bombing. Several shrines are erected and remain actively used by villagers as part of a memorial process, and shrines are also reportedly used to propitiate other local spirits for merit and good fortune. Like at Tham Pakou, this cave could be considered ‘living sacred heritage’ based on the cross-cutting and present-centred cultural, spiritual, and natural heritage uses and values.

From the perspective of heritage management, the Site Management Plan for Tham Bing requires that the cave is monitored on a monthly basis by members of the CHU. The cave is also monitored monthly by staff within the Environment Department at MMG-LXML, to monitor water levels and water quality to indicate the health of the local aquifers. To manage impacts the exclusion zone prohibits or restricts any human activity within the zones boundary outside of specific MMG-LXML employees and villagers from Namkheun and Ban Boun. Villagers of Ban Namkheun and Ban Boun have unrestrained access to the cave and do not need to seek permission from MMG-LXML to enter the cave. Explained by an MMG-LXML staff member, approval processes for access to Tham Bing differ between mine employees and villagers:

Approval needs to be sought from MMG-LXML officials before entering the buffer-zone. Villagers still have access to the cave and its buffer-zone, and do not require

obtaining permission from the MMG-LXML officials before entering or using the cave.⁴⁷

Even though a strict management program was in place, Tham Bing was obviously used regularly by either mining staff or local people. Over-use or unregulated use was having a noticeable effect on the cave environment (see Figure 22). Rubbish was a prominent feature at Tham Bing. The upper entrance to the cave and around the outer area where people were sheltering was heavily littered with rubbish. Rubbish included food wrappers or containers made of plastic, cigarette packets, garbage bags and other rubbish items that were found throughout the shelter and the entrances to the cave. The rubbish at the cave was openly discussed by MMG-LXML employees while undertaking the survey, and with some disdain, because it was noticeably impacting on the condition of the cave. However, while rubbish and littering was noticeable, there was no attempt to collect or remove the rubbish during the monitoring process. Another noticeable human impact at Tham Bing was graffiti. The walls of the first entrance to the cave there was graffiti written in Lao script spray-painted in two places. Monitoring reports indicated that the graffiti had been on the cave walls for a long period of time. The act of spraying graffiti on the cave walls was considered by MMG-LXML employees to be bad for the cave and environment generally, alike with the rubbish. However, there was also no attempt made in the past or present to clean or remove the graffiti from the cave walls.

⁴⁷ Interview with Lao MMG-LXML employee (SoSu), December 2013

Tham Bing is being increasingly used by local and new populations, including by mining staff and new economic migrants, as a result of mining and new access roads. New uses are arguably leading to the increased physical impacts on the cave environment and its surrounding ecology. It is important to identify that the management regimes for Tham Bing has allowed ongoing community-based interest and practices to remain intact. That said, the sustainability of



community use and identification of the impacts of this use remain limited, but it can be said it generates risk to the geoheritage values of the cave. Management activities appear to be overwhelmed with mining activities to limit or manage their associated impacts, or are indifferent or unwilling to apply management practices effectively to reduce the impacts from mining and human activity at the cave.

Figure 22. Impacts and Threats to Tham Bing. Graffiti at the lower cave entrance (Top); rubbish left at the main cave entrance (Bottom). (Photos: The Author).



Figure 23. Tham Bing is contained with the forested 'buffer zone' of mining haul roads (Above); Aquifer associated with Tham Bing (Centre); Forest inside the 'buffer zone' (Below). (Photos: The Author).

Mining activity can be overwhelmingly identified as the largest threat to Tham Bing in the present and in the future. Alike with Tham Hin Kiaw and Tham Pakou, mining activity is found to have increased the threat of damage or destruction to Tham Bing, even with the 'exclusion zone'

in place. Mining activity is extremely close to the exclusion zone protecting the cave, which the cave and its aquifer have taken on the appearance of a moated island of green and grey set amidst the red earth and haul roads of the mining landscape (see Figure 23).

Managing impacts of mining and human activities at Tham Bing is arguably complicated by application of various management regimes and old and new uses and values in the cave. Effectively there are two overlapping managed regimes within MMG-LXML, and also village level management (or use) of Tham Bing. Currently the ecological and cultural values of the cave are managed separately, and it remains unclear what co-management practises are applied and how longer-term impacts on the cave and its associated natural resources and aquifers will be managed by the mine and local community.

Managing Broader Impacts to Caves from Mining Activity

This section will consider the broader mining-based impacts to caves and their surrounding environments in more detail, focusing on the direct and indirect impacts, with challenges identified to manage or mitigate impacts discussed. Overwhelmingly, mining operations in Vilabouly District have supported increased access to the local environment which has led to loss of significant proportions of natural resources, and potentially their heritage values. As the two examples in this chapter have illustrated, increased access to land and use of natural resources has amplified pressure on caves. This process is identified to threaten the sustainability of caves and their surrounding environments, and the associated cultural heritage material, knowledge, beliefs and practices. Mining expansion plans and the increasingly visible impact mining has been a major

talking point because of the impact it was having on the natural resource base in the Thengkham area (see Figure 24). As one person explained:

Mining here has put pressure on the forests and their resources used by local Phou Tai and Mon-Khmer people. The people here are worried about these resources dwindling through the forests being cleared for mining.⁴⁸

At the time of research, mining expansion was planned for the Western section of the Thengkham Range where it was proposed a large scale open-cut pit would be developed. Discussion at that time indicated that mining expansion plans would likely end in the destruction of much of the Thengkham Range, including caves and other archaeological sites located within it. Planned mining-expansion was also anticipating a broad range of consequences for the local populations living in the Thengkham Range and its foothills. Concern over impact to forest resources or the loss of forest resources as a result of mining operations in the Thengkham Range area was unsurprising, and became a regular point of discussion among local villagers from Vilabouly and the Thengkham Range area. The threats and potential impacts on the local community as a consequence of this expansion was explained by Sepon Mining staff:

The Thengkham area where we are working is earmarked for mining in the next few years. This will greatly impact the Mon-Khmer groups that live in the Thengkham Range or foothills of the range, directly to the south (of the range), as these groups rely heavily on the landscape for water, fish, land to farm, forest products and places in the forest like cemeteries and spirit forests that are sacred to these groups.⁴⁹

⁴⁸ Interview with Lao MMG-LXML employee (SoSu), December 2013

⁴⁹ Interview with Lao MMG-LXML employee (CHU), December 2012



Figure 24. Mining Impacts on the Thengkham Range at TKSD (Above), and at the Puen Baolo archaeological site, also on the Thengkham Range (Below). (Photos: The Author).

Community concerns outlined above about impacts to the natural resource base from mining activities within the Thengkham Range bring into consideration the rights and interest present day local communities have to use and manage natural resources, including caves, and the effectiveness of heritage management practices generated within the Sepon Mine to support local use and management. As it was explained in Chapter 4, 5, and 6, Brou and Phou Thay people share a close relationship with the natural resource base in Vilabouly District and Thengkham Range area. This relationship is exemplified by exceptional local botanical knowledge, reliance on wild plants and meats for economic and subsistence use, and belief systems where ancestral spirits share association to natural places and features within a cultural landscape. Retaining and transmitting local traditional ecological knowledge is reliant on there being a ‘wild’ resource to endure. That is, knowledge in this context requires a natural source for knowledge and associated beliefs and practices to be transmitted and maintained, and the source needs the knowledge to maintain its existence. As Ito (2004) articulates “[i]ntangible culture produces tangible cultural objects which require intangible culture” (n.p).

To consider the relationship between people, culture and nature, the Brou-speaking people of the Thengkham Range provide an important example. Brou villagers still assert ownership of land contained within the Thengkham Range, and display a traditional connection through several cultural and spiritual means. Ongoing human relationships with the Thengkham Range are identified by land-tenure systems associated to the land and forest resources and the association of the range with ancestral spirits. For example, the use of cultural markers called *trai* or *dtin haiyee*

were recorded in the Thengkham Range between 2011 and 2013 (see Figure 25). A local Vilabouly person explained the use and meaning of this marker for local Brou and Phou Thay:

The *dtin haiyee* is a marker of marker of space and ownership by a particular village. The area that was owned is approximately a few hundred metres square...(It) is an old form of marking out boundaries, or laying claim to land for farming, building a house or for (claiming) products from the forest... These markers are used by both Brou and Phou Tai (but the name for them differs in language). People or a person laying claims to land or forest products, and depending on the marker, the claim can be open to negotiation, particularly if the land or product being claimed is not being used (by other villagers). To the Brou they are called *trai* and to the Phou Tai they are called *dtin haiyee*⁵⁰

Other symbolic bamboo markers observed in the Thengkham Range were recorded on the mining haul road through the forest of the Thengkham Range. Although constructed differently to the one discussed above, presumably the ongoing use of cultural markers functioned in a similar way to the *trai* or *dtin haiyee*, indicating that a system of communication for natural resource use remained ongoing with other villages, and potentially mining staff, in the Thengkham Range.

The Thengkham Range was also identified by the Brou to provide a residence for ancestor spirits who dwelt in natural features and places along the range, including at Peun Baolo and the TKSD mining pit. Outlined in the preface to this thesis, the Thengkham Range was the location of two documented spirit possessions during the archaeological excavation season in 2012. Mayes and Chang (2014) showed that the mining company incorporated local Brou landowners into a

⁵⁰ Interview with Vilabouly District villager, November 2013

ceremony or ritual processes at TKSD in an attempt to prevent or manage current and future spirit malevolence from affecting Sepon Mining staff. This was an example of Brou being incorporated into management of heritage in the Thengkham Range. Management of archaeological sites in the Thengkham Range remained with the mining company, and increasingly Vilabouly District and National Government Officials.

While Brou people are recognised to have villages or land in the Thengkham Range, they remained conspicuously absent from many negotiations regarding heritage management processes in that area of the mine. Generally, I argue there was a lack of representation by the Brou in the consultative process for heritage management, while Vilabouly District Government and Lao National Government were ongoing and prominent stakeholders. Again, the spirit ceremony at TKSD in 2012 (outlined above) is the strongest evidence that Brou were part of the process of negotiations for heritage management. While Mayes and Chang (2014) interpret the 2012 ceremony not as “permission seeking, but actually an alternative source of ‘ownership participation’ linking ancient heritage with contemporary local user” (Mayes & Chang, 2014, p.240), it is one of only two public events that could be considered ‘participatory’ by Brou persons in the management of heritage in the vicinity of the Thengkham Range (the 2nd begin the Tham Pakou consultation process). The lack of inclusivity in decision-making for heritage management and archaeological research raises an issue of historical subjugation of the Brou within Vilabouly District, identified by Ovesen (2002) while undertaking impact assessment from mining activity in Vilabouly District in early 2000s. The current context could be considered as part of an ongoing structural inequality in Vilabouly District, replicative of national relationships between Lao speaking and non-Lao speaking groups (in this case Phou Thay and Mon-Khmer speaking groups). This issue will be discussed in more detail in Chapter 8.

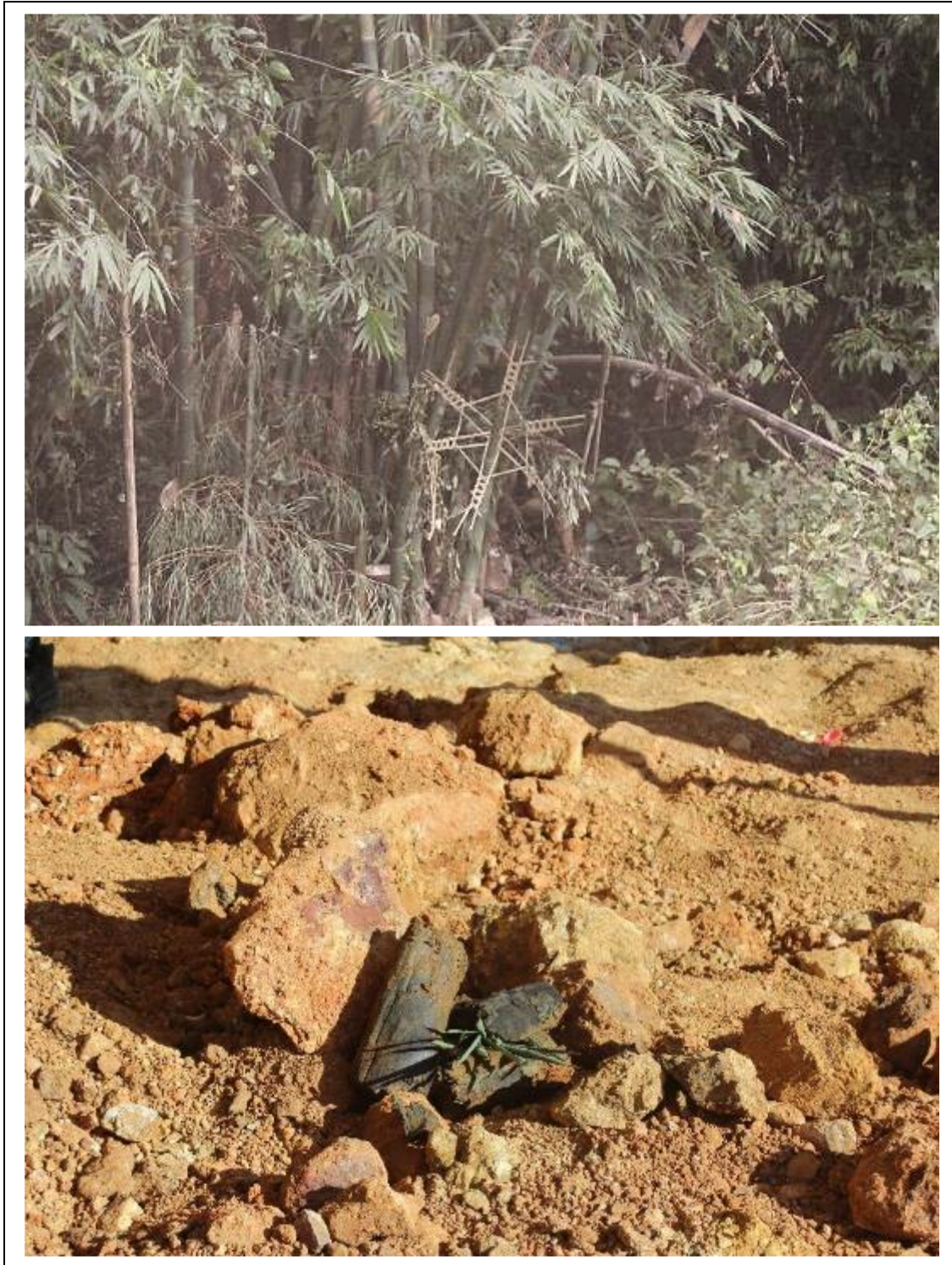


Figure 25. *Dtin Hai* boundary or land ownership Marker - Thengkham Range (Above); Offering of excavated wood to local spirits left at Thengkham South D mining pit (Below). (Photos: The Author).

Impact from In-Migration

Moving from direct mining impacts, other immediate threats identified were based on several indirect impacts from the mining process in Vilabouly District. In-migration particularly was bringing large numbers of non-Local Lao persons to Vilabouly District. The opportunity to access employment and economic benefit economically has brought many new people into Vilabouly District from Vietnam, and within Savannakhet Province. The presence of the mine also supported opening up otherwise inaccessible landscapes to people from outside the district. Road construction into previously remote forest areas has increased, supporting population movement into the village landscape and into previously inaccessible forested areas. Increased human activity in the area led to increased competition for use of the natural resource base, including caves. Illegal logging, local mining, and over consumption of other natural resources, including bamboo, edible plants, and primates, reptiles, and birds has increased. Laurance (2007) argues this is part of a general problem across tropical Asia, where mineral exploration activities “not only directly destroy or degrade forests, but they also provide a key economic impetus for road-building in forested areas. Such roads greatly increase physical accessibility to forests for colonists, hunters and swidden farmers” (p.1547).

Increasing and unregulated human activity in Vilabouly District was identified as one of the most immediate threats to several caves, including Tham Hin Kiaw and Tham Pakou. In particular, in-migration was identified as an actual and potential on the use and integrity of the caves and their surrounding natural environment. For Tham Pakou, MMG-LXML (2012) identified several “impacts from exploration and mining activities in the area...which is now only 500 metres east of the cave site. The area of the cave has been opened up to outsiders due to mining exploration tracks and roads” (n.p). Potential threats at Tham Hin Kiaw were also based on impacts

from “planned exploration drilling along the top of Thengkham outcrop [that] will increase access to the site and potentially damage related, thus far unrecorded, sites” (MMG-LXML, 2012, n.p).

Increasing human activity and in-migration can be attributed legislation for land use and ownership of resources within a mining tenement area in the Lao PDR. This raises an interesting issue regarding safeguarding heritage and ecology during the mining process. An MMG-LXML employee highlighted this situation:

In Laos there are land ownership laws and as a result villagers and local people can use and/or travel through (*mining areas*) and take from the forest if they want to. The mine cannot stop them from utilising the forests and riparian systems, neither does the government. As a result relatives of land dwellers (*villagers*) now come (*to the area*) to utilise natural resources of relatives village lands.⁵¹

Critically, the relaxed tenure for land and resources use within the mining tenement area risks impacting livelihoods of persons living in Vilabouly District and local ecology and heritage. From the mine’s perspective, it significantly reduces the ability of the company to enforce effectively management processes to reduce or mitigate impacts from those entering the district from to gain economic benefit form mining. As this and the next section highlight, complex governance processes are compounded by increased flows of people, adding to an already overburdened resource base.

⁵¹ Interview with MMG-LXML employee (CR Department), October 2012

Illegal Logging and Wildlife Consumption

Illegal logging and wildlife consumption could be considered activities that are having the most impact from in-migration, the creation of mining haul roads, and weak or inefficient regulatory enforcement. In the Thengkhram Range logging had a noticeable impact locally and was contributing to habitat loss and the reduction of local biodiversity. Generally small-scale, illegal logging is still identified as a threat to the environment surrounding the caves and the broader ranges within Vilabouly District. Loss of natural resources increases the risk that cultural knowledge and sites of cultural heritage, both natural and man-made, are impacted or destroyed.

It was generally acknowledged by local villagers that as soon as the roads came in, so did the loggers and wildlife poachers, who selectively removed all the large bamboo and the local primate population. This issue was identified as one of the most immediate problems to sustainable environmental management and cultural heritage management in Vilabouly District:

The biggest problem being trees and logging. In the past it was wildlife, which is still an illegal and thriving industry. But most of the primates and larger wildlife, including birds, have been taken.⁵²

The evidence of ongoing illegal logging was identified around Tham Hin Kiaw and Tham Pakou. Along the track that led to Tham Hin Kiaw large trees lay down in the forest and tree stumps had been cleared with chainsaws. Several short-term logging camps could also be identified along the forested track between Tham Hin Kiaw and Peun Baolo (see Figure 26). Often during the

⁵² Interview with MMG-LXML employee (CR Department), October 2012

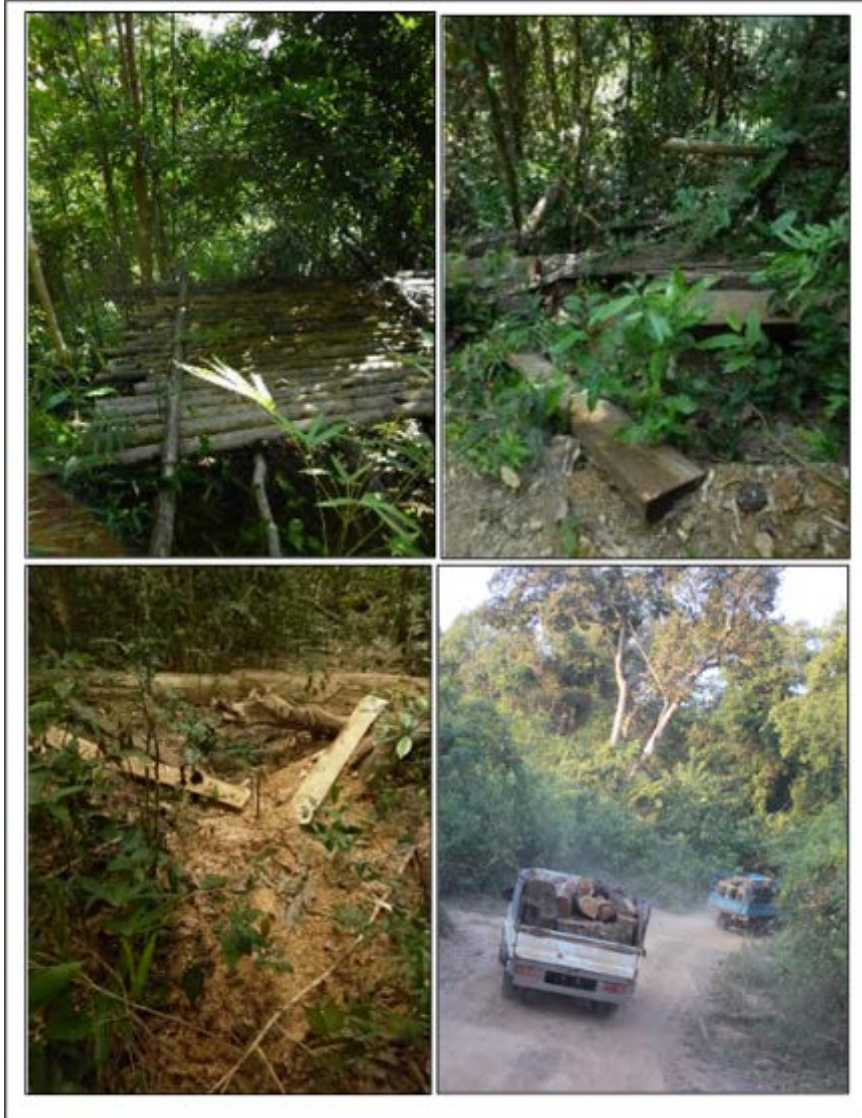


Figure 26. Illegal Logging Camp on forest track between Peun Baolo and Tham Hin Kiaw (Top); Illegal Logging close to Tham Pakou and trucks transporting logs out of the forest near Tham Pakou (Bottom). (Photos: The Author).

excavation season at Peun Baolo, chainsaws could be heard cutting down trees, with logs being milled in the forest, later carried out on the back of trucks or motorbikes.

At Tham Pakou illegal logging and deforestation was identified to be having a significant impact on the surrounding environment at the base of Phou Pakou Mountain (see Figure 27). Small-scale logging identified in the 2011 survey was originally

confined to isolated or discreet trees adjacent to the track leading to Tham Pakou. At that time the village guide indicated concern over logging within village lands, stated that felling of trees was not allowed without permission of the village headman:

This is another problem we have here (*pointing to recently logged trees along the forested pathway*). It is becoming more common to see trees like this. But we do know they are not people from Ban Namalou. We are concerned about this. Because

people are coming in from outside the village and cutting down our trees. This is not their forest and they do not understand the way it works in Ban Namalou.⁵³

The scale of the logging had increased significantly over time, indicated by the loss of trees and habitat, and explanations provided by Ban Namalou villagers. By 2013, illegal logging was removing larger ‘old growth’ trees and vines that once stood at the foot of Phu Pakou, opening up the once closed forest canopy. Logging had increased and was closer to the cave, and had crossed the location where Asian Elephants were identified to travel regularly. In 2013 villagers did voice concerns about the logging adjacent to the cave, increased hunting, and the changing nature of cave and environmental use in the village lands:

People have begun to encroach closer to the cave and this is a concern. I do not want to see the cave, trees or animals that lived in the area being damaged or destroyed. But logging is getting worse here. You can see the trucks with logs in the backs driving in and out of the forest and the village. There are also piles of logs in the village centre. This is having an impact on the forest close to Tham Pakou.⁵⁴

Again, persons performing illegal logging and using Tham Pakou were identified to be from outside the village, but these persons were identified to be related to Ban Namalou villagers:

The people who used the caves had ancestors from the village, so they might not live here in the village now, but their ancestors did. It is the same with people who come here for logging. The same goes for them too. People who come here to cut

⁵³ Interview with MMG-LXML employee (CR Department), December 2011

⁵⁴ Interview with MMG-LXML employee (SoSu Department), December 2013

the trees had connection to the village with ancestors from before, and now they come back and were logging the trees.⁵⁵

Vehicles were also observed transporting illegally cut logs out of the forest near Tham Pakou during 2013. Large piles of logs were also stacked up in Ban Namalou village, reportedly cut by illegal loggers, part of an increasing timber trade with Vietnam. Demand for illegal logs were coming from Vietnam,⁵⁶ but were facilitated by traders in Vilabouly District:

All trees logged from the village lands were sold locally to traders at Vilabouly. From there I do not know, but they might go to Vietnam because there are many traders from Vietnam in Vilabouly now⁵⁷

Increased human activity near Tham Pakou was considered to threaten cultural materials. The blue glass bead that was identified during the 2011 survey was not located in the cave in 2013. It is likely the bead was looted from the cave, possibly sold to traders, however this could not be confirmed. Loss of cultural materials like the blue bead reduce the knowledge of past practices in the region, including historical trade in this instance. Interestingly, there is a history of damage, destruction, and looting associated with changing lifeways in the region. Current processes could be considered as part of an ongoing process of change. Managing these places in the context of mining requires consideration of the broader landscape because caves are not isolated places, but are set within broader ecological and cultural landscapes. Management also requires stronger consideration of the indirect outcomes of mining activity to prevent ongoing impacts of natural resources and heritage sites within the mining tenement and Vilabouly District.

⁵⁵ Interview with Senior villager (Ban Namalou), November 2013

⁵⁶ See also EIA/Telepec (2008) for more on Vietnam's role in illegal logging in the Lao PDR

⁵⁷ Interview with Senior villager (Ban Namalou), November 2013



Figure 27. Threats to Tham Pakou. Logging has increased and the impact has become more pronounced between 2011 (above) and 2013 (below). (Photos: The Author).

Discussion

The IUCN (1997) recommends that caves and their surrounding ecosystems should be managed for the “full appreciation of all their economic, scientific and human values, within the local cultural and political context” (p.43). Identification and management of caves for their broad and interconnected associations is the strongest mechanism to protect caves as geoheritage, as interconnected ecology, and as the location for cultural, economic, and spiritual uses and values. It is also seen as the most appropriate way to ‘bridge the divide’ in heritage management. Caves in Vilabouly District are identified to hold overlapping, cross-cutting, or interdependent cultural values. This involves a complex relationship between uses and values in the past, and present and future-intended uses and, values that are associated to these uses. Chapter 6 illustrated the uses and values that make caves unique as ‘living’ and ‘sacred’ places. From the perspective of international ‘best practice’ heritage management then, Tham Hin Kiaw, Tham Pakou, and Tham Bing each have potential to hold tangible, intangible, historical and natural heritage values simultaneously. As a result, they are identified to fulfil, at least to some extent, all the criteria for cultural heritage (tangible, intangible and historical) and natural heritage protection at the Sepon Mine and within the Lao PDR (see Table 6). Notwithstanding the variety of heritage uses and values, caves generally remain classified as cultural heritage sites, managed for mostly tangible heritage values, based on management through largely archaeological methodologies. This has led to complexities in how caves are managed, and arguably has allowed for impacts and threats associated with mining-based activity.

Cave	Natural Heritage	Cultural Heritage		
		Tangible Heritage	Historical Heritage	Intangible Heritage
Tham Hin Kiaw	<ul style="list-style-type: none"> Local geodiversity, supporting minerals, local biodiversity, and water systems Source of copper ore (malachite) used for modern mining processes 	<ul style="list-style-type: none"> Source of wild foods for local Phou Thay & Lao people Potential physical connection to broader archaeological landscape of mining 	<ul style="list-style-type: none"> Potential evidence of copper mining for (malachite) approximately 400 years BP 	<ul style="list-style-type: none"> Connection to current Ancient Miners/Modern Miners narrative at the Sepon Mine
Tham Pakou	<ul style="list-style-type: none"> Local karst geodiversity, supporting local biodiversity and water systems Source of forest products (animal/plants) for subsistence Potential source of copper ore (malachite) used for modern mining processes 	<ul style="list-style-type: none"> Source of intermittent shelter and Forest products (animal/plants) for subsistence Evidence for current habitation by Ban Namalou and non-local Lao persons Potential Prehistoric Occupation Remains of Iron Age material culture Remains of Buddhist Period material culture and habitation Remains of Vietnam War period material culture and habitation Current residence of Ban Namalou village guardian spirits 	<ul style="list-style-type: none"> Material residue and site for the 'Memory' of Vietnam War period 	<ul style="list-style-type: none"> Brou community knowledge and use of plants and animals for subsistence Connection to Ancient Miners/Modern Miners narrative at Sepon Mine Brou cultural beliefs and rituals associated to village guardian spirits
Tam Bing	<ul style="list-style-type: none"> Local karst geodiversity, supporting local biodiversity and water systems Source of intermittent shelter for Ban Namkheun and Ban Boung villagers, and other local and non-Local Lao people Cave and surrounding environment a source of forest products (animals/plants) for subsistence 	<ul style="list-style-type: none"> Location of Buddhist and Animist Shrines Location for Ban Namkheun and Ban Boung villagers shrines to deceased relative of the Vietnam War 	<ul style="list-style-type: none"> Site for the 'Memory' of Vietnam War period 	<ul style="list-style-type: none"> Current residence of deceased ancestor spirits killed during Vietnam War period Memory and stories of deceased relatives of the Vietnam War Phou Thay community knowledge and use of plants and animals for subsistence at the cave Connection to Ancient Miners/Modern Miners narrative at Sepon Mine

Table 6. Identified Heritage Values and Significance of the Three Caves Surveyed from the perspective of International 'best practice' methodology.

Kiernan (2015) explains that “[a]ccommodating cultural heritage within the criteria used to identify and manage natural heritage properties, and vice versa, needs to be made explicit” in management practices. If all values identified are not made explicit in management regimes, then one or more values are often prioritised at the expense of the others. While there is some overlap in management between departments at the Sepon Mine, environmental, social, and cultural heritage assessments are for the most part conducted separately. Environmental surveys and management are performed staff in the Department of Environment or by consultants; social impact assessments are principally undertaken by SoSu staff or consultant anthropologists; and cultural heritage assessments and management are performed by internal archaeologists, or Lao Government and international archaeologists and run out of the CHU.⁵⁸ The division of roles is identified to have clear impacts on effective management of heritage during mining operations. As one staff member outlined:

We are trying to manage the impact on heritage here during mining operations. But the two divisions do not often interact on projects or day-to-day operations outside of the Social Sustainability Department assisting to manage and run archaeological projects on site. Sometimes we send members of our team out to work with the archaeological excavations, but members of your team [cultural heritage] rarely work with us [in SSD]⁵⁹

From the perspective of cultural; heritage, a primary focus on tangible heritage is common. As it has been shown in Chapter 2, this is also an international and national problem. Overcoming the tangible heritage bias remains an ongoing issue in heritage management internationally, and

⁵⁸ see Ovesen, 2002, p.90 for discussion on field work, including problems in the Lao PDR

⁵⁹ Interview with MMG-LXML employee (CR Department), December 2011

remains a major limiting factor of efforts to ‘bridge the divide’ in heritage. At the Sepon Mine, Mayes and Chang (2014) identify that “...interest at the mine has always gravitated towards the ‘tangible’ material artefacts and sites rather than the living cultures of the area. This is despite the importance of cultivating good relations with contemporary communities” (p.240). It is clear that a focus on tangible heritage remains ongoing and is problematic to effective management of heritage in mining operations. That said, Mayes and Chang (2014) explain the issue of a material focus, or a “bias towards the material was remedied by the commissioning of a cross-cultural ethnographic team to conduct independent surveys in near-mine communities of village histories, folk tales, ritual ceremonies and music” (p.240). The collection and safeguarding of intangible cultural heritage has not clearly been incorporated into methodological processes of identification and management of ‘cultural heritage’ by the CHU, and vice-versa for SoSu. This is a problem because it could be argued that social sustainability (along with natural sustainability) is the pertinent issue to safeguarding heritage, however, the value of intangible heritage is not adequately applied within natural or tangible heritage management practices.

Scientific archaeological research and AHM practice remains the principal mechanism to interrogate the local cultural history, cultural materials, and beliefs and practices, and to manage heritage places within the Sepon Mine. Arguably this approach has introduced new uses for and values for heritage (and caves). Critically this includes the identification and management of caves as *natural* heritage, or *tangible, intangible, historical* cultural heritage, as represented in Table 6. The use of international consultants to identify and manage heritage also raises discussion about the role of the ‘expert’ in archaeology and cultural heritage management, particularly in non-western contexts. Arguably external values (or significance) are placed over community beliefs and practices in cultural material and places as ‘heritage’ in the identification and management process,

and overrides local decision-making about what is valuable and what should be protected. Many items recorded by research teams, or objects found by villagers, were recorded to have different local meanings and values. However, the value and meaning of objects to local villagers was identified, but generally in *archaeological* terms, with the local value-meaning specificity of objects like stone adzes not reported to be significant. Further, all objects considered by researchers to be of *archaeological* or of *heritage value* were recommended to be taken from villagers in efforts to manage them and for safekeeping from looting or sale. This view did not take into consideration the value objects hold to local people, particularly villager interpretations that objects were imbued with luck and power, with these considered *archaeological artefacts* and real ‘masterpieces’ of Lao heritage.

Examination of heritage research reports at the Sepon Mine illustrate similar issues with translation of identified uses and values into heritage management planning and practices. This is recognised where the value or meaning of material objects were identified but were not translated into management objectives. Discussing this topic within a regional Southeast Asian context, Byrne (2013) has argued:

Western conservationists, though they may not themselves believe in the supernatural force of the old temple building or the sacred grove, nevertheless will often acknowledge local belief in this force and will try to make allowance for it in their management prescriptions. However, even where this is the case (and most often in places like Thailand allowance is not made) the conservationist’s focus still tends to be solidly on the tangible materiality of the building or grove (pp.165-166).

I argue that the difficulty to correlate values identified in heritage sites or objects by separate departments within the mine, and the failure to consistently incorporate and manage present community use and value of natural places like caves, illustrates this point. Some caves remain important to villagers in Vilabouly District, for spiritual practices like Buddhist rituals and other rites associated with ancestral spirits, and to memorialise the dead from the Vietnam War period. These values are identified, but generally do not have specific management practices applied to them.

Therefore, consultation and inclusivity in the heritage management process remains an issue for the Brou people. Mining activity in the Thengkhram Range was undertaken by Lao speaking people, but which took place in mostly Brou landscapes. This process could be considered an appropriation of Brou landscapes, places, and objects through construction of Lao or internationalised mining and heritage landscapes. Recognising that local knowledge is bound between natural and cultural places and sites, and linked historically and culturally to many natural sites and villages, stronger protective measures to manage Brou natural sites is required in the Sepon CHMP. There is also a lack of integration of village-level statutory and customary law, or localised 'cultural' management and conservation practices in the Sepon CHMP, and local customary management practices are not mentioned as inclusive or collaborative to the management process in the Thengkhram Range. While Brou communities are 'consulted' as stakeholders over mining expansion plans or unplanned impacts to heritage, there is minimal evidence that local customary management practices for sacred sites were incorporated into heritage site management planning, even at Tham Pakou. This presents several risks to maintenance of local heritage plurality found within the Sepon Mine, and has arguably missed the opportunity to integrate heritage management practices multi-laterally within mining operations.

Conclusions

This chapter has illustrated heritage management processes at the Sepon Mine in more detail by using caves as a specific example. The CHM Program is found to apply a largely international ‘best practice’ focus in heritage management. While this has supported efforts to identify, manage, and mitigate heritage from mining-based impacts, several issues in heritage management practices remain. Mining-based economic development activity in Vilabouly District is shown to impact local use and management of natural resources, including caves, placing increased pressure on natural resources, geohertiage, associated biodiversity, and cultural heritage values. Caves are managed as heritage for their cultural and natural heritage, and tangible and intangible heritage values. Arguably, the sustainability of caves and the uses and values that make caves unique as ‘living’ and ‘sacred’ places for Brou and Phou Thay communities are challenged by the introduction and application of new people and ideas, systems and process, and practices and performances. The next chapter will move to discuss the main findings and novelty outlined in the previous three Chapters. The discussion will consider the challenges and opportunities for managing ‘plural’, ‘living’ and ‘sacred’ heritage. It will consider the factors that have supported and maintain ‘the divide’ in heritage in the mining context at Sepon, and the ongoing impacts identified with applying a ‘divided’ heritage locally, nationally, and internationally.

8. 'Bridging the Divide' in Heritage? Opportunities, Challenges, and Implications

"...it is not just that Eurocentric approaches are inappropriate in developing countries, but also that developing countries are not suited to Eurocentric approaches"
(Rigg, 2007, p.44)

This chapter will discuss the findings and main themes emerging from Chapter 2 and Chapters 4 to 7. The chapter begins by reiterating how caves are 'living' heritage places with 'plural' uses and 'sacred' qualities, and argues that their current uses and values must be understood within broader temporal and spatial settings. Next, I discuss the opportunities and challenges for managing heritage at the Sepon Mine, and to 'bridge the divide' in heritage, supported by the ongoing uncritical application of dichotomous and categorical heritage as part of the regulatory process, and within organisation structures, or 'heritage silos'. The chapter then moves to consider more specifically the context for managing heritage in a mining context within the Lao PDR, where contemporary heritage management practices are constituted by a juxtaposition of historical influences, international obligations, and political aims, with each found to influence heritage management practices and are equally identified to be supported by, and supportive of, the mining process. Finally, the chapter proposes for consideration the Sepon Mine as a resource frontier, and that mining at Sepon represents a new phase in an ongoing process of change and interaction between human society and natural landscapes/places in the Lao 'frontier' uplands. Here, mining and heritage together introduce new social, economic or political processes that through interaction arguably challenge traditional livelihoods, socio-natures, and associated heritage beliefs, practices, and traditions.

Broadening the Scope of Heritage: From 'Dichotomies' and 'Categories' to 'Uses' and 'Values'

Role of the Community in Heritage Management

Engaging local community and ethnic groups in archaeological research and heritage management processes is found to support more comprehensive identification and management of local heritage. As Greer (2010) has shown, a process of collaboration between the researcher and the community leads to new understanding of archaeological research, including the development of new and locally directed heritage programs. Development of a more explicit community-run heritage management process, as Greer (2010) explained, allows for “the articulation of a number of Indigenous perspectives including the links between cosmology and ritual and landscapes, archaeological sites and artefacts” (p.55). The community-centric approach to understanding caves as heritage places in this thesis is shown to broaden the scope and definition of heritage by applying community knowledge about the past and present uses of, and value in, the landscape. Emic accounts have therefore provided a broader understanding of place-making processes, of natural resource selection and use, and complex social and cosmological interpretations and interaction within local environmental niches.

Identifying relationships between uses and values in the present, as well as between in past uses and future needs, are a step towards considering the role of caves as ‘living’ and ‘sacred’ places. Incorporating traditional knowledge and values has supported identification of the plural uses and values of caves, while identifying the greater heritage significance caves hold. Local knowledge can support methods to reduce impacts or threats to the sustainability of caves and natural places and their associated cultural heritage. Local knowledge also shows that uses and values in caves have increasing over time, dramatically in the present, through introduction of multiple users of caves, leading to the new and competing uses, values and meaning for caves.

From this perspective, there is therefore potential to apply community knowledge more realistically into management plans at the Sepon Mine. Involvement of community can broaden both the definition of heritage locally, provided the scope for recognition of management needs that are inclusive, not exclusive, of interconnecting and interdependent past, present, and future uses and values for caves, and report impacts or threats to caves and their heritage values.

Caves as 'Living', 'Plural', and 'Sacred' Heritage

Caves and associated limestone karstic formations in the Sepon Mine and the broader Vilabouly District display a range of uses and values which have developed across thousands of years and remain ongoing today. Outlined in Chapter 6, uses and values identified in caves are also found to extend into associated environmental zones, and hold a variety of interconnected and interdependent to be past, present, and future orientated purposes (see Figure 28). Caves have been incorporated within cultural landscapes over more than one time-period and as part of local and/or regional socio-cultural systems and economic activities, including prehistoric human activity, during the historical Buddhist period, through to the Vietnam (or American) Wars. In the present and anticipated future, caves remain important for a range of economic, subsistence, and religious activities. For these reasons, caves in the Sepon Mine and Vilabouly district should be considered 'living' and 'plural' heritage, and importantly, some caves that display properties of Sacred Natural Sites. Following Verschuuren et.al. (2010), sacred natural sites are areas which "are in some way holy, venerated or consecrated and so connected with religion or belief systems, or set aside for a spiritual purpose (p.2). Tham Pakou and Tham Bing in particular, as the location for spirits, ancestors and spiritual practices, are significant local and national sites and should be managed and protected 'sacred caves' or 'sacred natural sites'.

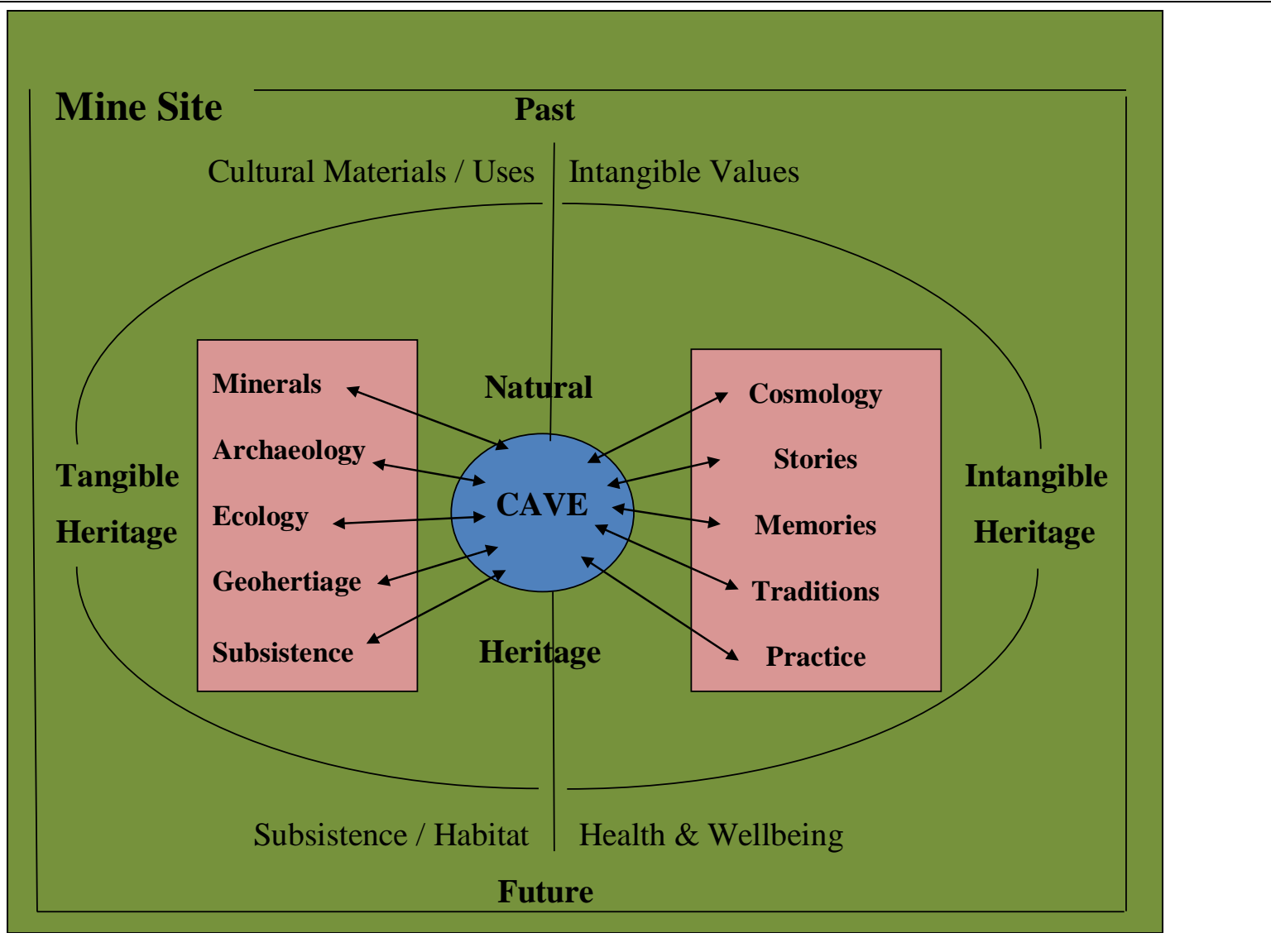


Figure 28. Identified Relationships between uses and values found in Caves in the Sepon Mine and Vilabouly District (Image: The Author).

Sidusunthorn, Gardener and Smart (2006) explain that caves and rock shelters have been an important determinant on human culture and society and share an important functional and evolutionary relationship with human society and culture across millennia. Further, they identify that caves preserve the evidence of change, be it environmental or social, and remain highly relevant to present day societies. Findings from this thesis concur with their conclusions. Findings from this thesis also arguably broaden Sidusunthorn, Gardener, and Smart (2006) conclusions, that the relationship between caves and human society should be also considered from the perspective of cultural determinacy, not only environmental determinacy. That is, that caves like few other natural environments, have been shaped by an evolutionary relationship with human culture and society, and contain the residue of human/nature interaction, anthropogenic modification and impact to the natural environment. Caves therefore illustrate the important role human society and culture have played in transforming and shaping the natural environment for a range of social, cultural, political, economic, and spiritual needs with positive and negative consequences as a result. Caves are therefore a unique environment where society, culture, and nature interact in a symbiotic and co-evolutionary capacity, and have conjointly shaped and directed the development of each other through interaction across temporal and spatial settings.

Relationships between Uses for and Values in Caves

The relationship between uses and values found in caves within the Sepon Mine and Vilabouly District deepen the significance of caves as 'heritage' places. As illustrated in Chapter 6 and 7, and in the previous section, caves and their constituent of karst at the Sepon Mine, the broader Vilabouly District and the Lao PDR have multiple uses and values that often overlap or are interdependent. Importantly the relationship between past uses and their present and future

value to current users are constituted temporally and spatially. Often *intangible* uses and values placed in caves as natural places show no *cultural tangible* evidence for this value or evidence for this value without community consultation. Discussed earlier in this chapter, community knowledge has provided information about the past and present uses of the landscape, making the unseen visible, and providing us with broader understanding of processes of place-making, natural resource selection and use, and complex social and cosmological interpretations and human interaction and adaptation to local environmental niches. In caves *intangible* heritage values are often not visible as *tangible* items, and caves are not regularly used because of their spiritual significance or taboo. The absence of *tangible* markers does not make these places meaningless, as can often be considered the case. In fact it is often the opposite, with *intangible* relationships in nature often invisible and unrecognisable without interpretation of local cosmology and belief. Within Vilabouly District, the spirits at Tham Pakou, and the story of the Dragon Field and its relationship related to Hin Som Sao, outlined in the preface and Chapter 6, highlight this situation.

The significance of caves as location that support a variety of overlapping, cross-cutting, or interdependent heritage uses and values illustrate the complex relationship between nature, culture, and society bound by a mixture of past uses, present uses and values, and future-intended uses (see Figure 28). In some caves residue of past uses are also valued in the present, and may have future-intended significance. For example, the past use of Tham Pakou for Buddhism is identified to be valuable in the present by members of Ban Namalou, and archaeologists and Lao Government staff. For the later, this is a location to research the extent of Buddhist culture and use of caves by Buddhist culture in Mainland Southeast Asia; for the former, the caves is valued as a store for material culture from the Buddhist period, and for personal merit making. Added to this, the cave is also valued for protection of the material and spiritual qualities that have arisen from

the Buddhist use of the cave. As this section illustrates, managing caves based on the uses and values of multiple stakeholders is complex, and will be discussed in more detail later in this chapter.

Continuity & Change in Uses of and Value identified in Caves

As the previous sections have alluded to, caves and their associated karst and environmental surroundings have also been identified to have undergone processes of continuity and change in how they are used and influencing how they are made valuable. To consider the local and broader regional and international significance of caves within the Sepon Mine and Vilabouly District, it is also necessary to discuss continuity and change in local caves over time, and the relationship between uses and values in the past, present, and future. Foremost, the continuity and change in uses and value of caves increases the complexity in managing these locations as they are comprised of a suite of interconnecting uses and values. It is the continuity and change in caves over time, and the relationship between uses and values across the past, present and future, that will form the basis for discussion on the management of caves as significant heritage sites to follow. For the purpose of this section, identified uses and values will be discussed outright in context with similarities to local and broader regional and international findings about caves and their significance.

Continuity and change of uses for and values in caves within the Sepon Mine and the broader Vilabouly District reflect transitions in local and regional social and cultural beliefs and practices, and the changing nature of beliefs and practices over time within the Indochinese region

and present day Lao PDR. Within Vilabouly District, findings from the research of caves follow a pattern of historical change locally and within the Indochinese Region:

Both [Phou Thay and Brou] groups have experienced considerable upheaval from foreign invasions and wars, beginning with the Thai depopulation between 1827 and 1860, French colonization and the first Indochinese war, the Japanese occupation during World War II, and the American bombings of the Ho Chi Minh trail which transverses the district. During these times of crisis when they would go into hiding the two groups' interdependency increased in their struggle for survival (Chamberlain, 2007, p.8).

Continuity and change in caves in the Sepon Mine and the broader Vilabouly District also follow a pattern of uses and change in use and value identified in other cave and rock shelter sites throughout the Lao PDR and the Southeast Asia region (Bellwood, 2006; Tacon & Tan, 2014). Arguably findings also reinforce what Stuart-Fox (1993) claimed are 'discontinuities' in historical regional development, including the historical context to the current Lao PDR. Identified uses of caves reinforce that a process of social, cultural and political change and disruption are a prominent and ongoing features along the southeastern borderlands between today's Vietnam and the Lao PDR. Importantly, findings identify that caves played a role within broader regional encounters and interactions between upland and lowland society across several significant historical, political, and cultural shifts over the preceding five centuries or more. It can also be argued that the current context of economic development in Vilabouly District - transnational mining and State-induced local change - be considered representative of a new phase in 'ongoing interactions' in the Lao 'frontier' uplands where caves again are significant. This process, defined by 'interactions' and 'frictions' between state-based actors and local political societies as a result of regional social,

economic or political interactions and influences, focused on natural landscapes/places in the region (see Scott, 2009; Tappe, 2015).

The proposition that the Sepon Mine represents a new phase in an ongoing process of change and interaction between human society and natural landscapes/places in the Lao ‘frontier’ uplands will be considered in more detail at the end of this chapter. Of importance here is that change in use and values of caves in the Sepon Mine, and the broader Vilabouly District, highlights the central role caves continue to play in supporting local human responses and adaption to new and disruptive processes. Findings indicate strongly that caves continue to support a human-culture-ecology nexus that is co-evolutionary and remains ongoing. Further, that this tripartite relationship is supportive of the sustainability of certain ecology and specific socio-cultural beliefs and practice in the past, present, and conceivably into the future. It must be noted however that such interactions and uses over time have equally led to the alteration and destruction of cave geology and presumably cave biota, and specific social and cultural practices in the process of the human use of them. The importance here is that caves, as part of the natural environment, provide a base for local subsistence strategies, socio-cultural development, and religious practice and more recently supported local adaptive responses to social conflict and political change.

In light of these findings caves could be considered as *refugia* for human society or population groups during times of significant social, political or ecological stress.⁶⁰ This context brings into consideration the role of caves in the future, and the importance of managing caves as

⁶⁰ For comparison see Veth (1989) consideration of water sources as refugia - for “providing networks of permanent water sources capable of withstanding climatic extremes” (p.83) during the colonisation of Australia’s arid zones; Bird, O’Grady & Ulm (2016) application of watering sites/springs as refugia to support hypothesised human colonisation of the continent of Australia; and Louys & Turner (2012) for consideration of Southeast Asia providing long-term refugia during early to middle Pleistocene human migrations.

natural environmental features because they are shown to support socio- cultural development, religion belief and practice. Perhaps more importantly, caves are identified to play a supportive function for local strategies and adaptive responses to social and political conflict and change, which could potentially support future human-induced environmental change or political instability.

The Challenges to Managing Caves as ‘Living’, ‘Plural’ and ‘Sacred’ Heritage within Mining Operations

The previous section has outlined the variety of important roles that caves have played in the past, continue to play in the present, and has emphasised the important role caves hold for future human populations and the natural environment. Chapter 7 began to consider the complexities found in managing caves as heritage places at the Sepon Mine, notable how natural places hold ‘plural’ ‘living’ and ‘sacred’ heritage significance. The mining context is shown to provide a strong basis for heritage protection and processes that support broadening the scope and definition of heritage, particularly in terms of how identification, heritage and mining together support a ‘standardised’ approach to heritage management. Yet, the application of international ‘best practice’ at the Sepon Mine has arguably limited application of innovative approaches to manage heritage based on interconnected or interdependent qualities (as ‘living’, ‘plural’ and ‘sacred’). Therefore, there remains considerable difficulty to simultaneously manage caves (and other heritage places) for their variety of heritage uses and values. The problem encountered is identified to be based on the application of a ‘nature-culture’ dichotomy and ‘categorisation’ of tangible and intangible heritage within management practices.

Findings from research at the Sepon Mine mirror what Kiernan (2015) has highlights as a central problem in the applied management of ‘sacred’ natural places internationally:

...significant challenges face those seeking to manage sites that have both natural geoheritage and cultural geoheritage dimensions, particularly given the common tendency for sites to be viewed as either natural or cultural heritage places rather than both (p.178).

The issue that Kiernan (2015) illustrates is identified within management of World Heritage Sites and Protected Area Management internationally. This issue is clearly problematic within extractive industries and can be identified through the role of the international within commercial contexts like the Sepon Mine. Within extractive industries, the particular challenge identified - to manage caves for a variety of uses and values – is based on the need to meet international standards and compliance to receive a Social License to Operate. Explained in Chapter 2, compliance procedures direct international companies to apply a distinct ‘type’ of heritage – a ‘type’ of heritage that is developed and promoted by international heritage agencies and practitioners as ‘best practice’ and that remains built on a *nature-culture* dichotomy and *tangible-intangible* categorisation.

Arguably, the need to meet regulatory compliance produces increased constraints within organisations to follow ‘standardised’ international approaches to heritage management. The critical dimension to this issue is found in the ongoing perseverance of UNESCO and other international heritage agencies persistence with promotion of a ‘best practice’ approaches to managing heritage that is structured on a ‘divided’ heritage model. The frameworks for heritage management that operation like the Sepon Mine apply to meet regulatory standards can be said to be inefficient to manage heritage sites that have dimension of natural-cultural overlap and multiple

past, present, and future uses and values. For the purpose of the next section then, this problem is situated within two main dimensions of operational practice in mining: the regulatory process for compliance and a ‘social license to operate’; and the structural configuration and procedural implementation of heritage within the mining organisation and operations.

Relationships between Mining and Heritage

Managing Heritage as an Internationalised Regulatory Process

Vershuuren (2010) states that “(r)econciling management strategies and policies for cultural and natural heritage management is key to conservation of sacred natural sites” (p.68). Chapter 2 illustrated that progress had been made at national and international levels to identify and manage heritage as ‘living’ and ‘sacred’ based on community or national beliefs and practices in built structures and natural sites. However, it could be argued that at the international level there still remains either resistance or inability to apply heritage management frameworks that embed practices which are built on the identification, management and promotion of local heritage with intersecting and cross-cutting uses and values. The lack of broader integration of heritage categories into management practice by international heritage agencies, and further, within the commercial sector, is identified as a major impediment to reconciling the ‘divide’ in heritage management. The problem largely remains at the international level, but has become localised nationally as a result of the integration between the international and the local though development of policies and laws in emerging nation states, and more recently, as part of extractive industries and commercial development process. Regulatory processes in extractive industries, like that at

the Sepon Mine, could therefore be argued to ‘mirror’ a ‘type’ of heritage that remains conspicuously present in program for World Heritage and Protected Areas Management.

The construction of heritage as a concept, and the methods developed and promoted to manage heritage internationally, remain a central and ongoing problem. Highlighted in Chapter 2, the major and persistent issue is the ongoing application of the ‘divide’ as part of ‘Eurocentric’ discourse and practice that dominate heritage management internationally. I argue following Nielson (2011) and Brumann (2012) that international heritage organisations continue to control a ‘World Heritage Arena’, and following Logan (2001), that these agencies have maintained a “cultural heritage bureaucracy at the international level” (p.52). As Smith (2006) has comprehensively argued, UNESCO promotes an ‘Authorised Heritage Discourse’ (AHD) which embodies UNESCO’s ‘idea of heritage’ that was ‘naturalised’ in the World Heritage Convention and creation of ‘Universal’ heritage values. UNESCO’s World Heritage Convention naturalised heritage as dichotomous and categorical and today continues to promote the legacy of a “dualist” and “dichotomous conception of heritage” focused on a “rigid division” (Pockock, 1997, p.266) of heritage. The ‘sharp divide’ that the UNESCO World Heritage Convention drew between cultural and natural, and tangible and intangible heritage (Gfeller, 2013, p.284) remains a problematic benchmark for ways of ‘seeing’ and ‘doing’ heritage internationally.

A problem also remains with the ongoing classification for caves and karst as largely *natural* heritage at the level of World Heritage. Cave and karst sites are listed as World Heritage based on several themes, including aesthetic quality, biodiversity, geo-climate and environmental history, mineral chemistry, and evidence of human use and occupation. However, notwithstanding the variety of known uses and values identified, caves have remained typically managed, protected, and promoted for their geological and biodiversity values (Hamilton-Smith, 2007). Other

complimentary values caves hold, including cultural or spiritual values, feature less on the World Heritage List of Mixed sites or cultural landscapes. This occurrence remains despite the IUCN *Guidelines for Cave and Karst Protection* providing a definition for caves and karst landscapes indicating these places are constituted by “a number of economic, cultural and scientific values” (Waterton, Hamilton-Smith, Gillieson & Kiernan, 1997, p.6). Highlighted in Chapter 2, the IUCN also promote several ‘living’ and ‘sacred’ natural heritage frameworks, applied as a methodology in this thesis, to evaluate the broader heritage value of caves. However, the IUCN continues to promote that caves and karst landscape are *natural heritage* ‘of outstanding universal value’ (IUCN, 2008) and in doing so have failed to promote methods to integrate the broader dimensions of cave uses and values into international management planning.

At the Sepon Mine the abovementioned international heritage ‘best practice’ definitions and management practices are applied as regulatory requirements and standards for social, cultural and environmental protection. Chapter 5 illustrated that the ESIA process applied from 2001 at the Sepon Mine was based on World Bank recommendation for operational standards in mining, which from the perspective of heritage are drawn from UNESCO developed World Heritage definitions and practices. It was also explained in Chapter 5 that the IFC provided start-up funding for the Sepon Mine, and the guidelines for social responsibility in mining were prepared by the IFC, the World Bank, and later the ICMM and the MCA. The environmental management system applied at the Sepon Mine - ISO14001 - is also regulated by the IFC and World Bank as performance standards for heritage management in extractive industries. The relationship between heritage and mining is therefore strongly illustrated through the application of World Heritage discourses and practices for heritage management. This relationship is identified explicitly in IFC Performance Standard 8, applied internationally within mining operations and at the Sepon Mine:

Performance Standard 8 recognizes the importance of cultural heritage for current and future generations. Consistent with the Convention Concerning the Protection of the World Cultural and Natural Heritage, this Performance Standard aims to ensure that clients protect cultural heritage in the course of their project activities. In addition, the requirements of this Performance Standard on a project's use of cultural heritage are based in part on standards set by the Convention on Biological Diversity (IFC, 2012, p.53).

The application of IFC Performance Standards in the Sepon Project shows that international heritage agencies and the World Heritage industry are not directly engaged with day-to-day heritage management in mining operations. However, indirectly, a relationship between mining and heritage certainly exists and is identified at the level of compliance for social sustainability and environmental management regulated by the IFC, World Bank and others.

The relationship between mining and international heritage 'best practice' at the Sepon Mine can also be identified through examination of applied international and national heritage management aims, frameworks, and practices. Chapter 5 illustrated that the Sepon CHMP is drafted from international 'best practice' and Lao national heritage legislation, which together provide the framework for heritage management practices during mining operations. The Sepon CHMP is based on the *2005 Lao Law on National Heritage* which is itself also built off the ICOMOS *Burra Charter*, and as a result, incorporates several internationalist aims, definitions and 'best-practice' approaches for heritage management.⁶¹ For example, national heritage is defined as "cultural, historical and natural heritage existing in the form of tangible objects, intangible

⁶¹ The Lao *2005 Law on National Heritage* is also overtly nationalist, which will also be discussed later in this chapter in relation to heritage and identity.

items, moveable or immovable property, and living or non-living organisms” (Government of the Lao PDR, 2005, p1). National Heritage is also considered to be “produced by mankind or formed by nature that have outstanding cultural, historical or natural value” (Government of the Lao PDR, 2005, p1). Cultural heritage and historical heritage are identified as ‘tangible’ and ‘intangible’ respectively, with natural heritage defined by its ‘scenic beauty’ or scientific or ecological value. Four levels of significance were given to national cultural and natural heritage: local, national, regional, and global.

The *2005 Lao Law on National Heritage* is built from a national statutory document for heritage protection – the *1997 Decree of the President of the Lao PDR on the Preservation of Cultural and Natural Heritage* (1997 Decree). Logan, Long, and Hansen (2002) have argued that “[t]he 1997 heritage proclamation similarly reflects the Lao PDR's willingness to embrace globalization, mirroring as it does international thinking on heritage protection, philosophy and practice” (p.53). The 1997 Decree was reportedly established by the Lao Government as a commitment to UNESCO and the World Heritage Convention to provide a ‘legal basis’ to “the Government’s responsibility for the conservation of the national heritage, natural and cultural, as well as of any specific World Heritage sites” (Government of the Lao PDR, 1999b, p.96). The 1997 Decree and 2005 Lao Law on National Heritage each illustrate the national application of largely internationalist terms that proscribe “the regulations and measures for the management, conservation, preservation and use of the national heritage” (Government of the Lao PDR, 1997, p.2). Importantly this includes the application of the ‘divide in heritage’ as cultural-natural and tangible-intangible. The 1997 Decree and 2005 Lao Law on National Heritage also promote a largely archaeological approach and focus on tangible heritage through preferment of methods for

management and research, survey, excavation, and inventory of objects and structures considered ‘national heritage’.

It is important to note that the use of international ‘best practice’ frameworks as the foundation for national policy, law, and management practices is not limited to the Lao PDR. Chapter 2 highlighted how the 1964 Venice Charter, the 1972 World Heritage Convention, and the 1979 ICOMOS Burra Charter were ‘exported’ or ‘adopted’ into the Asia-Pacific Region from the 1980s. Today throughout Southeast Asia, national heritage legislation and management practices are largely built of international definitions and practices, and as a result, promote a dichotomous and categorical heritage. For example, in Vietnam the national *2001 Law on Cultural Heritage* is recognised as being “broadly based on the World Heritage Convention and the Operational Guidelines” (UNESCO, 2004, p.37). In China, Qian (2010) explains that a national set of heritage management guidelines known as *The Illustrated Principles for the Conservation of Heritage Sites in China*, or the China Principles, “are regarded as primarily consonant to the Venice Charter and the Burra Charter” (p.256). Qian (2010) explains that “the drawing up and the implementation of national charters and regional protocols are more or less dependent on expertise from abroad” (p.263), arguing that the adoption of international heritage and conservation practices has removed regional and national practitioners from the process. Qian (2010) noted that this method of application of the China Principles has led to conflict with national and state legislation, are mostly applied as ‘top down’ processes, and are generally not well known by national heritage practitioners.

Applying international ‘best practice’ heritage management practices into law, policy, and practice throughout Southeast Asia has inadvertently led to proliferation of the ‘divided’ model for identification and management of heritage. While international discourses and practices are

fused with national aims for and uses of heritage, managing interconnected heritage between nature-culture and tangible-intangible remains challenged by a focus on *tangible* heritage, application of archaeological heritage management practice, and a largely bureaucratized and top-down governance model for heritage management.. Applying singular and static significance-values to heritage sites like caves, risks impacting on the multiple and interconnecting uses and values they hold, and the role caves have in the broader ecological landscapes and cultural lifeworld of local community groups. In a commercial context like the Sepon Mine, the regulatory environment determines what international standards are applied to manage heritage, which from the perspective of cultural heritage is largely for their archaeological values, and for caves leads to the management of them as cultural heritage exclusively. It is important to consider that the issue raised here is not based solely on identification of heritage, but also in applying identified heritage values within management practices. This is influenced by another component of applying the regulatory process, identified as organisational structures that support and legitimate the 'divide' in heritage. The process of operationalisation of heritage arguably increases the difficulty to managing 'living', 'plural' and 'sacred' heritage. The following section will move to explain this context in more detail by focussing on the structural operationalisation of heritage within operations at the Sepon Mine.

[Heritage as an Organisational Structure in Mining: Dichotomies, Categories, and Working in Silos.](#)

Kiernan (2015) has determined that complexities found with management of heritage sites that hold more than one value, often natural and cultural heritage, is often based on the structure of organisations. Kiernan (2015) states:

There is a common tendency for natural heritage management and cultural heritage management to be the province of different constituencies in a political sense, and different management agencies and professions at a practical implementation level. This dichotomisation poses challenges in fully recognising and harmonising protection of the full the range of values that can exist at specific sites (p.190).

Kiernan's (2015) determination that the 'dichotomisation' of heritage into categories for management practices highlight that the dichotomisation and categorisation of heritage is replicated in departments that manage heritage. As with the implementation of international heritage definitions and categories as 'best practice', the 'mirroring' of heritage dichotomies and categories structurally within organisations are also the result of companies or agencies acting to manage heritage following internationally proscribed heritage dichotomies and categories.

It seems apparent that international heritage agencies, government agencies, and heritage consultancies manage heritage in a way that replicate dichotomies and categorisation of heritage for operational purposes. While this is considered to be a practical or pragmatic approach to heritage management, it is in all likelihood a more cost-effective mechanism to identifying and managing heritage because it replicates international organisational and industry structures and associated practices. Byrne and Ween (2015) critically consider that culture-nature dualism remains a "major impediment to breaking out of the silos represented by nature conservation and heritage conservation" (p.2). It is clear that applying international 'best practice' heritage management processes maintain 'heritage silos' - the institutional construction of departments and agencies to manage heritage as either natural heritage or cultural tangible, intangible, or historical. However, it is reasonable to argue this process has led to the ongoing and potentially uncritical

application of the ‘divide as practice’ the operationalisation of heritage management, with ‘silos’ constructed on an ontological division between nature and culture, and the material and immaterial.

In commercial environments like the Sepon Mine, a ‘siloes’ structure is represented by organisational divisions for heritage management as natural heritage, cultural (tangible and intangible) heritage. This process is found to reinforce the ‘divide’ in practice locally, and arguably has the potential to maintain the ‘divide’ internationally wherever mining companies operate. In effect, the commercial application of the ‘divide’ not only prolongs dichotomous and categorical thinking about heritage, it also justifies and reinforces a dichotomous and categorical heritage in practice internationally. The fact that this structure remains ongoing today at locations like the Sepon Mine indicate that the problematic of the ‘divide’ remains firmly integrated within the ‘world-system’, and further, is indicative to the ongoing power and standing of the World Heritage industry internationally. It also points towards the increasing power and legitimacy of mining and extractive industries in defining heritage internationally and in local contexts. I argue that extractive industries like mining, which apply international heritage management ‘best practice’ in operations, are implicit in the ongoing application of the ‘divide’ internationally, and perhaps more pertinently, through uncritical reinforcement maintain that the ‘divide’ is authentic.

The reinforcement of heritage dichotomies and categories within institutional and organisational structures not only leads to the replication of internationalised concepts for heritage management, it also authenticates their authority. At the Sepon Mine, I argue that this process has reduced the capacity for innovation or improvement of heritage management practices, such as effectively managing caves that identified to hold ‘living’, and ‘sacred’ qualities, and equally ‘plural’ uses and values. In effect, the application of international and national heritage management policies and practices in organisational structures as ‘heritage silos’ continue to

reinforce the ‘divide’ in practice, and legitimate it as international ‘best practice’ in new non-Western international locations.

Combining values in management practices is difficult when heritage is operationalised into structural dichotomies and categories in locations where people and the environment share an historical, economic, and spiritual relationship. However, within Southeast Asia “...collaborative management, or co-management”... is today “promoted as a means to bridge the gap between the protected area and local stakeholders” (Parr et. al., 2013, p.60). Collaboration or multilateral management is considered integral particularly in areas where significant human investment and livelihoods are integrated firmly within the natural environment. The challenge for the Lao PDR and the Sepon Mine is to realistically integrate a collaborative and multilateral stakeholder engagement process as part of identification and management of locally significant ‘heritage’ sites, particularly natural places like caves. Focusing on collaborative and multilateral stakeholder engagement can lead to increased community-based identification and management of overlapping or interconnecting heritage values, as witnessed at Tham Pakou. However, effective and sustainable management must work across existing governance structures for heritage management to challenge the validity of applying international standards in the local setting, particularly if these structures are seen to replicate and validate the internationally proscribed ‘divide’ in heritage management practice at the local level.

Lao Heritage Discourses and Practices in the Context of Mining

Compounding the challenges already identified to ‘bridge the divide’ in heritage, those that result from international influences of the World Heritage bureaucracy and the structure and

operation of transnational mining operations and international regularity systems, is the context for practicing heritage management in the Lao PDR. Figure 29 has drawn together the influences to heritage management in the Lao PDR identified in this thesis, in an attempt to illustrate how the discourse, practice, and uses of heritage in the modern day Lao PDR resemble a bricolage of entities. Research indicates this process has developed over time and has led to current definitions of heritage, the way heritage is managed, and how heritage is ultimately used or applied at the level of government. While there remains more work to synthesise the relationship between influences and present application of heritage management practices in the Lao PDR, it is clear that they are constituted by a juxtaposition of historical influences, international obligations, and modern political aims. In the present context it can be interpreted, as it has been described in the literature, as being largely dependent on balancing the relationship between internationalised heritage management processes and national and historical heritage management discourses and practices, centered on the application of an archaeological heritage management and uses of heritage for socio-economic development and political purposes.

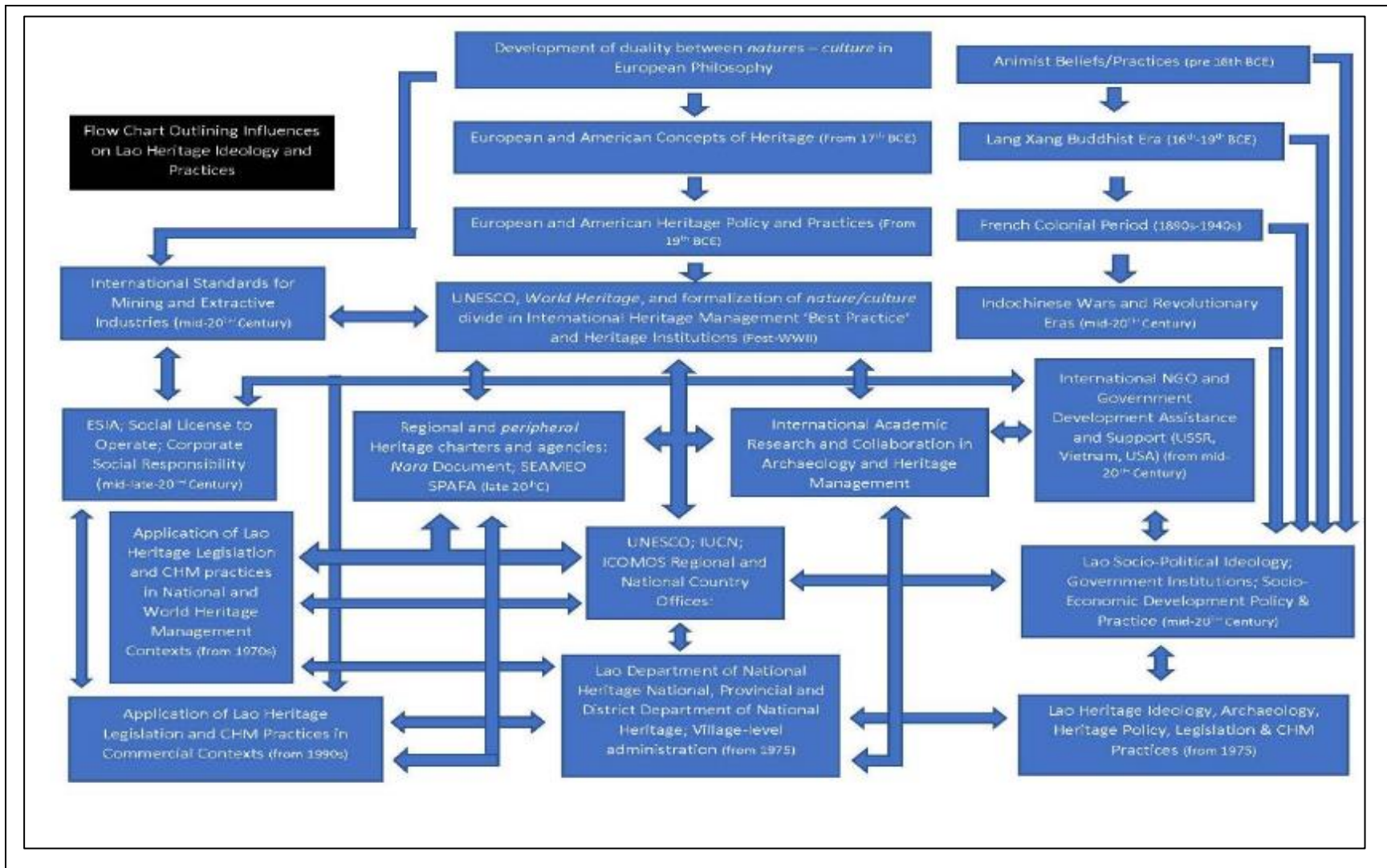


Figure 29. A Schematic Representation of the Identified Influences on the Development of Modern Lao Heritage Ideology and Practice

In the present context at the Sepon Mine, heritage management is performed within what Logan, Long & Hansen (2002) have argued is a ‘modernisation through economic development’ process. In this context heritage management process must reach what Long and Sweet (2006) identify as a “common ground” for “development of a particular interpretation...that suits both UNESCOs purposes and those of the Lao Government” (p.451). The context for managing heritage at the Sepon Mine also tends to display what Long and Sweet (2006) describe as “tension between the universalizing international vision of the world body and the national sovereignty interests of its [UNESCO] constituent state parties” (p.450). Like many other nations signatory to UNESCO, the Lao PDR must balance international influences with nationalistic aims for heritage management. This is a context that is considered to hold several conflicts of interest, for both UNESCO and the Lao Government. The indirect role that UNESCO has influencing heritage protocols at the Sepon Mine make ‘balancing’ the national and the international less overt, but it does not take away that such a relationship and process exists. What is more overt in the context of mining-based heritage management at the Sepon Mine is the relationship between heritage and economic development as the underlying economic and political rationale driving heritage management.

It can also be argued that mining-based heritage produces the same context, promoting a cultural identity and history. As Smith (2004) has outlined, heritage management processes in many ways support the dominant cultural political group in the location or work. In the case of the Sepon Mine, Lao speakers and those pertaining to a Lao identity control heritage management activities, and as a result. Cultural heritage management activities are focused on ‘pasts’ that today play a role in formulation of the present ‘Multi-ethnic Lao nation’. This has included early metallurgical societies, Buddhist heritage of Lang Xang, the Vietnam War and Revolutionary Era.

The issue being raised here is the potential to undermine or devalue the heritage of local non-Lao speakers and legitimise Lao political control of heritage resources and heritage interpretation. By excluding ethnic minorities and non-Lao interpretations of heritage and versions of history there is the potential to reduce the plurality and variety of heritage knowledge. The application of international ‘best practice’ in the context of mining highlights how the dominant international heritage discourse and practices are applied to ‘legitimate’ notions of national identity through specific uses of heritage knowledge. Importantly, the use of international heritage for nationalistic purposes raises doubt as to the dominance or imposition of ‘Eurocentric’ discourses and models of heritage practice in the Lao PDR, particularly as these practices are used to support Lao heritage aims and uses for heritage. Application of international heritage discourse and practices has also led to an uncritical application of the ‘divide’ in heritage as part of national heritage law, policy and practice. The issues raised above will be discussed in more detail in the following sections.

[Heritage Management and Economic Development: Law, Policy, and Practice](#)

It has been already been shown in this chapter that Lao heritage law and practices are built from international ‘best practice’, notably the ICOMOS Burra Charter. Further to this, it is identified that there is a strong relationship between Lao heritage law, policy, and economic development. From an international perspective, there are clear opportunities and challenges identified with aligning heritage and economic development processes, with impacts to heritage places, objects, and traditions reported as common outcomes (Winter, 2008). Logan, Long and Hansen (2002) critically argue heritage in the Lao PDR has become an “asset to be exploited” (p.62) for economic purposes because cultural heritage processes have come tied to economic development activities. Compounding this, the authors also argue that heritage law has been

underutilised and is inconsistently applied to manage heritage in the wake of rapid urbanisation and tourism, resulting in unsustainable development that is negatively impacting built heritage places. This view is best contextualised by Long (2002) who explains that “the balance between modernisation and the protection of heritage is tilted substantially in the favour of the former” (p.127). As discussed previously, heritage management practices in the Lao PDR that are contradictorily applied indicate conflict between an ‘internationalist agenda’ on one hand, and a ‘nationalist agenda’ on the other, with ineffective and unsustainable heritage management practices resulting from competition or inability to manage the two concurrently.

The challenges to implementing effective heritage management practices in the Lao PDR are identified within the internationalist-nationalist nexus described above. Foremost, cultural heritage management as a practice has only recently become established within the Lao PDR, emerging as a distinct practice since the roll-out of the NEM and regional economic integration from the late 20th century. Markedly, nationwide reforms driven by the NEM enabled a new era for archaeology and heritage management. This era led to what Long (2002) defined as a process of ‘internationally engaged’ heritage management, notably when the Lao Government became engaged with the ‘World Heritage system’. Long (2002) considers that engagement with World Heritage was one of several means at that time which supported the Lao PDR’s integration into “global institutional and economic processes” (p.130). UNESCO and other heritage agencies and international government and non-government organisations were influential in designing and supporting heritage policy and legislative development nationally. International influences were also greatly supportive of the development of critical aspects of civil society, including the system

of laws, governance, and instructions, and industries for economic development.⁶² For heritage, interaction with the ‘international heritage system’ resulted in institutional development of the nation’s heritage management system, while it also contributed to refinement of a ‘Lao national identity’ (Long & Sweet, 2006, p.446).

The relationship between heritage and economic development is also present in promulgations of Lao heritage law and policy. The 2005 Lao Law on National Heritage has clearly articulated the close association between heritage and economic development, stating that “socio-economic development shall proceed side by side with protection and conservation of the national heritage” (Government of Lao PDR, 2005a, p, 1; see also Sourya, Keosopha & Sisiengrat, 2005). Management and protection of cultural heritage is also integrated within the *2005 Environmental and Social Sustainability of the Hydropower Sector in the Lao PDR*; the *2010 Decree on Environmental Impact Assessment*; and the *2013 Environmental Protection Law*. Given its association to economic development in law and policy, surprisingly cultural heritage management is not applied as routinely as other livelihood-based or anthropological assessment of human and environmental impacts in development processes. Apart from the Sepon Mine, there is little to no visibility of the Lao Government conducting heritage management or heritage assessments with mining and resource development companies. Company and donor organisation ESIA reports provide information the most readily available information on outcomes for cultural heritage and community heritage values in commercial ventures (see Asian Development Bank, 2011; Nam Ngiep Power Company Ltd., 2014). Overall there is minimal visible critical engagement in these sectors by the Lao Government and little to no reported information available that provides

⁶² See Rigg (1995, pp. 152-153; 2007, p. 157; 2009, p. 705) for a chronological breakdown on major reforms brought about from the NEM, beginning in the period from 1975 and running through to 2003

assessment on actual or potential impacts on cultural heritage arising from economic development activity. As a result, actual and potential problems facing the cultural heritage of Lao and ethnic culture, communities and the environment from economic development-based activities are largely unknown.

There are several identifiable barriers to effective implementation of 2005 Lao Law on National Heritage and heritage management. There are significant challenges faced by the Lao PDR in the management of its national heritage, illustrating the historical, cultural and present-centred basis of management issues (Roberts, 2015). Limited government funding, limited or weak knowledge and application of the legislation, poor communication between government departments, and inadequate levels of education about heritage preservation within the lay Lao population, are identified as major limiting factors. The outcomes of inefficient use and application of heritage legislation have included looting, theft, destruction of heritage properties, and limited conservation of heritage objects (Gala, 2010). The challenge to provide adequate heritage management has increased significantly in the context of rapid nationwide economic development. From the perspective of managing caves and karst, Kiernan (2011) highlights the problems impeding effective heritage management in rural Lao PDR:

These tasks pose particular difficulties in Laos where financial resources and specialist expertise are limited and the understandable pressure for accelerated economic development has the potential to result in adverse environmental outcomes (pp.341-342).

If the Sepon Mine is anything to use as a guide, then the capacity for the national government to manage heritage is being stretched. As with other areas of the nation, international support

remains ongoing to support management of an increasingly complex set of civil and extractive development challenges. But as the next section will outline, there are also historical precedents that impact on the effective management of heritage in present-day Lao PDR. Historical precedents arguably continue to affect how heritage is defined and used in the present, and create a tension in the relationship between the international and the national in the application of heritage management practices and use of heritage knowledge.

Relationships between Heritage and Identity

A major issue identified to impact the effectiveness of heritage management in the Lao PDR is the relationship between heritage and identity. Uses of heritage in the Lao PDR have become more visibly applied to promotion of a national and multi-ethnic 'Lao' identity and to legitimate the current political regime. Tappe (2011) has shown that in the 21st century heritage has converged with politics to promote the “two main pillars of Lao national ideology” (p.607) - “first, the successful struggle of the so-called ‘Lao multiethnic people’...and second, the rich cultural heritage harking back to the golden era of the Lao Buddhist kingdom of Lan Sang” (Tappe, 2011, p.607). To promote an official national and multi-ethnic 'Lao' identity, the Lao government has made an explicit connection between the modern Lao 'multi-ethnic' society, the historical Buddhist Kingdom of Lang Xang, and the later Vietnam War and revolutionary period. Authorising nationhood and a national identity fused with political authority through 'heritage' is supported nationally by museum construction, promotion of 'key' national heritage sites, historical figures, cultural performances, and authorised 'texts'. As Tappe (2013) argues, the Lao Government has placed increasing emphasis on promotion of state-sponsored rituals and the

creation of physical objects, i.e. statues, temples, building as part of “late-socialist Lao national identity building and memory politics” (p.434).

National political aims are also argued to persist within heritage policy and legislation in the Lao PDR (Logan, Long & Hansen, 2002). Political aims for heritage are included the 1997 *Decree of the President of the Lao PDR on the Preservation of Cultural and Natural Heritage*, which as a document is argued to have been constructed as a platform for developing Lao nationalism. Kallen (2004) commented on the political nature of the 1997 Heritage Decree, stating that “[w]hile it is a common objective to actually use heritage to ‘raise the spirit of patriotism’, it is not often expressed so overtly in a code of law” (p.211). Kallen (2004) also argued that 1997 Decree illustrated “that the explicit aim of cultural heritage management in Laos is to legitimate the current political rule” (p.211). The later 2005 *Lao Law on National Heritage* can also be read as a political document, where the central apparatus of the legislation is “educating citizens with a conscious love for their nation and fine national traditions that is deeply embedded in their hearts and of assuring the elements for prosper sustainability of the nation” (Government of Lao PDR, 2005, p.1). Intriguingly punishments for not applying the law are also overtly socialist in their language, stating that “[i]ndividuals or organisations that have violated the provisions of this law shall be re-educated, fined, or subject to civil liability or criminal punishment, as determined on a case by case basis” (Government of Lao PDR, 2005, p.24).

[The Ongoing Use of the Past in Present Lao Heritage Discourses](#)

Historical conditions have remained embedded in present uses of heritage in the Lao PDR and remain strongly influential of current national ideologies and practices. As highlighted in

Chapter 2, historical influence is illustrated by application of practices and ideologies that were foundational to modern application of a ‘divided’ heritage and political uses of heritage. The legacy of the colonial era remains ongoing through application of European ‘scientific’ archaeology as the principal method to define, identify, and manage heritage by the Lao government. Historically speaking, the discipline of archaeology remains the longest standing research practice associated with heritage and the social sciences in the Lao PDR. Archaeology as a scientific practice was introduced to what is now the Lao PDR by French researchers in the late 1890s when the territory was a part of French Indochina. Kallen and Karlstrom (2010) stated that particular social values present in 19th century Europe underscored the style of ‘scientific’ archaeology introduced by Madeline Colani. Colani was considered to *construct* rather than *discover* archaeological sites, and in doing so, “fit a discourse defined by the political ambitions of the colonial period” (Kallen & Karlstrom, 2010, p.304). The discourse of archaeology exported to the Lao PDR by the French has remained and is said to have taken “the form of a temporal system to rank human bodies and material culture according to their approximation to modern European ideal as a way of validating Europeans notion of superiority” (Kallen & Karlstrom, 2010, p.302). The use of archaeology as the central discipline has also embedded an ongoing focus on tangible and material cultural heritage, and on origins and socio-evolutionary theory.

Archaeology has been applied to support nation-building efforts and political legitimation in more recent times. Goudineau (2015) discusses how the construction of the *Ho Lak Muang*, or city pillar sanctuary in Vientiane, 2012, was an intentional design created to house ancient *sema* stones - the original boundary markers of the ancient city of Vieng Chang from four centuries ago. Discovered during an urban construction project in Vientiane, the stones were subsequently excavated by archaeologists, and finally stored at the purpose-built *Ho Lak Muang*. An official

opening ceremony was conducted by Buddhist monks, and took place on the 450th anniversary of the founding of Vientiane (then Vieng Chan). Goudineau (2015) explains how archaeology as a scientific practice, was fused with Buddhist symbols to legitimate the official national narrative during the opening ceremony of the *Ho Lak Muang*:

In any event, the State is willing to establish its current patronage on the city's Lak Muang, as well as its place in history, with the support of ancient and indisputable emblems—far more ancient than those in Vat Si Muang. The State is responsible for this 'cultural innovation,' but through the selection of archaeological evidence, is attempting to show that it also relies on scientific expertise (p.41).

The centrality of archaeology theory and material culture conservation and preservation within national heritage management practices are also identified to be problematic for effective management of heritage places. At the Vat Phu Champasak UNESCO World Heritage Site, the use of archaeological methods have not supported managing the sites for its heritage values as a cultural landscape. The focus on the *tangible heritage* and use of archaeological practice to manage Vat Phou has led to neglect of other aspects of the World Heritage site, notably the natural and living values:

The existing [heritage] Decrees are concerned principally with the protection only of the archaeological sites themselves. There is some recognition that the landscape setting of the sites is also important in the protection of the trees on the mountains around Vat Phou but nothing in the decrees protects the character of the villages or of the remainder of the landscape (Government of the Lao PDR, 1999b, p.98).

Arguably the focus has been on the promotion of specific values, critical to retaining UNESCO World Heritage listing, but equally for elevation of key structures and their values, particularly a relationship to prior Buddhist State Societies located within the present day Lao PDR.

Legitimizing a Buddhist Heritage

In the Lao PDR there is strong support for promotion of Buddhist cultural heritage as National cultural heritage. The promotion of Buddhist heritage is also identified within the process of heritage management as the Sepon Mine. Illustrated in Chapter 5 and 6, there is clearly a long history of Buddhist practice in the local area, with strong evidence to show that this was disrupted abruptly during the Indochinese Wars and later Revolutionary Period, but that Buddhist practice has remained ongoing in some areas of Vilabouly District. Of interest here is how the introduction of mining at Sepon appears to have provided the opportunity to promote or reinvigorate Buddhism in the local area.

At the national level the association to the historical Buddhist Kingdom of Lang Xang is visibly applied in naming of the Lao Government mining company *Lang Xang Minerals Ltd.* The use of the elephant as the symbol for the organisation can also be considered to promote, and to some extent, reinforce the link between the ancient Buddhist past and the present Lao ‘multi-ethnic’ people (see Figure 30). Outlined in Chapter 5, this context is also supported by several examples of mining-supported Buddhist rituals at the Sepon Mine. This has included ongoing financial support and promotion from the Sepon Mine for construction materials for Buddhist temples (*wat*), contribution of copper cathode for casting of Buddhist images and symbols locally and nationally in Vientiane, and sponsoring of several annual festival locally within Vilabouly

District. Mining-sponsored support also included supporting the storage, removal, and conservation of the *Dong Son Drum* that was unearthed within the Sepon Mine, and the later merit making festival. Many of these events were presided over by National, Provincial, and District officials including the Deputy Prime Minister of the Lao PDR, and ceremonies were principally conducted following Buddhist rituals.

Thus, a tacit connection to the Buddhist past is made by the Lao Government that is forged or fused to the process of economic and social development of the modern nation. This context supports the findings of research by Tappe (2011; 2013) and Goudineau (2015) highlighted previously, intentionally promoting the ancient Buddhist Kingdom of Lang Xang to promote on a broader geographical basis for the current Lao discourse of identity and nationhood. This context also provides an example of what Tappe (2013) has described as “late-socialist Lao national identity building and memory politics” (p.434), as an example of intentional symbolic construction of built heritage and the application of state-sponsored rituals to legitimate connections to the past with the present.



Figure 30. Entrance to the MMG-LXML Mining Camp and Processing Centre. The use of Elephants in the current context of mining at Sepon emphasize a connection to the Buddhist Kingdom of Lang Xang. (Photo: The Author).

Interestingly, the presence of the Sepon Mine and support for a growing presence and centrality of Buddhism locally was viewed as part of a broader process of national Buddhist revival. This was reported by a MMG-LXML employee:

Buddhism is re-emerging as the dominant religion in Laos after a long period of time where was considered to be the ‘unofficial religion’ of Laos... Locally this can be seen as more money is coming in from the mine and villages are building temples and restoring temples.⁶³

In the Lao PDR several researchers have illustrated how the Lao government has been instrumental in a revival of Buddhist rituals and symbols since the late 1990s. Evans (1999), Pholsena (2006) and Tappe (2013) among others have identified that a national resurgence of Buddhism and the use of Buddhism as a ‘legitimizing force’ and political tool by the current government has been taking place. Examples include the reinterpretation of royal ritual and Luang Prabang, and merging of Buddhist and revolutionary sentiment in memorial rituals at the Vieng Xai caves. Within Vilabouly District, it can also be argued that a revival of Buddhism is taking place. Through the application of Buddhist symbols and the use of archaeology and historiography generated from mining-based heritage management activities, the Sepon Mine and Lao Government indicate making appropriation by cultural toponomy, a consideration discussed further at the end of the chapter.

⁶³ Interview with Expat MMG-LXML staff member (CR), November, 2011

Where there is a clear relationship between Buddhist heritage promotion, mining, and economic development, promotion or veneration of the ‘legacy of war’ is less direct than the association to promotion of Buddhist culture. As described earlier in this chapter, the ‘national liberation struggles’ are considered one of the two pillars of Lao nationalism in the 21st century (Tappe, 2013), and the use of caves during this era are used to promote national history and identity. The Vieng Xai Caves for example, known nationally as the ‘Birthplace of the Lao PDR’, have become a flagship destination for promotion of Lao national heritage and national identity. Vieng Xai was designated as a National Heritage Site by the President of Laos in 2005, becoming a strategic tourism destination for domestic and international tourists (Suntikul, Bauer & Song, 2011), and remain the focus of several annual State-based rituals (Tappe, 2013). Memorialization of the war effort in the Lao PDR also occurs through the erection of statues dedicated to ‘war heroes’ or the ‘multi-ethnic people’, and through veneration in public rituals and within national museums. Tappe (2013) has described how these statues represent the ‘struggle of the Lao multi-ethnic people’ and include an “official pantheon of Lao ‘ancestors’ and ‘national heroes’ (p.438) who supported the struggle and ideals of Lao society. Recent construction of statues outside the new Kaysone Pomvihane Museum in Vientiane are an example of this (see Figure 31). Here the soldier, the peasant, and the worker are depicted collectively in “the resistance struggle against foreign feudalists to protect and unite the nation” (Tappe, 2013, p.438). Much of the narrative of the ‘national liberation struggles’ has relied on official historiography written from within the Lao PDR and remains central to nation-building efforts today.

At the Sepon Mine caves are identified to have been used during the Vietnam War and Revolutionary Period. Given the importance of the ‘national liberation struggles’ and the place

caves have in storing physical and material remnants of that era, caves are of high interest to the Lao archaeologists. At least 5 caves located within the Sepon Mine are considered heritage sites based on representing the ‘Legacy of the Vietnam War’. However ‘war caves’ and the narratives that local persons retain about the Vietnam War era are not provided with a higher level of protection, even though there is a direct relationship with personal narratives of the ‘founding of the nation’. As ‘sites of memory’ of the Vietnam War era, caves could provide the location for future tourism, particularly because these caves are located on the Ho Chi Minh Trail. As it has been identified, what is not included in heritage management practices are the stories, memories, and livelihoods of people who lived in caves during the Vietnam War era. Further, the current veneration and rituals to the deceased from the Vietnam War period that residents retain and apply to cave sites are not studied actively by ethnographers. It is not certain why, with the sheer amount of information of the war in the area, more is not done to identify, safeguard and ‘tell the story’ of the war in Vilabouly District, particularly when historical narratives of the revolutionary era provides “key values... such as patriotism and solidarity, bravery and morality, sacrifice and perseverance, and thus functions as part of a national pedagogy” (Tappe, 2013, p.447).

[A Plural and Multi-Ethnic Heritage?](#)

The question then is how to interpret the intentional promotion of some ‘Lao’ heritage values while there is a clear lack of promotion of others? Further, what is the value of promoting certain ‘types’ of heritage by the Sepon Mine and the Lao Government? And finally, how does this impact on efforts to ‘bridge the divide’ in heritage? These questions bring to the forefront a perennial criticism in Lao heritage, that is, the lack of integrated ‘plural’ heritage values and multimodality in national heritage discourses; in short, a lack of realistic promotion of Lao ‘multi-ethnicity’ as national heritage. Condominas (2003) explains that the cultural traditions of minority

groups in the Southeast Asian Region “constitute one of the treasures of the national heritage, and even a treasure for humanity as a whole” (p.22). Goudineau (2003) localises this, explaining that that ethnicity is at the heart of what makes Lao PDR rich in cultural heritage:

It is quite clear to every observer that Laos owes part of its cultural wealth to the unique diversity which resides in the bosom of the different populations that have settled on its present territory down the ages, bringing with them a mix of languages, beliefs and aesthetic traditions (p.6).

However, Goudineau (2003) also expressed that the wealth and diversity engendered by ethnic-groups in the Lao PDR “is growing ever more fragile” (p.6) because of several historical, economic and political factors.

The origins to Lao concepts of ‘multi-ethnicity’, like many other aspects of Lao heritage, are historical and constructed. During the French colonial period a ‘three tiered’ classification system was applied to the ethnic groups of Indochina. This systems was based on geographic position and general settlement patterns of ethnic groups, but also cultural and linguistic difference. Groups were classified as lowland (*lao loun*), midland (*lao theung*), and upland (*lao sung*), with lowland ‘Lao’ speaking majority holding cultural and political capital (Goudineau, 2015; Ireson & Ireson, 1991). Multi-ethnicity became part of the official national discourse from the revolutionary period.⁶⁴ Evans (1999) has argued that ‘communist ethnography’ carried out in Vietnam and the Lao PDR post-1975 had a marked focus on ethnic or ‘minority’ cultures and the assimilation of ethnic groups in the majority ‘Lao’ culture.

⁶⁴ Goudineau (2015). However it was not until after the French left that the Lao took over this system of classification.



Figure 31. Statue depicting the three ethnic groups fighting together, outside the new Keysone Phomvihane Museum, Vientiane Lao PDR. (Photo: The Author).

The discourse of Lao ‘multi-ethnicity’ is considered to have “developed considerably over the past 20 years” (Goudineau, 2015, p.37). Modern promotion of a national ‘multi-ethnic Lao people’ is today argued to foster inclusivity of all people nationally, and their social and economic development, but it is still argued that the concept is used to control ethnic groups and assert legitimate political rule over them (Goudineau, 2015; Tappe, 2011; 2013). Central to the issue of inclusivity is the identification and management of heritage places with plural values and histories that are non-Lao. Although the national discourse promotes an inclusive ‘multi-ethnic’ Lao society, and ‘multi-ethnic Lao people’, heritage management processes at the Sepon Mine challenged inclusive multi-ethnicity in several ways. At the Sepon Mine ‘multi-ethnicity’ is reflected through anthropological research at the mine, which has been instrumental in supporting the Brou, illustrating their cultural traditions and present cultural and spiritual associations to the natural world. This has been outlined in the Chapters 4 through 7. However, there are historical

issues with the inclusivity of Brou at the Sepon Mine, initially raised by Oveson (2002) and later Chamberlain (2007, pp.85-86). These have been discussed in this thesis, relative to land tenure and inclusivity in heritage managed practice, and including several operational and structural patterns related to the use of archaeology and practice of heritage management, patterns that arguably remain a barrier to reconciling dichotomous and categorical application of heritage.

The purpose built local museum in Vilabouly Township, known officially as Vilabouly 'Culture Hall', is also a good example to examine the issue presented above. Vilabouly 'Culture Hall' was funded by MMG-LXML Ltd as a community-run facility to store and promote the district's archaeological finds and recognise the local cultural diversity within the national community. It was also intended that the 'Culture Hall' would promote local tourism and economic development after mining operations ceased. There were several factors in the construction and administration of the 'Culture Hall' that illustrate problems around inclusivity and multi-ethnicity. Mayes and Chang (2013) explained that the teams at SoSu and the CHU initially planned to call the location the 'Cultural Heritage Centre', aiming at "reducing the risk of the site turning into a monument and ensuring it was a place for realizing diverse and changing versions of past and contemporary cultural practice" (p.67). However, due to it being "a district centre it was also subject to the aims of bureaucratic administration and renamed 'culture hall'" (Mayes & Chang, 2014, p.242). The authors went on to explain that "[a]s a new orderly space it was to be representative of the district administration's guardianship over the development of local culture" (Mayes & Chang, 2014, p.242). The 'Culture Hall' is not considered a 'heritage centre'; structurally and symbolically it took on a 'Lao' architectural design (see Figure 32), and was administrated by Phou Thay speaking Vilabouly District officials. Archaeological artefacts displayed were not directly associated to the Brou villages or cultures whose lands many of the

artefacts were recovered, with associations of Brou persons of the district represented mostly in photographs. Overwhelmingly the 'Culture Hall' was not representative of Brou (and other Mon-Khmer speaking groups) and could be seen as reinforcing their 'lower' standing or status within the district, and likewise within the nation.

Museums in the Lao PDR are suggested to be a critical part of the economic and political infrastructure for the Lao Government since the Post-revolutionary period. Tappe (2013) argues that "[m]ost museums in Laos are designed along the ideological guidelines of the Lao People's Revolutionary Party"...and that..."museums display a number of particularities that reflect the ambivalence of current discourses of Lao national and cultural identity" (p.605). Thus, while the 'Culture Hall' displayed aspects of the 'multi-ethnic' group in the region, it remains symbolically, structurally, and politically a cultural product of the Lao or Phou Thay. Mayes and Chang's (2014) observation that the "...struggle for local cultures to negotiate recognition within the national community also remains to be resolved in the context of the new district heritage centre near the mine" (p.7) highlights the structural and political control for heritage and the use of heritage in local identity by the dominant political ethnolinguistic group. While this is only one example, it emphasises how mining can support the culture and practice of dominant groups in locations of resource extractions. As previously stated, the risk here is that plural heritage of non-Lao speakers is devalued while the dominant group's heritage is legitimated, as is the political control of heritage resources and interpretation of heritage and archaeological sites and objects. In the process, this reinforces longstanding patterns of Lao social practice regarding ethnic minorities, and can reduce the scope to expand the definition and management of heritage inclusive of broader concepts like 'living', 'plural' and 'scared' heritage.



Figure 32. Lao architectural style and symbolism applied to museums. The Keysone Phomvihane National Museum, Vientiane (above) and Vilabouly 'Culture Centre', Vilabouly District (below). (Photos: The Author).

Research in other archaeological and heritage management project within the Lao PDR have illustrated that incorporation of multivocal heritage, community value systems and management practices support successful heritage management programs (Egloff, 1998; 2003; Karlström, 2013). Involvement of the community in archaeological or heritage management practice is considered an important mechanism to not only examine the problems identified with applying ‘Eurocentric’ models of heritage and top down heritage governance practices, but also to see how the community responds, or is engaged with, the process of heritage and interpretation of heritage materials. In the Lao context, multiple histories and values of multiple actors, from the local community to the national government, are shown to contribute to how heritage is constructed, used, and valued. Kallen (2004) and Karlstrom, (2005) each identify that multiple histories and narratives are constituted within archaeological places and objects respectively. Applying multiple significance and meaning of places and objects, they explain, can expand the use of archaeology, the understanding of archaeological sites and objects, and ultimately enhance the effectiveness of cultural heritage management processes. I argue the process of inclusivity can induce a movement towards ‘bridging the divide’ in heritage within the Lao PDR.

Mining and Heritage: Territorialisation and New Frontiers

Sepon Mine as a ‘Frontier’

This final section proposes, for consideration, the Sepon Mine as a resource frontier, and to consider that mining at Sepon represents a new phase in an ongoing process of change and interaction between human society and natural landscapes/places in the Lao ‘frontier’ uplands. Extractive and resource industries as multi-national companies and transnational entities provide the enterprise and impetus for shaping policy and practice during operations. As Gilberthorpe and

Hilson (2014) have argued, resource industries act as key agents in shaping and influencing “the social, political and economic fabric of many societies” through a “processes of globalization” (p.2). This chapter has explained that by applying international regulatory codes and operationalising standards of ‘best practice’ extractive industries ‘internationalise’ standards and processes, including for heritage management. In this way, transnational industries play an auxiliary role in ‘legitimizing’ the ongoing application of dichotomous heritage discourse and practices into national and international heritage management policies and procedures. Critically, the mining company plays an auxiliary role in enabling ongoing application of a ‘divide’ in heritage though applying an organisational structure and process in operational standards of mining that mimics or replicates heritage categorisation and divisions. This is an international manifestation and one which highlights the role mining and heritage share in promoting an internationalised and European influenced ‘type’ of heritage.

Findings indicate that the Sepon Mine is characteristic of a ‘resource frontier’. The combination of both international mining and the application of Lao heritage in the local Vilabouly context has presented what Tsing (2003) has defined as the ‘frontier’:

...an edge of space, and time: a zone not yet – not yet mapped, ‘not yet’ regulated. It is a zone of unmapping: even in its planning, a frontier is imagined as unplanned. Frontiers are not just discovered at the edge: they are projects in making geographical and temporal experiences (p.5100).

The ‘mining landscape’ at the Sepon Mine, and application of international and Lao archaeological heritage managing practices within this landscape, have introduced or greatly increased levels of international, national, and district bureaucracy and governance. Mining and heritage together

have applied international definitions and practices for archaeological heritage management, while supporting a narrative of Lao heritage governance, with each competing with, and at times superseding, local traditional knowledge systems and management practice. This is represented through the definition (and management) of caves as ‘heritage sites’ consisting of *tangible, intangible, historical, or natural* heritage values.

Mining-based economic development activity in Vilabouly District has also brought with it pressures on cultural lifeways and the natural environment. Local changes have equally inflated and subverted local political structures and hierarchies, local knowledge systems and environmental governance. Illustrated in Chapter 7, the transformation of the natural environment and local socio-natures through the process of mining operations have changed the way Brou and Phou Thay interact with and interpret natural resources:

Traditional land ownership and resource uses are threatened by new forms of land-tenure and other legislation, like Cultural Heritage and Land Laws that stop or prevent people from utilising the forests. This is changing the way (land is used) and most importantly changing who uses land⁶⁵

The ‘mining landscape’ has competed with and at times supersede traditional knowledge systems and practices, transforming local socio-natures through the process of mining operations. Increasing pressure on natural resources is identified to risk sustainability of caves and their associated livelihoods, traditional knowledge systems and local definitions and concepts of heritage. As a result, local practices and values are being undermined and will potentially be lost as a result. In many ways the development of the Sepon Mine has created a new ‘spatial

⁶⁵ Interview with MMG-LXML employee (CR Department), December 2011

topography' in Vilabouly District (see Figure 7, p.174). The mining process has produced a new 'meaningful landscape' for mining, supplanted over a series of traditional cultural landscapes.

The application of transnational mining and heritage is consistent with research findings from other 'frontier' contexts nationally and internationally. Overwhelmingly, mining in Vilabouly District is found to produce similar consequence on natural resources and local livelihoods as in other location in the Lao PDR. Studies conducted by Shoemaker, Baird and Baird (2001), Ovesen (2002), High (2010), Barney (2007), Dwyer (2007), and Singh (2009) indicated that nationwide economic development projects including mining, illegal land concessions, logging, and hydropower projects are impacting or were identified to potentially impact local livelihoods and biodiversity nationwide. Baird (2011) provides an example of how State-sponsored land concessions are impacting local communities and indigenous groups living in concession zones:

... (land) concessions have resulted in significant alterations of landscapes and ecological processes, greatly reduced local access to resources through enclosing common areas, and have ultimately led to massive changes in the livelihoods of large numbers of mainly indigenous peoples living near these concessions (p.10).

Many large-scale resource and agricultural projects are often implemented in rural communities under the guise of social and economic development. Large-scale resource projects, including hydroelectric dams and land consigned for plantation crops, are however found to result in a series of State-sponsored resettlement program, where thousands of people nationwide have been relocated. In the Lao PDR, discussion has been fierce among researchers who argue that resettled

communities do not always benefit from resource projects (see for example: Baird, 2009; Evrard & Goudineau, 2004; High, Baird, Barney, Vandergeest & Shoemaker, 2010).

Resource developments and extractive industries are also criticised broadly within Southeast Asia and internationally for ‘reimagining’ the natural environment and alienating the association between people and the natural landscape in the process. This has created the conditions for superseding traditional knowledge systems, customary law and land rights, spiritual environmental values, and general day-to-day livelihoods. Tsing (2003) argues in Kalimantan resource companies acted as agents of change lies in their ability to “wrest[s] landscape elements from previous livelihoods and ecologies and turn[s] them into wild resources, available for the industries of the world” (p.2100). In Australia, Baird and Lyndon (2015) highlighted the role of heritage management practices in this process, arguing that “heritage increasingly intersects with and is shaped by industry, particularly [heritage management] within Aboriginal country” (par. 3).⁶⁶ These outcome resonate with Godoy’s (1985) formative argument that in mining sites new “cultural, political, and legal forms emerge, cross-cutting tribal and ethnic group boundaries” (p.207) and which eventually play a part in “shoring up a rapidly decomposing indigenous subsistence structure” (Godoy 1985, p.207).

In the Lao PDR, Barney (2009) argues problems remain underscored by a lack of pragmatic awareness to the “inter-connectedness and historical complexity of local social-natures and local livelihoods” (p.156). Barney (2009) has considered how a “failure to appreciate the cumulative nature of contemporary changes occurring” (p.156) in the Lao PDR today result from a lack of contingent planning and implementation of environmental governance strategies. As Godoy

⁶⁶ See also Baird (2015a)

(1985) identified in the late 20th century, mining often creates environmental and socio-cultural impacts because these developments are 'given preference' in national development policies. The solution does not seem to be reached through better enforcement or management and protection of cultural and natural heritage in national and state-based frameworks, but through greater control of resource industries and reducing their ability to degrade environments and destroy material and living cultural heritage.

Findings also identify that international organisations and financial institutions supersede national and international legislation and methods for heritage protection. It can be determined that state-based and corporate interests continue to drive the modern 'frontier' and resource development in the Lao PDR, including at the Sepon Mine. As a result, globalisation, processes of modern capitalism, and neo-liberal discourses continue the commodification of nature and its separation from culture through land reform and acquisition. Willems (2014) considers this 'trend' towards industry-based internationalised discourse for heritage management, stating:

In the globalizing world of today...the international private sector is becoming increasingly important and is supplementing such state-based national frameworks (that ultimately all go back to the European heritage regime) with what can be called global and transnational heritage regimes. One outcome of this is the increasing power/place resource companies have promoting and protecting heritage during mining operations (p.112).

Unchecked, this context can potentially remain ongoing, reproducing the conditions for superseding of local and traditional knowledge systems, customary law and land rights, spiritual environmental values, general day-to-day livelihoods, and application of the 'divide' in heritage.

Of interest, and in the interest of concluding this section, upland Southeast Asia has long been considered a “contested frontier zone, permanently threatened by lowland state encroachment” (Scott, in Tappe, 2015, p.318). Resource ‘frontiers’ are considered to have a historical basis to them, particularly the use of ‘natural landscapes’ for production and as ‘cultural’ during the colonial period. For example, Gilberthorpe and Hilson (2014) have argued that modern resource extraction in Southeast Asia “harbours remnants of colonial and post-colonial phases of resource extraction” (p.2). Many economies in the Asia-Pacific region today remain export-orientated and resource-dependent as a result of underdevelopment during the colonial period (Bryant & Parnwell, 1996, pp.4-5). Natural resource dependency in the Lao PDR, as it is in many developing nations, is viewed as one of the “most crucial components” in national economic and social development policy, supporting the Lao PDRs regional integration into the 21st century (Barney 2009, p.150). Since the late 1990s land tenure policies and expansion of state territorialisation in Lao uplands has been gradually extending and increasing its reach (Barney, 2009).

The point here is that modern resource extraction and land concessions in the Lao PDR (and parts of Southeast Asia) remain in largely upland areas inhabited by ethnic or minority groups. This factor can be seen as a process of where new modes of interaction with transitional and state-based actors are imposed, and are responsible for the development of new state-based and local strategies for livelihoods in response to a diminishing local natural resource base. Taking this into consideration, arguably the current context at the Sepon Mine represents a new phase in an ongoing process of change and interaction between human society and natural landscapes and places in the Lao ‘frontier’ uplands, as a result of new social, economic, or political interactions and influences. Change for places is recognised in the new and competing use, value, and meaning for these places

in response to mining, natural resource extraction, and local economic development. The outcome points towards new ways of seeing and being in the landscape, potentially resulting in an increasingly depersonalised nature and movement towards more Lao (and Western) concepts of livelihoods and economy. However, there is room to consider this current context is following a regional historical pattern in what is considered the ‘frontier’ uplands of the Lao PDR and Indochinese Region. Here, there is the potential that historical circumstances, uses of nature, and upland areas provide the space for ‘friction’ and ‘resistance’ against domination by corporate and state actors.

The longer-term question is, does the context of mining at Sepon truly “wrest landscape elements from previous livelihoods and ecologies and turn[s] them into wild resources, available for the industries of the world” as Tsing (2003, p.2100) has argued of resource developments, or is this a site for resistance to “‘global’ land-based economic projects” where “politicized memories affect contemporary land and other resource allocation and use” (Baird & Le Bullion, 2013, p.291). More broadly, does the view of nature, notably the uplands as a ‘frontier’, support modern ‘civilizing’ processes in Southeast Asia and the Lao PDR, and what will the role of heritage and mining play in this process more broadly? The lack of information known about the impacts of mining, the application of heritage in the mining context, and the outcomes of their application on local socio-natures in the Lao PDR makes this question difficult to answer here. What is clear is that the Sepon Mine and Vilabouly District provide an excellent opportunity to examine in more detail contemporary state and commercial incursion into a part of Southeast Asia identified to have an historical sequence of interactions and resistances between lowland states and upland societies. How caves, the concept of heritage, and mining fit into this process is a new dimension to a complex history in an ever more complex and rapidly changing region within Southeast Asia.

Conclusions

Research on management of cave and karst as heritage at the Sepon Mine brings to the foreground the challenges inherent in applying international ‘best practice’ approaches in protection and management of cave and karst. Caves are ‘living’ heritage places, with ‘plural’ uses, and ‘sacred’ qualities, and their uses and values must be understood within broader temporal and spatial settings. Managing caves for their multiple and cross-cutting heritage uses and values is found to create several challenges for management and their protection from mining-based impacts. The regulatory environment for mining and the structural application of heritage categories in organisational ‘silos’ promotes the dichotomisation and categorisation of heritage at the Sepon Mine. This largely uncritically application of international ‘best practice’ authenticates this practice of heritage internationally, limiting the ability to innovate and move beyond the ‘divide’ in practice. Contemporary heritage management practices in the Lao PDR are made up of historical influences, international obligations, and political aims. The application of heritage management practices at the Sepon Mine influence the ‘type’ of heritage valued and how heritage is used. It can be said that the application of heritage management practices at the Sepon Mine are inconsistent, but remain persistent in marginalising local interpretations of heritage and constructions of history. The Sepon Mine is a ‘resource frontier’ and is part of an ongoing process of change and interaction between upland and lowland actors in the Lao highlands. In this context, mining and heritage together have limited the ability to ‘bridge the divide in practice’ and instead have introduced new concepts of heritage that override or supersede traditional knowledge, beliefs, and practices associated with nature.

9. Conclusion

“...heritage is primarily not about the past, but instead about our relationship with the present and future”

(Harrison, 2013, p.4).

This chapter will provide the conclusions to this thesis by answering the research questions and summarising the main themes that emerged in the research and writing of this thesis. The chapter will begin by answering the research questions and consider implications of this research for understanding the application of international heritage management ‘best practice’ within an extractive industry in the Lao PDR. The chapter will then move to recommend new methods and future research directions arising from the research to support efforts to ‘bridge the divide’ in heritage management at the nationally and local level. This section will focus on promoting the application of regional charters and protocols in commercial heritage management practice, and enhancing the role of ‘belief’ and ‘heritage knowledge’ as potential mechanisms to support localised, effective, and sustainable heritage management. The chapter will finish by considering the role of heritage practitioners in the Lao PDR, and contextualising them within the national challenges for heritage management in a rapidly developing society dependant on natural resource extraction to meet socio-economic development needs.

Research Questions

What factors (historical, cultural, political, and/or economic) have supported the construction and ongoing application of a 'divide in heritage' in international 'best practice' approaches to heritage management and conservation?

The dichotomy or 'divide' inherent in contemporary international discourses of heritage and models of CHM have developed over several phases through European history. Each phase is identified to play a unique and critical role in creation, development and legitimation of the 'divide'. The Renaissance is most strongly connected with the development of dualistic thinking between culture and nature, namely through the work of Descartes. Scientific rationalism in the Enlightenment Period set the conditions for a focus on materialism and rationality, emphasising 'preservation' and a 'philosophy of care' for the past. The Colonial era was responsible for spreading the 'divide' globally in most regions colonial nations of Europe went. The post-WWII period is perhaps the most significant period in legitimating the 'divide' and further embedding concepts of tangible and intangible heritage as separate domains, in a discourse and in practical methods and organisational structures promoted by UNESCO which promoted an 'Authorised Heritage Discourse' that supported ongoing application of a nature-culture dichotomy and focus on tangible heritage management.

The latter half of the 20th century into the 21st century was marked by attempts to 'bridge the divide' between culture-nature and tangible-intangible heritage internationally. This process was exemplified by aims to 'restore balance' between Western and non-western concepts and practices of heritage in the World Heritage listing and heritage protocols and charters. This led to a process of broader level of refinement of heritage definitions and practices internationally from the 1980s, including promulgation by UNESCO of *cultural landscape* and *intangible heritage*

categories and conventions, and the IUCN and ICCROM developing new programs like the *sacred natural sites program*. These and other initiatives were broadly based on concepts of sustainability, and later biodiversity conservation, socio-economic community development, and poverty reduction. The emphasis on the ‘living’ traditions of local communities and Indigenous peoples, and the relationship between social practices, cultural beliefs and the natural environment, was a central foundation to these new heritage programs and practices.

International heritage programs continued to draw heavily on concepts of sustainability, integrated biodiversity conservation, and socio-economic development to promote improvement in the concept of conservation and methods for conservation management. This included the move towards co-management of National Parks, Biodiversity Conservation Areas and World Heritage Listed places that have overlapping or intermixed heritage values. However, in practice co-management of ‘mixed’ heritage sites were challenged by historical orientation toward conservation biology and scientism as the underlying rationality for natural heritage management. Equally, a focus on tangible heritage protection and ‘preservation’ of material culture underscored management of monuments, buildings and material culture. Management of these places remained challenged by linking effectively indigenous and scientific view of nature. Linking biodiversity conservation and sustainability with natural heritage and cultural heritage management to promote economic development and poverty reduction initiatives remained problematic. Protecting and promoting heritage to provide economic and social development for local communities that were not skilled or resourced to manage heritage resulted in many initiatives not leading to a positive change in the livelihoods of local people and communities living with heritage.

From the late 20th century heritage management became increasingly engaged within civil and mining development processes. CRM and AHM practices that were developed to meet the need of governments to manage and mitigate impacts to cultural heritage within civil and mining and resource-based development expanded rapidly. Protective measures like ESIA and CSR were developed to support the rights of indigenous communities and to provide safeguards for heritage within mining operations. Where mining did support identification of heritage and management practices, it was to limit impacts from mining operations by applying the ESIA process. Mining and resource industries are shown to play an increasingly central role in driving social and environmental policy and practice, and the construction and application of many social and environmental protective measures are argued to be closely aligned with the economic interests of mining and resource companies. There remains a strong indication that “CSR initiatives are intrinsically linked with the core business operations and strategies...and contribute to the firm’s effectiveness in accomplishing its economic interest” (AIM, 2011, p.5).

Mining and heritage together are therefore identified to engender a new paradigm for local communities that become engaged in the mining process. At Sepon Mine, and other mining sites internationally, the mining process has been identified to in several ways re-interpret the social, cultural, and political landscape, generating new outcomes for local communities and their heritage. From the perspective of heritage, the uses, values, and meanings that are used to perform and interpret heritage are determined first at the International level. Heritage ideas and practices derived from the international level as ‘best practice’ are then diffused through the national instructions and practitioners within the process of mining. This has results in implications at the local level, where aspects of regional and national history, politics and identity are acknowledged to be infused with how heritage is defined and practiced, and international heritage definitions and

practices are seen to challenge long-held significance of objects, places, and landscapes to local communities. In doing so, mining and extractive industries promote, validate, and reinforce the historical dualism between nature-culture and categorisation of the tangible-intangible, and through the regulatory environment, deter efforts to move beyond dichotomous and categorical application of heritage in the management of ‘plural’ and ‘living’ heritage in the mining context.

To what extent have international ‘best practice’ heritage management approaches interacted with national heritage definitions, policies and practices in the Lao PDR, and has this interaction influenced the management of heritage nationally and within a commercial mining context?

Cultural heritage management (CHM) policy, legislation, and practices in the Lao PDR are found to be influenced by a range of sources, mostly through engagements with European heritage concepts and archaeological practice and regional cultural and political ideology. During the colonial period from late 19th century the theory and practice of scientific archaeology was introduced to Indochina from the French colonial government. After 1975 the Lao PDR became engaged with international heritage agencies including UNESCO, ICOMOS, and the IUCN, and international academic institutions. CHM as a distinct practice has more recently become established within the Lao PDR since the late 20th century. From all accounts it emerged as a distinct practice from the New Economic Mechanism (NEM) and national integration with ASEAN in the late 20th century. As with other nations in Southeast Asia, CHM is facilitated by government departments largely constructed off international ‘best practice’ and organisation structure. The *Lao Law on National Heritage 2005* is largely built of the ICOMOS Burra Charter, and cultural heritage is managed mostly through internationally-founded archaeological methods

and practices. The uptake of international ‘best practice’ approaches in the Lao PDR has led to promotion of a ‘divided’ heritage, with the nature-culture dichotomy and categorical use of heritage identified in national heritage legislation, policy, and practice.

Archaeology and CHM practices in the Lao PDR are also identified to promote a national and multi-ethnic ‘Lao’ identity, endorse association between modern Lao society and the historical Buddhist Kingdom of Lang Xang, and legitimate the Indochina Wars and 1975 revolution in context with the current political regime. Authorising history, national identity, and political authority through ‘heritage’ is supported by museums, promotion of ‘key’ national heritage sites, historical figures, cultural performances, and authorised ‘texts’. At Sepon, the mining process is identified to support national heritage aims. Heritage management processes were largely controlled by Lao speaking people, findings from archaeological research were applied to support a Lao heritage discourse centred on the Tai people, Buddhist cultural heritage, and to some extent, the Vietnam War and Revolutionary Period heritage. It was identified that there is a risk this situation can undermine or devalue the heritage of non-Lao speakers, and potential to legitimise Lao political control of CHM, in the process reinforcing longstanding patterns of Lao social practice regarding ethnic minorities. This context highlights the ongoing complexity of uses of heritage in the Lao PDR, the place of ‘multi-ethnicity in the national discourse, and the relationship between CHM, economic development, and support for post-colonial discourses of the ‘multi-ethnic’ Lao identity and State authority.

Simultaneously balancing the promotion of national identity and the aims of national socio-economic development highlight the complexities found in applying CHM practice in Lao PDR today. Given its more recent development, the process for applying CHM, the ability of CHM to effectively manage heritage, and the outcome of CHM in economic development contexts remain

complex and equally poorly documented or discussed. Findings from this research at the Sepon Mine highlights the role archaeology and CHM play within the process of socio-economic development practices and nation-building strategies in the Lao PDR. It has identified how archaeology and CHM are practiced in a commercial context, why CHM is performed the way it is, and the complex interplay between national heritage aims and discourses and international ‘best practice’ approaches. Arguably the local setting at the Sepon Mine is strongly at the influence of the global through introduction and application of international definitions, frameworks, and practices for heritage management. Within mining, the reach of the global in the Lao PDR is pronounced, affecting not only practice and performance of heritage management, but also influencing the meaning and value of places and objects as ‘heritage’. Heritage is defined and managed following international definitions and practices for archaeological heritage management centred on the ‘divide’ in heritage. Regulatory and operational standards of mining that include the application of national legislation and international heritage management policies and practices in organisational structure support the process. Overall, this process is considered to have reinforced the ‘divide’ in heritage and aspects of the Lao heritage discourse and national uses of heritage. This process has not led to a balanced use and interpretation of heritage, but one that remains contested between local, state, and international actors.

What opportunities and challenges are identified to ‘bridge the divide’ in heritage by examining the use and value of caves as heritage locations at the Sepon Mine, and are these findings transferrable as heritage management practice internationally?

Caves are identified as ‘living’ places which are connected to broader ecological and cultural landscapes. Caves and their associated karst and environmental surroundings are found to have undergone processes of continuity and change in how they are used and made valuable since the prehistoric era. At the Sepon Mine, continuity and change in long-term use and value, and present use, are represented by a range of tangible, intangible, historical, and natural heritage significance. Caves and their associated karst and environmental surroundings support ecological diversity and provide essential ecosystem services. Caves are significant places for local communities (Brou and Phou Thay) and non-local Lao and expatriate persons, who find caves significant based on a range of past, present, and future uses and values. For local communities, caves are a form of cultural heritage; as natural environments, as sites of social memory, as the location for cultural beliefs and ritual practices, and as places that support a range of economic activities. Cultural values in caves are identified through desire by local communities to protect and preserve caves and their associated karst and environmental surroundings from damage or destruction, represented through informal community-based beliefs and management practices.

Managing natural places that have ‘living’, ‘plural’, and ‘sacred’ cultural heritage qualities is found to present several challenges for commercial entities, international heritage agencies, and national governments because they continue to apply international ‘best practice’ which reinforces ‘the divide’ in the structure and application of heritage management processes. Commercial management of caves as part of the mining process at the Sepon Mine do identify the range of past, present and future uses and values in caves to local Phou Thay and Brou groups. However, caves are not consistently managed for their interconnecting uses and values, but largely for discrete cultural heritage, archaeological, and natural heritage significance. Again, this process is determined largely by the regulatory environment and organisational structure of the mining

operation, which operationalises international ‘best practice’ heritage management practices which remain ‘divided’. Operational and structural-institutional processes are not found to translate uses and values identified into management practices effectively based on ‘heritage silos’ where natural heritage and cultural heritage are managed by different units or departments, creating an institutional ‘divide’ in the management of heritage as predominately *natural* and *cultural*. This has led to caves being managed as either cultural or natural heritage as archaeological and historical sites exclusively. Commercial contexts like the Sepon Mine are identified to promote and in many ways reinforce a distinct ‘type’ of heritage that emphasises a nature-culture dichotomy and tangible-intangible categorisation to meet international regulatory standards in mining operations.

The use of largely archaeological and ‘Western’ heritage management practices facilitate for a ‘mining-sponsored’ form of heritage. This is found to increase the risk of impact to the multiple and interconnecting uses and values, and the role caves within the broader ecological landscapes and the cultural lifeworld of local community groups. Caves remain identified and managed in dichotomous or categorical terms, neglecting the overlapping and interdependent relationship between *tangible*, *intangible*, *historical* and *natural* heritage values, and reducing the scope and definition of heritage locally. This is found to limit what heritage is protected and promoted, and ultimately risking community or indigenous group’s engagement with the heritage management process. Overwhelmingly, the threat to conservation and sustainable management of cave and karst areas from economic development activity focused on natural resource extraction highlighting the need for stronger protection of caves and karst. This is recognised as an international issue, not only in the Lao PDR. Recognition of the broader ‘living’, ‘plural’, and ‘sacred’ heritage values found in caves and natural heritage sites with overlapping uses and values

is required to support better heritage protection internationally. This would require a movement away from reliance solely on traditional international ‘best practice’ heritage frameworks towards application of regional, national, and local interpretations of heritage value and significance in management practices. Here there is potential to address the ‘living’ context of caves, and promote the role caves can play in support of future environmental and socio-cultural change.

‘Bridging the Divide’: The Way Forward

Localising Heritage Management Practices, Incorporating Regional Heritage Management Frameworks, and a focus on ‘Traditional Heritage Knowledge’ (THK)

In conclusion, there remain several challenges to ‘bridge the divide’ that are identified within the process of management, at the level of World Heritage, and through to the national and ultimately the local level. The authority of international heritage agencies and resource companies has allowed them to apply ‘best practice’ within national and particularly local heritage management practices. This relationship has arguably reduce the scope and definition of heritage within mining contexts, limiting what heritage is protected and promoted, and ultimately may reduce community or indigenous groups engagement with heritage management processes. It is critical that recognition of the cross-cutting heritage uses and values, and plural significance of natural places like caves is applied to management of locally culturally significant places. Managing or protecting caves for one ‘value’ or significance alone will not only risk damage or destruction to other identified ‘value’ or significance, but it also does not take into consideration the broader cultural and natural landscapes that caves may be are connected to.

Central to the practice of heritage management within operation there is an identified need to move away from overarching reliance on international ‘best practice’ approaches. Primarily this is because international ‘best practice’ continue to promote a dichotomous and categorical type of heritage that is found to be ineffective and unsustainable, and reduces the scope and definition of heritage. While applying international (and national) heritage management frameworks may be effective in identifying heritage values, management practices are not shown to be effective at supporting the broader interaction between ecological, historical, political, economic, and spiritual values in managed practices. Critically, this includes the inability of current heritage frameworks to protect the way these interact in the cosmologies of local communities, and in their day-to-day livelihoods and well-being.

Again, it is clear from this research that local interpretations of heritage are ‘plural’, are engaged as a ‘living’ process with local socio-natures, and that natural places are imbued with spiritual or ‘sacred’ meaning and purpose. There is also strong evidence to suggest that local management practices have worked to support the longevity of natural places like caves and their associated ecosystems. The age of the natural features surrounding local caves suggests intentional preservation or conservation of these sites, and their role in local religious beliefs and practices, that have likely to be ongoing for centuries. While it is clear different cultures or groups have occupied and used caves historically, intentional care of these places remains a factor in their longevity and intentional preservation. Taking into consideration local land-tenure and village landscapes, there is potential that local management practices and cultural concepts of significance can be integrated more realistically as part of management practice within mining operations in the Lao PDR and internationally.

Understanding that local knowledge and practices are intimately associated with natural resources, landscapes, and places, there is a need to consider the human use and knowledge of plants, animals, and natural resources as a heritage of local community groups and equally of humanity. In Vilabouly District, mining has introduced new and advanced practices in archaeological research and techniques, supported establishment of a cultural heritage management program, and was influential in educating and training local, provincial, and national persons with specific skills and education about the value of heritage and the need to preserve and maintain it. The CHM Program also placed emphasis on practicing collaborative and community-based archaeology and performing cultural heritage management inclusive of local communities. At least at the level of heritage identification, these practices have been supportive of efforts to ‘bridge the divide’ in heritage. There is identified value too for mining in supporting archaeology and local heritage management. Arguably, the value of heritage for the mining company lies in the opportunity to promote heritage as part of its CSR and ‘Social License to Operate’. There is identified value for the mining company too, generated from promoting archaeology and the finds from archaeological research locally, nationally, and internationally. The promotion of local histories have undoubtedly supported ongoing mining processes at Sepon, but have equally given strength to the argument that heritage matters, and that it should be protected and promoted. Overwhelmingly though, the role of archaeology and heritage remain caught up in ‘protecting heritage from destruction or change’, a process identified as formative to the development of the field of archaeology and heritage management since the 19th century.

Mining in the Vilabouly District has both enabled the process of heritage evaluation and discovery of new and unknown histories, while at the same time, it contravenes or destroys heritage knowledge, sites and locations known, and also those yet to be discovered. As a positive force,

mining has been shown to contribute constructively to development of an effective cultural heritage program, and provide the education and practice of archaeology and cultural heritage management ‘on the ground’. However, to enhance identification and particularly management of heritage, and arguably to reduce the impact on the natural resource base and their associated beliefs and practices, there is a need to consider human knowledge and intangible heritage as real, valid, and in need of protecting and promoting. However, there remains a problem with the validity of ‘belief’, and that is because ‘belief’ cannot be measured it is not considered rational, valid, or real. Compounding this, superstition, or belief in spirits in particular, also remains considered ‘backwards’ in the national discourse of the Lao PDR. Applying a rationality based on the ‘objective’ rules of science-based measurement for validity and competing discourses of ‘backward’ or ‘progressive’ are pervasive in heritage thinking, which more-often-than-not remains focused on the material or tangible and preservation of tangible heritage without connection to intangible belief and myth. While local intangible heritage has been the subject of study and safeguarding at the Sepon Mine and the broader Vilabouly District, the connection between the natural and cultural through intangible beliefs, practices, and language is at risk because the destruction of the natural environment and potential relocation of villagers from within the mining tenement area will ultimately diminish or eradicate this knowledge.

The spate of spirit possessions in Vilabouly District, as documented in the preface, illustrate the need to recognise how cultural belief in spirits is intimately associated to the natural landscape, albeit through a different logic and for different reasons. The introduction of new practices and beliefs through mining has taken effect in people’s personal lives, the response became visible in their social practices, and through use of old and new articulations of engagement, notably ritual and spirit possession. The emerging use of rituals and ceremonies for

the Brou have been considered as a new source of ‘ownership participation’ linked to an “ancient heritage with contemporary local user rights and a desire for inclusion in the story of mining development” (Mayes & Chang, 2014, p.240). Ritual and spirit possession was seen to ‘authorise’ material culture discovered by mining or archaeological excavation. However, these processes can also be seen as reasoned and rationalised responses to change through applying process of traditional practices and beliefs. Possession could also be seen as the outcome of political relaxation of the practice of ritual and beliefs within the Lao PDR, or alternatively, it could also be seen as a way of coping with change, or equally both. Either way, the retreat into traditions - in this case increased spirit propitiation and spirit possession - has been documented in other parts of Southeast Asia since the 1960’s by Spiro (1967) and Tanabe and Keyes (2002) as a response to social, political, or economic change. This context represents an underexplored local outcome or response to impacts from mining, the cultural responses to mining by local people to cope with change, and the important role of traditional belief in the maintenance of traditional livelihoods.

Incorporating regional heritage management frameworks could support further refinement and promotion of culturally-relevant heritage concepts and practices like spirit possession. These practices are in local logic measurable and definable, based on long-term association to places, and based on relational causes, whether they be spirit malevolence, or belief in the power imbued in natural objects. More rigour needs to be applied to incorporate the elements of regional heritage frameworks like the *Hoi An Principles* and *Nara Document on Authenticity* into management practices of national legislation and policy and commercial-based heritage management contexts. The Hoi An Principles for example share foundational elements with the ICOMOS Burra Charter, a charter which has also been show as foundational to the Sepon CHMP, and many national legal and heritage management practices within Southeast Asia, including the Lao PDR. The elements

that comprise the Nara Document and Hoi An Protocols can be expanded on to provide stronger recognition for local belief and practices that are not contained in European charters; to provide cultural-relevance to heritage management and conservation practices in the Asian region as these documents were intended to. This could provide stronger support for promotion of intangible heritage and incorporation of cultural beliefs and practices with built structures and natural places and features, a context which is found difficult to apply in current heritage management practices at the Sepon Mine. Within the Asian region significance and authenticity are localised, regionalised, and therefore different from Europe. Localising heritage practices to include ontological recognition of the interdependence of cultural-natural and tangible-intangible heritage and the recognition of local and community groups in heritage management and conservation practices could support efforts to ‘bridge the divide’.

There is also validity here in considering Traditional Ecological Knowledge (TEK) as a model for capturing integrated cultural uses and values in natural places and objects, and for applying them in commercial contexts. Concept like TEK could be considered as a model for development of a Traditional Heritage Knowledge (THK) also based on an indigenous knowledge system. Validation of a THK (or Practice) could support the realistic embedding of indigenous or ethnic community knowledge, practices, and participation as part of interpretations and explanations of heritage, potentially in a similar way that TEK and Science have integrated successfully within Natural Resource Management.⁶⁷ There is a need to investigate if a THK could be developed and applied in heritage management practices in commercial contexts to promote

⁶⁷ See Bohensky, Butler & Davies (2013); Huntington (2000); Usher (2000); and Hill et. Al. (2012)

and provide validity to religious or spiritual natural knowledge and the relationship of this knowledge to promote sustainability of local traditional knowledge, practices, places, and objects.

If using caves in Vilabouly District as an example to consider THK, as natural locations they serve as important places locally, and more broadly, in the evolution of human consciousness, religion, and society, and potentially acted as important *refugia* in the past. Natural heritage places like caves have been identified as important ‘sacred’ locations that have potential to support future environmental and socio-cultural change, and local communities apply customary practices to manage caves based on local values and uses. While communities are consulted as part of mining operations, this is usually about future impacts, and further, they do not take into consideration indirect impact from logging and illegal land use. Applying THK of natural systems and resources considered meaningful and central to local livelihoods could reduce risk of impacts through the mining process and other land-use changes in the Lao PDR and the Greater Mekong Subregion.

Overwhelmingly, to affect meaningful management of heritage a focus on local and community governance as part of multi-lateral management planning is required. This can support stronger heritage management practices and enforcement of local concerns and aspirations for places and resources considered significant. Multi-lateral engagement between socio-cultural, natural, and archaeological structures that are already embedded in mining operation could be established realistically as part of operational management practices. This must also include promotion of a stronger regulatory environment, including enforcement of heritage legislation, heritage management goals, and penalties for breaking the law. Multi-lateral management can also focus on building capacity for community-based management to support local socio-economic development and sustainable land use and management. Given the strength of the regulatory environment in the Sepon Mine, realistically inclusive multi-lateral management with local

communities and organisational departments managing heritage could provide a benchmark for other mining and extractive industries within the Lao PDR, an industry where there is identified lack of regulation for environmental and cultural heritage management. If successful, program evaluations could provide solutions to heritage management issues in commercial contexts located within other regional nations.

The Next Generation for Heritage in the Lao PDR

Ultimately, how heritage is managed will rest with the current and future generation of archaeologists and heritage practitioners within the Lao PDR and the Southeast Asian region. It is important to recognise the need to decolonize heritage management practices within Southeast Asia, and that the new generation of archaeologists and heritage practitioners are living in a society radically different to the one of the previous generation. This generation is far more exposed and connected to the world around them and have international and national tertiary education and practical training. In the Lao PDR there are now more trained national archaeologists and heritage practitioners as a result of the Degree in Archaeology and Cultural Resource Management from the National University of Laos. While heritage management remains supported through collaborations with international organisations like UNESCO, ICOMOS, and the IUCN, and international universities and research institutes, the internationalised approach is increasingly being met regionally with establishment of heritage management and education bodies, like SEAMEO SPAFA, and national government and academic institutions. Emerging national archaeologists are gaining invaluable field-work experience in commercial contexts like the Sepon Mine, and also learning about research processes and projects from senior national and

international practitioners. Increasingly, the role of national laws for heritage management are also being strengthened and applied. These factors combine to situate the current and particularly future generation of archaeologists and heritage practitioners in a strong position to promote sustainable and effective heritage management programs nationally, and within the greater Southeast Asian region.

That said, the Lao PDR remains a socialist one-party state, and as has been shown in this thesis, heritage in the Lao PDR remains connected to concepts of identity and political processes. While heritage process the world over can be considered political and centred on identity, the Lao PDR remains reminiscent of many post-colonial nations who are in the process of “reinterpreting their pasts and articulating their identities” (Bohland & Hague, 2009, p.109) in response to emerging desires for political control and broader social, cultural and economic influences in the modern era (see also Anderson, 1999). The responsibility for managing the country’s heritage remains broadly spread across government departments at the national, regional, district, and village levels. Government departments remain critically underfunded, and as a result, are purportedly unable to manage the demands that effective nationwide heritage protection requires. Lack of capacity and lack of awareness or oversight of issues has arguably compromised the integrity of heritage places, and is viewed to have reduced the potential for heritage management to provide a positive social and economic contribution to development, particularly in rural and impoverished regions (Kiernan, 2009, p.79).

Where the Sepon Mine has created the impetus for improvement in how heritage management can be effectively practiced nationally, the international context for managing national and local heritage, including training and research collaboration, mining can only maintain structural and financial support for heritage management indefinitely. In the end, national

heritage is the responsibility of the various levels of Lao government. For the current and future generation of archaeologists and heritage practitioners within the Lao PDR the future management of heritage may pose a challenging task. Future socio-economic development in the Lao PDR remains predicated on the exploitation of the countries natural resource base, principally through mining development, hydropower, and tourism (World Bank, 2010). Extractive industries like mining must be recognised as temporal industries, and as a result, poses several unanswered questions that may impact people and their traditional associations to significant places after industries like mining cease. How will heritage be managed when mining leaves? Who will manage heritage when mining leaves? Will the broader local community have a role in management of local heritage after mining? Will national institutional support for heritage management remain after mining ends?

It remains to be seen how deeply embedded internationalised 'heritage norms' (Coombe & Baird, 2015) are in the local population, how these norms have been incorporated into local people's lives and agendas, and the impact these may have on management practice into the future. This will have an outcome on heritage governance locally, and whether heritage can be managed as a resource for sustainable socio-cultural, and environmental and economic development to support limiting impacts on local populations and their heritage resources after mining ceases. Challenges will be increased where internationalised regulatory processes are applied uncritically, and insufficient national governance of heritage or the environment take place. Outcomes could potentially place greater risk on natural resources, local heritage knowledge, practice, and beliefs. To meet the challenges of a rapidly developing society structured economically on natural resource exploitation, there is an identified need to carefully navigate national politics and bureaucracy. This can promote development and implementation of effective, innovative, and sustainable of

heritage management practices that would be suitable to the context within which heritage is being managed. It is after all in the national interest that local communities as custodians of heritage and who hold the knowledge of living and sacred natural places and the practices which make them culturally significant remain empowered to identify, manage, and protect their heritage into the future.

References

- Asian Development Bank. (2011). *Nam Ngum 3 hydropower project: Final environmental impact assessment*. Bangkok: Asian Development Bank.
- Ahmad, Y. (2006). The scope and definitions of heritage: from tangible to intangible, *International Journal of Heritage Studies*, 13(3), 292-300.
- AIM. (2011). Corporate social responsibility in Southeast Asia: an eight country analysis. *Asian Institute of Management (AIM)*. Philippines. <http://www.rvr.aim.edu>
- Alivizatou, M. (2012). *Intangible heritage and the museum: New perspectives on preservation*. California: Left Coast Press Inc.
- Anderson, B. (1983). *Imagined communities: Reflections on the origins and spread of nationalism*. London & New York: Verso.
- Aplin, G. (2007). World heritage cultural landscapes. *International Journal of Heritage Studies*, 13(6), 427-446. DOI: 10.1080/13527250701570515
- Arhem, Kaj. (1996). The cosmic food web: human-nature relatedness in the Northwest Amazon. In P. Descola & G. Palsson (Eds.), *Nature and society: Anthropological perspectives* (pp. 185-204). London & New York: Routledge
- AsiaOne (2014, January 12). Ancient Laos cave gives visitors raw look at wartime history. *AsiaOne Online*. Retrieved from <http://news.asiaone.com/news/asia/ancient-laos-cave-gives-visitors-raw-look-wartime-history?page=0%2C0>
- Askew, M., Logan, W, S., & Long, C. (2007). *Vientiane: Transformations of a Lao Landscape*. London: Routledge
- Bacon, A-M., Demeter, F., Durringer, P., Helm, C., Bano, M., The Long, V., ... Rihs, S. (2011). The late pleistocene Duoi U’Oi cave in northern Vietnam: palaeontology, sedimentology, taphonomy and palaeoenvironments. *Quaternary Science Reviews*, 27, 1627-1654.

- Bainton, N, A. (2010). *The Lihir destiny: Cultural responses to mining in Melanesia*. Canberra, Australia: ANU E-Press. Retrieved from <https://press.anu.edu.au/publications/series/asia-pacific-environment-monographs/lihir-destiny>
- Bainton, N, A; Ballard, C; and Gillespie, K. (2012). The end of the beginning? Mining, sacred geographies, memory and performance in Lihir. *The Australian Journal of Anthropology*, 23, 22-49.
- Baird, I, G. (2006). Strength in Diversity: fish sanctuaries and deep water pools in the Lao PDR, *Fisheries Management and Ecology*, 13, 1-8.
- Baird, I, A. (2008). *Various forms of colonialism: the social and spatial reorganisation of the Brao in southern Laos and northeastern Cambodia*. Unpublished PhD thesis. The University of British Columbia, Canada.
- Baird, I, G. (2011). Turning land into capital, turning people into labour: Primitive accumulation and the arrival of large-scale economic land concessions in the Lao People's Democratic Republic. *Journal of Marxism and Interdisciplinary Inquiry*, 5(1), 10-26.
- Baird, M, F. (2009). *The politics of place: Heritage, identity, and the epistemologies of cultural landscapes*. Unpublished PhD Thesis. University of Oregon, California.
- Baird, M, F. (2015). Heritage ecologies and the rhetoric of nature. In K. Lafrenz & T. Rico (Eds.), *Heritage Keywords: Rhetoric and Redescription in Cultural Heritage* (pp. 207-219). Boulder, Colorado: University of Colorado Press.
- Baird, M, F. (2015a). Aboriginal country and the new heritage landscapes of the Pilbara. *Cultural Anthropology*. Retrieved from <http://www.culanth.org/fieldsights/765-aboriginal-country-and-the-new-heritage-landscapes-of-the-pilbara/>
- Baird, M, F., & Lydon, J. (2015). Introduction: The Pilbara crisis. *Cultural Anthropology*. Retrieved from: <http://www.culanth.org/fieldsights/768-introduction-the-pilbara-crisis>
- Ballard, C., & Banks, G. (2003). Resource wars: the anthropology of mining. *Annual Review of Anthropology*, 32, 287-313. <http://www.jstor.org/stable/25064831>

- Barker, G. (2005). The archaeology of foraging and farming at Niah Cave, Sarawak. *Asian Perspectives*, 44(1), 90-106. doi: 10.1353/asi.2005.0004
- Barney, K. (2007). Power, Progress and impoverishment: Plantations, hydropower, ecological change and community transformation in Hinboun District, Lao PDR: A field report. YCAR Papers No. I June 2007.
- Barney, K. (2009). Laos and the making of a 'relational' resource frontier. *The Geographical Journal*, 175(2), 146–159. doi: 10.1111/j.1475-4959.2009.00323.x
- Barthel-Bouchier D. (2013). *Cultural heritage and the challenge of sustainability*. California: Left Coast Press Inc.
- Bekken, D., Schepartz, L, A., Miller-Antonio, S., & Huang Y, Hou, W. (2004). Taxonomic Abundance at Panxian Dadong, a Middle Pleistocene Cave in South China. *Asian Perspectives*, (43)2, 333-359. doi: 10.1353/asi.2004.0019
- Berkes, F. (1999). *Sacred ecology*. New York: Taylor & Francis.
- Blake, J. (1993). On defining the cultural heritage. *International and Comparative Law Quarterly*, 49, 61-85.
- Bohensky, E. L., Butler, J. R. A., & Davies, J. (2013). Integrating indigenous ecological knowledge and science in natural resource management: perspectives from Australia, *Ecology and Society*, 18(3): 20. <http://dx.doi.org/10.5751/ES-05846-180320>
- Bohland, J. D & Hague, E. (2009). *Heritage and identity*. USA: Elsevier
- Bonnin, C. (2010). Navigating fieldwork politics, practicalities and ethics in the upland borderlands of northern Vietnam. *Asia Pacific Viewpoint*, 51(2), 179–192. ISSN 1360-7456.
- Borrini-Feyerabend, G (1996). *Collaborative management of protected areas: Tailoring the approach to the context*. Issues in Social Policy. Gland, Switzerland: IUCN.
- Bouchenaki, M. (2003) *The interdependency of the tangible and intangible cultural heritage*. 14th ICOMOS General Assembly and International Symposium: Place, Memory, Meaning:

Preserving Intangible Values in Monuments and Sites, Victoria Falls, Zimbabwe. 27 – 31 October.

Bridge, G. (2008). Global production networks and the extractive sector: governing resource-based development, *Journal of Economic Geography*, 8 pp.389-419.

Brockwell, S; O'Connor, S and Byrne, D. (2013). *Transcending the Culture-Nature Divide in Cultural Heritage: Views from the Asia Pacific Region*. Terra Australis Volume 36. Canberra, Australia: ANU Press.

Brumann, C. (2012). *Multilateral ethnography: Entering the world heritage arena*. Working Paper No. 136. Halle / Saale: Germany: Max Planck Institute for Social Anthropology.

Byrne, D. (1991). Western Hegemony in Archaeological Heritage Management. *History and Anthropology*, 5, 269-276.

Byrne, D. (1993). *The Past of others: Archaeological heritage management in Thailand and Australia*. Unpublished PhD Thesis. Canberra, Australia: Australian National University.

Byrne, D. (2013). The WCPAs natural sacred sites taskforce: a critique of conservation biology's view of popular religion. In: S. Brockwell., S. O'Connor., & D. Byrne (Eds.), *Transcending the culture-nature divide in cultural heritage: Views from the Asia Pacific region* (pp. 157-169). Canberra, Australia: ANU E Press.

Byrne, D. (2014). *Counterheritage: Critical perspectives on heritage conservation in Southeast Asia*. New York & London: Routledge.

Byrne, D & Ween, GB (2015). 'Bridging the culture-nature divide in heritage practice'. In L, Meskell (Ed.), *Global heritage: a reader*. pp. 94-111. Wiley Blackwell: London,

Carter, J. (2010). Displacing indigenous cultural landscapes: The naturalistic gaze at Frazer Island world heritage area. *Institute of Australian Geographer*, 48(4), 398–410. doi: 10.1111/j.1745-5871.2010.00644.x

- Chamberlain, J. (2007). *Sociocultural survey of Vilabouly district, Savannakhet Province*. Unpublished Report prepared for Lane Xang Minerals Ltd: Vientiane, Lao PDR.
- Chamberlain, J. (2010). *Ethnicity & symbiosis: Sopsaloung and Angkham*. Report prepared for MMG-LXML, January, 2010.
- Chapman, W. (2013). *Heritage of ruins: the ancient sites of Southeast Asia and their conservation*. Hawaii: University of Hawaii Press.
- Chen, P, G., Diaz, M., Lucas, G., & Rosenthal, M, S. (2010). Dissemination of Results in Community-Based Participatory Research. *American Journal of Preventive Medicine*. doi: 10.1016/j.amepre.2010.05.021.
- Cho, H. (2008). Conservation of indigenous heritage in the United States: Issues and policy development. *The Journal of Arts Management, Law and Society*, 38(3), 187-203.
- Christoffersen, L, E. (1997). IUCN: A bridge-builder for nature conservation. In: O, Bergesen & G, Parman (Eds.), *Green Globe Yearbook 1997: Year of international co-operation on environment and development*. USA: Oxford University Press.
- Clark, E, & Michailova, S. (Eds). (2004). *Fieldwork in Transforming Societies: Understanding Methodology from Experience*. Palgrave Macmillan.
- Clark, K. (2008). Cultural heritage management in the United States. In G. Fairclough., R. Harrison., H. J. Jameson Jr., & J. Schofield (Eds.), *The Heritage Reader* (pp. 82-98). London & New York: Routledge.
- Clements, R., Sodhi, N., Schilthuizen, M., & Ng, P. (2006). Limestone karsts of Southeast Asia: Imperilled arks of biodiversity. *BioScience*, 56(9), 733–742.
- Clifford, J. (1988). *The predicament of culture*. Cambridge. UK: Harvard University Press.
- Condominas, G. (2003). Safeguarding and promoting the intangible cultural heritage of lao minority groups. In Y. Goudinea (Ed.), *Laos and ethnic minority cultures: Promoting heritage* (pp. 19-26). France: UNESCO.

- Condominas, G. (2004). Researching and safeguarding the intangible heritage. *Museum International*, 56(221-222), 21-31
- Coombe, R, J., & Baird, M, J. (2015). The Limits of Heritage: Corporate Interests and Cultural Rights on Resource Frontier. In W. Logan, M. N. Craith & U. Kockel (Eds), *A Companion to Heritage Studies* (1st ed.). (pp.337-354). London, UK: John Wiley and Sons Ltd.
- Crites, J. (2007). Spiritual ecology. *Malamalam*, 32(3), 9-11.
- Cromie, P, W. (2010). *Geological setting, geochemistry and genesis of the Sepon gold and copper deposits, Laos*. Unpublished PhD Thesis, University of Tasmania.
- CSR Asia. (2015). *Case study: MMG - cultural heritage management system in Laos*. CSR-Oxfam International.
- Culver, D, C & Skeet, B. (2000). Hotspots of subterranean biodiversity in caves and wells. *Journal of Cave and Karst Studies*, 62(1), 11-17.
- Davis, B. (2000). Preliminary archaeological investigations in eastern Khammouan and Savannakhet Provinces, Lao People's Democratic Republic. *Bulletin of the Indo-Pacific Prehistory Association*, 3(19), 53-60.
- Day, M. (2011). Protection of karst landscapes in the developing world. In P. E. van Beynen (ed.) *Karst Management* (pp. 439–458). Dordrecht & New York: Springer.
- de la Harpe, D. (2015, November). *Exploring the ancient burial caves of Sabah*. New Sabah Times. Retrieved from http://www.newsabahtimes.com.my/insite/insite_display/33
- Demeter, F., Sayavongkhamdy, T., Patole-Edoumba, E., & Coupey, A-S. (2009). Tam Hang Rockshelter: Preliminary study of a prehistoric site in northern Laos. *Asian Perspectives*, 48, 291–308. DOI: 10.1353/asi.2009.0000.
- Descola, P & Palsson, G. (1996). Introduction. In P. Descola & G. Palsson (Eds.), *Nature and society: Anthropological perspectives* (pp. 1-22). London & New York: Routledge.

- Dirks, P. & Berger, L. (2013). Hominin-bearing caves and landscape dynamics in the Cradle of Humankind, South Africa. *Journal of African Earth Sciences* 78 (2013) 109–131. All rights reserved. <http://dx.doi.org/10.1016/j.jafrearsci.2012.09.012>
- Dwyer, M. (2007). *Turning land into capital: A review of recent research on land concessions for investment in Lao PDR. Part 1*. A report commissioned by the Working Group on Land Issues. Downloaded from: <https://dwyer.wordpress.com/publications/>
- Edgeworth, M. (2006). Multiple origins, development, and potential of ethnographies of archaeology. In M. Edgeworth (Ed.), *Ethnographies of archaeological practice: Cultural encounters, material transformations* (pp. 1-19). Lanham, New York, Toronto, Oxford: Altamira Press.
- Egloff, B. (1998). Practicing archaeology and the conservation of Tam Ting, Lao People's Democratic Republic. *Conservation and Management of Archaeological Sites*, 2, 163–175.
- Egloff, Brian (2003). Archaeology and the transformation of living heritage places. *IndoPacific Prehistory Association Bulletin*, 23, 173–186.
- EIA/Telepac. (2008). *Borderlines: Vietnam's booming furniture industry and timber smuggling in the Mekong Region*. Environmental Investigation Agency. (EIA)-Telepac: London.
- Evans, G. (1999). *Laos: culture and society*. Chiang Mai, Thailand: Silkworm Books.
- Evrard, O & Goudineau, Y. (2004). Planned Resettlement, Unexpected Migrations and Cultural Trauma in Laos. *Development and Change*, 35(5), 937–962.
- Falser, M & Juneja, M (Eds.) (2013). *Archaeologizing heritage? Transcultural entanglements between local social practices and global virtual realities*. New York & London: Springer.
- Fergusson, H. (2009). Phenomenology and social theory. In G. Ritzer & B. Smart (Eds.), *Handbook of Social Theory* (pp. 232-248). London & Los Angeles: Sage.
- Figlio, K. (1996). Science, transference and the unconscious. *British Journal of Psychotherapy*, 13(1), 75-85.

- Gala, A. (Ed.). (2010). *Protection of cultural heritage in Southeast Asia: Workshop Proceedings from the Asia Pacific Organisation for the International Council of Museums in Partnership with the Ministry of Culture and Information*. Hanoi, Vietnam, 9-13 April, 2001. Vietnam & Paris: ICCOM.
- Gfeller, A. E. (2013). Negotiating the meaning global heritage: 'Cultural landscapes' in the UNESCO world heritage convention, 1972-92. *Journal of Global Studies*, 8, 483-503. doi:10.1017/S1740022813000387.
- Gilberthorpe, E & Hilson, G. (2014). Introduction. In: E. Gilberthorpe., & G. Hilson, (Eds.) *Natural Resource Extraction and Indigenous Livelihoods: Development Challenges in an Era of Globalization* (pp.1-10). Surrey, U.K: Ashgate.
- Gill, W. (1996). *Wetlands and people: A report on WWF's experience of community based wetlands management*. Gland, Switzerland: WWF.
- Gillon, J. (2011). *Cultural Heritage Standards and Charters*. Retrieved from <http://gillonj.tripod.com/culturalheritagechartersandstandards/>
- GIZ., & BGR. (2015). *CSR in Lao PDR: Baseline assessment of social and environmental regulations & standards*. GIZ: Vientiane, Lao PDR.
- Glover, I., & Price, L. (2004). Asia, Southeast: Archaeological caves. In Gunn (Ed.), *Encyclopaedia of Cave and Karst Science* (pp. 107-109). United States: Taylor & Francis Books, Ltd.
- Godsen, C. (1999). *Archaeology and Anthropology: a Changing Relationship*. London and New York: Routledge.
- Goudineau, Y. (2003). Foreword. In Y. Goudineau (Ed.), *Laos and ethnic minority cultures: Promoting heritage*. Pp.5-7. Paris: UNESCO.
- Goudineau, Y. (2015). The Ongoing Invention of a Multi-Ethnic Heritage in Laos. *International Journal of Lao Studies*. Special Issue 2, August, pp. 34-53.

- Government of Lao PDR. (1997). *Decree of the president of the Lao PDR on the preservation of cultural and natural heritage*. Government of the Lao People's Democratic Republic, Ministry of Information and Culture. Vientiane, Lao PDR.
- Government of Lao PDR. (1999a). *Champasak cultural heritage management plan (Vol.1)*. Government of the Lao People's Democratic Republic, Ministry of Information and Culture. Vientiane, Lao PDR.
- Government of Lao PDR. (1999b). *Champasak cultural heritage management plan (Vol.2)*. Government of the Lao People's Democratic Republic, Ministry of Information and Culture. Vientiane, Lao PDR.
- Government of Lao PDR. (2005). *Law on National Heritage*. National Assembly of the Lao PDR: Vientiane.
- Greenough, P. & Tsing, A. (2003). *Nature in the global south: environmental projects in south and Southeast Asia*. Durham & London: Duke University Press.
- Greer, S. (2010). Heritage and empowerment: community-based Indigenous cultural heritage in northern Australia. *International Journal of Heritage Studies*, 16(1–2), pp.45–58. DOI: 10.1080/13527250903441754.
- Gupta, A., & Ferguson, J. (1992). Beyond "Culture": Space, Identity, and the Politics of Difference. *Cultural Anthropology*, 7(1), 6-23.
- Hamilakis, Y and Anagnostopoulos, A. (2009). What is archaeological ethnography? *Public Archaeology*, 8 (2–3), 65–87. DOI: 10.1179/175355309X457150
- Harmon, D. (Ed.) (1994). *Coordinating research and management to enhance protected areas*. Wisconsin, USA: IUCN.
- Harrison, D., & Schipani, S. (2007). Lao tourism and poverty alleviation: Community-based tourism and the private sector. *Current Issues in Tourism*, 10(2-3), 194–230. <http://dx.doi.org/10.2167/cit310.0>

- Harrison, D., & Schipani, S. (2009). Tourism in the Lao People's Democratic Republic. In M. Hitchcock., V. King & M. Parnwell (Eds.), *Tourism in Southeast Asia: Challenges and new directions* (pp.165-188). Copenhagen: NIAS Press.
- Harrison, R. (2013). *Heritage: Critical approaches*. London & New York: Routledge.
- Harvey, J. (2001). Heritage Pasts and Heritage Presents: Temporality, meaning and the scope of heritage studies. *International Journal of Heritage Studies*, 7(4), 319-338.
- Huntington, H, P. (2000). Using traditional ecological knowledge in science: Methods and applications, *Ecological Applications*, 10(5), 1270-1274.
- High, H. (2007). *Violent landscapes: Global explosions and Lao life-worlds*. Retrieved from http://www.academia.edu/349727/Violent_landscape_Global_explosions_and_Lao_lifeworlds
- High, H. (2010). Laos: Crisis and resource contestation. In D. Singh (Ed.), *Southeast Asian Affairs* (pp. 153–164). Singapore: ISEAS Publishing (Institute of Southeast Asian Studies).
- High, H., Baird, I., G; Barney, K., Vandergeest, P., & Shoemaker, B. (2010). Internal resettlement in Laos, *Critical Asian Studies*, 41(4), 605-620.
- Higham, C. (2002). *Early cultures of mainland Southeast Asia*. Bangkok, Thailand: River Books.
- Higham, C. (2004). *The Civilisation of Angkor*. Thailand: River Book.
- Higham, C. (2012). Hunter-Gatherers in Southeast Asia: From prehistory to the present. *Human Biology*, 85(1-3), 21-44. DOI: 10.1353/hub.2013.0017
- Higham, C, F, W., Guangmao, X., & Qiang, L. (2011). The prehistory of a friction zone: first farmers and hunter-gatherers in Southeast Asia, *Antiquity*, 85, pp.529-543.
- Higham, C., Higham, T., Ciarla, R., Douka.,K., Kijngam, A., & Rispoli, F. (2011). The origins of the bronze age in Southeast Asia. *Journal of World Prehistory*, 24, 227–274. DOI 10.1007/s10963-011-9054-6.

- Hill, R., C., George, G. M., Robinson, C., Jackson, S., and Abel, N. (2012). A typology of indigenous engagement in Australian environmental management: implications for knowledge integration and social-ecological system sustainability, *Ecology and Society*, 17(1), 23.
- Hitchcock, M., King, V, T. & Parnwell, M, J, G. (Eds.) (2010). *Heritage tourism in Southeast Asia*. Copenhagen, Denmark: Nordic Institute of Asian Studies
- Hodder, I. (1999). *The archaeological process: An introduction*. Oxford & Massachusetts: Blackwell Publishing.
- Hunter, M. (1981). The preconditions for preservation: A historical perspective. In D. Lowenthal, & M. Binne (Eds.), *Our past before Us: Why do we save it?* (pp. 22-32). London: Temple Smith.
- ICCROM. (2004, June). ICCROM newsletter no. 30. *Living religious heritage: Conserving the sacred*. Rome, Italy: ICCROM.
- ICCROM. (2005). *Conservation of Living Religious Heritage*. Papers from the ICCROM 2003 forum on living religious heritage: conserving the sacred. Rome, Italy: ICCROM.
- ICCROM. (2006, June). ICCROM newsletter no. 32. *Reflections of ICCROM's 50th anniversary*. Rome, Italy: ICCROM.
- ICCROM. (2013). *Program and Budget: 2014-2015 Biennium*. Rome, Italy: ICCROM.
- ICCROM. (2014). *Annual Report: November 2013 – October 2014*. Rome, Italy: ICCROM.
- ICOMOS. (2003). *The Hoi An Declaration of Conservation of Historic Districts in Asia*. Hoi An, Vietnam: ICOMOS.
- ICOMOS. (2006). International Charter for the Conservation and Restoration of Monuments and Sites (The Venice Charter 1964). Retrieved from http://www.icomos.org/charters/venice_e.pdf

- ICOMOS. (2013). *The Burra Charter: The Australia ICOMOS charter for places of cultural significance 2013*. Victoria, Australia: ICOMOS. ISBN 0 9578528 4 3.
- ICOMOS. (2015). *The Athens Charter for the Restoration of Historic Monuments – 1931*. Retrieved from: <http://www.icomos.org/en/charters-and-texts/179-articles-en-francais/ressources/charters-and-standards/167-the-athens-charter-for-the-restoration-of-historic-monuments>
- IFC. (2012). *IFC performance standards on environmental and social sustainability*. International Finance Corporation (IFC) & World Bank Group (WB). Retrieved from www.ifc.org/sustainability
- Ito, N. (2003). Intangible cultural heritage involved in tangible cultural heritage. *14th ICOMOS general assembly and international symposium: Place, memory, meaning: preserving intangible values in monuments and sites*. Victoria Falls, Zimbabwe. 27 – 31 October.
- Ireson, C, J., & Ireson, W, R. (1991). Ethnicity and Development in Laos. *Asian Survey*, 31(10), 920-937.
- IUCN. (1993). *IUCN – The world conservation union*. Gland, Switzerland: IUCN.
- IUCN. (1994). *A guide to the convention on biological diversity*. Gland, Switzerland: IUCN.
- IUCN. (1998). *Human use of world heritage natural sites: A global overview*. Switzerland: IUCN.
- IUCN. (2011). *Working with our partners - Sepon mine considers biodiversity offset plan*. Retrieved from: <https://www.iucn.org/content/working-our-partners-sepon-mine-considers-biodiversity-offset-plan>
- IUCN. (2012). *Livelihoods and landscapes strategy: Results and reflections*. Gland, Switzerland: IUCN.
- IUCN, (2012a). *IUCN conservation outlook assessments: Guidelines for their application to natural world heritage sites*. Gland, Switzerland: IUCN.

- IUCN. (2014). *Linking culture and nature: connecting practices*. Gland, Switzerland: IUCN.
Retrieved from:
https://www.iucn.org/about/work/programmes/wcpa_worldheritage/about_world_heritage/linking_culture_nature/
- IUCN-NERI. (2011). *Report on economic, social and environmental costs and benefits of investments in Savannakhet Province*. Poverty-Environment Initiative in Lao PDR. Report prepared by International Union for Conservation of Nature (IUCN) Lao PDR & The National Economic Research Institute (NERI), Ministry of Planning and Investment of Lao PDR.
- Ivarsson, S. (2007). *Creating Laos: The making of a Lao space between Indochina and Siam, 1860–1945*. NIAS – Nordic Institute of Asian Studies Monograph series, No. 112. NIAS: Malaysia.
- Jameson, Jr, H. J. (2008). Cultural Heritage Management in the United States. In G. Fairclough., R. Harrison., H. J. Jameson Jr., & J. Schofield (Eds.), *The Heritage Reader* (pp. 42-61). London & New York: Routledge.
- Jerndal, R., & Rigg, J. D. (1998). Making space in Laos: constructing a national identity in a ‘forgotten ‘country. *Political Geography*, 17(7), 809–831.
- Jokilehto, J. (1998a). International trends in historic preservation: From ancient monuments to living cultures, *APT Bulletin*, 29(3/4), 17-19.
- Jokilehto, J. (1998b). The context of the Venice Charter (1964). *Conservation and Management of Archaeological Sites*, 2, 229-233. ISSN 1350-5033.
- Jokilehto, J. (1999). A century of heritage conservation. *Journal of Architectural Conservation*, 5(3), 13-30. ISSN: 1355-6207.
- Kallen, A. (2004). *And through flows the river: Archaeology and the pasts of Lao Pako*. Gotab, Stockholm, Sweden: Elanders.

- Kallen, A., & Karlstrom, A. (2010). We should remember with gratitude – reflections of archaeology in Laos. In B. Berenice., B. Bacus. T. O. Pryce., & J. W. (Eds.), *50 years of archaeology in Southeast Asia: Essays in honour of Ian Glover* (pp. 301-311). Thailand, Bangkok: River Books.
- Karlstrom, A. (2005). Spiritual materiality: Heritage preservation in a Buddhist world? *Journal of Social Archaeology* 5(3), 338–355. DOI: 10.1177/1469605305057571.
- Karlstrom, A. (2009). *Preserving Impermanence. The Creation of Heritage in Vientiane, Laos.* Studies in Global Archaeology 13. Uppsala, Sweden: Uppsala University Press.
- Kemp. D. L., Keenan, J. C., Dejongsa, V. & A. Schleger. (2012). *Mining and local-level development: Examining the gender dimensions of agreements between companies and communities.* Brisbane, Australia: Centre for Social Responsibility in Mining, The University of Queensland.
- Kiernan, K. (2004). Religious Sites. In Gunn (Ed.) *Encyclopedia of Cave and Karst Science* (pp. 622-625). United States: Taylor & Francis Books, Ltd.
- Kiernan, K. (2009). Distribution and character of Karst in the Lao PDR. *Acta Carsologica*, 38(1), 65–81.
- Kiernan, K. (2010a). Environmental degradation in Karst areas of Cambodia: A legacy of war? *Land Degradation & Development*, 21, 503–519. DOI: 10.1002/ldr.988.
- Kiernan, K. (2010b). Human impacts on geodiversity and associated natural values of bedrock hills in the Mekong Delta. *Geoheritage* 2, 101–122. DOI 10.1007/s12371-010-0015-8.
- Kiernan, K. (2011). Challenges for environmentally sustainable development of natural resources in the Nam Ou Karst, Northern Laos. *Acta Carsologica* 40(2), 341–455.
- Kiernan, K. (2012). Impacts of war on geodiversity and geohertiage: Case study of karst caves from northern Laos. *Geoheritage* 4: 225–247. DOI 10.1007/s12371-012-0063-3.

- Kiernan, K. (2013). The nature conservation, geotourism and poverty reduction nexus in developing countries: A case study from the Lao PDR. *Geoheritage*, 5, 207–225. DOI 10.1007/s12371-013-0084-6.
- Kiernan, K. (2015). Landforms as Sacred Places: Implications for Geodiversity and Geoheritage. *Geoheritage* 7, 177–19. DOI 10.1007/s12371-014-0128-6.
- Kyophilavong, P., & Toyoda, T. (2009). *Foreign Capital Inflows in the natural resources sector: Impacts on the Lao economy*. International Seminar on Skills Development for the Emerging New Dynamism in Asian Developing Countries under Globalization. The University Network for Development in Asia (UNDA). Bangkok, Thailand.
- Landorf, C. (2009). A framework for sustainable heritage management: A study of UK industrial heritage sites. *International Journal of Heritage Studies*, 15(6), 494-510.
- Lao Statistics Bureau. (2014). *Statistical Yearbook 2014*. Lao Statistics Bureau. Ministry of Planning and Investment, Lao PDR. Vientiane.
- Latour, B. (1993). *We have never been modern*. Harvard: Harvard University Press. p. iv. ISBN 978-0-674-94839-6.
- Laughlin, C, McManus, J & d’Aquili, E. (1990). *Brain, symbol and experience*. Boston: Shambala.
- Laurence, W. (2007). Forest destruction in tropical Asia. *Current Science* 93(11), 1544– 1550.
- Lenzerini, F, (2011). Intangible cultural heritage: the living culture of peoples. *The European Journal of International Law*, 22(1), 101-120.
- Lewis-Williams, D. (2002). *The Mind in the Cave: Consciousness and the Origins of Art*. London: Thames and Hudson Ltd.
- Li, J, C. (2008). *Environmental impact assessments in developing countries: An opportunity for greater environmental security?* Working Paper No.4. Foundation for Environmental Security and Sustainability (FESS): USAID.
- Logan, W. (2001). Globalizing world heritage: world heritage as a manifestation of modernism and challenges from the periphery. In *20th century heritage: our recent cultural legacy: proceedings of the Australia ICOMOS National Conference 2001, 28 November - 1*

- December 2001, Adelaide* (pp. 51-57). Australia: University of Adelaide. Retrieved from <http://dro.deakin.edu.au/view/DU:30004820>
- Logan, W. (2012). Cultural diversity, cultural heritage and human rights: towards heritage management as human rights-based cultural heritage. *International Journal of Heritage Studies*, 18(3), 231-244.
- Logan, W., Long, C., & Hansen, R. (2002). Vientiane, Laos: Lane Xang's capital in the age of modernisation and globalisation. In W. Logan (Ed.), *The disappearing 'Asian' city: Protecting Asia's urban heritage in a globalizing world* (pp. 50-69). New York: Oxford University Press.
- Long, C. (2002). A history of urban planning policy and heritage protection in Vientiane, Laos. *International Development Planning Review*, 24(2), pp. 127-144.
- Long, C., & Sweet, J. (2006). Globalization, nationalism and world heritage: Interpreting Luang Prabang, *South East Asian Research*, 14(3), 445-469.
- Lonzy, L, R. (2011). Archaeology in the age of globalization: Local meaning, global interest. In L. R. Lonzy (Ed.), *Comparative Archaeologies: A Sociological View of the Science of the Past* (pp. 21-52). London & New York: Springer.
- Lowenthal, D & Binney, M. (Eds.) (1981). *Our past before us: Why do we save it?* London: Temple Smith.
- Lowenthal, D. (1985). *The past is a foreign country*. Great Britain: Cambridge University Press.
- Lowenthal, D. (2005). Natural and cultural heritage. *International Journal of Heritage Studies* 11(1), 81-92, DOI: 10.1080/13527250500037088.
- Loos, N. (1982). *Invasion and resistance: Aboriginal-European relations on the north Queensland frontier – 1861-1897*. ANU Press: Canberra.
- Lyttleton, C, & Allcock, A. (2002). *Tourism as a tool for development*. UNESCO-Lao National Tourism Authority Nam Ha Ecotourism Project. External Review July 6–8, 2002.
- Macnaghten, P., & Urry, J. (1998). *Contested Natures*. London, Great Britain: Sage

- Manhart, C. (2010). UNESCO's Fight against Illicit Traffic of Cultural Property, Restitution and Needs of Museums in Developing Countries. In D. Offenhauber., W. C. Zimerli., & M-T. Albert (Eds.), *World Heritage and Cultural Diversity* (pp.160-163). Germany: German Commission for UNESCO.
- Manini, A. J., & Albert, P. (2003). *Exploration and development of the Sepon gold and copper projects, Laos*. Paper presented at the Asian Update Symposium, Sydney Mineral Exploration Discussion Group.
- Marcus, G. E. (1995). Ethnography in/of the world system: the emergence of multi-sited ethnography. *Annual Review of Anthropology*, 24, pp.95-117.
- Marcus, G. E. (1998). *Ethnography through thick and thin*. Princeton, New Jersey: Princeton University Press.
- Marcus, G. E., & Fischer, M. M. J. (1986). *Anthropology as cultural critique: An experimental movement in the human sciences*. Chicago and Illinois: The University of Chicago Press.
- Marshall, Y. (2002). What is community archaeology? *World Archaeology*, 34(2), 211-219.
- Martyn, D; Trigger, D, and Parmenter, J. (2014). Mining in Aboriginal Australia: Economic Impacts, Sustainable Livelihoods and Cultural Difference at Century Mine, Northwest Queensland. In: E. Gilberthorpe & G. Hilson (Eds.), *Natural resource extraction and indigenous livelihoods: Development challenges in an era of globalization* (pp. 37-56). Surrey, U.K: Ashgate.
- Marwick, B., Schoongdej, R., Thongcharoenchaikit, C., Chaisuwan, B., Khowkhiew, C., Kwak, S. (2013). Hierarchies of engagement and understanding: Community engagement during archaeological excavations at Khao Toh Chong rockshelter, Krabi, Thailand. In: S. Brockwell., S. O'Connor & D. Byrne (Eds.), *Transcending the culture-nature divide in cultural heritage: Views from the Asia Pacific Region* (pp. 129-140). Canberra, Australia: ANU Press.
- Mauret, C. (2004). Burials in Caves. In J. Gunn (Ed.), *Encyclopedia of Cave and Karst Science* (pp. 167-169). United States: Taylor & Francis Books, Ltd.

- Mauret, C. (2004a). Asia, Southeast Asia. *Encyclopedia of Cave and Karst Science* (pp. 100-104). United States: Taylor & Francis Books, Ltd.
- Mayes, W., & Chang, N. (2013). Cultural heritage management and local participation in the development of the Sepon mine. In J. Weirtz (Ed.), *2nd International Conference on Social Responsibility in Mining* (pp. 55-62). Santiago, Chile. November 5-8.
- Mayes, W., & Chang, N. (2014). Discovering Sepon: Cultural Heritage and the making of a modern mine. *The Extractive Industries and Society*, 1, pp.237-248.
- McGuire, G., & Reimann, F. (2011). Sustainably managing social investment in poor communities surrounding the Sepon operations. In J. Weirtz (Ed.) *1st International Conference on Social Responsibility in Mining* (pp. 1-7). Santiago, Chile. November 19-21.
- Meskel, L. (2005). Archaeological ethnography: Conversations around Kruger National Park, *Archaeologies*, 1(1) 2005, 81-100.
- Meskel, M, & Pruecel, R. (2008). *A Companion to social archaeology*. London: Blackwell Publishing Ltd.
- Messeri, B. (2011). Heritage protection in Southeast Asia: Management Plans and Conservation of World Heritage Sites. Selected case studies in Thailand, Cambodia and Lao PDR. *SPAFA Journal*. 21(1), 5-21.
- Meyer, J, W; Frank, D, J; Hironaka, A; Schofer, E & Tuma, N, J. (1997). The structuring of a world environmental regime: 1870-1990. *International Organisation*, 51(4), 623-651
- Michaud, C. (2010). Research Note: Fieldwork, supervision and trust. *Asia Pacific Viewpoint*, 51 (2), 220–225. ISSN 1360-7456.
- MMG. (2010). *Leading miner, MMG Sepon, recognises value of cultural heritage*. MMG Media Release. Retrieved from: <http://www.mmg.com/en/Investors-and-Media/News/2010/08/23/Leading-miner-MMG-Sepon-recog-value-cultural-heritage.aspx?pn=36&backitem=BA5603A202CE4D1E848FABA9D1339247>
- MMG. (2011). *Sepon takes steps to improve dialogue with local community*. MMG Media Release. Retrieved from: [364](http://www.mmg.com/en/Investors-and-</p>
</div>
<div data-bbox=)

[Media/News/2011/09/24/Sepon-takes-steps-to-improve-dialogue-with-local-community.aspx?pn=10&backitem=D8ABE6789F2440EC946E3C207A67FA66](http://www.mmgs.com/en/Investors-and-Media/News/2011/09/24/Sepon-takes-steps-to-improve-dialogue-with-local-community.aspx?pn=10&backitem=D8ABE6789F2440EC946E3C207A67FA66)

- MMG. (2013). *Sepon copper reinforcing Lao culture*. MMG Media Release. Retrieved from: <http://www.mmgs.com/en/Investors-and-Media/News/2013/02/20/Sepon-copper-reinforcing-Lao-culture.aspx?pn=8&backitem=D8ABE6789F2440EC946E3C207A67FA66>
- MMG. (2013a). *Cessation of gold production at the Sepon mine*. Company announcements. MMG Ltd: Hong Kong.
- MMG. (2016). *MMG LXML Sepon supports 3,000 years of Cultural Heritage and Lao history*. MMG Media Release. Retrieved from: <http://www.mmgs.com/en/Investors-and-Media/News/2016/08/22/MMG-LXML-Sepon-Supports-3000-Years-of-Cultural-Heritage-and-Lao-History.aspx?pn=6&backitem=BA5603A202CE4D1E848FABA9D1339247>
- MMG-LXML. (2010). *MMG-LXML Sepon cultural heritage management plan*. MMG-LXML Ltd.
- MMG-LXML. (2011). *The Sepon gold and copper mine: Neighbours past, present and future*. Promotional Booklet prepared by Oxiana Resources Ltd and Lang Xang Minerals Ltd (LXML). Vientiane, Lao PDR.
- MMG-LXML. (2012). *Sites of significance within the Sepon SPDA*. MMG-LXML Ltd.
- Moghadam V & Bagheritari M. (2003) Culture, conventions, and the human rights of women: examining the convention for safeguarding intangible cultural heritage, and the declaration on cultural diversity. *Museum International*, 59(236), 9-18.
- Mouret, Claude (2004). Burials in Caves. Pages 167-169 in John Gunn (ed.) *Encyclopedia of Cave and Karst Science*, Taylor & Francis Books, Ltd. United States
- Moran, E, F. (2010). *Environmental social science: human-environment interactions and sustainability*. Wiley-Blackwell. EBOOK ISBN: 9781444319064.

- Martinsson-Wallin, H. (2012). World heritages – global and local perspectives. In H. Martinsson-Wallin & Karlström, A. (Eds), *World Heritage and Identity: Three Worlds Meet. A workshop arranged during the VII International Conference on Easter Island and the Pacific* (pp. 7-20). Gotland University, Sweden.
- Munier, C. (1998). *Sacred rocks and Buddhist caves in Thailand*. Bangkok: White Lotus.
- Munjeri, M. (2004). Tangible and intangible heritage: from difference to convergence. *Museum International*. 56(221-222), 12-20. ISSN 1350-0775.
- Ngam Ngiep Power Company Ltd. (2014). Environmental Impact Assessment for Nam Ngiep 1 Hydropower Project. Updated Version, January 2014. Executive Summary. Thailand: Asian Development Bank.
- Ndoro, W. (2001). *Your monument, our shrine: the preservation of great Zimbabwe*. Unpublished PhD Thesis. Uppsala University, Sweden.
- Negri, V. (2008). Introduction to heritage law in Africa. In W. Ndoro., A. Mumma., & G. Abungu, (Eds.), *Cultural heritage and the law: Protecting immovable heritage in english speaking countries of Sub-Saharan Africa* (pp.7-12). ICCROM Conservation Studies 8. Rome, Italy: ICCROM International Centre for the Study of Preservation and Restoration of Cultural Property.
- Nielson, B. (2010). UNESCO and the right kind of culture: bureaucratic production and articulation, *Critique of Anthropology*, 31(4), 273-292. DOI: 10.1177/0308275X11420113.
- Neilson, J. (2002). *Technical analysis of environmental and social impacts assessments for oxiana resources n.l / sepon project Lao*. Bankwatch. Retrieved from: http://bankwatch.org/documents/technical_analysis_2002.pdf
- O’Faircheallaigh, C. (2008). Negotiating Cultural Heritage? Aboriginal–Mining Company Agreements in Australia, *Development and Change*, 39(1), 25–51.
- Ovesen, J. (2002). Indigenous Peoples and Development in Laos: Ideologies and Ironies. *Moussons*, 6, 69-97.

- Oxiana Resources. (2008). *Our neighbours at Sepon*. Promotional Booklet prepared by Oxiana Resources Ltd. Vientiane, Lao PDR.
- Oz Mineral Ltd. (2008). *Sustainability report 2008*. Melbourne, Australia: Oz Minerals.
- Oz Minerals Ltd. (2008a). *Annual report 2008*. Melbourne, Australia: Oz Minerals.
- Pannell, S. (2013). Nature and culture in a global context: A case study from World Heritage listed Komodo National Park, eastern Indonesia. In: S. Brockwell., S. O'Connor & D. Byrne (Eds.), *Transcending the culture-nature divide in cultural heritage: Views from the Asia Pacific Region* (pp. 55-63). Canberra, Australia: ANU Press.
- Parr, J, W, K., Insua-Cao, P., Van Lam, H., Van Tue, H., Bich Ha, N., Van Lam, N., Ngoc Quang, N., The Cuong, N., & Crudge, B. (2013). Multi-level co-management in government-designated protected area – opportunities to learn from models in mainland Southeast Asia. *Parks, 19*(2), 59-74.
- Peluso, N. (1992). The Political Ecology of Extraction and Extractive Reserves in East Kalimantan, Indonesia. *Development and Change, 23*(4), 49-74.
- Peluso, N. (2012). What's nature got to do with it? A situated historical perspective on socio-cultural natures. *Development and Change, 43*(1), 79-104. DOI: 10.1111/j.1467-7660.2012.01755.x.
- Pilgrim, S., & Pretty, J. (2010). Nature and culture: An introduction. In S. Pilgrim & J. Pretty (Eds.), *Nature and culture: Rebuilding lost connections* (pp. 1-22). London & Washington: Earthscan.
- Pholsena, V. (2006). *Post-war Laos: The politics of culture, history and identity*. Thailand: Silkworm Books.
- Pholsena, V. (2010). Life under bombing in Southeastern Laos (1964-1973) through the account of survivors in Sepon, *European Journal of East Asian Studies, 9*(2): 267–290.
- Pockock, D. (1997). Some reflections on world heritage. *The Royal Geographic Society, 29*(3), 260-268.

- Poulis, J. (2014). Discussing strategy in heritage conservation: Living heritage approach as an example of strategic innovation. *Journal of Cultural Heritage Management and Sustainable Development*, 4(1), 16-34. <http://dx.doi.org/10.1108/JCHMSD-10-2012-0048>
- Pryce, T. A., Brauns, M., Chang, N., Pernicka, E., Pollard, A. M., Ramsey, C., Rehren, T., Souksavatdy, V., & Sayavongkhamdy, T. (2011). Isotopic and technological variation in prehistoric Southeast Asian primary copper production, *Journal of Archaeological Science* 38, pp. 3309-3322. doi:10.1016/j.jas.2011.07.016.
- Prince, H. (1981). Revival, restoration, preservation: changing views about antique landscape features. In D. Lowenthal & M. Binney (Eds.), *Our past before Us: Why do we save it?* (pp. 330-349). London: Temple Smith.
- Qian, F. (2010). China's Burra Charter: the formation and implementation of the China Principles, *International Journal of Heritage Studies*, 13(3), 255-264. Doi: 10.1080/13527250701228213.
- Reynolds, H. (1978). Race relations in north Queensland. James Cook University: Townsville.
- Rigg, J. (1995). Managing dependency in a reforming economy: The Lao PDR. *Contemporary Southeast Asia*, 17(2), 147-172.
- Rigg, J. (2006). Forests, marketization, livelihoods and the poor in the Lao PDR, *Land Degradation & Development* 17, 123–133. DOI: 10.1002/ldr.719.
- Rigg, J. (2007). *Southeast Asia: the human landscape of modernisation and development*. London & New York: Routledge.
- Rigg, J. (2007a) Land-locked Laos: Dilemmas of development at the edge of the world, *Geopolitics and International Boundaries*, 2(1), 153-174. DOI: 10.1080/13629379708407582
- Rigg, J., & Jerndal, R. (1996). Plenty in the context of scarcity: Forest management in Laos. In M. J. G. Parnwell & R. L. Bryant (Eds.), *Environmental change in South-East Asia* (pp. 145-162). London & New York: Routledge.

- Robben, A, C, G, M. (2012). Introduction. In A. C. G. M. Robben & J. A. Sluka (Eds.), *Ethnographic fieldwork: An anthropological reader* (2nd Ed.) (pp. 367-373). West Sussex, UK: Wiley & Blackwell.
- Roberts, N. (2015). The Cultural & Natural Heritage of Caves in the Lao PDR: Prospects and Challenges Related to Their Use, Management and Conservation, *Journal of Lao Studies* 5(1), 113-139.
- Rogers, P. (2009). *Tourism in Vang Vieng: Strategy for staying longer - spending more*. Lao National Tourism Administration-Asian Development Bank GMS Sustainable Tourism Development Project, Vientiane. Retrieved from: <http://www.mekongtourism.org/tourism-in-vang-vieng-strategy-for-staying-longer-spending-more/>
- Rosenbloom, B. (2010). *The Savannakhet historical trail*. Lao National Tourism Authority (LNTA) and the Asian Development Bank (ADB). Lao PDR: Vientiane.
- Rosler, M. (2006). World Heritage: Linking Cultural and Biological Diversity. In B. Hoffman (Ed.), *Art & cultural heritage: law, policy, and practice* (pp. 201-206). New York, USA: Cambridge University Press.
- Roy, R. (2005). Scientism and technology as religions, *Zygon*, 40(4), 835-844.
- Rumsey, A., & Weiner, J, F. (2001). *Mining and indigenous lifeworlds in Australia and Papua New Guinea*. Crawford House Publishing: Canberra, Australia. Rundell, J. 2009. 'Modernity, enlightenment, revolution and romanticism'. In: G. Ritzer & B. Smart (Eds.), *Handbook of Social Theory* (pp. 13-30). London & Los Angeles: Sage.
- Salazar, N, B. (2012). The value of translocal ethnographies in critical analyses of global heritage. In C. Brumann & K. L. Samuels (Chairs), *Inaugural Conference of the Association of Critical Heritage Studies (ACHS) June 5th – 8th, 2012*. Conference conducted at the School of Global Studies, Gothenburg University, Gothenburg, Sweden.
- Samuels, K, L. (2011). Fieldwork: constructing archaeological and ethnographic intersections, *Cambridge Archaeological Journal* 21(1), 152-156.
- Samuels, L. (2012). Multi-sited Heritage Ethnography. In C. Brumann & K. L. Samuels (Chairs), *Inaugural Conference of the Association of Critical Heritage Studies (ACHS) June 5th –*

- 8th, 2012. Conference conducted at the School of Global Studies, Gothenburg University, Gothenburg, Sweden.
- Sax, J. L. (1993). Nature and habitat conservation and protection in the United States, *Ecology Law Quarterly*, 47, 47-56.
- Sayavongkhamdy, T., & Bellwood, P. (2000). Recent archaeological research in Laos, *Bulletin of the Indo-Pacific Prehistory Association*, 19, 101-110.
- Sayavongkhamdy, T., & Souksavatdy, V. (2006). *Sites of archaeological and cultural heritage significance within the greater project development area (GPDA) of Sepon operations*. Unpublished Report prepared for Oz Minerals Ltd.
- Sayavongkhamdy, T., & Souksavatdy, V. (2011). *Archaeology and sites of cultural heritage significance within the Sepon expanded development area (SEDA) of Minerals and Metals Group-Lane Xang Minerals Limited (MMG-LXML), Lao PDR*. Unpublished Report prepared for Lane Xang Minerals Ltd: Vientiane, Lao PDR.
- Schipani, S. (2007). Ecotourism as an Alternative to Upland Rubber Cultivation in the Nam Ha National Protected Area, Luang Namtha, *Juth Pakai*, 8, 5-17.
- Schmitt, T. M. (2008). The UNESCO concept of safeguarding intangible cultural heritage: Its background and Marratki roots, *International Journal of Heritage Studies*, 14(2), 95-111. <http://dx.doi.org/10.1080/13527250701844019>
- Scott, J. C. (2009). *The art of not being governed: an anarchist history of upland Southeast Asia*. New Haven: Yale University Press.
- Sengupta, I. (2013). A conservation code for the colony: John Marshal's conservation manual and monument preservation between India and Europe. In M. Falser & M. Juneja (Eds.), *Archaeologizing Heritage? Transcultural entanglements between local social practices and global virtual realities* (pp. 21-38). New York & London: Springer.
- Shackelford, L., & Demeter, F. (2011). The place of Tam Hang in Southeast Asian human evolution. *Comptes Rendus Palevol* 11, 97-115.

- Sharma, B. (2013). *Contextualising CSR in Asia: Corporate social responsibility in Asian economies and the drivers that influence its practice*. Lien Centre for Social Innovation: Singapore Management University.
- Shoemaker, B., Baird, I. G., & Baird, M. (2001). *The people and their river: A survey of river-based livelihoods in the Xe Bang Fai River Basin in central Lao PDR*. Lao PDR/Canada Fund for Local Initiatives: Vientiane, Lao PDR.
- Short, J. R. 1991. *Imagined country: Society, culture and environment*. London & New York: Routledge.
- Sidisunthorn P., Gardener., S & Smart, D. (2006). *Caves of Northern Thailand*. Bangkok, Thailand: River Books.
- Singh, S. (2008). Contesting moralities: the politics of wildlife trade in Laos, *Journal of Political Ecology*, 15, 2-20.
- Singh, S. (2009). World Bank-directed development? Negotiating participation in the Nam Theun 2 Hydropower Project in Laos, *Development and Change*, 40(3), 487–507.
- Smith, L. J. (2004). *Archaeological theory and the politics of cultural heritage*. London & New York: Routledge.
- Smith, L. J. (2006). *Uses of heritage*. London & New York: Routledge.
- Smith, L. J. (2008). Towards a theoretical framework for archaeological heritage management. In G. Fairclough., R. Harrison., J. H. Jameson Jnr., & J. Schofield (Eds.), *The heritage reader* (pp. 62-74). London & New York: Routledge.
- Smith, L. J., & Akagawa, N. (Eds.) (2009). *Intangible heritage*. London & New York: Routledge.
- Smith, M., & Richards, G. (Eds.) (2013). *The routledge handbook of cultural tourism*. London & New York: Routledge.
- Smith, L. J., & Waterton, E. (2009). *Heritage, communities and archaeology*. Great Britain: Duckworth.

- Smith, L. J., & Waterton, E. (2012). Constrained by common sense: The authorized heritage discourse in current debates. In R. Skeates., C. McDavid & J. Carman (Eds.), *The Oxford handbook of public archaeology* (pp. 153-171). Oxford University Press: Oxford,
- Smith, L. J. (2006). *Uses of heritage*. London & New York: Routledge.
- Sourya, P., Keosopha, K., & Siseangrat, S. (2005). *Country paper of the Lao PDR*. Background paper presented at the Sub-Regional Experts Meeting in Asia on Intangible Cultural Heritage. Bangkok, Thailand, December 13–16, 2005.
- Soutsavady, V. (2014). *Heritage in the Lao PDR*. Conference Paper presented at the Australian Archaeological Association (AAA) Annual Conference, Cairns, Queensland. December 1-3, 2014.
- Sponsel, L. E., & Natadecha-Sponsel, P. (2015). *Illuminating Darkness: The Monk-Cave-Bat-Ecosystem Complex in Thailand*. Retrieved from:
<http://www.anthropology.hawaii.edu/department/projects/spiritual-ecology/cave.html>
- Spiro, M. (1967). *Burmese supernaturalism*. New Jersey, USA: Prentice Hall Inc.
- Stepan, N. L. (2006). Constructing Tropical Nature. In D. A. Posey & M. J. Balick (Eds.). *Human impacts on Amazonia: The role of traditional ecological knowledge in conservation and development* (pp. 17-32). New York: Columbia University Press.
- Stovel, H., Stanley-Price, N., & Killick, R (Eds.). (2005). *Conservation of living religious heritage*. Papers from the ICCROM 2003 forum on living religious heritage: conserving the sacred. Rome, Italy: ICCROM.
- Strang, V. (1997). *Uncommon ground: cultural landscapes and environmental values*. Oxford: New York.
- Stuart-Fox, M. (1986). *Laos: Politics, economy, and society*. London: Francis Printer.
- Stuart-Fox, M. (1993). On the Writing of Lao History: Continuities and Discontinuities
Journal of Southeast Asian Studies, 24, (1), pp. 106-121. Published by: Cambridge University Press on behalf of Department of History.
- Stuart-Fox, M. (1997). *A history of Laos*. Cambridge: Cambridge University Press.

- Stuart-Fox, M. (1998). Laos in ASEAN: Dilemmas of Development and Identity, *Asian Studies Review*, 22, (2), pp.1035-7823
- Stuart-Fox, M. (1995). The French in Laos, 1887-1945, *Modern Asian Studies*, 29, (1), pp. 111-139
- Stuart-Fox, M. (2008). *An historical dictionary of Laos*. United States of America. Scarecrow Press, Inc.
- Suntikul, W. (2008). The impact of tourism on the monks of Luang Prabang. ICOMOS. Retrieved from https://www.icomos.org/quebec2008/cd/toindex/77_pdf/77-9ytg-102.pdf
- Suntikul, W. (2011). *Linkages between heritage policy, tourism and business*. ICOMOS 17th. General Assembly, Paris. Retrieved from: <http://openarchive.icomos.org/1350/>
- Suntikul, W., Bauer, T., & Song, H. (2009). Pro-poor tourism development in Vieng Xai: Current state and future prospects, *Asia Pacific Journal of Tourism Research*, 14(2), 153–168.
- Suntikul, W., Bauer, T., & Song, H. (2010). Towards tourism: A Laotian perspective, *International Journal of Tourism Research*, 12, 449–461.
- Suntikul, W., & Jachna, T. (2013). Contestation and negotiation of heritage conservation in Luang Prabang, Laos, *Tourism Management*, 38, 57-68. <http://dx.doi.org/10.1016/j.tourman.2013.02.005>
- Synott, J. (2009). *Global and international studies: an introduction*. South Melbourne, Australia: Cengage Learning.
- Tambiah, S. (1991). *Magic, science, religion, and the scope of rationality*. Cambridge: Harvard University Press.
- Tan, N, H and Tacon, P, C. (2014). Rock art and the sacred landscapes of mainland Southeast Asia. In D. L. Gillette., M. Greer., M. H. Hayward & W. B. Murray (Eds.), *Rock Art and sacred landscapes* (pp. 67-84). New York & London: Springer.
- Tanabe, S., and Keyes, C, F. (Eds.) (2002). *Cultural crisis and social memory: Modernity in Thailand and Laos*. London & New York: Routledge Taylor & Francis.

- Tappe, O. (2011). From revolutionary heroism to cultural heritage: Museums, memory and representation in Laos, *Nations and Nationalism*, 17(3), 604-626.
- Tappe, O. (2013). Faces and facets of the Kantosou Kou Xat – The Lao “National Liberation Struggle” in state commemoration and historiography. *Asian Studies Review* 13(4), 433–450.
- Tappe, O. (2013a). National Lieu de Memoire vs. Multivocal Memories: the case of Viengxay, Lao PDR. In V. Pholsena & O. Tappe (Eds.), *Interactions with a violent past: Reading post-conflict landscapes in Cambodia, Laos, and Vietnam* (pp. 46-77). Singapore: NUS Press.
- Tappe, O. (2015). Introduction: Frictions and Fictions—Intercultural Encounters and Frontier Imaginaries in Upland Southeast Asia, *The Asia Pacific Journal of Anthropology*, 16(4), 317-322. DOI: 10.1080/14442213.2015.1049201
- Tattersall, I. (1998). *Becoming human: Evolution and human uniqueness*. USA: Harcourt Brace & Company.
- Taylor, K., & Lennon, J. (2011). Cultural landscapes: a bridge between culture and nature? *International Journal of Heritage Studies*, 17(6), 537-554
- The Laotian Times. (2018). *Sepon and phobia Mines Set to Close Operations by 2020*. Retrieved from: <https://laotiantimes.com/2018/02/11/sepon-and-phobia-mines-set-to-close-operations-by-2020/>
- Thorsell, J., & Sigarty, T. (1996). *Human use of world heritage natural sites: A global overview*. IUCN: Gland, Switzerland.
- Tilley, C. (1999). Archaeology as a socio-political action in the present. In D. Whitley (Ed.), *Reader in Archaeological Theory* (pp. 315-330). London & New York: Routledge.
- Tourism Laos. 2015. http://tourismlaos.org/show_province.php?Cont_ID=243
- Tourism Laos. (2015). *Savannakhet History*. Retrieved from: http://www.tourismlaos.org/show_province.php?Cont_ID=831
- Tonkinson, R. (2002). *The mardu aborigines: lining the dream in Australia's desert*. USA: Wadsworth Group.

- Treerayapiwat, C. (2005). Patterns of Habitation and Burial Activity in the Ban Rai Rockshelter, Northwest Thailand, *Asian Perspectives*, 44(1), pp.231-245.
- Trigger, B. (1984). Alternative archaeologies: nationalist, colonialist, imperialist, *Man*, 19(3), 355-370.
- Tsing, A. (2003). Natural resources and capitalist frontiers, *Economic and Political Weekly*, 38(48), 5100-5106.
- Tsing, A. (2005). *Friction: An ethnography of global connection*. Princeton and Oxford: Princeton University Press.
- Tucci, A., Sayavongkhamdy, T., Chang, N., & Souksavatdy, V. (2014). Ancient copper mining in Laos: Heterarchies, incipient states or post-state anarchists? *Journal of Anthropology and Archaeology* 2(2), pp. 1-15.
- Tunprawat, P. (2009). *Managing Heritage Sites in Mainland Southeast Asia*. Unpublished PhD Thesis. Silapakorn University, Bangkok, Thailand.
- Turner, S. (2010). Challenges and dilemmas: fieldwork with upland minorities in socialist Vietnam, Laos and southwest China, *Asia Pacific Viewpoint*, 51(2), 121–134. ISSN 1360-7456.
- Turtien, J. (2000). *Globalising heritage – on UNESCO and the transnational construction of a world heritage*. Stockholm: Stockholm Centre for Organisational Research.
- Ucho, P, J. (2001). ‘Heritage’ and ‘indigenous peoples’ in the 21st century, *Public Archaeology* 1, 227-238.
- Uhlig, H. (1980). Man and tropical karst in Southeast Asia: Geo-ecological differentiation, land use and rural development potential in Indonesia and other regions, *GeoJournal* 4(1), 31–44.
- UNESCO. (1972). *World Heritage conventions concerning the protection of the world cultural and natural heritage*. Paris, France: UNESCO.
- UNESCO. (2003). *Convention for the safeguarding of the intangible cultural heritage*. Paris, France: UNESCO.

- UNESCO. (2004). *IMPACT: The effects of tourism on culture and the environment in Asia and the Pacific: Tourism and heritage site management in Luang Prabang, Lao PDR*. Bangkok, Thailand: UNESCO.
- UNESCO. (2004a). *The State of World Heritage in the Asia-Pacific Region 2003*. UNESCO: Paris, France.
- UNESCO. (2004b). *The Yamato Declaration on Integrated Approaches for Safeguarding Tangible and Intangible Cultural Heritage*. Paris, France: UNESCO.
- UNESCO. (2007). *World Heritage: Challenges for the Millennium*. Paris, France: UNESCO.
- UNESCO. (2008). *IMPACT: The effects of tourism on culture and the environment in Asia and the Pacific: Alleviating poverty and protecting cultural and natural heritage through community-based ecotourism in Luang Namtha, Lao PDR*. Bangkok, Thailand: UNESCO.
- UNESCO. (2009). *Hoi An Protocols for Best Conservation Practice in Asia: Professional Guidelines for Assuring and Preserving the Authenticity of Heritage Sites in the Context of the Cultures of Asia*. Paris, France: UNESCO.
- UNESCO. (2012). *Culture: A driver and enabler of sustainable development. Thematic think piece*. UNESCO Post-2015 UN Development Agenda. Retrieved from: <http://en.unesco.org/post2015/sites/post2015/files/Think%20Piece%20Culture.pdf>
- UNESCO. (2015). *World Heritage: Culture-Nature Links*. No 75, April 2015. Paris, France: UNESCO Publishing.
- UNWTO. (2015). *United Nations World Tourism Organisation Fact Sheet*. United Nations: Gland, Switzerland.
- Usher, P, J. (2000). Traditional Ecological Knowledge in Environmental Assessment and Management, *Arctic*, 53(2), 183-193.
- Vargyas, G. (1996). Ancestors and the forest among the Brou of Vietnam, *Diogenes*, 44(2), 117-127.
- Vecco, M. (2010). A definition of cultural heritage: from the tangible to the intangible, *Journal of Cultural Heritage*, 11, 321-324.

- Verschuuren, B. (2010). Arguments for developing biocultural conservation approaches for sacred natural sites. In: B. Verschuuren., R. Wild., J. McNeely & G. Oviedo (Eds.), *Sacred natural sites: Conserving nature and culture* (pp. 62-71). London & Washington DC: Earthscan.
- Verschuuren, B, Wild, R., McNeely, J., & Oviedo, G. (Eds.) (2010). *Sacred natural sites: Conserving nature and culture*. London & Washington DC: Earthscan.
- Vientiane Times. (2010, February). 'Laos: an archaeological blank page'. Downloaded from: <http://penn.museum/sites/mmap/wp-content/uploads/VTArticle1.pdf>
- Vientiane Times, (2014, Fenruary). *Sepon mine completes restructure to focus on copper production*. Retrieved from: <http://www.mmg.com/en/Investors-and-Media/News/2014/02/04/Media-Release.aspx?ps=50&backitem=BA5603A202CE4D1E848FABA9D1339247>
- Watanabe, H., Shigematsu, K., & Anzai, M. (1985). *Archaeological survey of prehistoric sites in Laos*. University of Tokyo, Japan. URL: <http://hdl.handle.net/2261/4378>
- Waterton, J; Hamilton-Smith, E; Gillieson, D and Kiernan, K. (1997). *Guidelines for cave and karst protection*. International Union for the Conservation of Nature (IUCN): Gland, Switzerland.
- Wayakone, S., & Makoto, I. (2012). Evaluation of the environmental impacts assessment (EIA) system in Lao PDR, *Journal of Environmental Protection*, 3, 1655-1670.
- White , J. (2008). Archaeology of the middle Mekong: introduction to the Luang Prabang province exploration survey. In Y. Goudineau & M. Lorrillard (Eds.) *New research on Laos* (pp. 37-52). École française d'Extrême-Orient: Vientiane, Lao PDR & Paris, France.
- White, J, C., Lewis, H., Bouasisengpaseuth, B., Marwick, B., & Arrell, K. (2009). Archaeological investigations in northern Laos: new contributions to Southeast Asian prehistory, *Antiquity*, 83(319). Downloaded from: <http://antiquity.ac.uk/projgall/white/#author#author>
- Wijesuriya, G. (2005). The past in the present: perspectives in caring for Buddhist heritage sites in Sri Lanka. In H. Stovel., N. Stanley-Price & R. Killick (Eds.), *Conservation of living*

- religious heritage. Papers from the ICCROM 2003 forum on living religious heritage: conserving the sacred* (pp. 30-43.). Rome, Italy: ICCROM.
- Wild, R., & McLeod, C. (Eds). 2008. *Sacred natural sites: Guidelines for protected area managers*. Gland, Switzerland: IUCN.
- Willems, W, J, H. (2014). The future of World Heritage and the emergence of transnational heritage regimes, *Heritage & Society*, 7(2), pp.105–120.
- Williams, P. (2008). *World Heritage caves and karst*. International Union for the Conservation of Nature (IUCN): Gland, Switzerland.
- Wills, J., Long, C., Sweet, J., & Wilmot, S. (2007). *Transformative Learning in the Hidden City: Writing an Interpretive Plan at the Viengxai Field School in Northern Laos*. ICOMOS Extreme Heritage Conference, James Cook University, Cairns, Australia, July 19–21, 2007.
- Winter, T. (2008). Heritage and development: Introduction, *Historic Environment*, 21(3), pp.1-4.
- Winter, T. (2014) Heritage studies and the privileging of theory, *International Journal of Heritage Studies*, 20(5), 556-572. DOI: 10.1080/13527258.2013.798671
- Winter, T., & Daly, P. (2012). Heritage in Asia: Converging forces, conflicting values. In: T. Winter & P Daly (Eds.), *Routledge handbook of heritage in Asia*. London, USA & Canada: Routledge.
- Wolf, E. (1999). Anthropology among the powers, *Social Anthropology*, 7, 121–134.
- World Bank. (2010). *Natural resources for sustainable development: Hydropower and mining*. Lao PDR Development Report 2010. Washington: World Bank.
- World Monuments Fund. (2015). *Hintang Archaeological Landscape*. Retrieved from: <https://www.wmf.org/project/hintang-archaeological-landscape>
- Yamauchi, S., & Lee, D. (1999). *Tourism development in the Lao People's Democratic Republic*. DESA Discussion Paper No. 9. New York: United Nations.
- Yarrow, D. (1996). *Review of Aboriginal involvement in management of the wet tropics world heritage area*. Consultancy Report prepared for the Wet Tropics Management Authority. Cairns, June 1996.

Appendix 1. Ethics Approval Form 1

This administrative form
has been removed

Appendix 2. Ethics Approval Form 2

This administrative form
has been removed

Appendix 3. Three Party MoU (2010)



ລັດຖະມົນຕີ ມິນເຮນລ໌ ຈຳປັດ
LXML SEPON

*Memorandum of Understanding regarding national heritage research
in the Lao People's Democratic Republic between:*

The **Department of National Heritage** (DNH), Lao People's
Democratic Republic (Lao PDR)

James Cook University ABN 46 253 211 955, through the School of
Arts and Social Sciences, a body corporate established under the
James Cook University Act 1997 of Townsville in the State of
Queensland, Australia (JCU), and

Minerals and Metals Group Ltd-Lang Xang Minerals Ltd, Lao
People's Democratic Republic (MMG-LXML)

Appendix 4. Three Party MoU (2013)



ຄ້ານຊ້າງ ມິເນໂຣນສ໌ ລິມິເຕັດ
LXML SEPON

ບົດບັນທຶກຊ່ວຍຈຳ
ວ່າດ້ວຍການຮ່ວມມືໃນການຄົ້ນຄວ້າກ່ຽວກັບມໍລະດົກແຫ່ງຊາດ
ຢູ່ ສ ປ ປ ລາວ

ລະຫວ່າງ

ກົມມໍລະດົກ ແຫ່ງ ສ ປ ປ ລາວ (DNH),

ຄະນະບູຮານວິທະຍາ ມະຫາວິທະຍາໄລ ເຈມສ໌ຄູກ ແຫ່ງອົດສະຕາລີ (JCU)

ແລະ

ບໍລິສັດ ຄ້ານຊ້າງ ມິເນໂຣນສ໌ ລິມິເຕັດ (LXML)

Appendix 5. MMG-LXML Approval Letter

This administrative form
has been removed