Grounding Global China in Northern Laos: The Making of the Infrastructure Frontier

by

Jessica DiCarlo

B.A., Pepperdine University, 2008
M.A., University of California Berkeley, 2016

A dissertation submitted to the
Faculty of the Graduate School of the
University of Colorado Boulder in partial fulfillment
of the requirement for the degree of
Doctor of Philosophy
Department of Geography
2021

Committee Members:

Professor Emily T. Yeh, Chair
Professor Timothy Oakes
Assistant Professor Michael B. Dwyer
Associate Professor Carla Jones
Assistant Professor Yaffa Truelove

ABSTRACT

DiCarlo, Jessica, Ph.D., Geography
Grounding Global China in Northern Laos: The Making of the Infrastructure Frontier
Thesis directed by Professor Emily T. Yeh

This dissertation provides an ethnography of global China centered on one infrastructural corridor in Northern Laos. Through an analysis of three interrelated infrastructure projects that have become emblematic of China's Belt and Road Initiative—the Laos–China Railway, Laos–China Economic Corridor, and Boten Special Economic Zone—I offer a grounded view on a story that is often told from faraway, geopolitical perspectives. I propose the concept of the *infrastructure frontier* as a more nuanced way to think about China's global expansion. A discursive and material phenomena, the infrastructure frontier is a capitalist project that remakes space and time to create conditions to accumulate capital. The infrastructure frontier is made through the discursive repetition of the need to unblock Laos; undervaluation of land; spectacle and performance to attract capital; more-than-economic logics of Chinese capital; and both Lao and Chinese state-support. Infrastructure frontier-making simultaneously encloses space to open it to certain types of "development," capital, or exploitation. I show how the corridor and Boten were reinvented as zones of opportunity through performance, spectacle, and speculation. In addition, I show how the Lao state assembles land for railway construction and in anticipation for future value appropriation through techniques that create a lack of calculability and undervalue land. Furthermore, the dissertation demonstrates that rather than predatory, debt provides an outlet for overaccumulation by delaying devaluation of domestic Chinese capital. This is possible due to the involvement of Chinese SOEs and joint ventures that can take on long-term risk or transfer it to lower-level actors. Finally, this dissertation details local experiences of land loss and compensation. Rather than foregrounding dispossession, it explores how displacement and infrastructural temporalities work together to illuminate how people navigate suspension despite long periods of waiting, uncertainty around land, knowledge that past projects did not materialize, and feelings that participation and redress are not possible. In sum, this dissertation illustrates how the frontier is made and remade by capital and the state through infrastructure.

Dedicated to the people who I cannot mention by name in this dissertation.

And to Marmee and Grammy, in memory and with boundless love.

ACKNOWLEDGEMENTS

This dissertation is a result of the support, time, and energy of a countless number of individuals. First and foremost, I am indebted to the many people in Laos and China who generously gave their time, shared their stories and knowledge, and trusted me with that information. For safety, I have chosen not to acknowledge every person that I have worked with by name. However, this very long list of people includes villagers and local officials throughout northern Laos; many young Chinese workers; staff, researchers, and officials at government offices in both China and Laos; development workers; and experts in Vientiane. Thank you for making this project possible and for your candor and friendship along the way.

In Laos, I am also deeply grateful for the support and good humor of many friends. Thank you to Micah Ingalls, Lauren Theis, Valerie Scott, Perrine Simon, Nicholas Bosoni, Juliet Mills, Diana Suhardiman, Violaine Fourile, Justine Sylvester, Carole Cassidy, Kathryn Sweet, Soytavanh Mienmany, Joe Narus, Andrew Bartlett, among many others. Special thanks to Lisha Du and Aadittee Kudrimoti for your good spirits and help during fieldwork. To a number of other research assistants, translators, and friends, thank you for your efforts, learning with me, and many memories.

To my dissertation committee: my deepest thanks. I look to each of you with tremendous admiration and appreciation. Thank you for shaping this dissertation and my thinking over the past five years. Heartfelt thanks to my advisor, Emily Yeh, for pushing me and acting as an endless source of support while inspiring and encouraging me. She has championed my research and wellbeing throughout my graduate career and served as an example of the type of scholar I hope to be. It has been a privilege to learn from and with her. I also want to thank Tim Oakes, whose work has blazed a trail that I aspire to follow. Thank you for your consistent encouragement and critical feedback. You have been instrumental in my development as a China scholar, and will continue to be for years to come. This project has benefited immensely from the guidance and detailed feedback of Mike Dwyer. He generously introduced me to many of the people in Laos who I relied on throughout my fieldwork, and who became dear friends. Our conversations were pivotal to this project and helped me develop a nuanced understanding of the Lao context. He is truly a model mentor. Thank you to Carla Jones who has pushed my thinking in new directions. I have yet to leave a conversation with Carla without new readings, ideas for writing, and excitement about what else is possible. Warm thanks to Yaffa Truelove whose critical insights have strengthened my scholarship. During Yaffa's job talk at CU Boulder, I distinctly recall my admiration for her poise and presentation of theory. It was an honor to have her join my committee.

Several generous funding sources and institutions have supported my fieldwork and research, including the University of Colorado Boulder, the University of Bern's Centre for Development and Environment, the Association for Asian Studies and Chiang Ching-kuo Foundation, the American Association of Geographers, and Boston University's Center for Global Development Policy, and the P.E.O Scholar Award. A warm thank you to the women of

the P.E.O. Boulder Chapter for your support. All findings, opinions, and recommendations expressed in this dissertation are my own and do not necessarily reflect the views of the granting organization or funding sources that supported my work.

At the University of Colorado Boulder, I am endlessly thankful for the time and energy that my writing group has shared with me. Thank you, especially, for helping me through this last year: Emily Yeh, Xi Wang, Li Fan, Phurwa Gurung, Shae Frydenlund, Emma Loizeaux, Sierra Gladfelter, and Tsering Lhamo. Thank you to Kristen Drybread for our writing talks and to Jennifer Fluri and Colleen Reid for their support. Thank you to my fellow CU geographers; your company on this path meant so much to me and I look up to each of you: Caitlin Ryan, Kate Hale, Galen Murton, Yang Yang, Meredith DeBoom, Gabriella Subia Smith, Rupak Shrestha, Katie Clifford, Zhaxi Duojie, Richa Shakya, Ian Rowen, Sarah Tynen, David Bachrach, and Meghan Helmberger. Tremendous thanks to Karen Weingarten, Darla Shatto, Leslie Yakubowski for keeping me on task and the department together!

To dear friends and collaborators outside of CU Boulder. Thank you for your camaraderie, friendship, and conversations: Katie Epstein, Seth Schindler, Juliet Lu, Cecelia Springer, Seigi Karasaki, Dinesh Paudel, Inger Marin, Andrew Grant, Alessandro Rippa, Tyler Harlan, Dorothy Tang, Kelli Roemer, Grete Gansauer, Elise Otto, and Kris Smith.

I would also like to thank the academic mentors who have shaped my journey. To Alexander Diener, where to begin. You introduced me to human geography as a discipline and I am forever grateful. What else is there to say except: To the life of the mind! To Isha Ray, who is a model scholar, mentor, and reminded me that it was indeed not too late to start my Ph.D. I aspire to mentor as Isha does. To Suneeta Krishnan who guided my earlier forays into research and publishing. And to Nikki Kettle, who has encouraged my writing since high school.

To my community at the University of California Berkeley who paved the way for this dissertation and so vividly shaped my thinking. I am forever grateful. Special thanks to the scholars who gently and encouragingly set me on the path to the PhD and continue to inspire my work: Isha Ray, Nancy Peluso, and Michael Watts.

I am tremendously grateful for a number of collaborative and scholarly engagements over the last few years. To friends at the University of Bern's Center for Development and Environment in Laos, thank you for giving me such a welcoming home in Vientiane. I miss you all and appreciate how you open your doors to many of us wandering academic types. To sis Oy, eauy Na, ai Inthaneth, ai Vong, Michael, Rasso, Monh, Bai Moua, Yothin, and Soup: my warmest thanks. I was fortunate to return from fieldwork and begin my dissertation writing as a pre-doctoral fellow at Boston University's Center for Development and Environment. Thank you to my "Boston" community for all your enthusiasm, support, and incredible feedback: Kevin Gallagher, Xinyue Ma, Rebecca Ray, Yunnan Chen, Kehan Wang, and Alvin Camba. Thank you to the Chinese Academy of Science's Institute of Geographic Sciences and Natural Resources Research, especially Liu Weidong and Song Zhouying. It has been a privilege to join the Roadwork Asia team at the University of Zurich, and learn through their many scholarly examples: thank you to Agnieszka Joniak-Lüthi, Verena La Mela, Judd Kinzley, Rune

Steenberg, Tom White, Bjoern Reichhardt, Emilia Sulek, Eric Schluessel, Till Mostowlansky, Hasan Karrar, and Zarina Urmanbetova. Finally, thank you to the many people who have read and commented on parts of chapters that I have presented at conferences and workshops, especially Giles Mohan, Simone Abdul-Malik, Courtney Wittekind, Sarah Turner, Su Xiaobo, and Jean-Paul Addie. The kindness of these communities has made this journey a special and joyful one.

To the friends and family who have supported me through long studies, fieldwork, and endless writing, who celebrated and commiserated, who kept me fed when deadlines were tight and made sure to take me out on a run or bike ride. Special thanks to Katie Epstein, Alyssa Henry, Oliver Wood. And thank you to dear friends through so many chapters of life, I treasure sharing it with each of you: Angelica Morse, Stephanie Klimaszewski, Dania Lopez, Elysa Kliman, Stephanie Doe, Laila Ashaq, Lee Farmer, Cuckie Zatti, Mary Kittla, Laura Yale, Katie Stjernholm, Justin Schmidt, and Mike Barrett. To Tae, Chris, Maggie, and Kailey, with whom my interest-turned-obsession with China began as a Princeton-in-Asia Fellow. Thank you to my family for trusting the many twists, turns, and long paths that I have chosen—Victoria, Thomas, Aunt Eileen, Aunt Diane, and my parents, Stephen and Lorraine, I love you. Thank you to Nancy, Mark, and the whole Haley-Bourne family. To Aidan Haley and Carl Zoch for packing their bikes and riding across Xishuangbanna and through Northern Laos with me, as I stopped all too often to ask questions and take many notes. Finally, thanks to my, and many people's, fairy god(dess) mother, Marcie Telander. I appreciate and love you all deeply.

You each inspire me; thank you for sharing your light, enthusiasm, and support.

TABLE OF CONTENTS

Abstract ii
Dedication iii
Acknowledgements iv
List of tables, figures, maps, and images xi
Acronyms and abbreviations xvi
Monetary conversion and units of measure xix

PREFACE: A VIEW FROM NORTHERN LAOS 1
A note on terms 9

CHAPTER ONE:
ON THE INFRASTRUCTURE FRONTIER

I. Introduction 11
II. *Phak-lat*, Lao Party-state governance 16
III. Global China 18
Critical perspectives and moving beyond the BRI 19
d/Development from Opening up the West to the Belt and Road 25
IV. The infrastructure (re)turn 30
V. Dynamics of the Infrastructure frontier 33
Unblocking and enclosure in frontiers 35
Accumulation and undervaluation 36
Anticipation, spectacle, performance 39
VI. The projects 40
The Laos–China Railway 40
The Laos–China Economic Corridor 50
Boten Special Economic Zone 52
VII. Methodology 55
Ethnography on the road and on the rail 55
Study sites 59
Cycling as method 62
Detours, hurdles, and opting for the "unofficial" 66
VIII. Outline of the dissertation 69

CHAPTER TWO:
ROAD, RIVER, AND RAIL: AN INFRASTRUCTURAL HISTORY OF THE *MISE EN VALEUR* OF LAOS

I. Introduction 77
II. The origins of *mise en valeur* and *débloquement* of Lao territory 80
III. Infrastructure frontier-making over time 84
Infrastructural history: A long view 87
IV. An infrastructural history between "value creation" and "improvement" 89
Infrastructures of "the land in between" and caravan trade (pre-1893) 89
Infrastructures of débloquement and colonial control (1893–1945) 91
Battlefield and buffer infrastructures (1950s–1975) 99
Infrastructures of socialist ambition and economic transition (1975–1990s) 106
Infrastructures of economic development, regional integration, and poverty alleviation (1990s-2000s) 110
Infrastructures exchanged for land (2000s-2010s) 120
V. Weaving silk routes 122
VI. Conclusion 126

CHAPTER THREE:
RAILWAYS, ENCOMPASSING ACCUMULATION, AND CHINA'S SPATIOTEMPORAL FIX

I. Introduction 129
II. Histories of railways and banking: brief reflections 132
III. Railway profitability and dubious debt discourse 136
Mainstream economic assessments 136
Chinese "predatory" lending: the debt-trap meme and hidden debt 139
IV. Railway capital and an infrastructural "fix" 144
Financing the railway 144
China's spatiotemporal fix 150
Mediating institutions 152
V. Conclusion 155

CHAPTER FOUR:
CORRIDORIZATION, SPECTACLE, AND SPECULATION: REINVENTING ZONES OF OPPORTUNITY

I. Introduction 157
Etymological underpinnings 161
II. Corridorization: Channeling flows, containing flows 165
State visions, campaigns, and support 168
III. Seeing the world from Boten 173

A brief history 174
Visualizing "Boten Beautiful Land" 178
The zone as palimpsest 187
IV. Making mirages: Life between the spectacular and mundane 194
V. Conclusion 201

INTERLUDE.
拆 (chāi): to demolish, dismantle or tear down

CHAPTER FIVE:
ENGINEERING ENCLOSURES: ON LAND GOVERNANCE, COMPENSATION, AND VALUATION

I. Introduction 207
Enclosure, undervaluation, and infrastructure frontier-making 209
II. The role of the Lao state and "priority project" discourse 212
Capital shortage and the Lao state's role in the railway 212
Discourse of the priority project 215
III. Hybridity and the political economy of land in Laos 217
Tenure and land titling 221
Land concessions 224
IV. Legal-institutional mechanisms and a lack of calculability 225
"Abuse through ambiguity" 226
Land compensation regulations for Nam Theun 2 Hydropower Project 227
Land compensation regulations for the Laos–China Railway 230
The railway concession agreement and "special policies" 235
The institutional structure of railway land compensation and valuation 236
V. Land (under)valuation 241
VI. Conclusion 247

INTERLUDE.
Undercurrents of fear and the UN Special Rapporteur visit

CHAPTER SIX:
LIFE ON THE TRACKS:
SUSPENSION, WAITING, AND INTERSECTING TEMPORALITIES OF INFRASTRUCTURE

I. Introduction 251

II. From railroad time to infrastructural temporality....256
III. Lives suspended....262
Differentiation and the power of waiting....276
IV. Intersecting infrastructural temporalities:
Suspended presents meet suspended pasts....279
Past displacement and resettlement beyond infrastructure....281
First a dam, then a zone....285
First a zone, then a corridor, then railway tracks....288
V. Conclusion....291

CHAPTER SEVEN:
CONCLUSION

I. Overview....294
II. Dynamics of infrastructure frontier-making....295
III. Future directions from the local to the geopolitical....299
Hinterlands of the infrastructure frontier....300
Infrastructural competition....301
IV. Moving forward....302

BIBLIOGRAPHY....305

APPENDICES....340

TABLES

Table 1.1. Overview of the Laos–China Railway project 40
Table 1.2. LCEC sectors for investment and joint Laos–China cooperation 51
Table 1.3. Overview of the Boten SEZ project. 52
Table 3.1. Breakdown of railway project financing with loan conditions 148
Table 4.1. Etymology of spectacle and speculation 163
Table 4.2. Advertisement shared on WeChat by Haicheng Group, a Chinese conglomeration of real estate, construction, tourism, and logistics companies, and developer of the Boten Special Economic Zone in Laos 187
Table 5.1. Land, property, and tenure types as defined in Lao law 222
Table 5.2. Lao laws and decrees pertaining to land and compensation 237
Table 5.3. Selected unit price of different types of land. Source: Luang Prabang Provincial Governor (2018) 243
Table 5.4. Example compensation calculation that includes opportunity costs of potential cash crops 244

FIGURES

Figure 3.1. Shareholding structure of the Laos–China Railway Joint Venture 145
Figure 3.2. Laos–China Railway Financing Structure 146
Figure 4.3. Architectural design plans and styles shared by Haicheng 189
Figure 5.1. Railway timeline with key dates related to compensation, alongside new compensation, and land-related regulations 233
Figure 5.2. Laos–China Railway project management structure within the Lao government 237
Figure 5.3. Laos–China Railway management and reporting structure within the Lao government 238

MAPS

Map 0.1. Route of the railway and corridor through Northern Laos 3
Map 1.1. The railway line through Northern Laos mapped over population density 48
Map 1.2. North Laos with general area of study sites marked 61
Map 2.1. Map of French Indochina 1909-1954, spanning present day Vietnam, Laos, and Cambodia. 92
Map 2.2. Mekong River basin with the major dam projects envisioned in the 1960s 102
Map 2.3. Map of the Chinese road building route in Luang Namtha province, 1961-1973. 105
Map 2.4. The 1990s regional visions for infrastructure connectivity through ASEAN 109
Map 2.5. GMS map of regional connectivity plans 114
Map 4.1. Belt and Road corridor imaginary. 170
Map 4.2. Map of mainland Southeast Asia with Boten at the center. The map shows travel times from the zone and the railroad line (black and white line) running from China to Singapore. Source: Haicheng's sales office in Boten SEZ. 181
Map 4.3. Overlapping mandalas of 14th-century Southeast Asian kingdoms of Lan Xang, Lanna, Sukhothai, Khmer, Champa, and Ayutthaya, represented in a similar form of concentric circles that locate Boten as an important center on the regional map. 182
Map 6.1. Outline of planned Special Economic Zone and Development areas surrounding Luang Prabang City. The area inside the red line encompasses the protected area of the UNESCO Ancient City 286

IMAGES

Image 0.1. Elevated railway tracks built above village homes and agricultural fields in Oudomxay province 1
Image 1.1. A billboard advertising the railway on the entry road to Vientiane Capital airport. It reads "Construct the Laos–China Railway, benefit the Lao and Chinese people" 41
Image 1.2. China-Laos Railway, project site of China Railway No. 8 Engineering Group, in Luang Prabang Province near Pha O village 46
Image 1.3. Viengsavath Siphandone (Lao Minister of Public Works and Transport) and Jiang Zaidong (Chinese Ambassador to Laos) unveil the name of the first passenger train of the Laos–China Railway 49
Image 1.4. The skyline of Boten SEZ under construction during our cycling trip 53
Image 1.5. The author in front of a newly complete railway tunnel, constructed by the China Railway No. 5 Engineering Group 65
Image 1.6. The author arriving by bike at a Power China construction site 65
Image 1.7. An aerial view of the author and friend cycling through rubber plantations of northern Laos 66
Image 2.1. Newspaper headlined on the Mekong Valley project in *The Decatur Daily* 103
Image 4.1. Exiting China to enter Laos along the Belt and Road Lane at the Boten-Mohan border crossing 157
Image 4.2. The miniature replica of That Luang stupa (the original is located in Vientiane) marking the Boten border crossing 157
Image 4.3. Model of Boten SEZ located in the JingLan Hotel, which is owned by the zone's primary developer, Haicheng Group 159
Image 4.4. A page from the Haicheng company brochure for Boten, highlighting the high-level political backing of the project 171
Image 4.5. Graphic rendering of Boten's imagined future skyline that is included in Haicheng's marketing materials 173
Image 4.6. The border gate in Boten in the 1980s and 1990s 175
Image 4.7. Satellite imagery from 1985, 2007, 2011, and 2020 showing that land has been progressively razed since Boten was dubbed an SEZ 176
Image 4.8. A page from one of Haicheng's brochures advertising Boten as a new international city with a spectacle of fireworks behind a Disney-like castle and cityscape in the background 186
Image 4.9. A roadside sign pointing east to Boten's city center and west to NanThong tourist village 190
Image 4.10. A temple under construction with Boten's city center in the distance 192
Image 4.11. A billboard on Boten's main thoroughfare declares: "This is the Shenzhen Special Economic Zone in 1979. Different times, the same great cause"..... 193

Image 6.1. The railway workers who cleared land for the tracks initially carved around this mound of earth, which local villagers informed them contained a Hmong gravesite. The one coffin had been interred for nineteen years 269
Image 6.2. Construction of railway pylons above agricultural and village land in Oudomxay province 271
Image 6.3. A woman washes materials from wedding festival in her village's main stream, alongside which railway pylons have been constructed 273
Image 6.4. Railway pylons as they begin to make their way through and over Bopiat Village..... 290

ACRONYMS AND ABBREVIATIONS

ADB	Asian Development Bank
AIIB	Asian Infrastructure Investment Bank
ALTID	Asian Land Transport Infrastructure Development
AMBDC	ASEAN Mekong Basin Development Cooperation
ASEAN	Association for Southeast Asian Nations
B3W	Build Back Better World
BCEL	Banque Pour Le Commerce Exterieur Lao
BOT	Build, Operate and Transfer
BRI	Belt and Road Initiative
CBRC	China Banking Regulatory Commission
CCP	Chinese Communist Party
CDB	China Development Bank
CGIT	China Global Investment Tracker
CHEXIM	China Export Import Bank
CIEC	China Indochina Economic Corridor
CRCC	China Railway Construction Corporation, Ltd.
CSG	China Southern Power Grid Company
DSF	Debt Sustainability Framework
ECZ	Economic Cooperation Zone
EdL	Électricité du Laos
EdL-T	Électricité du Laos Transmission Company Limited
EIA	Environmental Impact Assessment
ESIA	Environmental and Social Impact Assessment
ESCAP	Economic and Social Commission for Asia and the Pacific
EWEC	GMS's East West Economic Corridor
FDI	Foreign Direct Investment
FMPRC	Ministry of Foreign Affairs of the People's Republic of China
G7	The Group of Seven is an inter-governmental political forum of Japan, Canada, Italy, France, Germany, the United Kingdom, and the United States
GDP	Gross Domestic Product
GMS	Greater Mekong Subregion (an ADB initiative)
GTZ	*Deutsche Gesellschaft für Technische Zusammenarbeit*, now GIZ
GIZ	*Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH* or the German Corporation for International Cooperation, formerly GTZ
HAGL	Hoang Anh Gia Lai Agricultural Joint Stock Company
HSR	High-speed railway
IDFC	International Development Finance Corporation
IFIs	International Financial Institutions

IMF	International Monetary Fund
JV	Joint venture
KPL	Khaosan Pathet Lao
Lao PDR	Lao People's Democratic Republic
LCEC	Laos–China Economic Corridor
LCR	Laos–China Railway
LFA	Laos' national Land and Forest Allocation program
LMI	Lower Mekong Initiative
LNRE	Lao National Railway Enterprise
LPRP	Lao People's Revolutionary Party
MDB	Multilateral Development Bank
MDG	Millennium Development Goals
MoEM	Ministry of Energy and Mines (Laos)
MOFCOM	Ministry of Commerce, PR China
MoNRE	Ministry of Natural Resources and the Environment (Laos)
MoU	Memorandum of Understanding
MPI	Ministry of Planning and Investment of Laos
MPWT	Ministry of Public Works and Transport of Laos
NDRC	National Development and Reform Commission of the PRC
NGO	Non-governmental organization
NLMA	Laos's National Land Management Authority
ODA	Official Development Assistance
OECD	Organisation for Economic Cooperation and Development
NERI	National Economic Research Institute (Laos; renamed NIER)
NIER	National Institute for Economic Research (Laos: formerly NERI)
NEC	GMS's Northern Economic Corridor
NEM	New Economic Mechanism
NSEDP	National Socioeconomic Development Plan
PAP	Project-affected people
PLA	The People's Liberation Army of the People's Republic of China
PPA	Provincial People's Assembly
PPP	Public private partnership
PRC	People's Republic of China
RAP	Resettlement Action Plan
RLG	Royal Lao Government
SAPs	Structural Adjustment Program
SEC	GMS's Southern Economic Corridor
SEZ	Special Economic Zone
SKRL	Singapore-Kunming Rail Link
SOE	State-owned enterprise

SPV	Special purpose vehicle
TLIC	Turning Land into Capital
TVA	Tennessee Valley Authority
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
UNDP	United National Development Programme
US	United States
USAID	United State Agency for International Development
US DoD	US Department of Defense
WB	The World Bank
YPDRC	Yunnan's Provincial Development and Reform Commission

MONETARY CONVERSION AND UNITS OF MEASURE

9100 Lao Kip = 1 US Dollar
1 hectare = 2.47 acres

PREFACE
A VIEW FROM NORTHERN LAOS



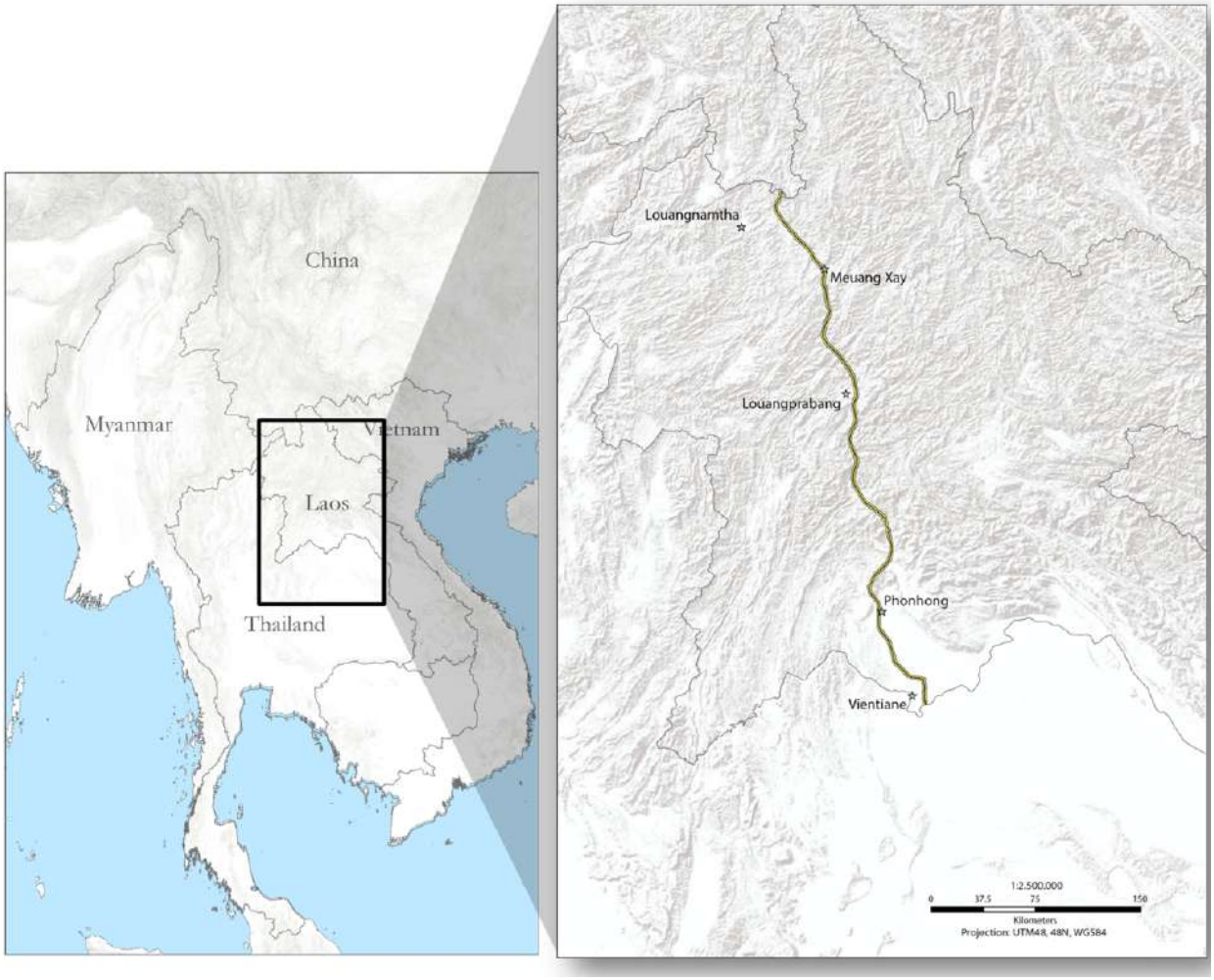
Image 0.1. Elevated railway tracks built above village homes and agricultural fields in Oudomxay province. (Source: The author, 2019)

It is early 2020, and construction on the Laos–China Railway is 85% complete—a number confirmed by my four-and-a-half-hour drive north from Vientiane along the railway route. Bridges are finally connected, and station construction has begun. I'm parked outside of what has become to me a familiar Hmong village. It lies alongside Highway 13, which is the main route that traverses northern Laos from the capital, Vientiane, to the border with China and also generally parallels the route of the Laos–China Railway. As I did when cycling the previous year (see methods in Chapter One), I am again relying on two wheels, this time a motorcycle, for fieldwork and to visit past informants-turned-friends. I'm waiting for one such person, Foua, to

arrive. We met initially through his extensive family network, and I came to treasure the time and stories he candidly and generously shares with me. During this particular visit to his home, he reminisced on how areas around Vang Vieng, the province's largest town and primary tourist location, have changed over the 30 years, identifying three primary drivers of these changes.

First, in Vang Vieng "there are big hotels and shops coming; it's not small anymore and people do not come for village life." Looking in the direction of town, he describes a once-free-flowing river shaded by trees, with small family-run shops alongside it. Many of those trees were cut down to make way for multistory hotels, a new road, bars, and restaurants. The contrast is clear if you drive just a short distance outside of downtown Vang Vieng. In town, the riverbank is a hot and dusty affair, while just a kilometer upriver, trees grow tall and the air is cooler.

Second, like many locals I've talked with in this area, he has watched the level of the *Nam Song* (Song River) drop, and worries that it could dry up within five years due to deforestation, the new road on its banks, and chemical dumping from construction projects. "It is very low, maybe because the government allows too many projects and doesn't [monitor them]. They chopped down too many trees, not just here but also north on the river. It's getting low these days, so I worry that one day in the near future, maybe just five years' time, the river will be cut off [dry] from March or April to June or July [the hot, dry season]." At Pathang Tunnel, he continues, "there has been a lot of chemical dumping. We know because we live here and see it every day and understand the changes." I ask who is the "we" that is aware of these projects, and Foua is adamant that everyone in town knows. Most importantly, he says, the local officials do nothing to stop it. Throughout my interviews in villages across northern Laos, this is a common perspective: that local officials both drive the challenges Foua identifies by facilitating large investment projects, and then overlook known harms that result.



Map 0.1 Route of the Laos–China Railway and corridor through northern Laos.

Third, he motions toward the southern hillside. The railway "is the main thing that concerns us [people in his village], because the Lao government gets rid of so much land for it. They say they will pay you if your house is in the way. When the Chinese say they will pay you, they do it, but our government…" He pauses and leans in to whisper, "You can take notes, but please save my life"—in other words, he was asking me to keep what he would say next confidential. Our gazes meet and I nod. A tractor roars by. He proceeds: "You know it is all money. What the Chinese say is true, they *would* pay for the land, but our government did not allow the Chinese to pay compensation directly. Compensation has to be paid through the [Lao]

government, and the government organizes compensation. So, they take some of the money and say land is cheap." Foua's explanation contradicts the common "China threat" narrative associated with the boom in large Chinese infrastructures around the world, and instead points to challenges within the Lao government and a distrust of local officials.

Our conversation is interrupted by a booming Hmong woman's "*Nyob zoo*" (hello) as she corrals Foua's children, her grandchildren, for dinner. Foua introduces me to his mother, whose interest in my presence seemed to pique when our conversation turned to a whisper. Foua continues, "So when the [Lao] government got money from the Chinese, they don't want to pay it all to the people who lose land. Mainly this is what we know." She agrees, saying that the Chinese company should be in charge of land compensation because they have more money. They share a common complaint that railway compensation is slow because it is determined and paid by the Lao government. They offer contrasting examples of private projects, like the Vang Vieng expressway, which they say are faster to compensate people for land. Because the developer rather than the government is in charge of compensation for other projects, compensation capital is required to be available before construction.

Their accounting of these challenges pointed me to a number of questions on capital and land for the railway. In the chapters that follow I show that railway capital was delayed, the Lao government led all land expropriation and compensation as part of their equity in the projects, and that people's lives along the tracks have been put on hold through multiple rounds of project negotiation. Over the course of my fieldwork between 2017 and 2020 studying construction of the railway, I was struck by how frequently complaints like Foua's focused not on China or even on the project itself, but on the Lao government and land appropriation. Indeed, villagers who lost land point to ways that Chinese workers or companies do things better. In some cases, Lao

villagers note that Chinese workers support local businesses or let them complete agricultural cultivation cycles. In contrast to popular, often Western, perceptions that Chinese companies and projects bulldoze smaller countries with Belt and Road Initiative (BRI) infrastructures, many people in the path of the railway describe their understanding of the project though their encounters with the Lao state. Often villagers in rural areas refer to their interactions with lower-level officials and village chiefs through whom they receive most of their on-the-ground information on the project. Unless villagers were hired to work on the project, local officials are their main, if not only, point of project contact. Most Lao people I spoke with have minimal to no contact with construction companies and Chinese workers, if only due to a wide linguistic divide. A number of people reminded me that the Chinese construction companies have direct approval from the central Lao government to proceed swiftly with construction, while the Lao government facilitated the movement and removal of people, homes, and agricultural land.

I begin with this vignette to illustrate how people on the ground have experienced the construction of a Chinese megaproject. I do so to acknowledge that much research and interest in such projects focuses on China, while attention to the host country tends to be surface-level, lacking, for example, a focus on domestic politics, perspectives, and histories. It is thus essential to first situate Laos in order to understand the processes and effects of global China's expansion within the country. Laos has long been defined by its infrastructural shortage and described as landlocked and blocked (Rigg, 1997); such views shape how infrastructures unfold today (see Chapter Two). Laos was also once described as receiving "little attention from the world's press, and equally little from academics" (Rigg, 1997: 153). The same cannot be said today—policy, media, and academic interest in Laos has exploded, particularly due to BRI projects. However, as I show through Laos's infrastructural history in Chapter Two, this attention is often in relation to

another place or power, today China. Yet, the contexts and histories of the host country offer important insights into how space and place are transformed as governments attempt to manage and engage with large-scale infrastructure projects.

Laos is the ideal theater in which to study China's expansion through infrastructure. Areas of Yunnan, just across the border, share ethnic, linguistic, and cultural similarities with Laos. A resource-rich, low-income country, it is an especially compelling place to examine global China due to, for example, their similar forms of Party-state rule, shared border, histories of economic interdependence, high levels of Chinese investment into Laos, and ethnic ties. For these and many more reasons, accepting Chinese investment is different for Laos than for, say, a country in Latin America or Africa, as relations with China are more historically sedimented. From precolonial caravan trade routes to China's "Going Out" in the 2000s, Southeast Asia has been one of China's primary geographic spaces of economic and commercial engagement overseas (Nyíri and Tan, 2017), yet a disproportionate amount of the literature on Chinese development and investment abroad focuses on Africa. Laos is especially under-studied in this regard (Liu, 2006; Tan, 2012). In addition, investments in China's bordering areas are as much about development within China as they are about the neighboring countries. China aims to secure border areas and improve its economic position by connecting neighboring areas to its transportation networks and value chains.

China indeed looms large, particularly for countries in close proximity and bordering China (Saxer and Zhang, 2017), and especially Laos as economic partner and investor. Laos signed on to the BRI in 2017, but infrastructure projects have been integral to Laos' national development and investment plans since French colonial times. Rhetoric centered on unblocking Laos has been repeated over time, resulting in models, maps, and images of connection. The

general spatial vision presented via the BRI also echoes decades of imagining an unblocked Laos, connected through transport, road, and corridor. As this dissertation will show, the Laos state embraces large-scale Chinese projects that recycle past discourses, dreams, and plans in order to realize domestic objectives. It was not uncommon during my fieldwork to hear from Chinese people in Laos or in Yunnan that Laos is like China 20 to 30 years ago. Many of my informants who worked in construction on large Chinese infrastructures cited their role in helping Laos develop and catch up to China.[1]

Similar to China's Reform and Opening Up since the 1970s, Laos underwent rapid macroeconomic growth as it transitioned from socialist development strategies toward a market economy, beginning with the institution of the New Economic Mechanism in 1986—*chin thanakaan mai* (new thinking) or *kanpatiphup setthakit* (the reform economy). Over the past two decades, Chinese investment in Laos has skyrocketed. In the early-2000s, Lao policy-makers developed a more hospitable regulatory framework for foreign direct investment (Lu, 2017). In 2004, Laos started to attract these investments more actively under the slogan "Turning Land into Capital" (Dwyer, 2007; Baird, 2011). Simultaneously, China's "Going Out" campaign incentivized Chinese nationals and enterprises to invest abroad. Chinese engagement in Laos has been encapsulated in the refrain "China has labor and capital but not land, Laos lacks labor and capital but has land!" (Lu and Schönweger, 2019). Chinese presence has come in the form of land acquisitions, agricultural investment, entrepreneurial and labor migration, special economic

[1] They demonstrate a mainstream perspective of development as moving through stages of growth, in a predetermined, stepwise, and linear manner (Rostow, 1960). The teleological imagination of development as a series of step is also laden with assumptions about sameness across the Lao and Chinese border.

zones, and resource extraction (Dwyer 2007; Hirsch and Scurrah, 2015; Lu and Schönweger, 2019; Nyíri, 2012; Tan, 2012).

As such, Laos' pull for foreign investment was met by China's push in the early-2000s for Chinese capital to "Go Out." Since then, China—through an array of both state and non-state actors—has become Laos' lead investor, most significant large-scale infrastructure developer, primary provider of aid, main holder of Lao sovereign debt, and second-largest trading partner after Thailand. Although mainstream depictions frame Laos as a weak state and China as a predatory monolith, this dissertation says otherwise, as large-scale infrastructure development entails an array of under-explored spatial and temporal processes, from within both Laos and China, that make the infrastructure frontier.

A note on terms

I. The railway

The Pan-Asian Railway is a network of railway lines (not yet all built) that run between China and Singapore via three routes: Myanmar, Laos, and Vietnam. This dissertation focuses on the first of these three branches that has been built, the "middle way" through Laos. Others writing on this line have referred to it as the Trans-Laos Railway or the China–Laos Railway (in Chinese 中老铁路; *zhong lao tielu*). While the name "trans-Laos" is apt, throughout this dissertation I chose to refer to it as the "Laos–China Railway." I do so first because it is the most direct translation of the Lao language name of the project ລົດໄຟລາວ-ຈີນ (*lodfai lao–chin*), and second because it is how most of my informants referred to the project.

II. Lao, Laos, and Laotian

In this dissertation, I use "Laos" to refer to the country of the Lao PDR and "Lao" as an adjective. The country's official name in English is the Lao People's Democratic Republic (Lao PDR) and in Lao language it is *Phathet Lao*. It is often pronounced as Laos or Lao and both are considered correct. This is because Laos is a former French colony and in the French language many end consonants remain silent (for example, the 's' in Laso). The French Romanized "*Lao*" as "Laos" and for the French speaker, this is still pronounced "Lao." This explains the spelling for the country name. In adjective form, the people are Lao (*kon lao)*, they eat Lao food (*ahaan lao*) , speak Lao language (*pasa lao*).

I, however, opt not to use the term "Laotian" due to its colonial origins. It was derived from the French adjective for Lao (the adjective): "laotien(ne)." In an interview, Lao historian Martin Rathie explains that the use of "Laotienne" reflects the colonial romanticized view of the Lao

people (Barajas, 2019). Furthermore, upon the founding of the Lao PDR in 1975, French words were removed from circulation on state-issued items (e.g., bank notes and stamps). Finally, and most importantly, people in Laos today do not use the term “Laotian,” but rather refer to themselves as Lao.

CHAPTER ONE
ON THE INFRASTRUCTURE FRONTIER

"The 'unblocking' of Laos thus became synonymous with construction of a rail line. On this one project the economic future of Laos was believed to depend. Until it became a reality, the country would remain an economic backwater."
(Stuart-Fox, 1995: 125; on the French in Laos)

"*Frontiers are not just discovered at the edge; they are projects in making geographical and temporal experiences*"
(Anna Tsing, 2003: 5100)

I. Introduction

Cycling from China's Yunnan province into Luang Namtha province in Laos is an infrastructurally striking experience. Pedaling, at times in silence and at other times to the rhythms of construction—rebar dragging on concrete, the stutter of a jackhammer—stirs multiple senses. Much of the landscape is mountainous, lush with green forest, and checkered by rubber plantations. From the old, paved two-lane highway that winds through the mountains of southern Yunnan, glimpses appear of a massive new highway that cuts low along the valley floor. Rather than running along the high ridges, the new expressway darts in and out of innumerable mountain tunnels, practically never changing its grade. The expressway's very appearance encapsulates frictionless movement and speed. Alongside the low-lying expressway, a similar infrastructure was under construction at the time of my bicycle journey in 2018. In some sections there was an elevated track and in others only huge concrete pylons—this would soon become the "China section" of a new railway line from Kunming through Laos to Southeast Asia.

Surrounding these two large connective infrastructures, the hillsides are punctuated by farmland in flatter areas and concentrations of concrete in others, where small towns and increasingly larger cities dot the landscape. The cities, from Jinhong to Mengla in China and

even to Boten across the border in Laos, share a certain aesthetic. This aesthetic became even more apparent when it disappeared as I traveled further south in Laos. The pylons for future railway tracks, however, persisted, appearing to pave the way for the sleek cities and larger towns that define the landscape on the other side of the border in China. Having lived in Yunnan province years prior, I recall similar landscapes of large infrastructures emerging. At the time of my research, one main highway offered the primary route from the Chinese border south through the country to Vientiane Capital. Yet, railway pylons were being erected to connect with those in China, and the hum of a city was emerging at the border in Boten.

This infrastructural experience stirred questions about the flood of capital and the rush of construction of large infrastructures, both within China and by China in other countries. The railway project is connected to a larger story about the influx of Chinese capital and development into once-remote places around the globe. In 2013, Chinese Party Secretary Xi Jinping declared the Belt and Road Initiative (BRI; 一带一路) to be the "project of the century." In railway alone, from 2013–2019, the China Railway Construction Corporation signed 21 railroad construction contracts worth approximately US$19.3 billion. According to the China Global Investment Tracker, between those same years, all Chinese companies engaged in overseas railway construction signed $61.6 billion in railway construction contracts. This is almost double the amount signed in the previous seven years, before the 2013 BRI announcement. Yet, as I argue in this dissertation, China's global expansion is more than a BRI event and Laos is a compelling place to tell this story.

Despite a population of just over 7 million people and an annual GDP of US$18 billion, Laos has received huge amounts of capital and support from China. At the same time, Laos is not a passive recipient, and has long pursued projects such as the railway and Boten that have begun

to take shape under the BRI banner. While the projects I study are "official" BRI infrastructures, this dissertation aims to avoid the pitfalls of focusing only on these projects as a post-2013 Chinese moment. Instead, I discuss their deeper historical roots, motivations, logics, and effects for both Lao and Chinese people. I add to a growing literature of nuanced ethnographic accounts that detail local engagements and encounters with various forms and actors of a rapidly expanding China (Saxer and Zhang, 2017; Nyíri and Tan, 2017; Oliveira et al., 2020; Woodworth and Joniak-Lüthi, 2020). I am interested connecting large flows of capital and infrastructure projects, with the everyday and mundane, in order to bring the background into sharp focus.

This dissertation is an ethnography of global China centered on one infrastructural corridor in northern Laos, the Laos–China Economic Corridor. Through three interrelated infrastructure projects that have become emblematic of the BRI—the Laos–China Railway, the Laos–China Economic Corridor, and the Boten Special Economic Zone—I develop a grounded perspective on a story that is often told from faraway, geopolitical views. The Laos–China Economic Corridor was proposed in 2018 as a means of accumulating capital and developing various sectors of the Lao economy along the new railway that will open in 2021. Boten is a key node on the railway and within the corridor. I view the corridor is both an infrastructure project in itself and closely linked to the railway and to Boten. Corridors are meant not only to channel and connect, but also to contain. Thus, I conceptualize the corridor as a space from within which to view global China's infrastructural engagements from a range of different vantage points.

Laos and the corridor have been imagined as blocked, which I detail in Chapter Two since colonial times. As recently as 2020, the World Bank released a report on the Laos–China Railway entitled "From Landlocked to Land-Linked: Unlocking the Potential of Lao-China Rail

Connectivity." The report, like many analyses of the railway, notes that it will speed up and enable movement, channeling flows of people and things. The project is framed as a means of improvement and economic development, even though the railway will not be profitable in itself. However, "land-linking" Laos is not as simple as constructing a railway. Instead, it entails a range of processes that make and remake northern Laos as frontier through infrastructure as a means to "unblock" Laos.

The overall argument of this dissertation hinges on what I call the *infrastructure frontier*. Rather than empty, thinking of space as blocked to be opened by infrastructure reorients our thinking of frontier toward something that is constantly being reproduced in the same place through infrastructure. I conceptualize the infrastructure frontier as a simultaneously discursive and material project that remakes space and time, in order to create conditions to attract investment and accumulate capital. I argue that, particularly through China's global expansion, a pattern of frontier-making is legitimized through large infrastructures, and a frontier lens spotlights the new forms of commodification, institutional orders, property regimes, spectacle, and authority that emerge. Thinking with infrastructure and frontier together thus offers useful insights into China's global infrastructure expansion, discursively, materially, and imaginatively.

I situate this dissertation in literature on global China, and I contribute to debates on China's global expansion and Chinese state capital. As Lee (2017) contends, "Studying global China means reimagining China beyond China, connecting, contextualizing, and comparing 'Chinese' development with that in other parts of the world." This is a key motivation of this dissertation and of my work in northern Laos. Rather than examining the impacts of the Laos–China Railway, for it is too early to anticipate how they will unfold, this study endeavors to make sense of a growing global China, and of the frontier-making effects—spatial, temporal,

political, and economic—that large-scale infrastructures produce. The following chapters explore spatial and temporal questions and speak to one another through themes of accumulation, (under)valuation, enclosure and opening, and temporalities of deferral, delay, and suspension. While dispelling common myths about a monolithic China, the dissertation reveals multiple logics of Chinese capital, how the Lao state is instrumental in pursuing projects. I also contribute a multitemporal perspective to critical studies on global China, showing how Chinese development projects entail a mix of temporalities, at once focusing on a glamorous or prosperous future, while also selectively mining the past.

While navigating two complex places and histories is not straightforward, I attempt to bring multiple scales of the "China side" and the "Lao side" to the forefront throughout this dissertation. For example, Chapter Three examines the logics of Chinese capital, and in Chapter Four I show how Chinese laborers, through mundane labor, produce spectacle that renders the infrastructure frontier investable. Chapter Five details how multiple levels of the Lao state undervalue land to make it available for construction, and Chapter Six details the local Lao experiences of displacement as suspension.

In the remainder of this chapter, I first provide some key information on the Lao governance context, and then situate my research within the literature on global China. Next, I introduce my conceptualization of the infrastructure frontier as a more comprehensive means to study processes of global China. I then summarize the three projects this dissertation is built upon: the Laos–China Railway, the Laos–China Economic Corridor, and Boten Special Economic Zone. I conclude with a discussion on my methodologies and an outline of the chapters to follow.

II. *Phak-lat*, Lao Party-state governance

Understanding the contours of Lao state politics is essential because the nature of (post)socialist authoritarianism is an integral factor in Laos' logics of development and geopolitical economic engagement with China. Yet, research on the contemporary Lao state and politics is scant. Creak and Barney (2018: 695) affirm, "If the politics of post-socialist Vietnam remain understudied compared to those of China, the region's third contiguous Marxist-Leninist state [Laos] represents an even wider lacuna in our understanding of how state power and authority operate under conditions of socialism and post-socialism." They posit a number of reasons why this trend persists, including state secrecy and non-transparency, suspicion of Western researchers or outsiders, and limited access to the inner workings of the Party-state. Yet, the primary reason they pinpoint is the dearth of "sustained disciplinary interest," noting that "few if any political scientists have specialised on Laos since the retirement in the 1990s of the Cold War-era scholars MacAlister Brown and Joseph Zasloff" (Creak and Barney, 2018: 697). Scholars who have examined the politics or political system of Laos have done so indirectly through development interventions and/or resource governance, and only quite recently (Bouté and Pholsena, 2017; Sayalath and Creak, 2017; Tappe, 2018; High and Petit, 2013).

Since 1975, Laos has been ruled through a one-party political system, the Lao People's Revolutionary Party (LPRP). The Lao Party-state, or *phak-lat* regime (Tappe, 2018: 172) adopted a Soviet style of governance. The country currently consists of sixteen provinces (*khoueng*), the prefecture (*kampheng nakhon)* of Vientiane, 139 districts (*mueang*), and approximately 11,000 villages *(ban).* Croissant and Lorenz (2018: 121) argue that "through its network of party organizations in all administrative units and the dual function of party cadres as party representatives and state officials, the LPRP has complete control and authority over

politics." In other words, the LPRP exercises power through government institutions, hence the term Party-state. The National Assembly is the highest state institution; however, it acts more like a rubber stamp for the Party (in the form of the LPRP's Central Committee and the Politburo). Croissant and Lorenz (2018) explain that unlike in a constitutional system, "the ruling party in Laos is above the law." Although a constitution exists, the Party is not bound by it, and it is often subject to interpretation by the National Assembly's Standing Committee, which is under the control of the Party.

Sayalath and Creak's (2017) work on the LPRP congress and the Party's "regeneration"—as top leadership was simply reshuffled at the Tenth Party Congress in 2016—shows "not only the degree to which the party's structures and processes have been designed to maintain party power and stability, but also to ensure elite prerogatives are not unduly challenged." Long-standing family relations and patronage networks reproduce the Lao political elite. In addition, many current Politburo members have familial relations with revolutionary heroes; even as the post-1975 generation of new leaders emerged, they had "inseparable kinship or patron-client ties to the old guard" (Tappe, 2018: 2). According to Martin Rathie (2017: 48), Lao Party-state politics are based on "'circles of power' [that] relate to groups who studied in the USSR, PRC, and SRV[2] … those who were active in the Lao People's Revolutionary Youth Movement … [and] those who cultivated investment ties while posted in foreign missions."

A number of scholars have argued that Lao state power is relational despite of the centralized power of the Party-state. Many of these analyses have used the concept of fragmented sovereignty to make sense of the Lao state, as defined by institutional disconnection,

[2] Union of Soviet Socialist Republics, People's Republic of China, and Socialist Republic of Vietnam.

internal struggles over regulatory power, regulatory contradictions, and limited technical capacity (Kenney-Lazar, 2018; Dwyer, 2011; Lund, 2011). Indeed, Laos' central, provincial, and local relations have been a consistent source of tension, particularly between the central government and the more regional interest of provincial governors. However, provincial officials, especially governors, have historically had a degree of autonomy, as they are directly appointed by the Lao president and then have the authority to appoint district chiefs and officials. In addition, Kenney-Lazar (2018: 684) writes that state power is "relational to other actors like resource investors, rural communities, and civil society, as well as its own internal contradictions and fragmentation." In examining interactions between Lao state and Chinese actors, Lu and Schönweger (2019: 2) point out that the "often competing state actors still have strategic political agendas and powerful implementing agency which Chinese state actors still navigate with limited success." Thus, relational state power in Laos has proven to be a hurdle for the diverse groups of Chinese actors that engage in infrastructure as well as other sectors in Laos.

III. Global China

China's rise is reshaping global capitalism, resource politics, and development, particularly though the sweeping emphasis on large-scale infrastructure projects that underpin the BRI. Announced in 2013, the transnational initiative commits over US$1 trillion to roads, power plants, ports, bridges, and railways that span over 140 countries in Asia, Africa, and Europe—in other words, spanning the territory of approximately two-thirds of the world's population, three-quarters of the world's energy resources, and one-third of global GDP. These large-scale investments are framed as the next iteration of "alternative development," signaling a new era in China's foreign policy and development practice and South-South collaboration

(Mawdsley, 2015). Some posit that China has occupied a vacuum left by the decline of mainstream development toward softer approaches by Western institutions (Fukuyama, 2015), posing a threat to Western agendas and interests (Pan, 2012). Such views suggest a cohesive and singular strategic "China."

Rather, China's global integration is complicated and contingent, proceeding through links between local and transnational actors that transcend borders, requiring grounded studies that complexify actors and examine the rescaling of the state, capital, and elite interests (Klinger and Muldavin, 2019). In Laos, Dwyer and Vongvisouk (2019) suggest a need to examine the interaction of local land issues and international relations such that the latter is a product of internal struggles rather than a coherent strategy. In dialogue with these scholars, I offer a critical, in-depth, and timely contribution to a rapidly growing literature on the geographies that emerge through flows of people, capital, and discourses related to global China's expansion.

Critical perspectives and moving beyond the BRI

This dissertation engages with scholarship on global China as a field of power that is taking shape and deployed around the world. I draw on Lee's (2017) formulation of global China—her shorthand for China's economic expansion and stabilizing strategy—not as a singular entity but as a phenomenon, and use this as an entry point to guide my inquiry and analysis. Lee (2017: xiv) argues in her incisive monograph that "global China is taking myriad forms, ranging from foreign direct investment, labor export, and multilateral financial institutions." Her characterization of Chinese capital operating under a logic of encompassing accumulation simultaneously shows the fragmentation of Chinese actors and state objectives, as well as its sensitivity to host country contexts.

My research on one particular form of global China is in conversation with a literature that grounds global China through specific locations, projects, and resources (Lee, 2017; Klinger and Muldavin, 2019; Lu, 2021; Joniak-Luthi, 2020; Murton, 2020; Oliveira et al., 2020; Sidaway et al., 2020; Mawdsley, 2008; Paudel and Rankin, 2020; Woodworth and Joniak-Lüthi, 2020; Yeh, 2016; Yeh and Wharton, 2016). To understand the BRI one must examine context, landscape, history, and politics. Oliveira et al. (2020) note that to understand how the BRI is reshaping global development it must be examined empirically "from the ground." Much of this literature focuses on how the initiative reshapes geopolitics and geoeconomics, while creating new geographies of development in China and its partner countries (Callahan and Hubbard, 2016; Hofman, 2016; Klinger and Muldavin, 2019; Mohan and Power, 2009; Murton, 2017; Murton, Lord, and Beazley, 2016; Sidaway and Woon, 2017; Sidaway et al., 2020; Suhardiman et al., 2021; Yeh, 2016). Others highlight shortcomings of BRI financialization mechanisms (Chen, 2020; Heslop, 2020; Paudel, Rankin, and Le Billon, 2020), including a tendency to enforce enclaved modes of uneven development within and across state boundaries (Rowedder, 2020; Sidaway et al., 2020). Scholars have also examined the BRI in relation to regional economic integration (Summers, 2016), while linking it with state transformation processes (Hameiri et al., 2019), as well as socioenvironmental impacts (Teo et al., 2020; Ascensao et al., 2018).

Within critical scholarship on global China, five dominant critiques emerge that I engage with throughout this dissertation. First, much research on China commonly depicts it as a monolith or single actor. In this view, China becomes a singular and unidirectional force and, as a result, research focuses on the impacts of China on distant places. Instead, I view global China as complicated and comprising, at times, contradictory forms of state, corporate, and personal

relations. In this view, it is essential to disaggregate varieties of both capital and actors as well as their motivations (Klinger and Muldavin, 2019; Yeh, 2016; Gonzalez-Vicente, 2011; Lee, 2014; 2017). Viewing Chinese capital and "China" as a monolith neglects the particular and contingent ways in which Chinese capital enters Laos and other host countries, and thereby problematically simplifies China's role within Asia. Far from unified, I argue that such investments and their effects are heterogeneous in terms of actors, processes, and outcomes.

Second, many infrastructural analyses show a preference for studying the present or very short-term history. Although literature in the field of infrastructure studies has expanded significantly in the last decade, much of it focuses on particular projects or on various stages of infrastructure development as political and developmental moments. A few notable exceptions have emerged, which I discuss in Chapter Two (see Enns and Bersaglio, 2019; DeBoom, *forthcoming*). Historical perspectives help shift our thinking beyond the confines of national history to instead examine the waves and evolutions of infrastructural discourses and complexes over many decades or centuries. An approach that historicizes infrastructures also responds to critiques that scholars, particularly those who study Chinese investment, tend to nationalize infrastructure projects, neglecting the long histories of many other actors, varieties of capital, and regional political systems.

Third, the BRI has received a flood of attention in the eight years since it was announced, becoming a central focus of analyses on both China and infrastructure development. Yet, the overwhelming focus on the BRI obscures more than it reveals. The BRI and China's global expansion or "rise" are framed as a "grand strategy," and often examined through perspectives of international relations, finance, or foreign policy. The BRI has also been increasingly positioned vis-à-vis US investment initiatives. This primarily Western commentary, policy analysis, and

research on Chinese overseas development tends to focus on geopolitics and international relations, often framing the BRI as a grand geopolitical strategy to reshape the world order, or claiming that "China" is predatory or debt-trapping . Such perspectives neglect the economic dimensions of export infrastructures as a "spatial fix" for China's chronic overproduction crises (see Chapter Three; Summers, 2016; Wang, 2021; Yeh and Wharton, 2016). In addition, debates centered on differences between Western and Chinese institutions, governance, or objectives neglect host country agency and assume that the "West" and "China" are free to compete as they like across the globe. This perspective may lead to rhetoric of imperialism or neocolonialism, whereby new forms of unequal power relations are produced. In sum, the BRI is typically presented as a centralized plan and grand strategy. Ethnographic research including this dissertation, however, reveals that it is neither. Klinger and Muldavin (2019: 3) explain instead that "the profound transformations that characterize China's global integration are not the result of isolated actors transforming the world according to a predetermined script of economic destiny." Along with a number of scholars, I show that the notion of a monolithic China is inaccurate.

Fourth, because Chinese overseas infrastructure projects are far from centralized efforts, they are driven by a wide range of interests that do not necessarily always align. As such, projects defy purely statist or market approaches (Alff, 2016; Hoffman, 2016; Yeh, 2016; Yeh and Wharton, 2016). Instead, Chinese investment overseas facilitates both "geopolitical objectives, such as projecting soft power," and "various economic objectives, such as addressing overcapacity and excess supply" (Yeh, 2016: 280). As Lee (2017) notes, both domestic development and global capitalism motivate the practices and phenomenon of global China. In addition, Byler (2020) contends that global China's "tool box or playbook is comprised of three

primary domains: economic investment, patron-clientelism; and institution building." Lampton, Ho, and Kuik (2020) argue that the pre-BRI period of railway considerations in Southeast Asia was driven by geoeconomics rather than geopolitics, while after 2013, geopolitical considerations became increasingly central in infrastructure development. They challenge overly geopolitical or competitive rhetoric, deeming China's current railway projects in Southeast Asia to be a tool of economic statecraft.

The global "d/Development" regime is undergoing significant restructuring with an expanding role of the state due to China's growing role in global capitalism. This transition is marked by a centrality of the market, as well as a "strategic ideological adjustment concerning the place of the state in Development, including a partial embrace of its role as promoter, supervisor, and owner of capital" (Alami, Dixon, and Mawdsley, 2021: 1295). Alami, Dixon, and Mawdsley (2021) identify five interrelated transformations in global development. One, which I take up in Chapter Three, is the extension of financial and debt relations. China's blend of d/Development mobilizes capital, labor, and resources for previously "uneconomic" infrastructures. In this way, China's global expansion is reshaping "big D" Development to influence "little d" development. Infrastructure is, of course, more than the hardware of "big D" Development. It also includes the institutional and financial mechanisms that make such projects possible.

Fifth, critical scholarship encourages a focus on not only "China" but also the host country and its domestic histories and processes (Gonzalez-Vicente, 2012; Klinger and Muldavin, 2019; Lee, 2017; Lu, 2021; Mohan, 2013; Yeh, 2016). This requires taking seriously the domestic dynamics where projects and processes unfold. Although research on Chinese megaprojects tends to focus on the "China" side of the equation, this dissertation offers a

different view, exploring the politics of host countries and the domestic mechanisms created to enable large-scale infrastructure projects. Attending to the host country perspective shows that host countries have agency to shape projects and, additionally, may also have a "boomerang effect" on Chinese entities and interest, shaping global China itself (Wang and Hu, 2017). Thus, it is also essential to consider the ways in which the Chinese state is reconfigured by its going global experiences.

In sum, I argue that global China must be understood as complicated and contingent, a product of processes within and outside China's borders. As the body of literature demonstrates, global China is far wider-ranging than the BRI, and moving beyond BRI-centric analyses produces more nuanced understandings of China's global expansion. Many infrastructure projects began well before the BRI, and are far from centrally coordinated. Furthermore, much macro-level research and reporting on the BRI neglects the complexities of local contexts in which projects take shape. To critically engage with this phenomenon requires historically and contextually grounded research that attends to the processes and forces, both global and local, that are shaped by and shape Chinese infrastructures (Hart, 2001; Mohan, 2013). It also entails considering host country agency and the ways in which host states use China's infrastructural objectives to pursue their own objectives for development or accumulation (Murton et al., 2016; Murton, 2018; DiCarlo and Ingalls, *forthcoming*; Schindler, DiCarlo, and Paudel, 2021). A more holistic approach moves away from purely state-centric analyses to examine additional scales, such as the local or worker experiences (Zhao, 2014; Alff, 2016; Kiik, 2016) and lower-level state and non-state actors (Lu, 2021; Suhardiman et al., 2021). Finally, we must also consider motivations within China to make sense of the multiple, overlapping interests of Chinese capital, firms, and state to "Go Out," a topic I turn to next.

d/Development from Opening Up the West to the Belt and Road

China's internal political economy has driven its external interventions and investments. To understand China's global expansion in infrastructure thus requires an understanding of China's domestic development, as well as of the country's evolution in foreign aid and investment. China's current global infrastructural model has roots in state socialism, immense domestic infrastructure production, the political economy of the Chinese state, and internal frontier imagery.

Development and capitalism are deeply entwined. The dialectic of "d/Development"—"little d" development as capitalist expansion and "big D" Development as a deliberate set of interventions or programs—is particularly blurry in the Chinese case (Yeh and Wharton, 2016). As many critical scholars have argued, "development" is always about a dialectic relationship between the two concepts (Hart, 2004; Lawson, 2014). China has recently focused on physical and institutional infrastructures that are hallmarks of modern economy and society. These are entangled in international capital flows in which it is not easy to pull apart a distinction between capitalist expansion and deliberate intervention, considering the aid and investment which have roots in China's domestic political economy since the 1970s.

Deng Xiaoping's 1978 economic reforms changed Chinese development and aid rationales, laying the foundation for development ideologies that persist today. Deng's economic reforms included preferential policies and investment in the eastern provinces, leading to massive wealth accumulation in China's eastern cities. From 1978 into the 1980s, the Reform and Opening Up era aimed to attract foreign investment and development along "belts" in coastal areas of eastern China. Deng's "ladder step" approach (梯度理论; *tīdu lǐlùn*) prioritized the

development of the eastern seaboard (Tubilewicz, 2006). This exemplified an acceptance of uneven development (Smith, 2010), giving economic priority to the coast under the assumption that economic growth would trickle down the ladder to other regions (Fan, 1997).Deng's ladder step approach dominated China's domestic economic development model for much of the 1980s into the 1990s.

The Chinese state has promoted additional key visions of progress and modernization that support domestic policies for development, namely through centralized state discourses of harmonious society, prosperous society, and scientific development. In 1979, Deng Xiaoping used the idea of a "moderately prosperous society" (小康社会; *xiǎokāng shèhuì*) to envision eventual modernization in China via a functional middle class. In later years, Hu Jintao, then-General Secretary of the Communist Party, connected *xiaokang* with economic policies concerning distribution of wealth. The middle class has been identified as an important driver in the shift in economic power from West to East (Harriss, 2009), and so distribution was central to the cultivation of a moderately prosperous society. In 2021, upon the 100th anniversary of the founding of the Chinese Communist Party, Xi Jinping declared that China has achieved *xiaokang* and that such a feat is "a tremendous contribution to the world" (*Xinhua*, 2021).

President Hu Jintao introduced the socioeconomic vision of "harmonious society" (和谐社会; *héxié shèhuì*) in 2002. According to Hu (2005), such a society is "democratic and ruled by law, fair and just, trustworthy and fraternal, full of vitality, stable and orderly, and maintains harmony between man and nature." This thus covers political, economic, cultural, and environmental dimensions. The idea of the "scientific development concept" (科学发展观; *kēxué fāzhǎn guān*) is related to harmonious society. These two concepts have been added to the constitution and were part of the government's 11th Five-Year Plan (2006–2010) (Chan, 2010).

Furthermore, Hu Jintao named "five coordinations" (五个统筹; *wǔ gè tǒngchóu*) as critical aspects of state policy toward development: urban and rural development, regional development, economic and social development, the harmonious development between humans and nature, and domestic development and opening-up. These domestic strategies and discourses have been translated to China's domestic and international development agendas.

In 1999, the Great Western Development Strategy, also known as Opening Up the West or simply Going West (西部大开发; *xībù dàkāifā*), was introduced as a broad strategy to push western regions of China to "catch up" with wealthier eastern regions. The idea of the frontier provided crucial imagery. Oakes (2007: 243) argues that the frontier story was a key product of Going West, as it mythologizes China's western frontier through a repackaged civilizing mission. Proposed after the Fifth Plenary Session of the 15th Central Committee of the Chinese Communist Party to address unevenness in development, the strategy actually did little to promote sustainable private and foreign investment in the west because it was formulated to meet political objectives, increase central power over rent distribution, and focus on central state-controlled investment (Goodman, 2004; Shih, 2004), all in line with "big D" Development (Yeh and Wharton, 2016). The influx of money for roads, dams, airports, or electrification resulted in a surplus of projects leading to overcapacity, as many were either unused, ran at losses, or processes excess energy. More than developing western provinces, connective infrastructures served to send cheap labor and resources to China's already wealthy eastern provinces where they were employed coastal factories (Oakes, 2004; Jeong, 2015).

The strategy of "Going Out" (走出去战略; *zǒu chūqù zhànlüè*) also launched in 1999 and exemplified China's changing approaches to aid and development. Since the 1990s, China's aid program has been situated in the context of its rapidly growing economic interests in Asia,

particularly in resource-rich economies. Similar to domestic development strategies like Going West, Going Out was not a comprehensive policy, but a broad strategy. Going Out reforms aimed to produce globally competitive enterprises in China and encourage foreign investment (Sauvant and Chen, 2014). They led to the creation of three state-led banks, two of which (the China Development Bank and China EXIM Bank) devised new approaches to development cooperation through investments (Yeh and Wharton, 2016). This positioned China as a global investor—both exporting capital and importing natural resources. This highlights changes in the country's national interests, namely the increased importance of economic interests (De Haan, 2010). Rather than past policy agendas to spread socialism, the state relied on a position of non-interference and collaboration to pursue economic goals.[3]

The BRI is a combination and continuation of Going West and Going Out (Yeh and Wharton, 2016). A successor to both campaigns, the BRI similarly stresses mutual benefit and cooperation, as well as a focus on the expansion of infrastructure and capital. While it lacks a clear strategy, it is establishing massive infrastructure projects and connecting China with the rest of the world through maritime and land routes intended to reduce trade time and costs and increase capital flows. Like Going West and Going Out, the BRI "largely consolidates and elevates already existing ideas and practices" (Yeh and Wharton, 2016: 308). The BRI merges the infrastructural focus of Going West ("big D") and the discourse and intentions of Going Out ("little d"). Summers (2016) argues that while both have geopolitical implications, Going West used development to justify territorialization, whereas Going Out served as a spatial fix. Thus, as China's approach to foreign development has rapidly evolved, the lines between aid and

[3] China's position of non-interference was initiated in the 1950s (Aidoo and Hess, 2010) and continued through the Going Out policy (McDonald et al., 2009) and the BRI.

investment have blurred. The Chinese government views both aid and trade as "economic cooperation" (Nyíri and Tan, 2017), which enables state-owned enterprises to intervene in foreign markets in poorer parts of Asia. As such, development becomes a project concerned with capital and commercial activities. These differences are key for examining the process of BRI infrastructure investment today, which operates as both spatial fix and territorialization, particularly, as Yeh and Wharton (2016) argue, in regions that border China. In sum, Going West was intended to address uneven development and inequality in China, while Going Out was a means of geographic expansion of capital beyond China's borders. Each centered infrastructure to facilitate flows of capital, goods, people, and trade, and thus to spur economic growth.

Railways have been a critical infrastructure within China's development trajectory. They have been positioned within China's domestic development as a means of equalizing the east and west of the country, and as a strategic sector for Going Out and the BRI. A Lao consultant noted that the Laos–China Railway is "critical for China's success to develop [its domestic] western regions," suggesting that transportation across China's peripheries constitutes an additional means to develop western parts of China that have yet to connect with the east or with the global economy. A senior planner in Beijing explained, we have "a much greater vision—to grow through neighbors, even the EU and Eurasia." He gave the example of the Pearl River Delta region as a successful infrastructural agglomeration across Hong Kong, Macau, and Guangdong, "enhancing welfare and growth potential of each of the other localities, creating a virtuous upward spiral for all." Rhetoric of connection leading to economic development is at the heart of infrastructure frontier-making, but the motivations and processes it entails paint a different picture.

IV. The infrastructure (re)turn

As the BRI makes clear, around the world, infrastructure-led development is back. Investment in large projects has reached record levels globally and in Asia in particular (Dodson, 2017; Schindler and Kanai, 2019). Development rationalities since the 1950s have relied on infrastructure as a growth model: from river basin development, economic corridors, and urban spaces of post-war "spatial Keynesianism" (see Brenner, 2004), to China's BRI today. "Big D" Development emerged in the post-World War II era as a project to intervene in the "third world." During this time, development economics positioned infrastructure as key to modernization and development (Rostow, 1960), and necessary for achieving additional economic growth (Hirschman, 1957). However, Western approaches shifted in the 1970s, and with the introduction of a basic needs approach to development, the centrality of infrastructure receded. This was followed by the neoliberal turn in development and structural adjustment programs characteristic of multilateral financial institutions of the 1970s–1980s, and subsequent paradigms of "sustainable" and social development from the 1990s into the 2000s. The 2008 financial crisis marked a return to infrastructure-led development as a global paradigm (Schindler and Kanai, 2019). The World Bank, for example, supported state-led spatial planning in response to the economic crises. The announcement of the BRI in 2013 marked a transition to large, state-backed infrastructure development around the world. In the past decade, China has massively expanded its global infrastructure investment, so much so that Bach (2016: np) called it "the paradigmatic infrastructural state: a state produced by and through infrastructure as a modern project."

The return to infrastructure-led development coincides with the "infrastructural turn" in the social sciences. This burgeoning literature seeks to investigate and theorize infrastructure as a

complex sociotechnical system, and as a critical political field. Over the past decade, the infrastructural turn has grown out of science and technology, mobility, critical development, and urban studies to examine infrastructure as human/nonhuman assemblage, as well as material (Larkin, 2013; Star, 1999). Infrastructures are embedded with power and distributive agency, as well as diverse sets of practices and meanings (Larkin, 2013). They mediate resource flows, and shape social and environmental practices (Monstadt, 2009), producing new forms of inequality (Lyttleton, 2017). They are both durable and fragile, and inspire speculation and uncertainty (Mitchell, 2014). Infrastructures are more than material; they are also symbolic (Larkin, 2008). Stuart-Fox (2008) argues that the first bridge across the Mekong in 1994 was more symbolically than economically significant. Similarly, Creak (2011) suggests that the early-2000s infrastructural transformations around Vientiane, including the National Cultural Hall, Kaysone Phomivihane Museum, wider roads, and new monuments, were intended to reflect the ideology and image of the Lao People's Revolutionary Party.

There are a number of ways to conceptualize and study infrastructures (Harvey, Jensen, and Morita, 2017; Larkin, 2013; Carse, 2017a) that provide a fresh lens through which to study Chinese overseas development. Yet, scholars have only recently begun to theorize and study China within the infrastructural turn (Bach, 2016; Hirsch, 2017; Goodfellow and Huang, 2021; Oakes, 2019; 2021). According to Harvey, Jensen, and Morita (2017: 1), infrastructures "can appear as vast, uncontainable networks that may be resistant to established social methods." For Larkin (2013: 329), infrastructures are "matter that enable the movement of other matter" and "objects that create the grounds on which other objects operate, and when they do, they do so as systems." In this way, they appear apolitical; however, literature within the infrastructural turn shows the "technopolitical work" done by infrastructures (Anand, 2011; Barry, 2013). At the

same time, they may aim to produce speed, mobility, and connectivity, but often fail to do so (Flyvberg, 2009). Building on this literature, I conceptualize infrastructures as processes; more than a backdrop on which relations unfold, infrastructures are "woven into the fabric of society … situated, heterogeneous, and quotidian" (Harvey, Jensen, Morita, 2017: 35). They are simultaneously material and symbolic, entailing imaginative and performative work.

Attention to infrastructural forms and the relations that produce them acknowledges that infrastructures attract specific sets of actors, and produce space in particular ways (Massey, 2005). The development of a special economic zone (Nyíri, 2012), a highway (Pathammavong et al., 2017; Thongmanivong and Fujita, 2006), or a rubber plantation (Kenney-Lazar, 2012) each offers insights into the spatiality and shape of frontier. While they share similarities in investment structure, their dissimilarities in form lead to unique effects. Railways require expanses and concentrations of land and capital, and levels of coordination over huge distances. Roads, like rail, are built to transport people and goods, yet they differ in form and do not require the same scale of capital investment. The rail is a line with fixed nodes where goods and people enter and exit at specific stations, at scheduled times, and for a set cost. The road is more porous, meaning people and goods can more readily move on and off. In her book on the TAZARA Railway, Jamie Monson (2009) writes that roads tended to be favored by Western donors, because they represented the freedom of the market through their freedom of movement, allowing "shipping according to one's own timetable, with stops anywhere along the way where market forces supported economic activity" (Monson, 2009: 3). In Tanzania in the 1970s, competing road and railway projects mirrored the competition in development visions between a socialist railway of centralized control and a capitalist highway representing economic enterprise. Railways however, like roads, "may separate as much as they connect" (Diener, 2015:

380) and must be examined not through a project's "infrastructural orthodoxies" or stated purposes, but in ways that illuminate the uneven and unintended effects of infrastructure on the ground (Gurung, 2021).

V. Dynamics of the infrastructure frontier

Conceiving of the railway as creating an infrastructure frontier illuminates an important set of challenges in studying global China's infrastructural expansion. I develop the concept of the infrastructure frontier to pursue a more expansive analysis of how space and time are reproduced through tensions surrounding infrastructure. Central to my argument, the frontier is continually remade through infrastructure. Laos, for example, has been repeatedly peripheralized by the logics of capital accumulation in ways that render it as frontier—available and ripe for investment, a zone of opportunity. Rather than a linear conception of Laos moving from landlocked to land-linked, the infrastructure frontier demonstrates the recurrence of narratives to unblock Laos for purposes of accumulation. In this way, the infrastructure frontier differs from other perspectives on the frontier as it constantly remakes the same space as frontier through infrastructure. As this dissertation will show, the frontier is made through the repetition of infrastructural legacies, undervaluation, spectacle, performative labor, ambiguous legal regulations, as well as temporalities of suspension and delay.

The term "frontier" has many meanings, carrying particular baggage and requiring precision in its use. It may designate a space of lacking or underdevelopment, while simultaneously signaling a space ripe with opportunity and riches for the taking (Woodworth, 2017). In addition, frontiers are also spaces in with authority and power are deeply contested and in flux (Watts, 2018). In Laos, the frontier has been conceptualized as a "relational space,"

produced through the interactions of various actors and institutions (Barney, 2009). The concept of frontier appears across much empirically rich research on contemporary Southeast Asia (Li, 2014a; Kelly and Peluso, 2015; Barney, 2009). Much of this work focuses on resource frontiers and the rapid transformation of agrarian spaces into areas of resource extraction, due to the early-21st century booms in transnational investments in the region (Borras and Franco, 2011; Baird, 2014; Hall, 2011; Woods, Kramer, and Buchanan, 2013). Resource frontiers expanded with corporate transnational capital as "entrepreneurs and armies were able to disengage nature from local ecologies and livelihoods" (Tsing, 2005: 28). Following the 2007–2008 financial crisis and the resultant global land rush, much "land identified as a resource available for global investment [was] classified as 'underutilized' or frontier land, or sometimes as marginal, idle or waste land" (Li, 2014b: 592). From this perspective, frontiers allow an ever-expanding capitalism to absorb regions deemed marginal (Cleary, 1993), where new forms of commodification emerge (Barney, 2009). In contemporary Southeast Asia, studies on resource frontiers have analyzed patterns of logging, cash crop expansion, resource degradation, and displacement (McCarthy, 2006; Tsing, 2005; Walker, 1999). Scholars have thus examined resource frontiers as extractive spaces in which land tenure, social relations, and political economy have been reconfigured (Sturgeon, 2005; Rasmussen and Lund, 2018). In these cases, a perspective of land as marginal or underutilized enabled the introduction of capital to make such spaces "productive."

Frontiers, in Tsing's (2005) words, are "projects in making geographical and temporal experiences." Building on this, I use the concept of the infrastructure frontier as an analytical tool to understand the phenomenon of global China in all its nuance, complexity, and multiplicity. As a capitalist project, the frontier is driven by multiple interests that span borders, as well as states, state-owned enterprises, corporate actors, and communities. As infrastructure is

developed for the purposes of fixing capital and generating speculation and future investment, I suggest that infrastructure frontier-making is a spatial, temporal, and imaginative process, that produces uneven experiences of infrastructure.

Unblocking and enclosure in frontiers

Frontiers are often imagined to be "empty," lacking regulation or governance, yet "full" of extractable resources (Côte and Korf, 2018; Eilenberg, 2014; Li 2014). A means of capitalist expansion and accumulation, they are "not just edges; they are particular kinds of edges" (Tsing, 2005: 28–29). They are often understood as remote, at the margins, and in borderlands (Scott 2009; Turner, Bonnin, and Michaud, 2015; Giersch, 2006)—however, the shape of the infrastructural corridor says otherwise, and frontiers do not necessarily lie at the territorial edges of states (Eilenberg, 2012). Rather than remote, peripheral, or empty, the infrastructure frontier is instead central to state control, imagined as space to be "unblocked" for purposes of capital accumulation. The infrastructure frontier is thus characterized by a dual movement in which blocked space is at once enclosed, only to be reopened to certain types of capital, "development," or exploitation.

Spaces are imagined as blocked, in order to be claimed as frontier for capitalist expansion in the name of improvement and "d/Development." As such, more than material, frontiers and infrastructure are also discursive constructs that legitimize particular investments or development interventions. The infrastructure frontier is "unblocked" only to be destroyed and then spectacularly reconstructed. Put into context, a Lao official explained, "First, it is railway construction. Second, we have to prepare all the land for the [railway] stations. There will be many investors and some very large stations. Third, industrial development, new cities, and economic activities will happen all along the railway." As he discussed government plans for

land expropriation, he emphasized that development and investment are needed, and would come once land was "made free" (see Chapter Four) for investment, reconstruction, and the spectacular conjuring of capitalist space (see Chapter Five).

Ambitious and large-scale infrastructure investments require large tracts of land as well as tenure security, and they then produce new dynamics and spatialities of land appropriation, authority, and spaces of accumulation. Patterns of infrastructure booms, like resource booms, reshape the dynamics of the land rush by facilitating additional land or resource grabs, as the creation of resource frontiers renders infrastructural corridors and their hinterlands available for capitalist development. Connective infrastructures render a broader landscape "productive" and "investable" whether for tourism, agricultural production, or manufacturing. As such, the global boom in infrastructure—as material and spectacle—renders and re-renders land as investable; this produces an infrastructural land rush whereby possibilities of connectivity spur new streams of investors that span agriculture, business, tourism, and manufacturing.

Accumulation and undervaluation

Furthermore, scholars have shown that frontiers are more than sites of extraction; they are also sites of "creative, if often ruinous, production" (Cons and Eilenberg, 2019: 2) and of struggles over accumulation (Moore and Patel, 2017). Frontiers "mark the construction of a new space of accumulation" (Watts, 2014: 194). Cons and Eilenberg (2019: 2) contend that to understand frontier-making, what matters most are "the various forces and processes that are assembled to reinvent these spaces as 'zones of opportunity.'" Marxian scholars have focused on the relationship between value and frontiers, a theme that runs through this dissertation. For example, through a world systems approach, Moore and Patel (2017) argue that capitalism relies

on undervaluation or "cheap natures." They contend that capitalist frontiers come into existence through "the encounter zones between capital and all kinds of nature—humans included. They are always, then, about reducing the costs of doing business. Capitalism not only has frontiers; it exists only through frontiers." Infrastructure, in this line of thinking, becomes a means of bringing new capitalist frontiers into existence. In addition to (under)valuation to create frontiers, this literature suggests that space is rendered abstract in order to be commodified, bought, and sold (LeFebvre, 1991).

Frontiers thus can be imagined as a "permanent prospect" (Watts, 2014: 193) through which infrastructure, and the relationships and processes they entail, create the conditions necessary for exploitation and accumulation. The infrastructure frontier is recreated across time because it introduces the possibility of connection that will lead to value creation. As Chapter Two demonstrates, the French colonial policy of *mise en valeur* rested on visions of unblocking Laos and using land-based resources to generate wealth for the French colony. Similarly, through Laos' Turning Land into Capital strategy, the Lao state leveraged land-based resources to attract foreign investment and in exchange for infrastructure development.

Resource frontiers have also been conceptualized as spatiotemporal fixes (Harvey, 2001) or spaces in which the production or extraction of value acts as solutions to crises of accumulation elsewhere. As Mitchell (2020: np) explains, more than speeding up material flows, "infrastructures work on time, but not in the ways we commonly assume … They introduce a gap, out of which the present extracts wealth from the future." In this way, capital creates frontiers not only for the extraction of resources but also for the accumulation of wealth. In this view, infrastructure frontier-making becomes a means to invent additional space to pursue spatiotemporal fixes. Undervaluation as a process of the infrastructure frontier enables the

deferral of capitalist crises and devaluation within China. The infrastructure frontier requires not only surplus capital in China, but also ways to "fix" that surplus in Laos—ways to absorb capital through projects. In this sense, Laos is an ideal fix for Chinese capital because the surpluses in China match what is deemed as lacking in Laos. As I noted in the preface, China has capital, labor, and technological knowledge, and Laos has land.

However, the phenomenon of the infrastructure frontier is not solely motivated from within China. Infrastructure frontier-making is characterized by a dual movement of enclosure and opening that is made possible by the Lao state and a host of other actors and institutions. Laos has been portrayed by multilateral development banks, private sector actors, and Lao state agencies as a "new frontier" for resources and investment (ADB, 2004). Companies and state-owned enterprises from across East and Southeast Asia as well as Australia and France began to invest in Laos in the 2000s. Barney (2009: 147) argues that the "neoliberal-inspired discourse of the Mekong as an untapped resource frontier serves as a legitimating ideology for a particular strategy of large-scale resource development and regional integration" ended up producing "the unevenly regulated, 'land rush' quality of many of these land investments." Conceptualizing northern Laos as frontier space that is "open for business" erases the existing practices, peoples, and land use systems. Instead, frontier dynamics restructure rural spaces by generating particular property relations that involve dispossession or privatization of property (White et al., 2012), as the railway has begun to do.

Anticipation, spectacle, performance

In addition to the material construction of infrastructures, the infrastructure frontier is performed, imagined, and symbolic. Notions of investment, infrastructure, and frontier all

involve some level of looking forward—of imagination and anticipation. Spectacle and anticipation hold one's gaze when pausing in awe amid the often-frenzied calculus of speculation. Investment, by its very nature, entails imagining, wagering, and speculating on an uncertain future (Tsing, 2000; Beckert, 2016). As Rippa, Murton, and Rest (2020: 84) write: "Long before their actual construction starts, such projects already work as a promise for future prosperity and connectivity and lend legitimacy to logics of the 'state' in areas historically difficult to access and hard to govern." More than serving *as* promise, they also manipulate promise in ways that affect those who imagine what is yet to come. Frontier-making too entails imaginative work (Tsing, 2005; Cons and Eilenberg, 2018). In Tsing's (2003: 5102) words, the frontier is an "imaginative project capable of molding both places and processes," rather than a place in itself. Cycles of spectacle, anticipation, and imaginative labor are intended to inspire speculation, and together they act as tools of enticement and allure that are characteristic of capitalist frontiers (Tsing, 2003). Performing what Tsing (2005) terms an "economy of appearances" is crucial for finance capital. Overlapping economic, visual, and dramatic performances form an economy of appearances, or the self-conscious making of spectacle in order to gather investment funds (Tsing, 2005: 57).

In sum, infrastructures produce and are produced by frontier dynamics that continually define space as needing to be unblocked to be rendered productive. As this dissertation will demonstrate, China's global expansion and infrastructure frontier-making entail the manipulation of not only space, but of time. Taking this perspective begins to unravel the work of capital, authority, and imagination in making the infrastructure frontier.

VI. The projects

The Laos–China Railway

Lao Name:	ລົດໄຟລາວ-ຈີນ (*lodfai lao-chin*)
Chinese Name:	中老铁路 (*zhōn-lǎo tiělù*)
Location:	Northern Laos. From the China-Laos border, the line runs south, traversing Luang Namtha, Oudomxay, Luang Prabang, and Vientiane provinces, ending in Vientiane Capital.
Developers:	Laos–China Railway Company Limited, a Sino-Lao joint venture. Shareholders include the Lao National Railway State Enterprise; Boten–Vientiane Railway Company Limited, a joint venture between China State Railway Group Company Limited, China Railway Group Limited, Power Construction Corporation of China, and China Railway Construction Corporation Limited; China Investment Corporation; and Yunnan Investment Group.
Main Contractors:	China Railway Group Limited; Power Construction Corporation of China; China Railway Construction Corporation Limited.
Known Financiers:	Export-Import Bank of China, with additional capital input from multiple Chinese state-owned enterprises (see Chapter Three) and the government of Laos.
Cost:	US$6 billion.
Project Status:	Construction began on December 25, 2016. The line is set to open on December 2, 2021(Lao National Day) and be operational in 2022.

Table 1.1 Overview of the Laos–China Railway project.

A billboard advertising the Laos–China Railway (Image 1.1) sits on a main thoroughfare leading into the Vientiane Capital airport, serving as a reminder of the promises of socioeconomic development and the strengthening relations between Laos and China. According to Chinese and Lao sources, the railway will boost trade, investment, and tourism by connecting China with Southeast Asia. Drawing on key development discourse in Laos over the last two

decades (see Chapter Two), the project's cooperation framework states that China aims to help Laos become "land-connected," the battery of Southeast Asia, a golden tourism zone, and a corridor of history and culture, for increased income and improved transportation. The Laos–China Railway is the first railway *through* Laos.[4]



Image 1.1. A billboard advertising the railway on the entry road to the Vientiane Capital airport. It reads "Construct the Laos–China Railway, benefit the Lao and Chinese people." (Source: the author, 2018)

Motivated by the Lao central government's stated aim to connect with the global economy, regional economic integration together with an emphasis on large-scale infrastructure development (primarily hydropower development and transportation networks) are framed as main drivers for economic growth and poverty reduction (GoL, 2016a). This was amplified in 2004, when the government started to actively attract foreign investment under the slogan

[4] There are 3.5 miles of track, from the Thai border east of Vientiane to a small station at Thanaleng, that opened to traffic on March 5, 2009.

"Turning Land into Capital," which lubricated the granting of "state land" to investors for development projects. Since 2005, the government has granted hundreds of land concessions to foreign actors from dozens of countries to develop megaprojects. As such, Laos has witnessed a boom in infrastructure projects and a significant increase of foreign investments (Keovilignavong and Suhardiman, 2017). Hydropower plants, highways, and mines have appeared across the landscape as part of the government's policy to promote foreign direct investments (GoL, 2016a), while simultaneously China's Going Out campaign incentivized Chinese investment abroad.

The Laos–China Railway is also part of China's vision for the Kunming-Singapore Railway (also known as the Pan-Asia Railway)—a BRI flagship project in mainland Southeast Asia. The vision for the Pan-Asia Railway has not been fully realized, but comprises three routes from Kunming to Singapore: a western route through Myanmar and Thailand, a central route through Laos and Thailand, and an eastern route through Vietnam, Cambodia, and Thailand. All three would connect in Bangkok and extend south through Malaysia and Singapore. A retired official from China's Ministry of Railways explained that Laos (the "middle way") was "an easier place to start" as negotiations on the west branch (through Myanmar) and the east line (through Vietnam) were far more contentious. The middle way, he explained, is key because the projects from China through Vietnam and Myanmar were put on hold or took longer to negotiate and implement due to environmental risks and geopolitical tensions (an agreement for the Thai section was recently inked in October 2020[5]). Xu Liping, an expert in Southeast Asian studies at China's National Institute of International Strategy, explained: "From an economic perspective,

[5] This agreement is for the first phase to connect Bangkok to Nakhon Ratchasima by 2026. The second phase is not yet under agreement but would extend from Nakhon Ratchasima to Nong Khai at the Lao border.

the route through Laos is of least significance among the three, but it is the safest choice because the country is the most stable politically."

According to a former Chinese official from the Ministry of Railways, the Lao line was a gamble that they hoped would push other lines within the Pan-Asian network forward by demonstrating to neighboring countries how seamlessly and quickly the Lao line began operation. The gamble seems to be paying off in Thailand, where the government has signed agreements with China for railway lines from Bangkok north toward Laos (Luekens, 2019; Obe and Kishimoto, 2019), while Myanmar and Vietnam are proving more challenging. A Chinese businessman in Laos explained that by starting with Laos "it will be easier to push railway construction based on Chinese technical standards to other countries in the Indochina Peninsula, thereby greatly improving the level of interconnection between my country and the Indochina Peninsula countries." However, if it fails, he noted, the whole BRI will be in question.

Like many BRI projects, the idea of the Laos–China Railway existed well before the initiative (see Appendix for timeline). The railway was proposed numerous times by both non-Chinese and Chinese actors. The idea of a railway through Laos was first introduced in 1900 by the French, but for a number of reasons it did not materialize (see Chapter Two). More than a century later, plans for a regional railway reemerged. In the early-2000s, the Association of Southeast Asian Nations (ASEAN) announced that an agreement had been signed and construction would begin. Funding, as with the French proposals, remained a key problem. In 2004–2005, the Lao government sent a delegation to Japan to look for funding and construction expertise. Japan did not see the project as a viable investment so declined to participate.

Former Lao Vice Prime Minister Somsavat Lengsavad's push for the railway demonstrates active pursuit of the project within Laos. There is no other figure in Laos who was

more instrumental in this project than Lengsavad, who was also a former director of the Laos–China Railway steering committee. He was known for his infrastructural ambitions and deep Chinese connections[6] and, in addition to the railway, he facilitated a number of infrastructure deals in Vientiane, including the somewhat infamous That Luang Marsh Special Economic Zone (Tan, 2012; Dwyer, 2013a). In a 2012 speech to the National Assembly on the railway, he noted that Chinese engagement in the railway project can be traced to 2001–2002, when the Government of Laos proposed the project to the Chinese government (Lengsavad, 2012). Although he said that 2001 was "not the right time" for the two countries to cooperate on the project, the Lao government continued to propose the railway specifically to its socialist neighbors.

By March 2008, China's Ministry of Commerce sent a project investigation team to Laos under what they called "Aid to Laos National Railway Network Planning." The team conducted field surveys which became, in 2012, the foundation for the first feasibility study on the Laos–China Railway. When President Hu Jintao agreed to increased cooperation with Laos in 2009, bilateral negotiations for the Laos–China Railway project began, and cooperation agreements were signed in 2010.[7] The 2010 agreements, however, were put on hold for two

[6] Leaders in Laos are often close to leaders in other countries where they have personal connections or attended school, e.g., China, Vietnam, the USSR, or Thailand.

[7] The following documents laid the foundation for cooperation on the project. On April 7, 2010, in Beijing, representatives from the Ministry of Public Works and Transport of Laos and the Ministry of Railways of China signed the memorandum of understanding on "Understanding on Railway Cooperation between the Ministry of Railways of the People's Republic of China and the Ministry of Public Works and Transport of the Lao People's Democratic Republic." On October 4 of the same year, China and Laos signed the "Minutes of the Meeting between the Ministry of Railways of the People's Republic of China and the Ministry of Public Works and Transport of the Lao People's Democratic Republic on Deepening the Implementation of the Memorandum of Cooperation." And finally, in December, the two governments signed the

reasons. First, within Laos there was domestic criticism regarding rumored land concessions for the project—which supposedly included up to one kilometer of land on each side of the track, totaling at least 82,800 hectares. This is why, as I discuss in Chapter Six, some villagers had been instructed not to farm on their land as far back as 2010, long before construction began in 2016. Simultaneously in China, through then-Vice President of the PRC and First Secretary of Secretariat of the Chinese Communist Party Xi Jinping's anti-corruption campaign in 2011, a key Chinese politician backing the project, the former Railway Minister Liu Zhijun, fell from grace. Subsequently, China's Ministry of Railways was dismantled and reorganized into the China Railway Corporation in order to centralize power. That year, Laos' primary state newspaper, the *Vientiane Times,* addressed the scandal in China by reassuring readers with the headline: "Laos–China Railway on Track, Despite Rumours." In 2014, project negotiations resumed, and a deal was eventually signed toward the end of the year, resulting in a new feasibility study[8] and new financial arrangements in the form of a joint venture. In an interview with journalist Peter Janssen (2015), Lengsavad said he "hope[d] to reach an agreement with Beijing by June" on the final terms and plans for the project.

"Trans-Asian Railway Memorandum of Understanding on the Technical Solutions for the Mohan/Moding to Vientiane Section of the Passage."

[8] The second feasibility study in 2016 is nearly identical to the original that was produced in 2012. As to be expected, the dates and timeline changed, there is an additional section on seismic activity, and some estimates for traffic volume had been recalculated.



Image 1.2. Laos–China Railway project site of the China Railway No. 8 Engineering Group, in Luang Prabang Province near Pha O village. (Source: the author, 2019)

In 2016, Chinese and Lao central governments established the Laos–China Railway Company joint venture to oversee the construction, management, and operation of the railway.[9] The Lao side holds a 30% share in the project through the Lao National Railway State Enterprise, while Chinese capital is contributed through several state-owned enterprises headed by the China State Railway Group Company Limited. The railway project uses a build-operate-transfer model with a total project connection period of 75 years—five years of construction and a concession period of 50 years, with a possible extension of 20 years. Within the Lao

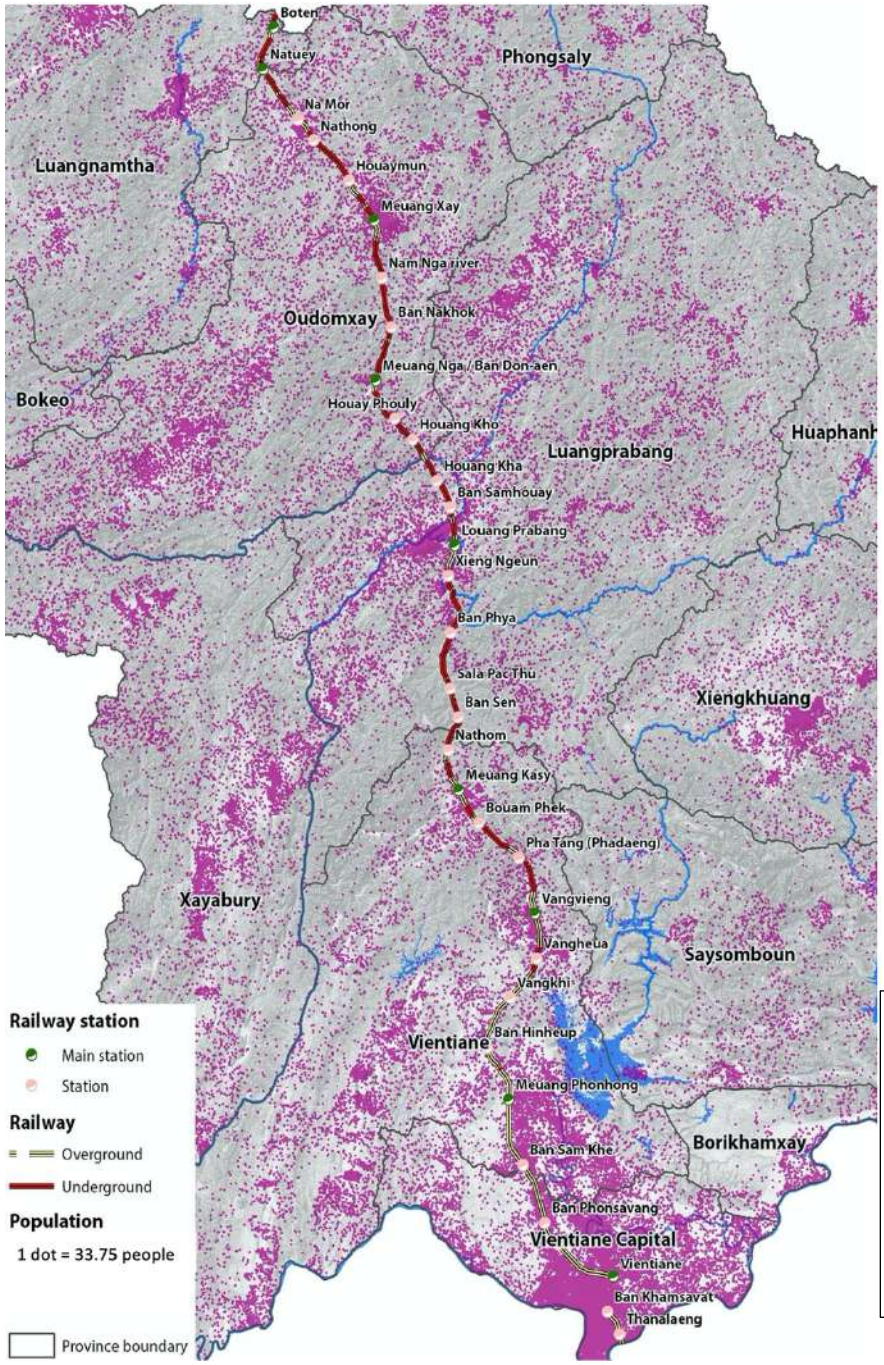
[9] Details of the Laos–China Railway's financial and project management structures are the topic of Chapter Three.

government, the Department of Railway under the Ministry of Public Works and Transport was renamed the Laos–Thai Railway Department and the new Laos–China Railway Department was formed to oversee the project. However, the Laos–China department did little more than monitor construction and review monthly progress reports from the Laos–China Railway Company joint venture.

Construction began on December 25, 2016, with the track and main stations projected to open on Lao National Day, December 2, 2021. The mixed-traffic line (passenger and freight) is being built to China's national Guo Biao standards (国标). Despite Lao and Chinese media rhetoric of "high-speed" capacity, this track will be capable of speeds only up to160km/h (passenger) and 120km/h (freight), which is below the international standard 240km/h and 380km/h respective speeds for high-speed rail. Regardless, it will take four hours to travel from Vientiane to Boten at the Chinese border, or ten hours to travel to Kunming; the Vientiane–Kunming trip currently takes about 24 hours by car.

Upon completion, the Laos–China Railway will include 32 stations (10 passenger stations, 22 crossing stations, and freight and logistics compounds). Its route connects Laos' northern border town of Boten to its capital city, Vientiane, via 414 kilometers of standard gauge track that cut through 13 districts and five provinces in Laos. Running through the heart of northern Laos, the railway traverses some of the country's most populated, biodiverse, and resource-rich regions (see Map 1.1). In the first province at the northern border, Luang Namtha, it spans only 16.9 kilometers through four villages, followed by 126.6 kilometers of track that cross three districts and 41 villages in Oudomxay province. In Luang Prabang province, the 80 kilometers of track cut through three larger towns, including the province's namesake UNESCO World Heritage site, and 28 villages. Finally, Vientiane Province's 145.5 kilometers of track

span four districts and 60 villages as the railway winds its way down from the mountains to the terminus in Vientiane Capital, where 45 kilometers of track run through three districts and 34 villages. In total, 32 stations have been mapped and planned by developers; however, the railway enterprise will initially build and open only 10 main stations—the largest in Luang Prabang, Vang Vieng, and Vientiane Capital.



Map 1.1 The railway line through Northern Laos mapped over population density. (Source: the author and the Centre for Development and Environment, 2019)

On October 18, 2021, a *Vientiane Times* headline declared "Gleaming New Trains Arrive ahead of Railway Open." The first passenger train was dubbed *Lancang* (in Chinese: 澜沧; in Lao: ລ້ານຊ້າງ), the name of the upper reaches of the Mekong River in China. The name holds an additional meaning in Lao, referencing the Lao Kingdom of Lan Xang (1353–1707),[10] which translates to "a million elephants" in Lao and Thai (Stuart-Fox, 1998). The train cars were presented at a ceremony at the new Vientiane Station in Xaythany district, attended by a number of officials including the Lao Minister of Public Works and Transport, Viengsavath Siphandone, the Chinese Ambassador to Laos, Jiang Zaidong, and General Manager of the Laos–China Railway Company, Xiao Qianwen.



Image 1.3. Viengsavath Siphandone (Lao Minister of Public Works and Transport; right) and Jiang Zaidong (Chinese Ambassador to Laos; left) unveil the name of the first passenger train of the Laos–China Railway. (Source: *Vientiane Times*, 2021)

[10] The Kingdom of Lan Xang flourished until the 18th century when it was divided into two kingdoms: Vien Chang and Luang Prabang.

In his speech at the ceremony, Chinese Ambassador Jiang announced that for the "next phase of development, Laos and China will accelerate the construction of facilities alongside the railway to help develop the Laos–China Economic Corridor" in order to "foster conditions for economic recovery as well as generate closer cooperation between Laos and China" (*Vientiane Times,* 2021).

The Laos–China Economic Corridor

"This is a corridor to Southeast Asia, not a railway for Laos," a friend and Lao official shot at me across the table at a restaurant on the bank of the Mekong where we would frequently meet in the evening. "What do we need a railway for? People won't go to stations that are far away; for local people it is more convenient to travel by road unless you live close to a station. We should fix the roads first if this were about Laos." This summation, that the railway project is about a corridor, is one I take seriously in this dissertation, by focusing not only on the railway itself, but on the broader aims of accumulation.

During discussions between the Lao and Chinese governments during General Secretary of the Chinese Communist Party Xi Jinping's 2017 visit to Vientiane, the notion of a Laos–China Economic Corridor (LCEC) was introduced as a means of benefiting from the Laos–China Railway and developing investments around it. With the railway, the corridor has been endorsed as a key part of the BRI. It is intended to provide a platform for other infrastructure projects and increased investment from and integration with China. As I detail in Chapter Four, corridors are a key component of the BRI. The LCEC is considered part of the larger China-Indochina Peninsula Economic Corridor, which connects Southwest China from Kunming and Nanning with the Indochina Peninsula, to bolster cooperation between China and the Association of

Southeast Asian Nations. The 2,500-kilometer corridor consists of cooperation projects in nine areas: infrastructure, industrial parks, agriculture, tourism, livelihoods, finance, technology development, human resources training, talent building, and other areas of common interests (Fang, 2019). Within Laos, the LCEC runs through the five provinces that the railway directly passes through: Luang Namtha, Oudomxay, Luang Prabang, Vientiane, and Vientiane Capital.

- Transportation and logistics - Energy resources, grid development - Modern agriculture - Industrial cooperation - Mining - Processing and manufacturing - Investment and finance	- Cultural exchanges and tourism - Livelihoods and poverty alleviation - Ecological protection - Science and technology - Human resources - Water transportation - Civil aviation

Table 1.2. LCEC sectors for investment and joint Laos–China cooperation.

In December 2020, a Lao and Chinese state-led research organization cosponsored the Laos–China Economic Corridor Think Tank Cooperation video conference.[11] They focused on two distinct topics: industrial parks along the corridor and cooperation in international security. More than one hundred people, from scholars and officials to entrepreneurs, were invited to and joined the call that was broadcast from six locations—Vientiane in Laos, and Kunming, Beijing, Shanghai, Hangzhou, and Nanning in China. Economic zones and new cities have emerged as a key focus of corridor investment. This is because they have potential for larger-scale and wider-ranging investment. In the early-2000s, Laos began to use special economic zones to attract foreign investment. These zones have become key nodes on the railway corridor to attract additional investment in the region.

[11] It was co-led by Laos' National Economic Research Institute and China's Kunming South Asia Southeast Asia International Logistics Research Institute.

Boten Special Economic Zone

Lao Name:	ເຂດເສດຖະກິດພິເສດ (*Boten khet sethakit phiset*)
Chinese Name:	磨丁经济特区 (*módīng jīngjì tèqū*)
Location:	Boten (ບໍ່ເຕັນ), Luang Namtha Province, Laos; at the border across from Mohan in Yunnan, China.
Type of Project:	Special economic zone for real estate, tourism, logistics, and new city development.
Developers:	Yunnan Haicheng Industrial Group Company, Ltd. (海诚集团; Hǎichéng jítuán). Established in 2000, Haicheng is registered and headquartered in Kunming, China, with three subsidiaries in Kunming, Xishuangbanna, and Pu'er. It focuses on five sectors: real estate development, tourism, hotel management, property services, and construction engineering, and has more than 2,000 employees.
Main Contractors:	Power China (中国电力建设集团); Sinohydro (中国水电) (Bureau 14, possibly others).
Known Financiers:	Private capital through Hai Cheng, loans via China Construction Bank (CCB; 中国人民建设银行(*zhōngguó rénmín jiànshè yínháng*) and Lao China Bank (LCNB; 老中银行; *lǎo zhōng yínháng*).
Cost:	Approximately US$10 billion.
Project Status:	Under construction, which began in December 2016 and is projected to take 10–15 years. In the meantime, Haicheng is seeking investors for various projects and businesses, and has begun to sell apartments.

Table 1.3 Overview of the Boten SEZ project.

One of the largest infrastructure investments in Laos, Boten Special Economic Zone (SEZ), or "Boten Beautiful Land," is located in Luang Namtha province on the Lao side of the primary international border crossing between Laos and China. Boten-Mohan has been the main international border crossing between the two countries since the early-1990s.

This border-town SEZ is a case of boom to bust, and perhaps boom again. It was designated an SEZ in 2003. The zone was first developed by Fuk Hing Travel Entertainment Group, a private Hong Kong developer and investment company that leased the land for 30 years with the option to renew it twice and built hotels, casinos, bars, and massage parlors. The casino town—named Boten Golden City—officially opened in 2007 and, at its height from 2010 to 2011, attracted thousands of tourists and gamblers primarily from China and Thailand. However, the zone quickly developed a reputation as a lawless and violent place, rife with crime, prostitution, gambling, and rumors of murder. There were also reports of indebted Chinese gamblers held hostage. Under pressure from Beijing, the Lao government intervened, and the notorious casino outpost was shut down in 2011and became a ghost town.



Image 1.4. The skyline of Boten SEZ under construction during our cycling trip. (Source: Carl Zoch, 2018)

In April 2012, a 50-year land lease with an option to extend was awarded to Yunnan Haicheng Industrial Group Company, Ltd., a private real estate development company registered and headquartered in Kunming, with three subsidiaries in Kunming, Xishuangbanna, and Pu'er in Yunnan province focusing on five major sectors: real estate development, tourism, hotel management, property services, and construction engineering. When the lease was awarded, the Lao government set up preferential development policies, as well as a strict no-gambling rule. Since then, the zone has been revived as a transportation hub and urban center with a US$10 billion, 15-year construction plan. It is now considered a high-level priority project by both the Chinese and Lao governments, in need of special attention due to its strategic location and the impending connection between Southeast Asia and Yunnan. In addition to developing the zone itself, in 2015 the two governments signed an "Agreement for Joint Construction of the China-Laos (Mohan-Boten) Cross-Border Economic Cooperation Zone (ECZ)," a much larger free trade zone that encompasses Boten as well as Mohan on the Chinese side of the border. And, in 2016 they signed another agreement to accelerate urban development, with the goal of developing a city with education and health facilities, a central business district and financial center, tourist attractions, and a logistics and duty-free area.

As the first stop on the railway from China in Southeast Asia, the 1,640-hectare zone is envisioned and marketed as a new international city, with high-rise apartments that the sales office claims will house 300,000 to 350,000 people by 2035. Other investments include agriculture, livestock and manufacturing parks, a cultural center, five-star resort, golf course and tourism zone, an education institution, public health center, business and trade area, development of real estate and financial institutions such as banking and the stock market, post and telecommunication, and warehouse and distribution logistics area. Construction of the project

started in December 2016 and is projected to take 10–15 years. In the meantime, Haicheng is seeking investors for various projects and businesses within the zone and has begun to sell apartments. These projects have been subcontracted to various Chinese construction companies including Power China and Sinohydro. Questions of extraterritoriality, sovereignty, and environmental and local impacts continue to circulate around the project.

VII. Methodology

Ethnography on the road and on the rail

The chapters in this dissertation are based on seventeen months of ethnographic research between 2017 and 2020. Ethnographic fieldwork in this context, specifically for a politically sensitive project, is essential. My preliminary inquiries drew on a number of my existing contacts from past work in China, specifically in Yunnan between 2012 and 2014 and in Dalian, Beijing, and Shanghai between 2008 and 2011. During my preliminary dissertation fieldwork in the summer of 2017, I spent time in Yunnan, China, and Laos. I then returned to Laos for a year of in-depth research from September 2018 to August 2019, with trips to Yunnan and Beijing interspersed. I conducted follow-up fieldwork in Laos from January 2020 to the end of March, when my time in Laos was cut short by the COVID-19 pandemic.

In this dissertation, I crisscross the length of the corridor, from Vientiane to Boten at the border with China, throughout the construction of the project, before any trains were on the track. In addition to the methods that I describe below, I completed two transects of the rail toward the beginning and at the end of my dissertation fieldwork. Over three weeks, from December 2018 into January 2019, I (along with two biking enthusiasts and dear friends) bicycled from Xishuangbanna, China to Vang Vieng, Laos. I repeated a similar route from

Vientiane to Boten via motorcycle between February to March 2020. During that time, I returned to many of my study sites for follow-up research and to reconnect with a number of the people I had worked with between 2018 and 2019.

My methodological approach was iterative, itinerant (Schein, 2000), and multi-sited (Marcus, 1995). To study global processes and to ground global China in specific places, I relied on in-depth ethnographic fieldwork and multiple methodologies (Burawoy, 2000; Hart, 2006; Darian-Smith and McCarty, 2017). I engaged a suite of methods including semi-structured and in-depth interviews (n=232), focus groups, participant observation, and mobile ethnography (Adler and Adler, 1994; Novoa, 2015; Streule, 2019). My approach entailed seeking out different entry points to answer the same questions. I sought to understand how projects were implemented and how they emerged in specific places in connection with their motivations from elsewhere. I gathered data that cuts across scales to unpack the complicated and often contradictory narratives surrounding the railway. For example, I regularly engaged with development organizations and civil society groups who worked on issues of land. I conducted interviews with government officials at the central, provincial, and district levels in Laos, and with villagers, lawyers, and other legal and land policy experts, as well as focus groups and interviews with village leaders and affected households. In both the capital and villages, I recruited interlocutors based on their engagement with the railway, corridor, zone development, or foreign investment in Laos more broadly. My processes for identifying interviewees were iterative. As such, my first two months in Laos were filled with introductory meetings, lunches, and coffees, many of which developed into friendships and working relationships.

Because the railway is a politically sensitive project, I engaged in interviews both formally and informally. Often, I spoke with people on walks, in their homes, or on their

agricultural land, which allowed them to point to the material impacts of railway construction. These meetings were nearly all prearranged through local NGOs or family members to enable easier access to villages or towns I visited. I thus was able to engage in both formal village meetings (with an official present) as well as smaller, informal discussions with people at their homes, in their fields, or on walks. I also intentionally focused on local points of view in an attempt to gain both Lao and Chinese perspectives and lived experiences shaped by and in turn shaping corridor infrastructures (cf. Nyíri and Tan, 2017). I regularly engaged in observation and many informal discussions with individuals at or in areas surrounding construction sites, for instance migrant laborers, smallholder farmers, and resettled households. Chapter Five highlights Chinese worker experiences in producing the spectacle of Boten, while Chapter Six explores how lives of local Lao people have been suspended.

I also "studied up" (Nader, 1972) primarily with Lao officials, as well as with some Chinese officials in Beijing. I interviewed, for example, central-level Lao officials across eight ministries to understand high-level politics and negotiation processes surrounding these projects. This was made possible as I was fortunate to undertake formal research with Laos' National Institute for Economic Research and the University of Bern's Centre for Development Environment. This affiliation afforded me access that would have been otherwise difficult to get, enabling me to speak with company representatives, local laborers and businesses, and Lao officials.

During my time in Vientiane, I also regularly engaged with local and international NGOs, collaborated on related projects, and joined official government sector meetings and working groups. My past professional experiences as a practitioner in the field of development enabled me to undertake participant observation as I worked with various groups, gaining an inside

perspective on their positions on Chinese infrastructures, on the railway, and within the "development" circle in Vientiane.

Interviews with government officials were often conducted in English, otherwise they were conducted in Lao (with the help of a translator). Interviews with Chinese actors—engineers, laborers, contractors—were conducted in Mandarin, at times with the assistance of a translator. All conversations in villages along the railway were conducted in Lao with the assistance of translators. I chose to work with multiple translators and research assistants—male and female, of different ages, some local to a study location and others from the capital of Vientiane. I thus was able to conduct interviews in diverse settings accompanied by different actors ranging from government officials to Lao activists, to local translators. This allowed me to control for who was in the room in ways that revealed how people answered questions. When I was accompanied by an official in villages, villagers typically expressed their excitement about a project or referred to other people being happy with it. Conversely, during interviews in which I worked with a local Lao translator or development practitioners, villagers raised a number of concerns. They often questioned how they could legally be kicked off their land, how they could find more information on projects or learn how to negotiate their loss, and how the state could improve the current compensation rules and procedures.

I complemented qualitative, ethnographic methods with analysis of relevant policy, media (*Vientiane Times* archives since 2002), administrative, project, and legal documents. I conducted textual analysis of news stories and documents related to the railway and resettlement in Laos, broadly published between January 2006 and May 2019. I also examined both Lao and Chinese policy documents and agreements, and engaged with state discourses centered on China's interactions with Laos and Southeast Asia. I often compared provincial and national

policy with experiences on the ground to question the notion that most development projects come with "growing pains" (a regular refrain I heard during Chinese and Lao meetings and conversations). In addition, I regularly kept up with relevant *Xinhua* and regional news publications. I engaged with additional Chinese language sources through various groups and boards on WeChat (微信; wēixìn), such as 老钟经贸促进会 (The Laos–China Economic and Trade Promotion Association), or 老挝磨丁(Laos Boten—run by the SEZ's developer) as well as relevant 一带一路 (Belt and Road) materials.

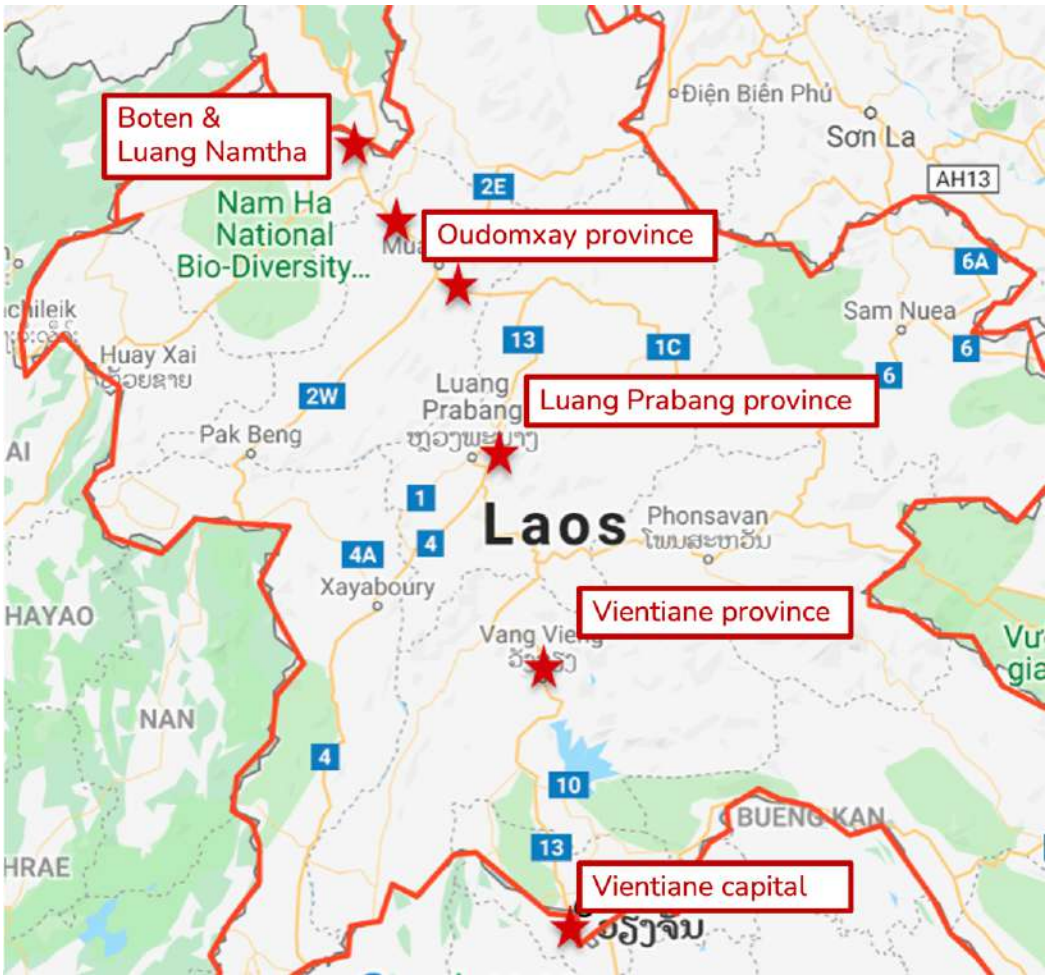
Study sites

My study locations were selected based on two methodological considerations related to the nature of connective infrastructure. First, I decided to include multiple fieldsites (the nodes of railway connection) in order to understand a diversity of perspectives and experiences across northern Laos, which is a far from homogeneous terrain. Second, I chose to engage in regular movement using the train as transect. The railway is meant to glide swiftly and frictionlessly over the terrain. By contrast, my time studying it was slow and bumpy, recalling the "friction" that exists in the ground and that conjures these projects and processes into being. Using the rail as transect, I traveled slowly and intentionally by bicycle from Xishuangbanna to Vang Vieng to see on the ground what was happening on both sides of the border and across northern Laos. I repeated this trip multiple times—once in full, motorbiking from Vientiane to the Chinese border, as well as in multiple, smaller segments.

These sites were purposely located in both population centers where infrastructural decisions are made, and in areas of Northern Laos through which the rail passes. The resource-rich Lao uplands are dotted with agricultural communities, are primarily a part of the 70% of the

country that is dependent on subsistence agriculture, and have an average GDP per capita of US$1,700, though much less in smallholder and upland villages. These villages are sometimes situated near new construction sites, where residents had very limited information on what was happening. The provinces in which I spent time are those that the railway passed through: Luang Namtha, Oudomxay, Luang Prabang, and Vientiane provinces, and Vientiane Capital (from north to south). I have decided not to name individual villages, due to the political context of Laos and the sensitive nature of the railway and other government-backed projects, though I do name Boten and Vientiane Capital, as the people I spoke with there are able to maintain anonymity. Because of the high-level political nature of project, many state actors have been instructed not to share information about it. Lampton, Ho, and Kuik (2020: 93) point out that once the Party-state made decisions on the railway, "debate concluded, for the most part, and questions since have revolved around implementation challenges, overseeing the budget, and spending issues." Thus, in this dissertation I offer provincial descriptions of where villages are located rather than specific village names or locations.

The Lao capital of Vientiane was my southernmost site. Located on the banks of the Mekong River, it is the largest city in the country and home to nearly one million people. In a meeting early in my fieldwork, an official at Laos' Ministry of Planning and Investment told me, "Laos is very small. You will see and know people in the same area. This can be good or maybe not so good." I found that the size of the capital and the community in Vientiane were extremely beneficial both personally and for my research, as I was able quickly understand the policy and development landscape and arrange interviews through a snowball sampling approach.



Map 1.2. Northern Laos with general area of study sites marked. The precise locations of most villages will remain anonymous throughout this dissertation. (Source: the author, 2021)

My additional fieldsites (starred on Map 1.2) all lay north of the capital in villages, provincial seats, and Boten SEZ. Directly north of Vientiane Capital lies Vientiane province.[12] I was based in the tourist town of Vang Vieng while doing fieldwork in this province, and able to easily visit the villages where I worked by motorbike and bicycle. My research here focused on construction impacts for villagers, displacement, and land compensation. I collaborated with

[12] Laos is divided into 17 provinces and 1 prefecture. Vientiane Capital is the prefecture, while Vientiane province is a separate province that lies north of the capital.

organizations interested in the human rights issues surrounding infrastructure construction as well as a number of individuals who live and grew up in affected villages. Most of my connections to people in the provinces were made slowly over time through a growing network of people engaging in similar questions and work. Further north in Luang Prabang province, I followed the same processes and methods. As I collected data along the railway line, I tacked between multiple sites and actors involved in and affected by land and compensation issues. In Luang Namtha and Luang Prabang provinces, I interviewed local government staff and affected villagers. In Oudomxay and Vientiane provinces, I spent time talking with affected villagers, and in Vientiane Capital, I conducted interviews with central government staff from the Ministry of Planning and Investment, experts on land, and economists from multilateral banks. In every province that the rail passes through, I interviewed villagers impacted by railway construction. I met with state officials and railway planners in Luang Namtha, Luang Prabang, and Vientiane Capital. Finally, my northernmost site, Boten SEZ, is situated in Laos at the border with China. Here, I conducted interviews with and ethnographic research among Chinese workers who were employed by the developer of the zone.

Cycling as method

> "The bicycle is halfway between the shoe and the car, and its hybrid nature sets its rider on the margins of all possible surveillance. Its lightness allows the rider to sail past pedestrian eyes and be overlooked by motorized travelers. The cyclist, thus, possesses an extraordinary freedom: invisibility."
>
> (Valeria Luiselli, *Manifesto á Velo*, 2014)

> "There are a lot of walker-poets, who write their verses to the rhythm of their feet: the Rédas, the Roubauds. Cyclist-poets are less numerous, it seems, but that's due to inattentiveness, since the bike is a good place to work for a writer. First, [one] can sit down … surrounded by windy silence, which airs out the brain and is

> favorable to meditation; finally, one produces with his their legs a fair number of different rhythms, which are so much music to verse and prose."
>
> (Paul Fournel, *Besoin de Vélo,* 2001)

Fournel's quote vividly encapsulates the poetry and prose that assembles in my mind as I bike. Not just any ride, of course: it is the type where a rhythm is crafted over hours of movement, legs up and down, layered with the rise and fall of my heart rate as it matches the slope of the pavement, pavement upon which I not only see but really *feel* the rough and mutable surface, the way I feel the changes in air temperature and dew point. The smells of noodle-based breakfasts give way to dumpling-filled lunches, until dinner when, after a day of cycling, anything smells delectable. Like the train journey, cycling long-distance is easy to romanticize on paper. The magic in all of this closeness and slowness and sensing is that it is not *all* magic. If you know what it's like to bike behind a truck filled with freshly tapped rubber for hours on end, then you know what I mean. If you know what I mean by "pollution headache" then you understand how the perceived adventure is not so glamourous. Although less than glamourous, the bike as a vehicle for research opens many doors—for reflection, access, and a more sensory experience.

Speed is a keyword that surrounds the imagery of the BRI. Infrastructures are billed as hyperconnective, offering increasingly swift movement of people and things. Chinese projects are often selected for their competitive pricing and swift construction at "China speed." However, because megaprojects involve tremendous transformations of lives and landscapes, I decided to travel slowly to explore the infrastructures in this dissertation. My choice of locomotion was primarily bicycle, on which I pedaled more than 800 kilometers over 18,000 meters of elevation gain to understand the flows within the corridor and the lives and land that sustain these huge infrastructure developments.

For the researcher, slow movement affords an unparalleled sense of understanding. You sense—feel, smell, see, hear—all that is buzzing around you much more intimately. The opposite of the smooth, fast train whizzing above landscapes, cycling, like ethnography, is slow, attuned to the pace of lives below raised tracks. I biked with the children who ran alongside the road. Vehicles rushed past with little regard either of us, nor the passing villagers. From the bike, I feel the rush of transportation even more acutely. A truck of bananas *has* to get to the border to meet a quota, a group of tourists *must* get to the next town for lunch. On the bike, it is easy to pause or veer off the road should curiosity beckon. One can stop to eat noodles, talk to the truck drivers, and track what they're trucking. Indeed, rather than sitting squeezed in a van, air-conditioning and music blasting, I can smell the rotting fruit that's been sitting at the border too long and I can stop to ask about it.

Another benefit for the cyclist is a dual feeling of visibility and invisibility. In one sense, the bicycle and motorbike are the common mode of transportation on these roads, so it is easy to come and go quietly, without the fanfare of large vans that often carry groups of visitors (whether they are researchers, travels, or officials). In another sense, cycling allows for visibility. Arriving by bike becomes a conduit for conversation and has, throughout my experiences, opened doors that arriving by other means never has—introductions, and curiosity (why was I doing this?!).



Image 1.5. (Left) The author in front of a newly complete railway tunnel, constructed by the China Railway No. 5 Engineering Group. (Source: Carl Zoch, 2019)

Image 1.6. (Right) The author arriving by bike at a Power China construction site. (Source: Carl Zoch, 2019)

Bicycling is representative of my methodology of choice, ethnography. It is personally engaged in place and with people, day to day, face to face. Cycling as method gets past the statistics and policy projections, offering a view of big infrastructure projects and the spaces in between, from the ground. It affords a deeper appreciation for the textures of a region, a more sensual experience of the landscape and the lives that are sustaining the rail project. It also provides a unique point of entry to interact with people, and offers space and time for deep reflection. Typically, once I push past day four, there is both mental and physical acceptance of slowing down. I begin to see my surroundings differently—with a crispness in sight and in mind. On the ride, I have hours to think. Cycling as method is a moving meditation that helps me not only sit with ideas but to talk through them in a way that I have yet to find in front of a computer screen. In doing so, it becomes even clearer to me how one can meld with one's research. As I

pedaled up another 1,000 meters of hillside switchbacks, I wondered how I would ever pull apart "data collection" from being in and with this project. I suppose that's the beauty of ethnography and also the trouble. Some days I would question if I had gathered any data and on others, my mind and notebook would be bursting with reflections and ideas.



Image 1.7. An aerial view of the author and friend cycling through rubber plantations of northern Laos. (Source: Carl Zoch, 2018)

Detours, hurdles, and opting for the "unofficial"

My methodology was based on the political and cultural context in Laos and surrounding the railway, which is well known as a sensitive project. As a priority project (see Chapter Four),

the Laos–China Railway and economic corridor have strong government support. Data collection in China and on sensitive BRI projects has become increasingly bureaucratic and challenging, particularly for a US-based researcher. Similarly in Laos, because my research centers on a priority development project, asking questions on its planning, negotiation, and construction can be sensitive and taboo, so much so that many Lao researchers and activists will not publicly discuss such projects. There is little tolerance in Laos for views that oppose the government or its decisions and positions, and there is an undercurrent of fear that results from the regular silencing of anti-government sentiment and stifling of civil society. For this reason, villagers are often not willing to speak openly or critically about a project like the railway, and it took a great deal of time and trust before people expressed their thoughts.

The sensitivity of the railway and related infrastructure projects required me to be nimble in my research techniques. I chose to engage in both formal and informal approaches. Throughout my work, I heard a range of perspectives that would have likely not emerged if all my fieldwork was conducted as part of an "official" study. Conducting an approved or official study in Laos means that government officials join on village visits. It became clear that systematically assessing village-level perspectives on the railway would be challenging, because if I opted to move through formal channels, I would likely be accompanied by someone from Vientiane who worked for the national university or a government ministry. Although I opted to forego the official route through the university, I did end up working with various Lao research institutes and thus had numerous experiences in the field with them. I realized after a short time with an approved translator that I was not hearing the whole story, as villagers repeated the same Party line on the railway.

A Lao activist and friend in Vientiane suggested that I spend time with her family in Luang Prabang province to make sense of a less official viewpoint. Bounchan, her elder cousin, moved from his village farther north in the province to the outskirts of the Luang Prabang city in 2005. He is a driver, owns a small restaurant, and has not looked back. “This is my home and I like living here a lot,” he beamed. “Though the tourism is changing and becoming more difficult to make enough money to live.” During our time together, we shared long conversations about the changes he has seen in northern Laos and his hopes for his job and family. We informally visited villages affected by railway construction, curious to get a pulse on how deeply affected people really were and how they feel about the railway and the “coming development.” Traveling and working with Bounchan in this context had a number of advantages, as he speaks with the softer lilt of the Luang Prabang accent that our many interviewees here share. His position as a local who is accustomed to working with tourists normalized my presence, and his casual demeanor produced an air of trust that led to many long days of wandering walks and conversations. These experiences, unaccompanied by government staff, offered glimpses into the experiences and interactions that villagers have with the state through land compensation for the railway.

Finally, provincial differences in access and sensitivity became clear throughout my research. The further away (north) from Vientiane Capital, the fewer restrictions on construction site access. For example, based on my work in the northern provinces, I had grown accustomed to walking onto construction sites and talking with, typically, Chinese workers. This proved to be much more difficult and restricted outside of Vang Vieng, where I was regularly shooed away as either an annoying tourist or nosey journalist when I approached a site. Given Vang Vieng’s proximity to the capital of Vientiane, construction workers, like villagers, were told not to

engage or talk about the project with outsiders. This led me to spend more time farther north, particularly in Luang Namtha and Boten.

VIII. Outline of the dissertation

Following the introductory chapter, this dissertation comprises five body chapters and a conclusion. It begins with a historical chapter on infrastructures in Laos since precolonial times. The subsequent four chapters operate as couplets that speak to one another in a number of ways. Chapters Three and Four focus on China, particularly on the motivations of Chinese capital, labor, and investment. Chapters Five and Six focus on Laos, especially the processes and temporal experiences associated with land expropriation.

Chapter Two takes a historical view of infrastructure development in Laos through the lenses of "value creation" (the French colonial policy of *mise en valeur)* and the recurrent theme of "unblocking" landlocked Laos. These perspectives on infrastructure, I suggest, offer a means to understand and situate global China within a longer trajectory of spatial projects, and to challenge mainstream China-centric stories on the railway. Lao territory, since colonialism, has been framed as a frontier for capitalist expansion. Discourses of unblocking Laos as well as of valuation creation have been reproduced through successive infrastructures. I develop the concept of infrastructural history to trace the large connective infrastructures that various powers either attempted to or succeeded in building, namely rail, road, and river transport.

To do so, I periodize Laos' infrastructural history from precolonial times to the present. The periods includes: Infrastructures of "the land in between" and caravan trade (pre-1893); Infrastructures of débloquement and colonial control (1893–1945); Battlefield and buffer infrastructures (1950s–1975); Infrastructures of socialist ambition and transition (1975–1990s);

Infrastructures of economic development and poverty alleviation (1990s–2000s); and Infrastructures exchanged for land (2000s–2010s); before turning to Chinese investment in the corridor. The sedimented histories of infrastructure show how they were often predicated on notions of improvement, "value creation," or geostrategy, often imposed from elsewhere.

Across these periods, I show, first, a set of infrastructural geographies that have repetition in space and time, second, that Laos is often viewed in relational to elsewhere, and finally, the recurrent problem of finance and control of connective infrastructure which resulted in many projects never being built. However, because many large connective infrastructures were not built due to their high cost, or, if built, served a purpose beyond their stated means, I conclude by considering past infrastructure failures alongside the present boom of Chinese investment. I suggest that large infrastructures are materializing now due to push and pull factors from both sides of the border: the Lao state exchanges land and resource access for infrastructure they cannot build or finance themselves, and has mobilized capital and land-based resources for the railway in order to hold equity in the project, while Chinese projects increasingly rely on public-private partnerships and take on large financial risk.

Picking up on the recurrent problem of funding large infrastructures from Chapter Two, **Chapter Three** explores the logics of Chinese capital that have enabled the construction of the railway. My goal is to excavate overlooked aspects of finance and debt. I begin by reflecting on the relationship between railways and the development of capitalism, and show that because they are challenging to fund, railways became deeply entwined with the development of finance and the creation of large banking systems. Railways often do not, through the function of that infrastructure alone, generate significant revenue, nor enough capital to repay project debt. It is no surprise that debt relations remain one of the most prominent concerns circulating around the

Laos–China Railway. The project has attracted intense scrutiny from observers around the world regarding its cost, and has consequently been interpreted as an instance of debt-trap diplomacy—in which China uses loans to ensnare countries for political or ideological reasons. However, it is overly simplistic to assume that capital always operates under a singular profit motive or as geopolitically predatory. Instead, many of the risks and financing challenges of the railway have fallen and will fall on Chinese state-owned enterprises (SOEs). By examining railway capital, I build on Lee's (2017) logic of encompassing accumulation by showing that rather than solely profit-seeking or debt-trapping, there are additional logics at play.

The two key arguments that I add are, first: debt provides an outlet for overaccumulation by delaying devaluation of domestic Chinese capital. The railway tells an important part of the story of the expansion of Chinese state capital as a spatiotemporal fix for China's domestic overaccumulation. Mitchell suggests that "capital wants delay. Postponement brings capital into being and allows it to multiply. The delay, the ability to push something into the future yet continue to control it, can be understood as the very origin of money." More than just expanding across space, railways facilitate an expansion of capital into the future. As such, the railway and other BRI infrastructures offer an opportunity for China to address chronic crises of domestic overaccumulation of capital through a temporal fix to avoid domestic devaluation. I suggest that this temporal dimension of the spatiotemporal fix is an under-explored and crucial driver of the processes of global China. Second, this deferral is possible due to the involvement of Chinese SOEs and the use of public-private partnerships and joint ventures. They are able to either take on long-term risk or transfer risk to lower-level actors, which I illustrate as SOEs did by offloading risk onto subcontractors and laborers when rail finance did not come through. SOEs have both political and economic support, and thus more tolerance for risk and more power to

offload it. In sum, Chinese capital operates with a set of imperatives that are driven by domestic economic considerations and by the dual character of SOEs and joint ventures as simultaneously commercial and embedded in the state.

Like Chapter Three**, Chapter Four** foregrounds accumulation. I examine how corridor spaces are reinvented as "zones of opportunity" that are worthy of investment through three processes: corridorization, spectacle, and imaginative labor. To begin, corridors have a variety of purposes. They enable visions of hyperconnectivity and the movement of people, capital, and things. Corridorization, however, is about more than connectivity. It entails an iterative process of enclosure and opening—a dual movement that simultaneously encloses space while opening it to certain types of capital, development, or exploitation and directing them along a particular enclosure of space. An approach to corridorization shows that although the railway is a linear connective infrastructure, the reach and shape of the economic corridor is transformative within and far beyond the corridor itself.

Dependence on spectacle is a regular feature of the search for financial capital and of large-scale infrastructure construction. The Laos–China Economic Corridor and Boten, which I analyze as part of the process of corridorization, were (re)invented and revived by spectacle and speculation motivated by the infrastructural promise of the railway. I trace the revival of Boten, from a defunct casino town to an aspirational global city, special economic zone, and hub for licit accumulation. It is envisioned and marketed as an international city yet to come, with high-rise apartments and aspirations of 300,000 to 350,000 residents by 2035. The visual and imaginative work occurs in Boten through the models, plans, marketing materials, and performance meant to inspire speculation. These plans often invoke local architecture and images of an idyllic Southeast Asia alongside a booming business district. In addition, miniature

models of Boten serve as tools of conjuring and imagination, for the purpose of attracting capital. The model, like the corridor, also defines the scope and parameters of the future vision; it is not open-ended imagining but rather contained and layered with bounded visions. Miniature replicas of the city become tangible tools for imagining the future, while also imposing a defined scope that contains and constrains future visions. In this way, the miniature become requisite to construct the grand.

In addition to models and marketing, spectacle is performed by the Chinese company workers in the zone. The final section in this chapter is a grounded ethnography with these workers that focuses on the lulls, hype, and hangover they experience to produce and sustain the spectacle of Boten. Labor is attracted to Boten by visions of what the city will become. However, once in the zone, daily life cycles between drudgery and the production the mirage of a luxurious Boten for visiting elites and VIPs, because investment depends on creating a performance of possibilities and prosperity. Taken together, this chapter details how spaces are reinvented as zones of opportunity through performance, spectacle, and the imagining of the corridor as "open for investment." Corridorization is a form of frontier-making, relies on spectacle that drives actors (laborers, investors, and the state alike) to speculate on an imagined future.

Chapters Five and Six turn to Lao experiences of construction on the ground and in officials' offices. **Chapter Five** focuses on land, which, like processes of corridorization, must be enclosed or contained in order to be "opened" for construction. Because infrastructure development entails significant changes to property relations, I advance my theorization of the infrastructure frontier by asking how land is assembled for railway construction and in anticipation for future value appropriation. Processes of infrastructure frontier-making require various mechanisms to free up land—meaning to both unpeople it and undervalue it. I show that

land compensation as a state-led process enables the enclosure of land through techniques that undervalue land. These include ambiguity surrounding laws and regulations, the hybrid nature of property relations in Laos, and legal-institutional mechanisms set up to conduct land valuation and compensation.

The chapter then explains these techniques. First, land expropriation and compensation for the railway was the responsibility of the Lao government as a portion of their equity in the railway. In pursuit of the creation of surplus value, state-led land compensation mechanisms minimize the exchange value of land in order to make it available for railway construction and investment. State power enabled the government to price land arbitrarily, which they do precisely because they do not have sufficient capital on hand to contribute to their committed investment. This is possible, I suggest, due to the state's ability to selectively deploy the notion of state land, as well as to the legal mechanisms created by the state for land compensation. The final section shows how land was appraised and subsequently undervalued and under-compensated through various calculations, mappings, and inaccurate observations. This occurred at the expense of the local population. As a result, the Lao state reduced their capital input, enabled swift construction, and rendered land available for present construction and future investment, while leaving many people along the railway in a state of suspension.

Turning to local Lao experiences of land loss and compensation, **Chapter Six** is told from the perspectives of individuals in multiple villages in each province along the railway corridor. It brings together literatures on waiting and the temporalities of infrastructure to examine how megaprojects intersect with displacement through temporal modes of anticipation and suspension. My analysis reveals the diverse and often contradictory perceptions of large-scale infrastructure development and how these are shaped by long periods of waiting and

uncertainty around land, knowledge that past projects did not materialize as promised, and feelings that participation and redress are not possible.

My analysis follows two "timescapes." In the first, I ethnographically narrate accounts of waiting through four characters. Each of their homes is located within the railway corridor, and they have lived multiple years suspended in the dusty and uncertain materiality of construction. Their experiences show how the railway creates states of prolonged waiting for construction to proceed. Here, I am interested in the drawn-out moments and years of railway development through which life is suspended, as people wait for an unclear future. In some villages, the mantra "wait and see" was repeated for years. In others, people attempted more active forms of waiting so as not to be forgotten or overlooked. In all cases, suspension holds power over people's time.

Calculations to determine how and how long to wait, however, entail not only suspended presents but also, as the second timescape, past experiences of infrastructure-led displacement. Throughout my fieldwork, I encountered a pattern across the provinces where I conducted interviews: Lao locals speculated on the future promises of the railway by telling stories of past delay, dispossession, or disappointment. For some, this is not their first experience of displacement; they have lost land or been moved due to village consolidation programs, agribusiness, large-scale infrastructures, and other resettlement schemes. Through multiple waves of infrastructural development, people make sense of the promise and failure of infrastructure alongside previous, sometimes similar experiences of displacement. Chapter Six, along with my analysis on deferral and delay of capital, contribute a temporal critique to the understanding of global China and infrastructure. Chinese development projects entail a mix of temporalities, creating temporal unevenness as lives are held in suspension. I conclude the

dissertation in Chapter Seven by summarizing the dynamics and tensions of the infrastructure frontier, and directions for future research.

CHAPTER TWO
ROAD, RIVER, AND RAIL:
AN INFRASTRUCTURAL HISTORY OF THE *MISE EN VALEUR* OF LAOS

I. Introduction

In November 2017, Chinese Party Secretary Xi Jinping visited Laos, marking the first foreign visit of his second term and the first time a Chinese head of state had visited Laos in 11 years. It was a historic event that symbolized the importance that Beijing attaches to its relationship with Laos. The concept of a Laos–China Economic Corridor (LCEC) was introduced as a means of further benefiting from the Laos–China Railway by developing investments around it. During the visit, Xi and then Lao President Boungyang Vorachith witnessed the signing of the Laos–China Master Plan, which includes a range of transportation, energy, agriculture, tourism, commercialization, banking, and industrial park projects. They also signed a Memorandum of Understanding (MOU) to "Jointly Promote the Construction of the Lao-China Economic Corridor." In April 2019 at the second international forum for China's Belt and Road Initiative (BRI) held in Beijing, then president Vorachith, as representative of the Lao government, and his Chinese counterpart signed another MOU on the development of the LCEC cooperation framework from 2019 to 2030.

This ostensibly "new" corridor has deep roots and like many BRI corridors, did not originate with the initiative. Trade routes and pathways have crisscrossed northern Laos for centuries, and the notion of the BRI economic corridor is reminiscent of many similar iterations of connectivity, from the precolonial Tea-Horse Road to the 1990s regional infrastructure programs to connect South, East, and Southeast Asia. Over time, as this chapter will demonstrate, many of Laos' infrastructural objectives were externally driven or defined and have since been taken on and reproduced by the Lao government. Thus, Laos' current infrastructural

construction under the BRI is much more than a "China" phenomenon; rather, prior infrastructural residues, histories, and legacies shape global China and its processes and pathways on the ground in Laos. Laos' history of infrastructure development (largely planned and as of yet unrealized, while also embedded in the political system) has laid the foundations for global China's developments in Laos today.

Outsiders have continually defined Laos by disconnection and relative isolation. The kingdom of Lan Xang (1353–1707) was viewed as distant and inaccessible, known as "the land in between" (Evans, 2002) to caravan traders. Imaginaries of infrastructure and development in Laos present a historically sedimented contradiction: the framing of Lao territory as being remote and isolated when in fact, extensive trade routes have spanned it since the time of the early-14th century kingdoms. Indeed, Laos has long been connected by river systems, which were sufficient for its needs until extractive capitalism (under colonialism and continuing today) became the basis for governing. The river system was not sufficient for that kind of rule and economy, so land-based connective infrastructures became of the new focus and, since colonialism, have been at the center of each successive infrastructural era. However, Laos has been continually defined as "blocked" in many ways, due to the mountainous terrain and sweeping rivers.

Situating infrastructure within a longer historical trajectory of spatial and territorial projects brings global China and the BRI into better focus, and in doing so, challenges mainstream China-centric stories about the railway and corridor. In particular, connective infrastructures of road, river, and rail offer a lens by which to situate China's global expansion. In this chapter, I focus on successive eras of infrastructure development situated within the dominant development paradigms of their times. These eras produced distinct geographies of

both uneven development and constructed ideas of what Laos and d/Development looked like at various points in time. I draw attention to the politically influenced locations of these infrastructures, situating them in their political economic contexts. In doing so, I show that the continuous redefinition of *mise en valeur* and *débloquement* sheds light on the current moment in China's infrastructural expansion.

Although the BRI is invoked in far-reaching future terms, it often relies on infrastructures, discourses, and visions of the past. The Laos–China Railway was not a unilateral Chinese move into Laos, but had been part of development thinking in Laos since long before China was the major developing power or partner. This chapter reveals how the spatial, political, and territorial logics of past infrastructure-led development have been recycled and revived by periodizing Laos' infrastructural history into infrastructural eras; it explores the origins, rise, and fall of various key infrastructure types and their accompanying rationales.

This approach responds to a burgeoning critiques of BRI studies, that do not necessarily take a longer-term historical frame of analysis (Enns and Bersaglio, 2020). It is instead essential to situate global China scholarship within longer host country histories of infrastructure designs, planning, and goals that the entry of Chinese capital encounters and helps realize. This approach also addresses the critique that scholars, particularly those who study Chinese investment, tend to nationalize projects, focusing on their "Chinese-ness" and neglecting the many other actors, varieties of capital, and regional politics with long histories that are involved (Goodfellow and Huang, 2021). In Southeast Asia, for example, the economic corridor model originated with the Greater Mekong Subregion Program of the Asian Development Bank (ADB) and is now re-deployed through China's BRI as Silk Road economic corridors. Furthermore, the ADB approach is rooted in an explicit aim to revive old Silk Road trade routes as well.

II. The origins of *mise en valeur* and *débloquement* of Lao territory

In 1923, former Governor General of French Indochina Albert Sarraut published *La mise en valeur des colonies françaises* ("The Improvement of the French Colonies"). Sarraut's work synthesized colonial policy at the time and popularized the doctrine of *mise en valeur*. For Sarraut, *mise en valeur* entailed the dual tasks of increasing the economic value of the French colonies and alongside programs of social welfare. Sarraut was explicit in his description of the intentions of French colonization: to simultaneously extract material wealth and to carry out a *mission civilisatrice* or civilizing mission for the "improvement" of local populations. He described the project of *mise en valeur* as:

> "un programme d'ensemble de grands travaux publics, d'outillage économique et d'œuvres sociales, dont la réalisation méthodique dans les diverses parties de notre domaine colonial français est de nature à imprimer une impulsion puissante tant au développement de ses richesses matérielles qu'à l'œuvre humaine de civilisation poursuivie par la France parmi ses sujets et protégés indigènes."
>
> "An overall program of major public works, economic tools, and social works, the methodical realization of which in the various parts of our French colonial domain is likely to provide powerful impetus both to the development of its material wealth and to the human-centered work of civilization pursued by France among its native subjects and protected peoples." (Sarraut, 1923: 23) (translation by author)

Echoing and defending Sarraut's agenda, colonial administrator Camille Guy (1923: 267–268) wrote a review of the text that emphasized the shift in colonial policy away from exploitation

toward social welfare.[13] He vehemently asserted that "[s]ufficiently nourished, sufficiently educated, defended against disease, the natives will become for us, not subjects, but auxiliaries … It would be a crime unworthy of France to consider our natives as 'fiscal sponges,' whereas for us they must be 'living entities.'"[14] The relationship between colonization and social welfare was at the center of French *mise en valeur*. This was especially apparent in Laos, where a shortage of labor presented a central dilemma to *mise en valeur*—without sufficient labor, how would the colony pay for itself? (Gunn, 1990). The focus on the shortage of labor illuminates the fact that more than a shift in colonial agendas toward social welfare, *mise en valeur* was primarily concerned with the circulation of capital. As historian Martin Stuart-Fox (1995: 122) recounts, the "Lao budget continued to require an annual subsidy from the general budget for Indochina. For French officials in Laos, a perpetual concern was how to keep expenditure down and revenues up." According to historian Geoffrey Gunn (1990: 32), Laos was "a permanent

[13] For scholars examine the outcomes of colonial rule in Laos and problematize social welfare as a policy goal see for example, Gunn 1990; Stuart-Fox, 1997; Ivarsson, 2008

[14] "Suffisamment nourris, suffisamment instruits, défendus contre les maladies, les indigènes deviendront pour nous, non des sujets, mais des auxiliaires. C'est ce que Mr Sarraut démontre avec une émouvante éloquence. Ce serait un crime indigne de la France que de considérer nos indigènes comme des «éponges fiscales», alors qu'ils doivent être pour nous des «entités vivantes». Dans ce but nous devons pratiquer envers eux, loyalement et résolument, une politique à association. Que certains députés, obéissant à des préoccupations, d'ordre purement électoral, cherchent à ressusciter la doctrine de l'assimilation qui a fait une lamentable faillite; que certains, plus chimériques encore, demandent la tion en masse des indigènes, sans tenir compte ni des pays, ni du de civilisation des habitants, ni même de leurs désirs, ce sont là des tentatives sans lendemain. Il faudrait pour cela que nous imposions, brutalement et sans transition, nos lois, nos coutumes, notre statut personnel, notre justice. Or, c'est avoir une bien grande prétention que d'imposer notre civilisation à des gens qui en ont une, imparfaite sans doute, mais réelle pourtant et d'essayer ce tour de force de faire franchir à un noir, en une seule génération, la distance qui sépare un serf du xnie siècle d'un citoyen d'aujourd'hui. Il faut certes développer les indigènes, mais prudemment et sans heurts; il faut, en un mot, hâter leur évolution, mais seulement dans leur «plan social»." (Guy, 1923: 267-268)

drain on French resources." And so, achieving the *mise en valeur* of Laos became an "obsession" of French colonial administrators (Stuart-Fox, 1995).

The related colonial task of *débloquement*—unblocking or unlocking Laos—was introduced as complementary to *mise en* valeur and entailed opening connective pathways through, for example, roads, railway, river, and at times, communications. In line with official policy, economist Pierre Deloncle (1930) advanced the view that *mise en valeur* required the *débloquement* of Laos in such a way that changed the "natural and historical" orientation of the country. The policy led colonial administrators to require major infrastructure development and/or improvements in the forms of irrigation, railways, roads, telegraphs, hospitals, and schools. These infrastructural goals were made with the assumption that their implementation would result in broader and faster transportation, healthier workers, and better communications—all leading Indochina to produce more goods and make France wealthier (*Journal Officiel, Chambre des Deputes*, Débats, 3 July 1912 in Burlette, 2007).

I begin with *mise en valeur* as a theme that runs through this chapter to reflect critically on the tensions it encapsulates and how those tensions articulate with recurrent problems of funding and control of infrastructure. On the one hand, as the title of Sarraut's book indicates, *mise en valeur* is colloquially translated as "development, improvement, or enhancement." On the other, the literal translation is "putting into value"—*mise* meaning to putting or placing[15] and *valeur* meaning value or worth—and means "value realization." Although *mise en valeur* "authorized social welfare, construction of economic infrastructures, population policies, and political engineering" (Aldrich, 2012), there was, especially in Laos, very little spending and

[15] *mise* (noun) is a putting, placing, which is derived from that feminine past participle of the verb *mettre* "to put, or to place."

investing on the part of France, and yet value realization was a top priority. The colonial development policy of *mise en valeur* became, in essence, an effort to make colonies pay for themselves by becoming economically self-sufficient, as opposed to receiving high capital transfer from the core to the periphery.[16] Research on Indochina and West Africa provides examples of this same approach, as well as the paradoxes and contradictions it engendered (Chauveau, 1985; Stuart-Fox, 1995; Tenzon, 2019).

Evans (2002: 50) wrote of the colonial government in Laos that "[f]rom the beginning [it] failed to pay its way—just the first of the modern states in Laos to experience a perennial fiscal crisis. It raised just enough money to pay its officials and no more. There was nothing for development, road building, schools, hospitals, or any of the other fruits of the *mission civilatrice*." Rather, than strictly for the sake of improvement, *mise en valeur* was conceived to offer the precondition for accumulation. As the central concept that reshaped French colonial development in Asia and Africa alike, *mise en valeur* came to exemplify the means by which the French aimed to fashion colonial policy in terms of the "market" rather than what had become viewed as outdated modes of colonial exploitation and oppression (Davis, 2010). This is, first and foremost, because French presence depended on capital's entrance and circulation, from either within the colony through taxes and duties or in the form of loans or commercial investment from France (Gunn, 1990: 29). Frederick Cooper, (1998) in his work on "modernizing bureaucrats," argues that the idea of development came about as a means to save colonialism, by making colonies more productive and ideologically stable. However, "development"—something he says is done *to* and *for* colonies, not with them—becomes

[16] Core here meaning from either French commercial actors or the government for French administrators to maintain the colony (periphery).

expensive and eventually becomes the reason why administrators pulled out of colonies. In other words, development came about to bolster the project of colonization and was in turn bound up in the process of decolonization (Cooper, 1998), which is one reason that colonial claims to pursue development as improvement cannot be taken at face value.

III. Infrastructure frontier-making over time

Lao territory, since colonialism, has been framed as a frontier for capitalist expansion. As I note in the introduction to this dissertation, infrastructure frontier-making is a spatial and imaginative act that entails a mix of temporalities. A number of themes throughout this chapter connected to value creation and unblocking Laos show how frontier imaginary is reproduced through successive infrastructural periods. It is built on visions of rendering space through *mise en valeur*. *Mise en valeur,* in the colonial sense and how it was used over time, becomes a powerful project and discourse rooted in the notion of Laos as a space of tremendous resource wealth.

Capitalist expansion from the period of colonial *mise en valeur*, through geostrategic wartime efforts, to economic corridors, and the BRI relies on this sort of colonial doublespeak referenced above: at once "d/Development[17]" alongside exploitation, which can be traced through histories of connective infrastructures of *débloquement*. The distinction that Hart (2001) makes between "big D" Development and "little d" development is especially useful to think with alongside *mise en valeur*. Hart (2009: 119) defines "big D" Development "as the multiply

[17] The distinction between "Big D" and "little d" development originated with Cowen and Shenton's *Doctrines of Development* (1996) historical examination on "the invention of development," in which they contend that development is both intentional intervention and the creative and destructive forces of global capitalism.

scaled projects of intervention in the third world that emerged in the context of decolonization struggles and the Cold War [and] '[l]ittle d' development refers to the development of capitalism as geographically uneven but spatially interconnected processes of creation and destruction, dialectically interconnected with discourses and practices of Development." Through this framework, she illustrates how both development discourses and practices evolved since the 1940s to situate the 1990s moment of neoliberalism and structural adjustment programs in which she was writing. I return to the d/Development later in this chapter and again in Chapter Three to consider the current moment of development alongside China's state-capital relationship in relation to large infrastructure projects.

Finally, this chapter also reveals the repetition of Laos as continually defined in relation to elsewhere, which allows for the remaking of Lao territory—both before and after Laos became the national unit it is recognized as today—as frontier. For examples, throughout French colonialism, Laos was viewed as peripheral and isolated—a place yet to be accessed, often in relation to its neighbors or resources. Regional powers, particularly in wartime, identified Laos as a buffer, while other regional powers viewed the country as a bridge. In the early-2000s, the Chinese state endorsed Yunnan province as 桥头(qiaotou)—which in Mandarin Chinese means "bridgehead"—to lead China's economic expansion in Southeast Asia. According to Su Xiaobo (2013: 1225) this positions Yunnan's border regions as "not only a zone of contact for people living in different territories, but, more importantly, a new state space of development where capital can pursue profit as long as trade barriers are removed and infrastructure is enhanced."

Such framings draw on colonial objectives of *mise en valeur* and *débloquement* or "unblocking" Laos. More recently, Laos has been defined by connection, as bridge, buffer, and pivot in relation to the infrastructure *du jour*. For example, two regional economic initiatives, the

Association of Southeast Asian Nations (ASEAN) as well as the Asian Development Bank's Greater Mekong Subregion (GMS) program often highlight that Laos is the only country in Southeast Asia without access to the sea. Both the GMS and BRI claimed to revive historical trade routes and put forward the idea of the greater Mekong (Yunnan and peninsular Southeast Asia) as "a natural trading market" (ADB, 1997: 2). In a project document for road construction in the northwest, the ADB (1997) explicitly notes that the idea of Laos as a natural marketplace goes back many years. In their description, about 2,000 years ago "a 'silk route' [that] connected the capital of the PRC's Sichuan Province (Chengdu) with Assam, India, passing through Myanmar, with subroutes through Thailand and Lao PDR"… when "trade thrived until eventually disrupted by colonial boundaries and the Cold War."

These legacies need to be read carefully. For example, in the same document the ABD (1997) claims that economic links between Laos and neighboring countries have been weak since the mid-1940s and thus need to be revitalized by improved and expanded roads. This notion of previously weak connection, however, erases the spaces and practices of the very trade routes they claim to revive. As Dwyer (2020: 4) makes clear, a focus on a shortage of roads ends up "obscuring existing forms of connectivity," such as caravan trade routes and smaller village-oriented paths, which he argues, citing James Scott (2009), "were often more advantageous to upland communities than the taxation and property regimes that accompanied the arrival of roads."

Such histories—as they are erased only to be revived in different ways over time—are rewritten and reimagined with particular infrastructural agendas and logics in mind. The dynamics of erasure and revival pave the way for the creation of an infrastructure frontier, which I suggest is made through a variety of earlier regimes of infrastructures (both built and unbuilt),

based on connection as much as disconnection, speculation, and expectation of improvement and wealth. Waves of infrastructure-led development are layered on each and embedded within legacies of past infrastructures of improvement, exploitation, and control. This occurs despite frequent problems, including the argument that large infrastructures consistently arrive "late, over-budget and fail to perform up to expectations" (Flyvberg et al., 2009) and that the "worst" get built (Flyvberg, 2009). Yet, infrastructure remains at the center of development agendas and plans. Both the completion and the failure to build infrastructures continually generate the need for new infrastructural plans and projects.

Infrastructural history: A long view

Much of the literature within the recent infrastructure turn focuses on singular projects, projects in the short term, or stages of infrastructure development in particular political and developmental moments. A few notable exceptions have emerged. Enns and Bersaglio (2020) rely on the *longue durée* to show the "coloniality" of new corridor infrastructures in Kenya and Tanzania. Similarly, in Namibia, DeBoom (*forthcoming*) traces the infrastructural geopolitics through "radioactive strategies" and infrastructures of uranium mining from the European scramble for Africa to the current war on climate change. Balakrishnan (2019) examines capitalist development in India through three dominant infrastructural periods—colonial railways, Green Revolution irrigation canals, and post-liberalization economic corridors. Drawing inspiration from DeBoom's (*forthcoming*) and Enns and Bersaglio's (2020) focus on the *longue durée* (Braudel, 1958; 2009) of megaprojects, as well as Balakrishnan's (2019) periodization of infrastructure, I propose an approach of *infrastructural history,* or a perspective on infrastructure in place over multiple decades or centuries. In this chapter, I use infrastructural

history to trace how the tensions of *mise en valeur* are reproduced through seemingly disparate moments, actors, and the visions and logics of infrastructure over time. Acknowledging that history is not "one thing after another" and place does not develop in isolation, this perspective connects logics and geographies of past and contemporary projects.

This chapter thus develops a critical historical overview of large-scale infrastructure development in northern Laos since the mid-19th century. It does so through an analysis of connective infrastructures—rivers, roads, and rails—using a lens of *mise en valeur*. Infrastructure, as a method of territorial transformation, capital accumulation, vision of modernization, geopolitical tool, and agent of state legitimacy, is a central figure in Lao precolonial, colonial, and contemporary history. This history matters because, on the one hand, there are recurrent infrastructural problems over funding and control, and on the other, a set of infrastructural imaginaries are repeated over time and result in the layering of projects that share similar geographic locations. Examining successive infrastructural periods reveals how seemingly disparate plans and aspirations come together across time.

The next section embarks on a detailed analysis of infrastructural strategies and their spatial visions and logics across six infrastructural periods. I begin with an exploration of infrastructure prior to and then during the French colonial period. As infrastructure is entwined with the production of the state and geopolitics, the next section focuses on regional actors and geopolitics of infrastructure, specifically the US and China. I note how the Cold War has shaped subsequent infrastructural development in the Mekong Region and specifically Laos. It then considers infrastructures of the socialist state and social engineering starting in 1975, before turning to the economic reform and transitions that began in the mid-1980s. Unlike the socialist era, this period is outward-facing and characterized by a focus on regional cooperation and

transportations networks. The final section examines the Lao state's land-based infrastructure finance model as a precursor for the financing arrangement currently being popularized through BRI infrastructures. In the next section, entitled "Weaving Silk Routes," I knit together the themes of infrastructure frontier-making and *débloquement* by looking at Laos–China Economic Corridor (LCEC) to argue that the current conjecture of *mise en valeur* through infrastructure is possible due to the intermingling of state and private interests and China's blurred boundary between d/Development.

IV. An infrastructural history between "value creation" and "improvement"

This section focuses on transformations in connective infrastructures from symbols of colonial control and resource exploitation to geopolitical tools, to means of poverty alleviation and a key component of contemporary economic development. Each period is punctuated by themes of improvement, dis/connection, resource access, and "value creation" and have laid the foundation for the current iteration of infrastructure-led development in Laos.

Infrastructures of "the land in between" and caravan trade (pre-1893)

The infrastructures that created the precolonial geographies of trade and caravan circuits consisted of road and river transport. The area that would become Laos as the French delimited borders, enjoyed a widely connected precolonial geography. Historically, what is today northern Laos and the uplands was composed of various tributaries and kingdoms that were connected by river transportation that ran from the border with China south to the kingdom of Luang Prabang. The space was defined by tribute and multiple sovereignties, in a classical political mandala arrangement that defined early Southeast Asia.

Northern Laos has "long histories of settlement, conquest, abandonment and repopulation" (Walker 1999: 19), due in part to the proximity to the southern Silk Road or the Tea-Horse Road (茶马道, *chá mǎdào*) and smaller routes radiating from it.[18] As a channel of information, migration, military, and trade, the Tea-Horse Road reached some of the most remote areas across Asia. Fuchs (2008: 64) writes that "[s]alts, medicines, silver, pelts, jewels and all manner of other goods would in time find their way along the Tea Horse Road making it what some locals called a 'conductor of economies.'" In addition to trade, it was an important conduit of political economic and cultural exchange.

Caravan traffic was thus of great importance in this area. Existing and extensive trade pathways tended to be conducted through village networks on small forest backroads, rather than between Saigon and Vientiane. Horse caravans (马帮; *mǎbāng*) were thus essential in transporting both goods and people. One especially important route was located in the northwest settlement of Luang Namtha. The area of Muang Sing (formally Sipsongpanna, and settled by the people of Jinhong), in particular, was in close proximity to Yunnan's caravan routes, which then stemmed south following both dirt paths and rivers, with waterways flowing into the Mekong near the Burmese border (Walker, 1999: 36). South on the Mekong River, the royal capital of Luang Prabang was limited in rice production and so relied on trade with other areas on the Mekong and rice from the north around Muang Sing (Walker, 1999: 37). Overland, for example, a 1917 customs report estimated that 1,200 Chinese Haw traders entered Luang Prabang Province in massive horse caravans (Halpern, 1966).[19]

[18] Also known as the or the Ancient Tea Horse Road (茶马古道, *chá mǎ gǔdào*).

[19] For histories on precolonial trade in the regions see Walker, 1999; Evans, 2002; Stuart-Fox, 1997.

The establishment of French Indochina did not eliminate these precolonial trade networks and practices. As the next section shows, in the early-twentieth century, caravans from Siam continued to flood Laos with goods from Bangkok (Roy, 2007), despite French attempts (with varying degrees of success) to orient Laos toward Saigon in French Indochina.

Infrastructures of **débloquement** *and colonial control (1893–1945)*

> « En Indochine, les forêt de la Haute-Cochinchine de Cambodge, du Laos et du Haute-Laos, les mines du Laos, de la vallée supérieure du Fleuve Rouge sont inexploitables faute de moyens de transports. Les riz due Cambodge, les produits si varies de l'Annam ne peuvent accéder soit aux fleuves soit aux ports d'où ils pourraient être exportés sure les marches où la demande abonde.»
>
> "In Indochina, the forests of Upper Cochin-China, Cambodia, Laos and Upper Laos, the mines of Laos and the upper valley of the Red River are unusable due to lack of means of transport. Neither rice from Cambodia, nor the varied products of Annam are able to access either rivers or ports where they could be exported to markets where demand abounds."
>
> (Explanatory memorandum of the 1898 railway program; translation by author)

Laos' incorporation into French Indochina in 1893 was mediated by infrastructures of control and *débloquement*, those built and perhaps even more so those unbuilt and unfinished. Considered a "colonial backwater" by France, administrators aimed to achieve the *mise en valeur* of Lao territory through the construction of transportation infrastructures and trading posts (Gunn, 1990; Stuart-Fox, 1995) that would pay for themselves. Merchant capitalists first looked to the Mekong River as connective infrastructure for their "grandiose dreams … of exploitation of a huge natural commercial emporium" (Gunn, 1990: 30). When this proved difficult due to the mountainous topography, they looked to construction of railway and road, but as this section demonstrates the cost of such infrastructures were prohibitive.

The infrastructural experience of Laos within French Indochina reveals how connective networks positioned Lao territory within the broader Indochinese space (Ivarsson, 2008), foreshadowing a pattern of other powers viewing Laos as both "forgotten" and isolated (see Jerndal and Rigg, 1998), to be oriented in relation to neighboring countries. Indeed, the French viewed Laos in relation to elsewhere, in relation to France as a means to generate wealth for the motherland, to Vietnam as a hinterland for resources developed by Vietnamese labor, and to Siam as a space from which to cut Laos off to reorient trade network into French Indochina (Stuart-Fox, 1995).



Map 2.1 Map of French Indochina 1909-1954, spanning present day Vietnam, Laos, and Cambodia. (Source: Karnow, 1994)

Laos' colonial experience also demonstrates the challenges of infrastructural funding. Within French Indochina, Laos has been viewed as the poor stepchild and significantly more colonial capital went to Vietnam than Laos or Cambodia. The construction of connective infrastructure to expand commercial pursuits was expensive, and administrators across a vast landscape had to ensure that the colony did not lose money for France. Colonial infrastructures were premised on notions of improvement, connection, and required access to labor in order to

make or extract goods for the wealth of France and to support the colony. Funding issues coupled with Laos' general isolation meant that infrastructural efforts were often left incomplete (Gunn 1990; Stuart-Fox, 1995; Ivarsson, 2008). Such visions and experiences of infrastructural "success" coupled with their failures foreshadow the recurrent vision of Laos as a buffer, bridge, and pivot point in the region over decades to come.

These infrastructures comprised the majority of French investment and construction in broader French Indochina, where Laos was one of five territories along with Cochinchina, Annam, Cambodia, and Tonkin. Each had a resident general who reported to the governor-general. Although the protectorates were intended to function in concert, they frequently clashed over matters of resources and money (Stuart-Fox, 1995). This was especially true given the unified colonial budget for French Indochina and the high cost of maintaining administrators in Laos with access to few resources and low direct taxation. The construction of infrastructure—roads, railways, canals—was expensive, and the colonial administrators had to ensure that the colony did not lose money for France. While hopes for connective infrastructure in Laos did not come to fruition, the rest of Indochina saw booming construction in an expensive railway system, highways, and educational and public buildings. It was during this that time much of Vietnam's infrastructure was constructed. The French built or upgraded over 9,000 km of roads and 3,800 km of railways in Indochina for multiple purposes: to access and export natural resources, as part of a regional "civilizing' mission," and to protect strategically against possible foreign or domestic unrest (Del Testa, 2005).

Railways became a visible sign of French power over the various protectorates and peoples in much of Indochina (Burlette, 2007). Yet very little of this was built in Laos, which was further neglected because of its distance and isolation from colonial administrative centers,

the coast, and main ports. Upon his arrival to French Indochina in 1897, Governor-General Paul Doumer noted that the region had only two railways—neither of which were in Lao territory. "Laos is desperately in need of railroads, and it has fewer than any other country in the Union," writes Virginia Thompson (1937: 375). And although each subsequent governor after Doumer proposed railways, they were put on hold for other projects and investments. The construction of railway lines in French Indochina was a huge and expensive feat of engineering that occurred only outside of Lao territory. With two loans from the French government, colonial administrators built thousands of miles of railway, particularly between 1898 and 1913 in Indochina. Not unlike the Laos–China Railway today, one of the primary French rail lines in Indochina—from Tourane to Hué—paralleled a main road (the Mandarin Road), which already had capacity for the colony's trade and transport needs. Yet, they built the railway line in parallel to the road because locations further inland were deemed to have little commercial or resource value and a very sparse population.

The roots of the Laos China railway lie in colonial railway initiatives, as a tool of *mise en valeur* (Stuart-Fox, 1995; Tan, 2015). Both Britain and France imagined weaving together a vast railway network across Indochina, to the likes of the trans-Siberian line (Doig, 2018). As the above paragraph highlights, the French did accomplish that in parts of Indochina. However, inland in Laos, the French only built a very short, narrow-gauge line from Don Det to Don Khon in southern Laos near Si Phan Don (Four Thousand Islands) in Champasak Province. The seven-kilometer rail, built by the Mekong Exploration Commission and operated by the Lao State Railway, opened in 1893 and closed in the 1940s (Whyte, 2010). Two other proposed railways in colonial Laos—the railway from China to Singapore and a line proposed in the 1920s from

Thakhek to the South China Sea coast—both went unbuilt, due to the tremendous cost and mountainous landscape.

River connectivity offered another possible geography of colonial connectivity in Laos. The French began with river exploration as a means to access China. Mekong river travel would afford access to both Siam in the west and south and China in the north, exemplifying the fact that the French interest in Laos was often in relation to somewhere else, foreshadowing Laos' infrastructural patterns as the "land in between." Some of the French interest in Laos lie in hopes of accessing trade in China, and the wealth that Britain attained through dominance of Chinese trade and major ports in Shanghai and Hong Kong. It is thus unsurprising that connective infrastructures were at the center of colonial policy in French Indochina as it sought not only ports but also a "backdoor to China" that avoided the British ports (McCoy, 1970: 69). French colonial administrators viewed the Mekong River as the preferable route to connect with China and to hamper British colonial expansion in northern Burma. In the other direction, the Mekong was the only means of connection with the seaports of Cochin-China. Thus, McCoy (1970, 78) explains, as "the French acquired Laos in 1893 they still entertained the fantasy that it would be a profitable river empire." However, according to the *Compagnie des Messageries Fluviales*[20] the cost of improving river travel was too high (Thompson, 1937) due to the mountainous terrain in the north and east as well as challenges of river travel on the Mekong (Keay, 2005). In addition, many merchants were unable to compete in terms of trade with the Chinese, and as the "dream of instant wealth faded, the French resigned themselves to maintaining order and managing their administration as inexpensively as possible" to avoid straightening the colonial budget (McCoy, 1970: 78). And so, costs along with the challenges of terrain and river travel reoriented the

[20] River Shipping Company

attempts of *débloquement* away from the Mekong to Lao territory and land-based routes, by developing roads to access natural resources.

As railway and river proved difficult and expensive, roads were envisioned as the keys to unlock Laos (Ivarsson, 2008). Exemplifying the turn away from river travel, in a 1936 article in *La Tribune Indochinoise,* colonial administrator Ernest Outrey called the road a "great instrument of civilization and pacification" that opened "Laos' difficult access" to "the magnificent effort of colonizing France." Geostrategically, the French aimed to orient Laos away from Siam in favor of connection with Vietnam, because after failing to incorporate Siam within French Indochina, administrators pushed for all trade to route to Vietnam. McCoy (170: 83) calls the attempt to build road networks across the Annamite mountains from Laos to Vietnam, where they could orient port access away from Siam (the port of Bangkok) to French Indochina "France's greatest scheme for Laos." This only accelerated with the early-19th century realization of Lao's mineral wealth, which became the impetus for a boom in road building. While there was little impact or expansion of local agriculture, the French did develop and mine one resource: tin. Roads were built to the Vietnamese coast to export 939 tons per year (of Indochina's 1,602 total tons) (McCoy, 1970: 84). Thompson (1937) writes "[w]hen the potential wealth of [Laos] became evident, the [colonial] administration began to veer away from the Protectorate ideal to direct government, making *tabula rasa* of native institutions."

However, the difficulties of construction through rugged, jungle mountains left a number of efforts only partially completed. While actual connectivity *often* failed in both the local and wider networked senses, colonial road construction programs in the 1920s and 1930s were considered by the French a success in that they, at the very least, oriented Laos away from Siam (which generally maintained control over Lao commerce and trade) in favor of Indochina

(Ivarsson 2008). Thompson (1937: 375) warned that, without these road programs, Laos "will permanently escape to Bangkok." The programs were described in an article entitled *Le réveil du Laos* (The Awakening of Laos) as "the beginning of a new era where Laos, liberated from its isolation, freed from hindrances, will occupy its legitimate position in the Indochinese family" (*Le Monde Colonial Illustré* 1936 in Ivarsson, 2008). This again illustrates how French interest in Laos was often in relation to elsewhere, even as they were not entirely successful in diverting trade to Saigon, the narrative of such was a powerful one (Ivarsson, 2008). By the 1940s, however, a noteworthy road was completed: the "longitudinal artery" that runs north-south and connects Laos largest towns for the first time. "Route Coloniale No. 13"[21] (the main highway that the railway today roughly follows) connected Thakhek and Paksane in the south with the Capital of Vientiane and eventually to Luang Prabang in the North, forming a unified Lao space (Ivarsson, 2008).

The French colonial state was present via infrastructure in another way, through corvée labor or what Gunn (1990: 122) calls "infrastructure of colonial control," whereby forced labor was used to build infrastructures for the administration of the colony, and roadbuilding became a symbol of "unmitigated colonial oppression" (Gunn, 1990: 59). Infrastructure objectives were motivated by notions of immense resource wealth, which position Laos as a frontier, ripe for exploitation. Stuart-Fox (1995: 118) argues that myths of fabulous resource wealth were promulgated to justify expansion via "infrastructures of colonial control." Such infrastructures consisted of roads, administrative posts, and barracks that every male age 18-60 was required to build. Thus, colonial administrators imposed a governance regime whose objective was to

[21] La Route Coloniale No 13. 1943. *Indochine*, 140: 7.

activate the population and transform territory in order to capitalize on Laos' natural resources. In practice, however, very few Lao were engaged in projects unless their villages were located near a new *route coloniale*. Such disconnection for the smaller Lao population, reveals connection not within Laos but for colonial administrators to facilitate trade and import of Vietnamese labor for the wealth of the colony.

Indeed, the French vision for connectivity and economic activity in Laos ignored and ran counter to the already existing expansive network of trade. For Lao people, the construction of networks of colonial roads and rails made little sense because they neglected the existing trade conducted through village networks on small forest backroads, rather than between the cities of Saigon and Vientiane, which were largely home to French and Vietnamese rather than Lao. Despite attempts at connectivity, most Lao villages and local economies remained largely removed by infrastructural "improvements" and regional connections; more than 90 percent of the population, whose lives and livelihoods were distant from central markets and roads, was thus unaffected by French infrastructural efforts (McCoy, 1970). Similarly, the regional trade and commerce was dominated by a mix of French, Chinese, and Vietnamese. Thus, the construction of connective infrastructures, particularly between Vietnam and Laos, restructured the flow and nature of intra-Indochinese relations[22] more than within Laos itself. This focus on passing *through* Laos and viewing Laos not for itself but in relation to elsewhere would persist through future infrastructural periods, for a variety of reasons that connect back to the ideas of *débloquement* and *mise en valeur*.

[22] Rapport sur le fonctionnement du service en 1941-1942, CAOM, Archives du Haut-Commissariat de France à Saigon (1946-1954), Résidence supérieure au Laos (1899-1950), in Roy, 2007

Battlefield and buffer infrastructures (1950s–1975)

Infrastructural objectives were reoriented around Cold War geopolitics and Lao state-building. After the withdrawal of the French, the next thirty years were characterized by conflict.[23] The Cold War spurred Laos' civil war from 1945-1975, a period also known as the "thirty-year struggle" (Stuart-Fox, 1993; 1999). Infrastructure agendas continued to be driven by outside actors, now the US and China. Funding continued to be a problem. The initial rule of the Royal Lao Government (RLG) experiences similar challenges as the French—a lack of capital for infrastructure that is required to generate revenue for the government. However, this period illustrates that the civil war became an impetus for leaning on outside aid and capital for infrastructure in the Cold War context.

In the initial postcolonial years, under the RLG there continued to be little revenue for infrastructure and economic development. A lack of connective infrastructure was, according to Evans (2002) one of the primary obstacles to the country's commercial development at that time. Rivers were the main mode of local transport. By the mid-1950s there were 5,600 kilometers of roads (800 km paved and thus passable in rainy seasons), and vehicles were simply not the main mode of transport, with 19 vehicles registered in 1945 and only approximately 100 in the 1950s (Evans, 2002). The lack of capital initiated a self-reinforcing cycle: without improved

[23] The Lao Civil War from 1959 to 1975 was between the Communist Pathet Lao (including many living in North Vietnamese who were of Lao ancestry) and the Royal Lao Government (RLG). It is associated with the Vietnam War, Cold War, and Indochina Wars. The First and Second Indochina wars are known respectively as, first, the French Indochina War and, second, the Vietnam War (or the American War). Both the Pathet Lao and RLG received significant external support in a proxy war between the global Cold War superpowers. Because the US was not authorized to operate in Laos and as Laos became a covert theater for other conflicts, the CIA called it the Secret War.

connectivity the Lao could not develop agricultural or natural resources from which the government could collect taxes. And without taxes, the RLG was unable to improve connective infrastructures. According to Evans (2002: 96): "the RLG made few economic demands on the rural population and essentially left the peasants untaxed for the whole of its existence."

Legacies of failed *débloquement* were taken up by American forces in Laos during the 1950s efforts to contain communism through infrastructure. During the Cold War and America's stand against communism, many Lao leaders hoped to remain neutral, but "the [political] Right could be too easily bought by American largesse, and the Left was too closely allied to Vietnamese communism" (Stuart-Fox, 2008: x). Charles Yost, the first US Ambassador to Laos emphasized to the US State Department that the:

> fall of Laos would have [a] most serious effect on [the] security of free neighbors, particularly Thailand and Cambodia, which would thereby acquire [an] extensive common frontier with Communist bloc vis-à-vis both armed invasion and infiltration, mountainous jungle area separating Laos from Viet Minh and Chinese presents far less penetrable frontier than would [the] Mekong [valley]. Laos [was] therefore of prime importance to strategic Southeast Asia as a whole. (FRUS, 1982).

Cold War era developmentalism and the American (Vietnam) War thus reoriented infrastructural objectives and funding in Laos. Infrastructure served as a way to justify expansion by "bringing development" while at the same time US viewed technological assistance, including infrastructure construction, as a means to inhibit the spread of communism in the region—two sides of the same coin.

Through the 1950s and 1960s the US deployed two tactics to contain communism, one that attempted to "fix" underdevelopment and another that strategically exploited it for geopolitical ends. The US Bureau of Reclamation and US State Department, through initiatives

like the Mekong Valley Project, established river basins as sites of technical intervention primarily through large hydropower projects, which were modeled on the Tennessee Valley Authority (TVA). Despite the stated technocratic purpose, underlying geopolitical rationales are well-documented (see Sneddon, 2015). Sneddon (2012: 573) describes the role of the US State Department in encouraging international cooperation around the Mekong as both critical and hidden, as they "steered the newly independent governments of Indochina toward cooperation, initially with each other and, more importantly, with an American state willing to provide economic and technical assistance as part of an emerging strategy of containment in Cold War-era Southeast Asia." The resulting Mekong Committee[24] included Laos, Thailand, Cambodia, and South Vietnam (though not the upstream countries of Burma and China) and intend to investigate the feasibility of large-scale river basin projects. While described as a primarily American project, the Mekong Committee, the World Bank, and the United Nations also played critical roles (Lagendijk, 2020).

As US officials worried that they were losing the modernization race for hearts and minds, their river basin goals became increasingly ambitious, often exceeding what was technically feasible (Sneddon, 2015). The Pa Mong dam became a focal project as the US Department of State "astutely perceived the attractiveness of a singular, massive project in terms of garnering US financial support and thus demonstrating US beneficence in the region" (Sneddon, 2012: 574). Unlike colonial infrastructures, the scale of the dam project coupled with geopolitical intentions mobilized large amounts of capital and teams of experts from the Bureau to the lower Mekong.

[24] Mekong Committee is shorthand for the Committee for the Coordination of Investigations of the Lower Mekong Basin

The immense technical challenges of engineering dams across on the Mekong echo in challenges noted in constructing the Laos–China Railway through the mountainous landscape of Laos today. In each case, the challenges, while not unreal, were emphasized rhetorically to demonstrate the unique technical ability of both the Bureau in engineering dams (as demonstrated across the US) and Chinese railway companies in building railways (as demonstrated across China). Technical representations, such as maps, reports, diagrams, and newspaper articles, became tools to demonstrate the Bureau's convictions regarding the feasibility and benefits of the proposed projects. As technical representations accumulated across hundreds of US and regional reports, resistance to the construction on technical grounds became less notable, and legitimized US presence as more than geopolitical (Sneddon, 2012; 2015). Map 2.2 shows critical dams on the Mekong. These became the basic representation of the "developed" Mekong well into the 1990s.




THE DECATUR DAILY

Behind The News

Mekong Valley Project: Another TVA

Map 2.2 (Left) of the Mekong River basin with the major dam projects envisioned in the 1960s. (Source: United States Bureau of Reclamation 1965 from Sneddon, 2012)

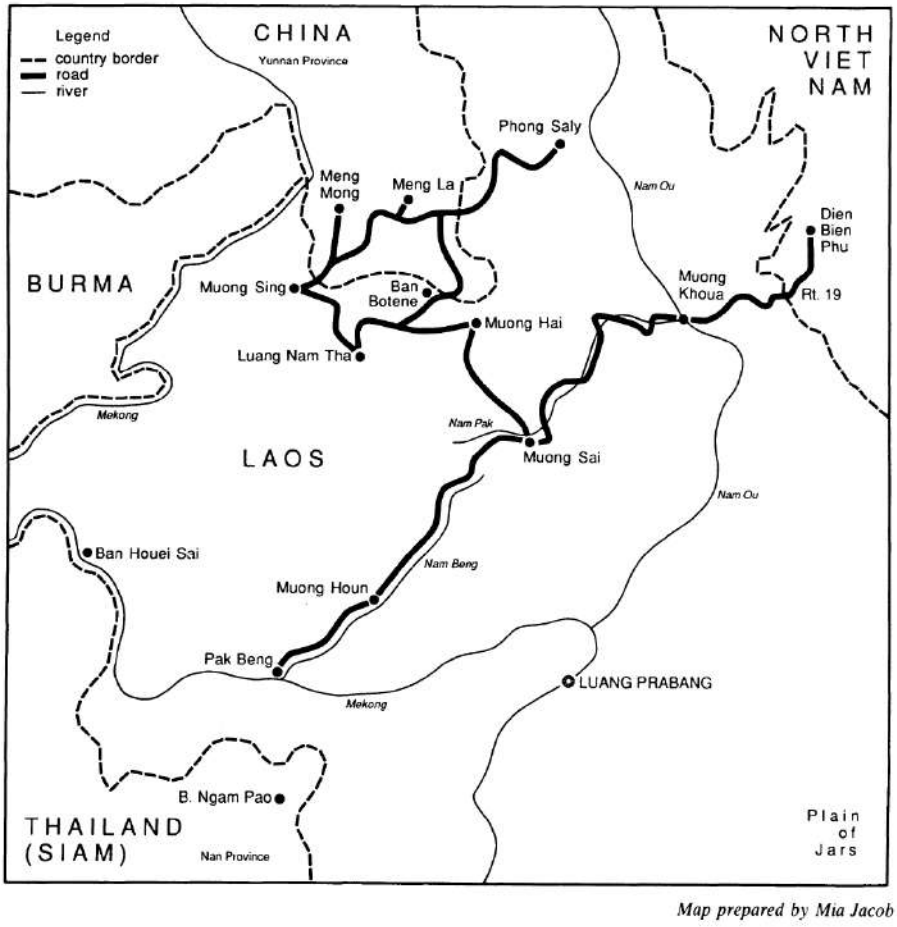
Image 2.1. (Right) Newspaper headlined on the Mekong Valley project in *The Decatur Daily.*

Paralleling the French geostrategy to orient Laos and transnational connectivity toward Indochina, the US was also committed to severing and reorienting connections. The communist *Pathet Lao* were connected to North Vietnam and subsequently supported by Beijing and Moscow. And so, the US aimed to sever Laos' ties with communist Vietnam and orient Laos and the RLG toward Thailand, which served as the US proxy for "stability and democracy" in the region. The US strategy took two infrastructural forms: the river and roads. The US looked to the Mekong River to tie Laos in with Thailand. The Mekong River is, in essence, the Lao-Thai border. While the width of the Mekong River is often well over 1 kilometer, there are stretches

along the mountainous areas of the Thai border that narrow to a few hundred feet. On the other side of the border in North and Northeast Thailand, US developmentalism was part of the US's broader anti-communist struggle (Kislenko, 2004), was key to the idea of directing and forging certain connections with Laos, albeit through many "frontier locations" in Thailand. In 1953, when Beijing created the "Thai Nationality Autonomous Area" in Yunnan province, the US responded by increasing aid in the forms of railways, roads, and airports, to parts of northern Thailand deemed critical for security (Randolph, 1986). Within Laos, US actors also engaged in road building, primarily in the form of aid. In the 1960s, USAID undertook a project to reconstruct Route 13 from Vientiane to Luang Prabang, which had, according to US reports, "seriously deteriorated until at many points it was only a footpath through the jungle" (USAID, 1968a: 17). It was approved on the condition that it would primarily be a training facility to strengthen the RLG Ministry of Public Works (USAID, 1968b). Construction began in 1965 and would be complete in mid-1969.

On the other side of the Cold War divide, Chinese initiatives also attempted to pull Laos closer to communist counterparts. In particular, on his visit to Beijing in 1941, then Lao Prime Minister Souvanna Phouma arranged a deal for foreign aid for road construction. The roads would be Chinese-built and connect Yunnan Province with northern Laos, despite the conflict and ongoing civil war in Laos and much of the areas where the road would be constructed. Road building in northern Laos began in 1962 with the route from Yunnan Province, China to Muang Xing in Luang Namtha, Laos (see Map 2.3). Construction was piecemeal, taking place in the drier season. It picked up again in the 1970s and during wartime construction workers were protected by the Chinese army (Stuart-Fox, 2008). Not all roads were completed; for example, Stuart-Fox (2008) notes that the road from Muang Xing to Dien Bien Phu was not completed,

likely due to Chinese tensions with Vietnam. While there was a pause in China road building in the 1980s, it was revisited when bilateral relations warmed with the good neighbor policy. A former American ambassador described Chinese road building in northwest Laos between 1961 to 1973 as visible evidence of "the pathway to spread the communist revolution into Thailand, forming a red circle around Indochina" (Godley and Goar, 1991: 285).



Map 2.3. Map of the Chinese road building route in Luang Namtha province, 1961-1973. (Source: Godley and Goar, 1991)

As Lao territory was deployed as a buffer state for (geo)political purposes, a number of important dynamics emerge, which persisted in the coming decades of Laos' infrastructural history. First, external forces, such as development actors and bilateral partners, continue to pull the country in competing directions as they imagine and frame Lao territory in relation to

elsewhere for the purpose of "outside" and non-Lao actors. French colonial orientation of Laos away from Siam (today Thailand) and toward Indochina (e.g., today Vietnam) was reversed by US efforts to use infrastructure reorient Laos toward Thailand and away from communist Vietnam. These efforts by funders and builders of potential infrastructure to direct Laos' external orientation would persist through time. Second, this period presaged a development vision based on connective infrastructures yet to come. In the 1990s, initiatives by multilateral initiatives, such as ASEAN and the ABD's GMS, would emphasize there is "no need to choose" between geopolitical sides. During this time, Laos was able to engage with multiple neighbors.[25] Within the GMS and ASEAN, Laos pursued its land-linked objectives, as a new fractionalized politics of connectivity emerged.

Infrastructures of socialist ambition and economic transition (1975–1990s)

With the advent of the socialist nation-state, Lao leaders were for the first time dominant in steering infrastructure agendas. Roads were reprioritized for new purposes. In the early years after independence, roads were oriented toward social engineering and transforming the local population. By the 1980s, however, the notion of "turning battlefields into marketplaces" signaled an important shift in the economic organization of the country whereby the rationale for moving from landlocked to "landlinked" was to develop markets.

Following the fall of South Vietnam in 1975, the communist Pathet Lao who were supported by the North Vietnamese, established control over the whole of Laos. The proclamation by the Lao People's Revolutionary Party (LPRP) of the Lao People's Democratic

[25] More recently, with China-US competition, there is a reemergence of the insistence to choose sides (at least from the US in the Lao context).

Republic (Lao PDR) on 2 December 1975 placed the country firmly in the socialist sphere, solidifying "special" or "fraternal" relations with communist neighbors China and Vietnam. Moving forward, the Pathet Lao's aim to create "new socialist men and women" evoked Soviet social engineering models centered on the transformation of populations to create a socialist society (Bouté and Pholsena, 2017; Evans, 1988). Rural infrastructure was an effort by the Lao government at social engineering. As Rigg (2002: 619) writes, roads became "emblematic of a state's ability to infiltrate and dominate geographical space and impose itself on the people inhabiting that space."

From 1978 and through the 1980s, Lao's new communist leadership instated rural collectivization and village consolidation programs. Roads were reprioritized in Laos, this time bolstered by post-war security concerns, particularly in the uplands of northern Laos, which had become a hotbed of resistance. Roads became entangled with goals of nation-building through village consolidation, whereby remote communities were settled close to infrastructure, in the name of development (For critiques see Evrard and Goudineau, 2004; Rigg, 2005; Baird and Shoemaker, 2005). Upland governance entailed resettlement, focal sites, and managed enclosures (see Baird and Shoemaker, 2007) that were all directed along and around main roads, in order to manage and monitor the upland population.

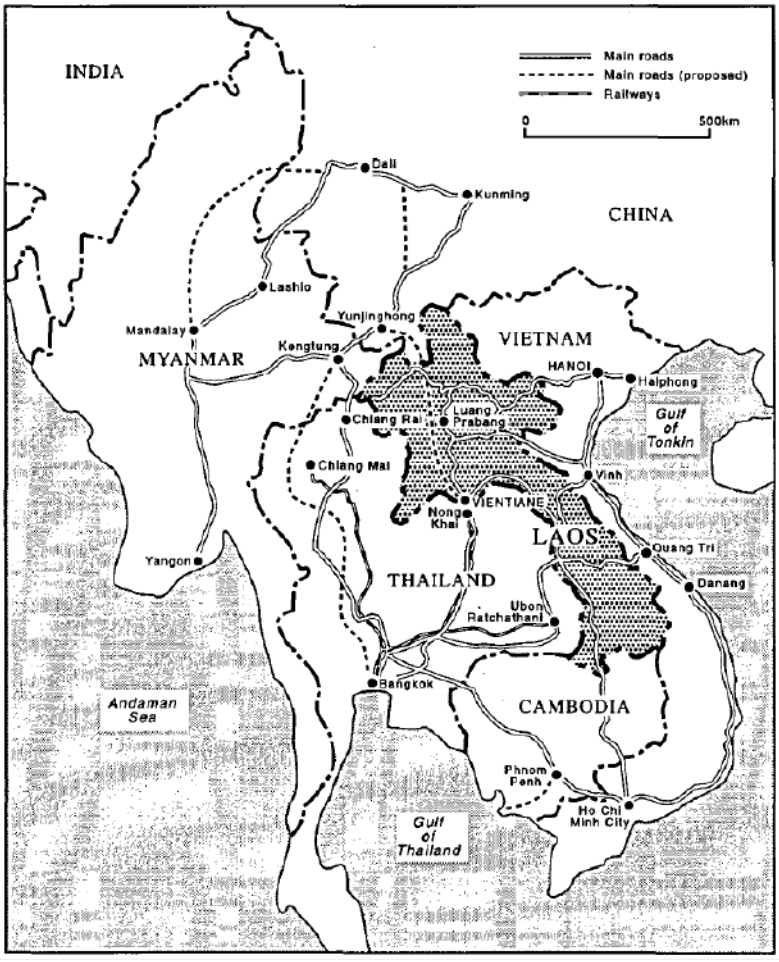
Road building thus continued to play an important role in Laos' political and economic geography. Rather than a geopolitical tool or buffer, roads and connective infrastructure were reframed within the national agenda in another way. National investment strategy since the 1980s centered on integrating marginal communities through investment in physical infrastructures (Evans, 2002). The first National Socioeconomic Development Plan (NSEDP) for 1981 to 1985 explicitly calls for the development of transportation and communications

infrastructure. Roads were then viewed as the primary way to integrate Laos into the world economy and reduce poverty by drawing people closer to roads and thus, into markets (Rigg 2005; Ali and Pernia, 2003).

In 1988, Thai Prime Minister Chatichai called for an effort to turn "battlefields into marketplaces" (Innes-Brown and Valencia, 1993: 333), indicating that while the thirty years of conflict had ended, the early communist period was mired in violence. The call for marketplaces also reflected the shift in Laos toward more market-oriented economic policies. During the late-1980s, Laos pursued not only post-war socialist ambitions, but also implemented sweeping economic liberalization. Laos' past National Socioeconomic Development Plans (NSEDPs) reveals the reemergence of the centrality of infrastructure as a growth strategy based in neoliberal economic policies. The 2nd NSEDP, developed at the Fourth Party Congress in 1986, encouraged private investment and adopted what would come to be known as the New Economic Mechanism (NEM). This, in essence, led to an open-door policy for foreign investment that was picked up in the next NSEDP (1991-1995), which pushed the development of a free-market economy. While Laos has been a member of the International Monetary Fund (IMF) and the Asian Development Bank (ADB) since the 1960s, it was only after the NEM that the government began to actively engage in neoliberal, market-based approaches to economic development.

Turning battlefields into marketplaces necessarily entailed the construction of transport infrastructure. With the dissolution of the Soviet Union and the shift toward state-driven neoliberal economic policies, Laos' opening to foreign investment ushered in Western and OECD donors. The influx of multilateral organizations resurrected infrastructural objectives of transforming landlocked Laos into a regional bridge. Laos' isolation and disconnection, which was once viewed as a hindrance, became key to the country's development strategy through the

need to overcome it. After 1989, discourse of transforming landlocked Laos into a regional bridge dominated national and multilateral development agendas (Rigg, 1997; see Map 2.4). Roads, as central to state-building efforts, were meant not only to unify the new state but also transform Laos from landlocked to "land-linked." This refrain reverberated through future decades of economic development and state-building efforts.[26] As I show in the next section, the refrain recalled *débloquement* in calling for the creation of swift, frictionless forms of regional transportation through Laos.



Map 2.4 Map of the 1990s regional visions for infrastructure connectivity through ASEAN.

[26] The repetition of a "landlinked" Laos has become a point of frustration for many development practitioners and researchers alike who have grown weary of the overused phrase and now view it as a particularly hollow and useless term.

Infrastructures of economic development, regional integration, and poverty alleviation (1990s-2000s)

As battlefields were envisioned as marketplaces, the next period centered on opening Laos for resource access, regional trade, and economic development. Moving from an internal focus during the socialist era when the government attempted to create a unified Laos through roads, this subsequent period extended these internal networks to externally connect Laos to its neighbors. Roads took on new meanings as they were now also intended to address poverty by integrating Laos with the region to increase trade. In the national policy space, regional integration was framed as the key to poverty reduction. Connective infrastructures were thus central to Laos' goal to "graduate" from a Least-Developed Country (announced in 1996) and to its National Socioeconomic Development Plans (NSEDPs). In NSEDPs, local to large-scale projects were framed as the driving force to achieve national development goals. Roads continued to be celebrated as a silver bullet to foster economic growth through integration (Evans 2002). Between 1990 to 1995, over half of public investment went to renew or construct more than 2000km of roads (Pholsena, 2006), and another 1000km were added from 1995 to 2000. Public spending on infrastructure peaked at 62 percent in 1998 (Lao PDR 2001b:37 in Pholsena, 2006). The 5th and 6th NSEDPs (2001-2005 and 2006-2010, respectively) pivot toward human-centered development, specifically emphasizing "social tranquility and political stability" in order to "modernize the economy, reduce poverty and develop human resources" and a 20-year aim to meet the Millennium development Goal (MDG) of poverty elimination by 2030 (5th NSEDP). The 6th NSEDP, endorsed at the 8th Party Congress and adopted by the National Assembly followed suit, focusing on poverty alleviation, natural resources, businesses, and human resources, as well as education, health, and laws that enable rural development and

transparency (Stuart-Fox, 2008). Subsequent NSEDPs returned to large projects and as a result of the NEM, most macroeconomic growth between 2006 and 2011 resulted from Foreign Direct Investment (FDI) in mining and hydropower.

As such, roads during this period were used as both a means to secure the uplands in the 1970s and 1980s as well as the new economic development models of the 1990s (Dwyer, 2011), which tended to be pursued through regional initiatives. Laos began to open up to other regional neighbors (while still favoring the socialist bloc) as well as international and multilateral organizations and Western countries. The government pursued marketization and opening up alongside similar policies of opening and reform in China and Vietnam, and Soviet aid took over the vacuum left by America in the 1980s. With the collapse of the Soviet Union and end of European aid, Laos began to accept multilateral aid primarily from Japan, as well as many others including Australia, France, and Sweden. Investment in infrastructure and for development projects primarily came from Thailand (Stuart-Fox 2008), as well as loans from the IMF, WB and ADB.

The transition toward a state-driven market economy in 1986 opened Laos to foreign investment and an influx of multilateral organizations, which resurrected the state's objective of transforming landlocked Laos into a regional bridge. There is a return to infrastructural initiatives that adopt of view of Laos from elsewhere, which are externally developed and adopted by the Lao government. Take, for example, the Association for Southeast Asian Nations (ASEAN). The organization was formed in 1967 as a Cold War bulwark to curb the spread of communion in the region—the five founding member countries were Malaysia, Indonesia, the Philippines, Thailand, and Singapore; other countries were not added until in the 1990s. By the 1990s the agenda centered on connection and economic development. Laos' joining of ASEAN

in 1997 marked a turning point that drew the country into a regional network with varying political views and allegiances. This time, however, as ASEAN advocated regional integration, there was no need to "choose sides." Infrastructurally, this was reflected in ASEAN's ambitious plans for road and railway networks to crisscross much of Southeast Asia—this included connectivity from Kunming to Singapore.

It was at this time that the railway was revived from its colonial origins. At the 48th session of the Economic and Social Commission for Asia and the Pacific (ESCAP) in Beijing in 1992, the notion of a Trans-Asian Railway that had been loosely discusses in the 1970s and 1980s was put back on the table. The commission endorsed a regional project of Asian Land Transport Infrastructure Development (ALTID) comprises of highways, rail networks, and logistics areas, citing the value of both uninterrupted flows of trade, freight, and passengers across international borders (UN, 1996). France and Korea undertook the first UN study for this project in 1995. In 1996 the United Nations commissioned a study, which was funded by the Government of Japan, on constructing and operationalizing the Trans-Asian Railway in Southeast Asia. At the same time, the Singapore-Kunming Rail Link (SKRL) was proposed at the 5th ASEAN Summit in December 1995 by Malaysia under Prime Minister Mahathir Mohamad as a means to connect ASEAN with southern China. The following year in June 1996, Mahathir hosted the ASEAN transport ministers and created the SKRL Special Working Group (see Lampton, Ho, and Kuik, 2020). The SKRL was a precursor to China's Pan-Asian Railway, though the routes are not identical. In fact, plans for the SKRL did not run north-south through Laos to Bangkok (as it does now in China's Pan-Asian Railway vision), but rather east-west to the Vietnamese coast. The project's importance to ASEAN Mekong Basin Development Cooperation (AMBDC) was reaffirmed at the 2005 ASEAN Meetings in Vientiane on

"Enhancing ASEAN cooperation in engineering for poverty alleviation and sustainable development" (Pongkhao, 2005). During the meeting, the recurrent problem of project funding was met with a pledge from member states to supply resources and engage in "meaningful marketing programmes that would lead to the funding of SKRL and other ASEAN wide projects" (Pongkhao, 2005: 3).

Not unlike the French colonial and wartime infrastructure motivations, more recent infrastructures have reflected the interests of Laos' neighbors. They were, however, focused more on regional stability and trade than division as reflected in ASEAN and the Asian Development Bank's (ADB) Greater Mekong Subregion Initiative (GMS). Both ASEAN and the GMS positioned Laos as a transportation and logistics hub ("landlinked") and energy provider ("battery of Southeast Asia") in a regional division of labor. Both, as others had in the past, identified Laos as a country with latent economic potential to be unlocked by enhancing connectivity and accessing resources. Infrastructure offered hopes of enhancing the supply side of the economy, reducing reliance on mining, and fostering pro-poor growth; while the GMS planned economic corridors of roads, railways, and logistics infrastructure.[27] Geographically located at the heart of the GMS, Laos seemed poised to receive infrastructure investment, as regional integration became the primary "vehicle by which landlockedness [could] be transformed from a national liability into a national asset" (Rigg, 1997).

[27] A term used in development economics. Ravallion (2004: 2) notes two common, yet divergent, definitions: One focuses on inequality during growth, e.g. incomes of the poor grow more than the nonpoor (see Baulch and McCullock, 2000; Kakwani and Pernia, 2000). The other defines pro-poor growth as when "poor people benefit in absolute terms, as reflected in an appropriate measure of poverty (Ravallion and Chen, 2003)."



Map 2.5. GMS map of regional connectivity plans. (Source: Asian Development Bank)

The ABD's GMS is one of the most relevant pre-BRI initiatives.[28] As Dwyer (2020: 2) eloquently writes, the GMS "exemplifies [the BRI's] currently beating heart: transnational transportation infrastructure, following a historic trade route, co-financed by the Chinese government, launched in the boom years of the 2000s." The GMS is often cited as the primary framework that began to promote a development model of economic corridors and zones that centered on regional transportation networks in Southeast Asia. The Asian Development Bank (ADB) initiated the GMS in 1992 following the successes of the Singapore-Johor (Malaysia)-Riau (Indonesia) growth triangle (Pholsena and Banomyong, 2006: 118). An ADB-initiated meeting of the GMS member-states coordinated a diplomatic agreement between the governments of Cambodia, Laos, Myanmar, Thailand, Vietnam, and China to pursue a similar strategy with the goal of greater economic regionalism. In its early iterations, the GMS focused almost exclusively on the development of transnational infrastructures, later expanding to include ten working sectors and eleven flagship programs that focus on agriculture, energy, the environment, human resource development, investment, telecommunication, tourism, trade, and transportation. Glassman (2010: 15) argues, however, that the material and discursive production of the GMS serve to "naturalize and help consolidate a hegemonic understanding of regionalization" … making "certain kinds of sociospatially uneven development seem inevitable—and even desirable—rather than contingent and socially contested." Again, Laos was

[28] The GMS is an initiative launched by the Asian Development Bank (ADB) in 1992. GMS groups five of the ten ASEAN member countries—Myanmar, Thailand, Lao PDR, Vietnam and Cambodia—together with the Chinese provinces of Yunnan and Guangxi. It supports projects in the following sectors: agriculture, energy, environment, health and human resource development, information and communication technology, tourism, transport, transport and trade facilitation, and urban development.

presented as in need of connectivity to achieve its *mise en valeur*, and regionalization as a means to capitalize on comparative advantages among neighboring countries is naturalized through arguments of neoclassical trade theory.

A precursor to BRI, the GMS too was framed as win-win and providing mutual benefit through investment and trade. It also offered a model for a dramatic and ambitious program of regional integration through economic corridors. Indeed, before the BRI proposed the revitalization of historical trade routes, the GMS initiative was trying to recreate the precolonial geographies of trade. It laid the foundation for a regional corridor and economic zone model, including railways, for which connective infrastructures served as the backbone (ADB, 2010; 2016). It resonated with regional and national goals to link the countries of the "Greater Mekong Subregion" and create new economic zones like the "Golden Quadrangle." Based on a corridor model, the GMS is built around the three transnational highways of the Northern Economic Corridor (NEC), the East-West Economic Corridor (EWEC) and the Southern Economic Corridor (SEC). Both the NEC and EWEC pass through Laos, which according to a 2004 ABD report entitled "Ready for Business" described a "new frontier" of business and natural resources opportunities in Laos, that in effect rendered land available and investable.[29] Consequently, the areas of influence extended well beyond any single route, encompassing an economic zone that runs parallel with, and reaches beyond, the main transport artery.

In addition, the recent LCEC and its cooperation framework have roots in what became known as the 2008 North Plan. Even more than the GMS, the North Plan, like LCEC, is a specific bilateral agreement which encourages a wide spectrum of land-based investments that

[29] ADB 2004 Ready for business ADB Review December 2004.

were primarily proposed in the 1990s and 2000s. The North Plan was developed by Yunnan's Provincial Development and Reform Commission (YPDRC) as a "technical assistance project" for Laos.[30] It was developed in a similar manner to the LCEC Cooperation framework—on paper as technical cooperation between the Chinese and Lao governments rather than a regional initiative and in practice proposed in a top-down manner from Chinese counterparts. After a year-and-a-half of planning (from April 2007 to October 2008) by nearly 100 planning experts, it was approved by China's Ministry of Commerce and Laos' Ministry of Planning and Investment, and subsequently implemented by the Land and Resources Research Office of Yunnan, China and included in Laos' 8th National Development Plan. It was designed in Yunnan to share the province's development experiences with northern Laos, citing that "the experiences of Yunnan could be a good reference for Laos." This is based on a commonly held belief in China that Laos is behind or backward (落后; *luòhòu*) and that Laos today looks like Yunnan Province two decades ago. The language in the North Plan (2008: 15) speaks directly to the Chinese notion of a civilizing mission in Laos: "The mentalities of most people are still at the starting stage of

[30] The full plan is entitled the "2008-2020 Planning for Industrial Economic Development and Cooperation in the Northern Part of Lao People's Democratic Republic." The initial concept took shape at a March 2004 meeting of the Yunnan-Northern Lao Cooperation Working Group (YNLCW). The bilateral Yunnan-Northern Lao Cooperation Mechanism was formalized in October 2008 between the two governments. In November of the same year, the group developed a master plan with Chinese expertise and guidance on mining surveys and the power sector. Both mining and Opium Replacement Programs were two priority areas. The preparation of the final North Plan began in April 2007 between the Chinese side (YPDRC and Provincial Land and Resources Research Office with support from other government departments and their research institutes as well as Chinese academics) and the Lao side (NERI under MPI with relevant central ministries and provincial governments). The plan was endorsed in September 2008 at a meeting in Kunming, Yunnan and signed over to the GoL on 12 January 2009 to be included in the 7th NSEDP (2011-2015).

agricultural economic development, which is unsuitable for development of market economy and economic globalization. Their awareness of development, competition, openness and self-reliance and hard work still need to be improved." Echoes of a similar development/civilizing mission persist within the LCEC. A Chinese engineer explained: "The railway is not enough; Laos needs guidance to know how to develop and China is a good example."

Like the LCEC, the North Plan focuses on models and means for economic development in the northern provinces of Laos.[31] In order to achieve its lofty objectives, the North Plan explicitly calls for the construction of infrastructures to support industrial development. Infrastructures include those for communications and transportation, e.g., railway, waterways, roads, and aviation. It cites the Laos–China railway as a central portion of the planned Kunming-Singapore railway, which the document labels a "kernel project of the GMS" which, once finished will "become the most convenient railway pass for Laos to connect with China and the Indo-China Peninsula." The plan explicitly proposes commodifying land and opening land markets for investment, and doing so through strong support of the Lao government. The plan's writers, no doubt relied on the Lao turning land into capital (TLIC) strategy, which was widespread at that time and covered a broad spectrum of land-related development, discussed below. The North Plan was novel in that it only focuses on industrial and economic development and is more prescriptive and project-based than the GMS corridors. Yet, it is similar to the ambitious agenda setting that is common in China's domestic strategies. At the time of the North Plan's design and proposal, it pointed to China's evolving approach to overseas investments and

[31] The North Plan included nine provinces: Phongsaly, Luang Namtha, Bokeo, Oudomxay, Huaphanh, Xiengkhuang, Luang Prabang, Xayabury and Vientiane. At the time of its drafting this area had a population of 2.4 million and an area of 139,000 km^2 (The North Plan, 2008).

aid as centering on large infrastructures, SOEs, and industrial development. It also offered Laos an alternative to the bottom up and community-oriented development models of the 2000s.

Not unlike *mise en valeur* visions, such plans discursively frame northern Laos as a frontier—as empty, backward, in need of "development," rich in natural resources, and ripe with opportunity. However, such "development outcomes" did not often materialize as planned. The North Plan remained primarily that—a plan—and means for actors from China, specifically Yunnan province, to facilitate cross-border investment under the guise of development cooperation through the "corridor." Similarly, the GMS also largely failed to deliver the development it promised (Dwyer and Vongvisouk, 2019; Dwyer, 2020). For example, the GMS's Northern Economic Corridor was constructed between 2003–2007 and expanded roads further in northern Laos, Luang Namtha from the Chinese to Thai borders in particular. It was, however, deemed unsuccessful for reasons of cost recovery. After completion, an ADB project review found it to be totally "uneconomic." Road building was funded by loans with the assumption that the Lao government would be able to collect tolls. In line with questions of *mise en valeur,* the NEC raised questions of how to pay for infrastructure. While northwest Laos saw increased foreign investment and trade with China and Thailand, the Lao government was not able to implement road tolls to recoup on their debt and local development processes were highly uneven, because "state power has come down largely on the side of enclosure and extraction rather than of social protection of poor and vulnerable sub-populations in the corridor's impact zone" (Dwyer, 2020: 2). The effects of the GMS's NEC strayed far from its promises and excluded vulnerable populations from infrastructure mitigation protections (Dwyer, 2020). As the ADB review indicates, the project was "less than successful," with far greater benefits for China and Thailand than for Laos and that "extending the benefits of the road to local residents is

an ongoing challenge" (ADB, 2014: ix). Benefits have more clearly accrued for China and Thailand than Laos.

Infrastructures exchanged for land (2000s-2010s)

This final infrastructural phase that I discuss is the domestic Lao strategy known as "turning land into capital" (TLIC), which I suggest is the latest iteration of *mise en valeur*. This slogan and strategy emerged in the 2000s as Laos began to attract foreign investment (see Kenney-Lazar, Dwyer, Hett, 2018; Baird 2011). It remains relevant today as land concessions continue to be awarded for infrastructure development and land-based investments. However, it is a double-edged sword in that foreign actors provide infrastructure in exchange for Lao resources, leading to the question of who wins and whether value is actually generated for Laos in the end. *Mise en valeur* for the Lao state (i.e., measured here in the government's perspective by international economic growth indicators such as "graduating" from LDC status) was not realized through past national, geopolitical, and regional projects. TLIC thus presented a state-led national effort to not only realize value creation but also to continue to pursue *débloquement*, or in present-day terms "achieve a landlinked Laos."

TLIC is a broad and at times vague strategy, and there have been multiple interpretations of its purposes and processes, which vary across different government offices and researchers in the land sector. Kenney-Lazar, Dwyer, and Hett (2018: 4) identify four understandings of the goal of TLIC: to generate broad economic value for Laos, to fund government projects, to privatize and commodify state land, and to retain control over land as a national asset. The means to achieve TLIC predictably varies as well, e.g., trading land for development, financing

infrastructure through land, state land concessions, and land titling to create land markets (see Chapter 4 for discussions on land in Laos).

A particular strand of TLIC that is relevant here is based on the old socialist land barter system of giving forest concessions in exchange for road building. This is because timber quotas are some of the few areas that local governments have the ability to control (though there have been central government efforts to rein the practice in). TLIC thus starts with infrastructure, such as roads, health and education facilities, or any project that is done by local governments, and is how local governments finance development. While it may be piecemeal, it has led to local construction of roads, schools, and government buildings. Thus, under TLIC, resource extraction became a way to fund infrastructure development, as investors developed necessary infrastructure and in return received some rights over land or resources for a set amount of time (Baird, 2010). State authorities sought to finance infrastructure through the sale of natural resources such as timber (Dwyer, 2011; Dwyer and Ingalls, 2015). This happened to such an extent that research has connected forest loss with development of energy and transport infrastructures (Dwyer and Ingalls, 2015).

The land-based financing model of infrastructure has also evolved from a tool to access resources or connect remote regions of the country, especially the uplands, to a means of developing urban spaces (Pathammavong, Kenney-Lazar, Sayaraj, 2017). Urban exchanges of infrastructure for land are exemplified in the C-Games stadium, 450 Year Road project, and the That Luang Marsh Special Economic Zone, all located in Vientiane. For example, the 450-year road concession agreement stipulated that fifty meters on each side of the road could be leased to private sector actors to finance the project. Many of these infrastructure projects were financed through land leases, raising the question of how much of the country would be “sold away” for

infrastructure development. Some of the same problems of TLIC are mirrored in more recent railway debates—for example, whether the government getting something in return or just giving away land. Multiple debacles surrounding TLIC road construction involving the challenges of cost and control have haunted the railway and are reminiscent of past infrastructural periods.

V. Weaving silk routes

In 2011, Tan (2011: 73) wrote of the Laos–China Railway that such "[h]erculean works are rather symbolic because the Chinese are on track to achieve the *mise en valeur* of Laos that the French dreamed of during their colonial rule but failed to implement." After decades of infrastructure "failures," the present conjuncture of Chinese development raises the question: how is this moment different? I suggest that the answer moves in two directions—one that reproduces trends throughout Laos' infrastructural history and another that diverges from them. The Laos–China Railway and Economic Corridor offer vantage points to explore how the phenomenon of global China builds on the *mise en valeur* of Laos.

First, discourses of connectivity and improvement since colonialism have generated a common-sense logic that Laos will never be "developed" or economically self-sufficient without large "modern" infrastructures. Projects make bold claims about the future and also echo a number of past dynamics and spatial/infrastructural strategies employed by colonial France, wartime America, and regional organizations. The preceding insights in light of the BRI corridor in Laos show historical sedimentations of past infrastructure development priorities. For example, as Laos was re-envisioned by regional development actors and business interests as a resource frontier (Barney, 2009), the Lao state's efforts to transform the country's infrastructure took on new urgency and meaning. Building on the above infrastructural history,

the BRI knits together multiple infrastructural imperatives—of (dis)connection, security, win-win economic development and investment, and poverty alleviation—that mobilize infrastructure as a central force of both Chinese and Lao state and non-state actors and financing.

Laos' infrastructural history discursively established the conditions that enable Chinese capital to move more easily today. Infrastructural efforts entail recycled discourses of *mise en valeur* and *débloquement* to forward to notion of purposes of the BRI as a new, win-win, and non-conditional version of South-South collaboration (Liu and Dunford 2016: Liu, Dunford, and Liu, 2020). The desire for *mise en valeur* and the image of Laos as a "blocked" place remain at the root of many infrastructural aspirations today. They form the common-sense logic of connective infrastructures that has been historically and is, in part, where much of their power and elite support originate. Projects are not a complete break from the past, but rather they have long been on the infrastructural agenda and have yet to be achieved. Such projects and visions of connectivity thus remain desirable. Like colonial attempts at *mise en valeur*, the promise of "fabulous resource wealth" continues to inspire *débloquement*. As the ADB claimed that it initiated and built the GMS to achieve a well-integrated and prosperous Mekong Subregion—free of poverty and committed to protecting the environment—so the BRI and Lao state rely on logics of "growth-first" development that prioritize a particular vision of modernization.

Most recently due to an overcapacity of energy and the construction of the Laos–China Railway and Corridor, discourse has redeployed language of *débloquement*: to transform the country from a "landlocked to land*linked*," imagining Lao territory as a bridge between larger regional economies. The corridor plays a central role in the country's development. In April 2019 at the Second BRI Forum, Lao president Vorachit praised the BRI as compatible with Lao government policy to transform the country from landlocked to land*linked* and situated the new

Laos–China Railway and Economic Corridor as the centerpiece of this strategy. The image of the economic corridor came to encompass connective infrastructures and their "associated benefits." In Chapter Four, I argue the corridorization is about more than connectivity; it entails an iterative process of enclosure and opening, or a dual movement, at once, enclosing space, while opening it to certain types of capital, "development," or exploitation. The purpose of corridorization is a process of frontier-making that renders space open for investment, while directing it along a particular enclosure of space. This highlights the actual *mise en valeur* of large infrastructure development—*mise en valeur* as improvement was conceived to offer the precondition for accumulation, similar to the idea of d/Development.

Second, funding dilemmas reverberate throughout this infrastructural history. Specifically, Laos lacked significant revenue-generating economic activity to build infrastructure in the first place, alongside the overall lack of infrastructure slowing expansion of economic activity. This is not an issue unique to Laos, but one that is important to consider when reflecting on who is building and funding large projects. Laos cannot afford to construct these projects itself and must instead barter for foreign entities to do so in exchange for its natural resource wealth, and subsequently deal with a host of private and other state interests. Because the BRI subsumes existing projects under its banner, some suggest that these projects would happen with or without that label. This may be the case with some projects, but for large connective infrastructures and various associated special economic zones, other sources of capital were not readily available. Global China does not encounter the ongoing challenges of infrastructural funding in the same ways as past colonial, development, or investment actors. Instead, state capital interacts with private capital to increase circulation, materializing BRI infrastructures that were not previously possible.

As in past infrastructural periods, capital's entrance and circulation depends on the dialectical position of infrastructure as means of simultaneous improvement and accumulation. However, the d/D boundary suggests too strong a distinction that does not characterize global China's infrastructural engagements. This is a distinct rupture from past periods, which illuminates a transition away from the classic distinctions between "big D" and "little d" Western development that Hart (2001; 2002; 2004; 2009) traces since the 1950s. Hart's distinction of "big D" Development upheld colonial assumptions rooted in trusteeship, by the "global North" over the "global South" (Cowen and Shenton, 1996). Unlike the West's "big D" Development models of trusteeship, China stresses non-interference and mutual benefit. Much BRI-focused research points to a Chinese "grand strategy" emanating from Beijing directing huge amounts of state capital toward "trojan horse" projects. Looking to the railway today, however, value realization involves more than a central state agenda, demonstrating the shortcomings of nation-focuses analyses. Semi-state and private firms going out from Chinese to engage in infrastructure development (among a multitude of other sectors). The processes and flows of aid, investment, people, and goods from China "blur" or d/Development (Mohan and Tan-Mullins, 2009; Yeh, 2016). China combines state loans that support commercial ventures and encourage private investments.

Projects with histories of going unbuilt due to cost are thus made possible through new financial mechanisms. The current period points to a shift in funding mechanisms on both sides of the border. Chinese projects increasingly rely on public-private partnerships (PPPs)[32] and

[32] A public private partnership is an arrangement between government (public sector) actor(s) and private sector actor(s) to co-finance a project.

special purpose vehicles (SPVs),[33] which are also popular in Laos and under the BRI. In Laos, for example, the Ministry of Public Works and Transport recently proposed the expansion of Route 13 through a PPP with the World Bank.[34] As Chapter Three illustrates, the railway project in Laos is financed and operated by an SPV that draws on both public and private capital. Finally, in line with TLIC, the Lao state continues to exchange land and resource access for technical and financial assistance in building large infrastructures.

VI. Conclusion

This chapter took a historical view of infrastructure development in Laos through the lens of "value creation" (the French colonial policy of *mise en valeur)* and a recurrent theme of "unblocking" landlocked Laos. Lao territory, since colonialism, has been framed as a frontier for capitalist expansion. The infrastructure frontier depends on visions of accessing Lao territory as well as physical infrastructures themselves, which not only shape but are themselves shaped by the contexts within which they unfold. The events outlined illustrated the repetition of dreams unrealized. The French did not achieve the *mise en valeur* of Laos (Stuart-Fox, 1995), geopolitical conflicts of the 1960s and 1970s prevented projects from materializing (Nguyen, 1999), and regional ABD corridor projects have been deemed "unsuccessful" (ABD, 2004). A focus on *mise en valeur* over Laos' infrastructural history revealed how the Laos–China

[33] A "special purpose vehicle" in investment terms refers to a subsidiary company and standalone legal entity formed to undertake a specific project in order to mitigate, disaggregate, and isolate risks.

[34] https://www.mpwt.gov.la/attachments/article/876/PPP%20October%20Workshope%20PR%20V3.pdf

Economic Corridor revives and resurrects these unrealized visions of connectivity from precolonial times to the GMS. Viewing the LCEC through past infrastructure illuminated the array of logics that have been repeated and recycled over centuries that entailed more than contemporary Chinese or Lao visions.

I drew historical connections by periodizing Laos' infrastructural history from precolonial times to the present. I traced the continuities and ruptures associated with large connective infrastructures—rail, river, and road, transport—which various powers either attempted to or did build across time. Current policies, infrastructures, and their rationales reverberate across waves of infrastructure development through colonialism, war, independence, and contemporary times. Each period is punctuated by goals for improvement (broadly) and "value creation" or accumulation, reproducing particular power dynamics and uneven development. Imperatives for megaprojects to lie in generating not only capital, but also maintaining political legitimacy and geopolitical relationships. In addition, this chapter points to the material challenges, as well as the contradictions between the various powers asserting themselves in Laos.

The sedimented histories of infrastructure show how they were often predicated on notions of improvement, and imposed from elsewhere. However, many large connective infrastructures were not built to their high cost, or if built served a purpose beyond their stated means. In sum, across these periods, I show a set of infrastructural geographies that have repetition in space and time, that Laos as often viewed in relational to elsewhere, and finally, the recurrent problem of finance and control of connective infrastructure which mean many projects were not built. I conclude by considering past infrastructure "failures" alongside the present boom of Chinese investment. Large infrastructures are materializing today due to push and pull

factors from both sides of the border. In Laos, the state exchanges land and resource access for infrastructure they cannot build or finance themselves. For the railway specifically, the Lao state has mobilized capital and land-based resources hold equity in the project. On the Chinese side, projects increasingly rely on public-private partnerships and take on significant risk. A topic I turn to in the next chapter.

Media coverage of China's infrastructural investments and the BRI tends to focus on the financial implications of such projects as debt trapping, as well as on the geopolitical agenda of China. As this chapter has shown, this perspective neglects the sedimented histories of infrastructure in a particular place. Picking up on the recurrent problem of funding infrastructure, the next chapter brings the tensions of *mise en valeur* and d/Development to an examination of the Laos–China Railway to explore the logics of Chinese capital that have enabled the construction of the railway. The chapter examines issues of profitability and accumulation around the railway, narratives of debt-trapping, and the financing modes and mechanisms for the project. More than a grand strategy from Beijing, the railway tells an important part of the story of the expansion of Chinese state capital globally and within the trajectory of Laos' infrastructural history.

CHAPTER THREE
RAILWAYS, ENCOMPASSING ACCUMULATION, AND CHINA'S SPATIOTEMPORAL FIX

I. Introduction

> "The promoters of new projects justify them to the public by material needs, not financial opportunities. The movements and supplies that will flow faster thanks to new infrastructure are presented as a requirement to be met, a necessity for life, a condition of well-being, an improvement, or, as economists call it, development. Finance—the only element that exists in order to grow, the one factor whose very possibility lies in growth—appears as something secondary. Capital seems to arrive after the fact, to enable needs to be met. In creating the effect of a world divided into the real and the financial, infrastructure projects establish the apparent primacy of the real or the material, of physical needs and human wants, and place finance as the servant, the subservient element existing only to help meet such needs. Let us reverse this order of priority and put the question of finance first." (Mitchell, 2020: np)

Mitchell's (2020) call—to put finance first—raises curious questions about the Laos–China Railway. Railway promotors justify the project as a means for economic growth that will contribute to material needs. For example, during a ceremony at Vientiane station, Chinese Ambassador to Laos, Jiang Zaidong, described the train as a "symbol for the Lao people in depicting a strong and prosperous country, and…improv[ing] the quality of people's lives" (*Vientiane Times*, 2021). Indeed, the promises of meeting needs, contributing to development, and improving lives are the stated rationales for many large infrastructure projects. Additionally, much discourse and debates about the Laos–China Railway highlight finance as geopolitically predatory. However, this misses a critical point about financing large scale infrastructures: the infrastructure itself is the key means of accumulation.

Railways often do not generate enough revenue through their infrastructural function alone (e.g., tolls, fares, freight fees) to repay debts. Therefore, it is little surprise that the question of debt relations remains a prominent concern about the Laos–China Railway. The project's high

cost has attracted intense scrutiny from observers around the world who frame it as an example of "debt trap diplomacy." Significant criticism circulates about China's infrastructural lending as a form of debt trapping—that "China" uses loans to ensnare countries for political or ideological reasons. 'Because many Chinese projects are outwardly unprofitable, Chinese investments have been framed as parasitic, preying on poorer countries' infrastructural and capital deficits. However, it is overly simplistic to assume that capital always operates under a singular profit motive. As this chapter demonstrates, the Laos–China Railway is not projected to be profitable, but it is also not a case of debt trap diplomacy. How, then, does the railway fit within global China's logics of expansion through infrastructure?

The politics and financing of railways across time and space offer critical perspectives to apply to thinking about China's global railway expansion today. Cronon (1991: 81) writes that due to the enormous cost of the US transcontinental railroad,

> everything that moved by railroads—and every place through which the railroad ran—became linked to the imperatives of corporate capital. The railroad became the chief device for introducing a new capitalist logic to the geography of the Great West.

Cronon encourages us to reflect on the contemporary logics of railway capital, which Chinese entities are now spending billions of dollars to finance around the world. However, a different logic of capital is taking shape around this new infrastructure frontier. Chinese railway capital is characterized by state-owned enterprises (SOEs) that both have the capacity to lend huge amounts of capital and withstand, even benefit, from a long waiting period for investment returns. For Mitchell (2020), this is the point of large infrastructures—they "work on time" in ways that are not immediately obvious. Contrary to public discourse, railways are not built primarily to speed up the movement of things or to achieve "space-time compression" (Harvey,

2001). Rather, they are "device[s] for stretching forward the passage of time … an apparatus for the creation of a delay" and during which time associated "financial instrument[s] can increase in value thanks to the passage of time" (Mitchell, 2020: np)

Following Mitchell's (2020) provocation to put finance first, this chapter examines the debt and financing structures of the railway to analyze the logics of Chinese infrastructure capital. Lee's (2017) premise that Chinese state capital is distinctly different from global private capital offers a useful entry point to consider Chinese capital on the infrastructure frontier. While global private capital is clearly motivated by a "logic of profit maximization," she suggests that Chinese state capital (which she defines as originating from central state-owned enterprises and policy banks) is motivated by both profit and interests radiating from Beijing. It operates according to a "logic of encompassing accumulation," which includes profit, as well as resource access and political/diplomatic influence

The goal of this chapter is to excavate overlooked aspects of finance, debt, and capitalist spatiotemporal "fixes." Joining Lee (2017) and Mitchell (2020), I introduce two key arguments. First, infrastructure abroad serves as a spatiotemporal fix to address domestic devaluation within China. The "temporal fix" is an under-explored, yet pivotal part of global China's calculus. Debt is an outlet for overaccumulated Chinese domestic capital, as it projects value far into the future and does not decay like physical infrastructures. Mitchell suggests that: "[c]apital wants delay. Postponement brings capital into being and allows it to multiply. The delay, the ability to push something into the future yet continue to control it, can be understood as the very origin of money." Though railways are often thought of as means to increase the flow of people and goods across space, I position them as a way for capital to reach far into the future, across time.

Second, I argue that this deferral of profits is possible because of Chinese SOE's structure and the use of public-private partnerships (PPPs) and joint ventures (JVs) to oversee projects. SOEs have political *and* economic support, which affords them more tolerance for risk and more power to offload it. They either take on the longer-term risk or transfer it to lower-level actors like subcontractors and laborers. This insight builds on Lee's theory of encompassing accumulation by adding the temporality of delay in railway capital.

The remainder of this chapter explores the logics of Chinese capital through railway finance in four parts. First, I review the historical funding patterns for three major railways and outline their relationship to financial institutions. I then argue that the Lao railway is not an example of debt trap diplomacy, despite its slim chance at profitability because most of the financial risk actually falls to Chinese SOEs. In the fourth section, I outline the financial and joint venture (JV) arrangements for the project to show where financial responsibility and the implications of the delayed arrival of capital for lower level actors.

II. Histories of railways and banking: brief reflections

The history of railways is also a history of finance capital and debt. This section reflects on the centrality of finance capital in constructing railway networks across three different places and times—19th century United States and Switzerland, and early-20th century China. It reviews how connective infrastructures, specifically railways, have been funded, despite their massive price tag. Both railways and debt have been central in the making of capitalist frontiers. Faith (1990: 102) describes the world's financial markets before railways as "at best, primitive affairs, incapable of providing the unprecedented amount of capital railways absorbed, [with] only a handful of European countries and American states [having] raised capital outside their own

country." How did one infrastructure lay the foundation for the modern banking system? The answer lies in credit and projecting value into the future.

The American railway boom from the early-to-mid-19th century was built on a system of land grants and the expansion of banking. Mitchell (2020: np) wrote of the 19th century American transcontinental railroads, that despite their stated intentions to move goods and people, "their value was often as a means to construct financial networks." White (2011) agrees that the purpose of the transcontinentals was mainly to move capital. Early financial infrastructures in the United States were limited to small lenders for farm mortgages or city-based firms that gave short-term credit to merchants. These were far too small to finance large-scale infrastructure or industrial projects and lacked the necessary credit to provide long-term and sufficiently large streams of capital. Because banks could not fund even the smallest rail lines, city and state governments had to support the railway industry. Although connecting existing cities in the east would have offered more profit, the east-west lines to the booming frontier were deemed more strategically important. State support to expand west came in two key forms: municipal bonds to private railway companies and land grants. Thus, the US railways spatiotemporally fixed capital in land, built infrastructures, and through the deferral of time via bonds.

In Switzerland, as well, there was no existing financial system beyond the government that was willing to take on the amount of debt needed to construct a national railway network. In 1849, politician and railway baron Alfred Escher, a pivotal figure in the development of Swiss railways, anxiously observed neighboring countries building rail networks:

> The rail tracks are approaching Switzerland, moving nearer on all sides. People are coming up with plans to route the railways around Switzerland. There is thus a danger

> that Switzerland will be entirely circumvented and that, in the future, it will be left with no option but to present to the world the sad face of Europe's forgotten backwater.[35]

Rather than to turn to foreign investors for capital, Escher founded *Kreditanstalt* (now Credit Suisse) in Zurich in 1856 for the sole purpose of financing railway construction. The bank offered private railway firms access to capital in order to eschew foreign influence, particularly from the French, who were eager to connect the Swiss railways to the larger networks being built in France (Cassis, 1994). Rather than following a central or state plan, the country was covered in an extensive network of small and medium lines constructed from competition between private companies and entrepreneurs. Eventually, however, the demand for capital exceeded what the new bank could provide and led to the 1870s railway financial crisis. This forced Credit Suisse to expand its banking and financing operations beyond the railway sector. It also required that "Credit Suisse … turn to foreign banks to meet the demand" (Cassis, 1994: 1090). By the end of the 19th century, the government nationalized the network into Swiss Federal Railways (*Schweizerische Bundesbahnen*). The Swiss railway relied on the capitalist system to create new institutions and resources to access capital and, in doing so, solidified the relationship between a burgeoning banking system and the government. Alfred Escher created a landscape of infrastructure finance, using both state and investment/banking institutions. Even today, the bank's website homepage reads: "It all began with Swiss railroads in 1856. When the country needed to finance the expansion of its rail network, the forerunner to Credit Suisse was founded."

Twenty years later, during China's early railway development in the 1920s and 1930s, the Chinese government found itself short on capital and big on plans. At that time, Sun Yat-sen,

[35] Alfred Escher's speech as President of the National Council, 1849.

then the Premier of the Kuomintang and former Provisional President of the Republic of China, had put forth a nation-wide development plan that entailed an expensive, country-wide vision of connectivity. The text, *The International Development of China* (1920) proposed massive networks of telecommunication and connective infrastructure, including 100,000 km of railway. Unlike Swiss's early railway development, this place explicitly called for foreign capital to constructions million miles of transportation infrastructure (roads, canals, and railway), as well as for ports, cities, mining, and agriculture (Godley, 1987). Sun (1920: 204) wrote that although his plan was "welcomed everywhere and by everyone in the country … The only anxiety ever expressed regarding my scheme is where can we obtain such huge sums of money to carry out even a small part of this comprehensive project." Sun predicted that the tremendous amounts of capital would be available from Western powers after World War I, and disseminated the plans widely, many to US political offices, in search of funding and expertise to execute the gargantuan vision (see Sun, 1920). However, American politicians unanimously rejected the request for finance, citing the plan as too large and expensive, with little chance of viable returns.

There are a number of threads to follow from each railway experience. Across each location, the challenge of amassing enough capital to build railways brought about new financial mechanisms that reconfigured relationships between the state and private finance. From the United States, we see how land was put up in place of capital; from Switzerland we learned of the invention of a massive banking system to finance infrastructure; and China offers an example of the need to draw on foreign capital for infrastructure. The history of railways was driven by debt and the creation of funding mechanisms capable of fronting large amounts of capital, waiting a long time for return on investment, and offloading risk to others. In each case, the creation of financial tools that "worked on time" was key (Mitchell, 2020).

III. Railway profitability and dubious debt discourse

The Laos–China Railway has been widely cited as an example of Chinese predatory lending and debt trapping (Linter, 2020; Shah, 2019; Siow, 2021). Even though "debt trapping" has been invalidated in a variety of contexts, the China EXIM Bank loan for the railway sparked concerns over sovereign debt in Laos. My intention here is not to dispel the idea that *capital itself* is predatory or entrapping but to reframe what these terms mean in the context of China's overseas lending. Capital is by its very nature predatory as it seeks ongoing fixes to crises of overaccumulation (Harvey, 2003; Jessop, 2006). However, infrastructure investments are not necessarily intentional *geopolitical* Chinese traps. Rather, they pull countries into circuits of capital "so that they can be available as 'sinks' for surplus capitals for which they are judged liable" (Harvey 2003: 118).

Mainstream economic assessments

It is hotly debated whether railway lines in BRI countries will ever reach a financial return on investment for any party involved. Many existing high-speed and standard rail services rarely operate profitably, even in wealthy and densely populated regions. According to multilateral development banks, as well as the Laos–China Railway feasibility study, the project will not generate enough profit to pay for its construction, operation, and management for years to come. Yet, as an article in Laos' state-run newspaper realizes, "the Laos–China railway is not just an investment project … for the purpose of making a profit" (*Vientiane Times*, 2020). Several analyses that have estimated passenger and freight traffic over the 25-year concessional loan period all come to the same conclusion. Even the LCR Feasibility Study (2012 and 2016:

141) concluded that "[t]he financial suitability of the project is poor." According to the study, within the first six years of operation (excluding construction), the joint venture will run at a loss due to high principal and interest debt repayment. The feasibility study warns that if the railway "employs the *commercial operation mode*, the project will have poor financial sustainability" (emphasis added), noting that it will only be financially viable if the Government of Laos enacts preferential policies for the project. The Lao government has granted a five-year tax holiday that will begin the first year the railway company recovers from accrual losses.

Similarly, a confidential World Bank report on the short and long term macro-fiscal impacts of the LCR warns of high financial costs.[36] It considers the railway a "double-edged sword for Lao's economy: if executed well, it holds tremendous gains; if it fails, the country will be mired in a severe debt crisis." Building on the feasibility study, the World Bank projected five macro-fiscal scenarios to calculate how long the project will operate at a loss. Each scenario predicts losses in the initial years of operation—the most optimistic is for 6 years, and the least is for 25 years. The longer losses occur, the greater the Lao government's contingent liability (based on their 30 percent LNRE stake). However, in the public version of the report titled, "From Land-Locked to Land-Linked: Maximizing the Development Impact of the Lao-China Railway Connectivity," the Bank takes a "*cautiously* optimistic" position regarding future profits. It says the railway "*could* provide [Laos] with a land link to global and regional supply chains, which could make the country more attractive to investors, create new jobs, and accelerate economic growth."

[36] Although this report remains confidential, I was able to access it through a key informant who maintains close relations with the Lao World Bank office.

The World Bank estimates operating losses between US$590–4,383 million in the first 25 years of railway operation. This is derived from the ticket/freight prices listed in the feasibility study: 0.3RMB per person per kilometer and 0.5RMB per ton of freight per kilometer. The price to travel the full length of the line (414 km) would be 124.2RMB (about US$19) for one passenger and 207RMB (about US$32) for one ton of freight. According to the Feasibility Study, the LCRC would recover from accrual losses and make a profit starting in 2038, the 17th year of operation (though the World Bank thinks this timeline is optimistic). In this scenario, the LCRC would repay the China EXIM Bank loan according to the original payment schedule by 2046 (the 25th year of operation).

During construction, the Lao government's fiscal responsibilities were 1) equity funding, 2) interest payments, and 3) land compensation. Additionally, tax exemptions and project incentives have already generated significant revenue losses for the government. For example, the costs of tax exemption on imported goods for railway construction were estimated to be $87 million in 2018 and $424 million for the duration of construction (2017-2021). This includes loss of VAT (58.4 percent), customs duties (36.2 percent), and excise tax (5.4 percent) (World Bank Confidential).

An economist in Laos summarized: "The project is too expensive for Laos. The rail is just not profitable by itself. It is about regionalization, exporting technology, and economic, and political influence." His statement touches on multiple points concerning the cost of the railway and the resounding questions around debt, how to profit from transport and trade, and China's motivations beyond profit. However, as the next section shows, geopolitical assumptions—namely, that in the absence of a clear or consistent revenue stream, projects *must* be designed to exploit other countries—do not hold.

Chinese "predatory" lending: the debt-trap meme and hidden debt

The lack of project profitability, combined with enormous finance costs, has led Western analyses to obscure the actual motivations of Chinese projects. The assumption is that saddling countries with debt facilitates debt-trap diplomacy. The term was first introduced to describe a bankrupt Sri Lankan port (Chellaney, 2017) but has since rippled through Western media, think tanks, and political offices. Many Western (especially American) commentators and policy-makers have concluded that China's lending actions are predatory. Former US Secretary of State Rex Tillerson referred to Chinese lending as "predatory economics" while former US National Security Advisor John Bolton (2018) claimed that China strategically uses debt to "hold states in Africa captive to Beijing's wishes and demands" and uses the BRI plan to "advance Chinese global dominance." Much of this discourse blatantly ignores China's domestic economic rationales for the BRI, host country opinions about the projects and finance, and the history of Western and specifically US exploitation of the global South. I raise this point on Western perspectives because they are powerful discourses that affect power relations between debtor and borrower (DeBoom, 2020).

The evil creditor caricature, combined with negativity bias, characterizes many popular and policy perspectives on China's overseas engagement. Graeber (2011: 8-9) notes that throughout human history, people have held a common view that "anyone in the habit of lending money is evil." In his book on the global history of debt, he finds few sympathetic views toward professional moneylenders, concluding, "I'm not sure there is another profession (executioners?) with such a consistently bad image" (Graeber, 2011: 10). Bräutigam (2020) raises a similar point in her analysis of China's supposed debt trap diplomacy. Since negative rhetoric is often more

memorable than positive rhetoric (Bräutigam, 2020), these discourses may impact host country receptivity or influence Chinese actors.

To date, though, there is no evidence suggesting that China engages in predatory lending with the aim of imposing geopolitical conditions or strategic asset seizure (Acker et al. 2020; Bräutigam and Huang, 2019; Bräutigam, 2020; Carmody, 2020; Carmody, Taylor, and Zajontz, 2021; Jones and Hameiri, 2020; Kratz, Feng, and Wright, 2019; Lai, Lin, and Sidaway, 2020; Malik et al. 2021). Malik et al. (2021) analyzed over ten thousand Chinese loans to find that "[n]one of these lending practices are intrinsically harmful to the interests of developing countries." Rather, "debt trap diplomacy" is a "meme," which took "deep root in Washington, DC, and ricocheted beyond Delhi to Japan, all along the Beltway and again into *The New York Times*" (Bräutigam, 2020: 2).

Two widely cited examples of debt trap diplomacy are the Hambantota Port in Sri Lanka and Piraeus Port in Greece. Mainstream discourses claim that, due to the ports' inability to pay back Chinese loans, "China" seized their assets. However, Acker et al. (2020) suggest this narrative is too simplistic. The decision to privatize both ports was made by their respective governments in an effort to reduce high sovereign debt ratios. This does not just include debt from China—in fact, the Sri Lankan government's debt spanned two decades.

Some historical context of Hambantota Port reveals a more complete story. The port was in development for several decades (Bräutigam and Huang, 2019), with both the French and Danish undertaking feasibility studies. The China EXIM Bank only became involved after Chinese aid rebuilt the fishing port after the 2004 tsunami. The Sri Lankan government decided to privatize the port due to the country's high external debt. The port struggled with profitability and, by 2016, the government faced an external debt of 57 percent of GDP (10 percent was to

China). The state used the money from privatization to pay off sovereign debts to the US (8-12 percent interest rates), rather than Chinese loans with lower interest rates (Bräutigam, 2020). Furthermore, the government selected China's largest port owner and operator, China Merchant Port, to be a strategic partner. Today, the Chinese Merchant Port company owns 70 percent of Hambantota's shares, while the Sri Lankan Port Authority controls 30 percent. Notably, of 116 Chinese-built overseas ports, Hambantota is the only one considered (rather uncritically) to be debt trapping (Bräutigam, 2020).

The Laos–China Railway shares many similarities with the port: infrastructures are built ahead of demand and operate under significant initial losses; the existing political economy in the country is not necessarily equipped to handle such losses; and there are outstanding debts that are unrelated to the supposed "debt trap" project. This is not to say that debt is not an issue in Laos. As with Sri Lanka, Laos currently has a high level of sovereign and public debt, which indeed requires close attention. However, dubious narratives of debt trapping, hidden motives, and helpless host countries are misplaced. The railway does pose some risks for Laos' debt burden, especially through operating losses (the problem of profitability) and possible contingent liability (discussed in the next section). However, the railway remains *one* project and the state is only responsible for 12 percent of the debt. It is hardly a "trojan horse" for a "Chinese" takeover of Laos.

According to the World Bank, in 2020, Laos' public external debt was 65 percent of GDP, up from 59 percent in 2019. These are not exceptionally high percentages when compared to debt-to-GDP ratios in other countries. More than one hundred countries have a ratio of 50 percent or higher, with more than 50 countries having a ratio of 70 percent or more. In 2020, Fitch Credit Ratings estimated the country's (possible) contingent liabilities at approximately 30

percent of GDP. These predominantly include public private partnerships (PPPs), which are an increasingly popular model allowing China to pursue more commercial pursuits without complicated state guarantees.

Barney and Souksakoun (2020) offer a detailed analysis of debt in the Lao context, astutely arguing that the hydropower and energy sectors contribute to Laos' unsustainable debt. They suggest that Laos is in more danger of entering a "debt cycle" than a trap. As in Sri Lanka, debt in Laos has accumulated from multiple sources over the last two decades. The country has a long history of development financed by external loans from the Asian Development Bank, World Bank, and bilateral partners. Today, external debt stems from Chinese bilateral loans (approximately 47 percent), followed by ABD and World Bank concessionary loans, and the commercial bond market. The Lao government's total railway debt payment in 2022 will be about US$110 million, or 11.6 percent of the total public debt payment and 19.2 percent of the year's debt payment to China EXIM Bank.

Alongside the debt trap meme, the notion of "hidden" Chinese debt, particularly around the BRI, has become popular in recent years. A 2019 report by the National Bureau of Economic Research analyzed 5,000 loans and grants from China to the global South and determined that 50 percent of China's lending is "hidden," meaning the loans were not reported to the IMF or World Bank (Horn et al., 2019). Two years later, in 2021, a report by AidData[37] based on a dataset of 10,847 Chinese projects resurrected the notion of hidden Chinese infrastructural debt. The report posits two types of "hidden" debt. First, there is the under-reporting of loans which is the responsibility of the borrower, not the creditor (e.g., Chinese banks). The second category

[37] AidData—a research lab based at the College of William and Mary's Global Research Institute—tracks foreign aid and investment data and has become especially well-known for their database on China's global infrastructure finance.

includes loans that are made to SOEs, joint ventures, and special purpose vehicles (SPVs) without a sovereign guarantee. This keeps loans off the host state books. It is no surprise that both China and Laos are interested in reducing their (reported) sovereign debt, lest the IMF Debt Sustainability Framework (DSF) penalize them.

Jepson (2021) also examined Chinese loans that are "hidden in plain sight" within Central and Eastern Europe. He believes that the excessive concern over China's hidden debt and its underlying objectives are misplaced since many of the loans and financing structures are not abusive, or even well-hidden. Chinese loans are often considered to lack transparency since much loan data is never made public (though this is not unique to China) (Jones and Zeng, 2019). However, Jepson (2021) found that it is the centralized national data sources in many host countries, not Chinese actors guarding secret information, that makes acquiring information about the loans challenging.

Terms like "trap" and "hidden" imply underhanded and manipulative motives. They problematically portray "China" as more monolithic, centralized, and coordinated than it really is. Furthermore, they discount the host country actors involved in project negotiations and fail to consider how Chinese actors may be exploited. Finally, they mistakenly rely on a calculus of profit maximization. Rather than maximizing profit, Kratz (2015) has demonstrated that, in the context of Chinese overseas railway investment, operating losses are accepted, as long as they are less than the costs of letting projects sit idle (Kratz, 2015). As with historical transcontinentals,

> [c]urious as it might seem to an outsider, railroad managers sometimes had to set rates they knew would lose the company money. This was the logic of capital, and it was also the logic that would make Chicago the greatest railroad center in the world (Cronon, 1991: 85)

IV. Railway capital and an infrastructural "fix"

This section advances a critique of the debt trap and hidden debt narratives, arguing that loan conditions are not traps, as the popular meme suggests. Railway project financing conditions are focused on creating capital flow for Chinese markets in the long-term (a temporal fix), not about controlling the Lao government geopolitically. In addition to simply dispelling the debt trap narrative, I add to Lee's (2018) notion of encompassing accumulation by arguing that deferral is an often overlooked yet integral aspect to this logic. As I will argue, deferral is possible due to the involvement of Chinese SOEs and the use of PPPs and joint ventures.

Financing the railway

The Laos–China Railway reflects the shift in Chinese financing toward public-private partnerships (PPPs) and risk-sharing across multiple sources of capital. PPPs and JVs are also encouraged in Laos.[38] The Laos–China Railway Company, Ltd. (LCRC) is a Lao and Chinese joint venture, also known as a Special Purpose Vehicle (SPV), that was created specifically for this project. An SPV is a PPP subsidiary company and a standalone legal entity formed to undertake a specific project and mitigate, disaggregate, and isolate risks. The LCRC was established as a joint venture between the China Railway Corporation and the Lao Ministry of

[38] Article 4 of Laos' Railway Law encourages local and foreign companies to invest in railway development and commercial enterprises as public-private partnerships and concessions. There are three types of investments recognized in Laos: general business (via the Ministry of Commerce), concession business (via the Ministry of Planning and Investment, MPI), and special or specific economic zones (via the National Committee for Special Economic Zones). The railway is considered a joint venture and concession. However, given the scale of the project, it is managed by the Laos–China joint venture, not by the MPI or MPWT.

Public Works and Transportation to oversee the financing, design, construction, and operation of the railway.

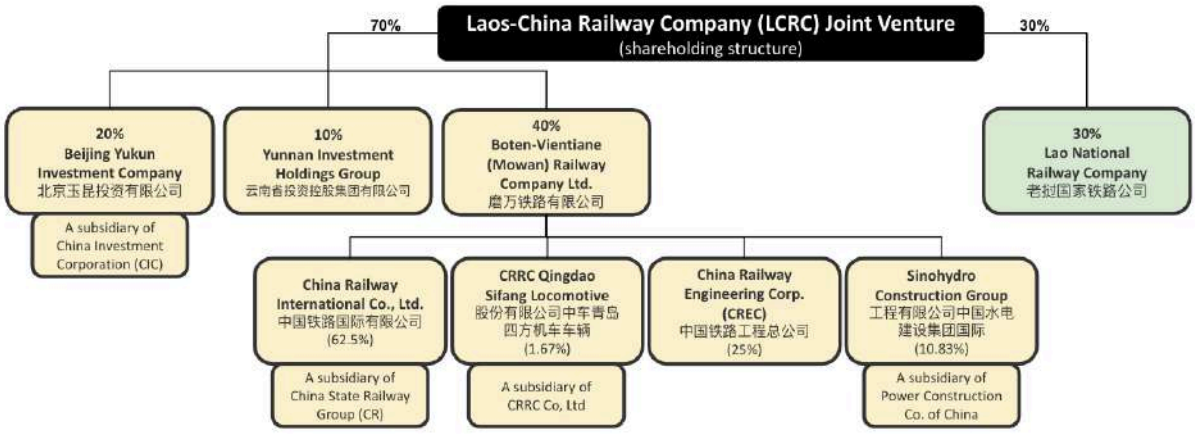


Figure 3.1. Shareholding structure of the Laos–China Railway Joint Venture. Yellow boxes represent Chinese entities (SOEs) and green boxes represent the Laos government. Assembled by the author through interviews and information provided by the JV and Lao government.

The LCRC joint venture is based in Vientiane and holds 15 billion yuan (approximately US$ 2.38 billion), or 40 percent of the total railway budget, in registered capital. The LCRC shareholders are the Boten-Vientiane (Mohan) Railway Co., Ltd., Laos National Railway Company, Yukun Investment Co., Ltd. (a wholly-owned subsidiary of China Investment Corporation), and Yunnan Investment Group Corporation, with an investment ratio of 4:3:2:1, respectively (Figure 3.1). The joint venture is composed of Chinese and Lao capital input, with a 70-30 percent shareholding split. The 70 percent Chinese share is held by a consortium of Chinese SOEs that are led by the China Rail Corporation (CRC), while the remaining 30 percent is held by the Lao National Railway Company.

Three forms of capital are used for railway construction: concessional loans from Chinese policy banks, equity capital from the Lao government, and finance capital from Chinese SOEs.

The Laos–China Railway thus exemplifies trends in Chinese finance. Chinese actors typically pursue flexible forms of development and governance (Tang, 2020; Gonzalez-Vincente, 2011), meaning there is no single way that projects are financed. Often it is a mix from multiple sources including loans, SOEs, and host governments. Liu, Weidong, and Liu (2020) identify five types of financial resources for Chinese overseas investment and BRI projects: aid, preferential loans, development finance, commercial loans, and special funds. Funding sources for overseas construction projects tend to come from Chinese policy banks and state-owned enterprises (SOEs) engaged in construction (Lee, 2017).

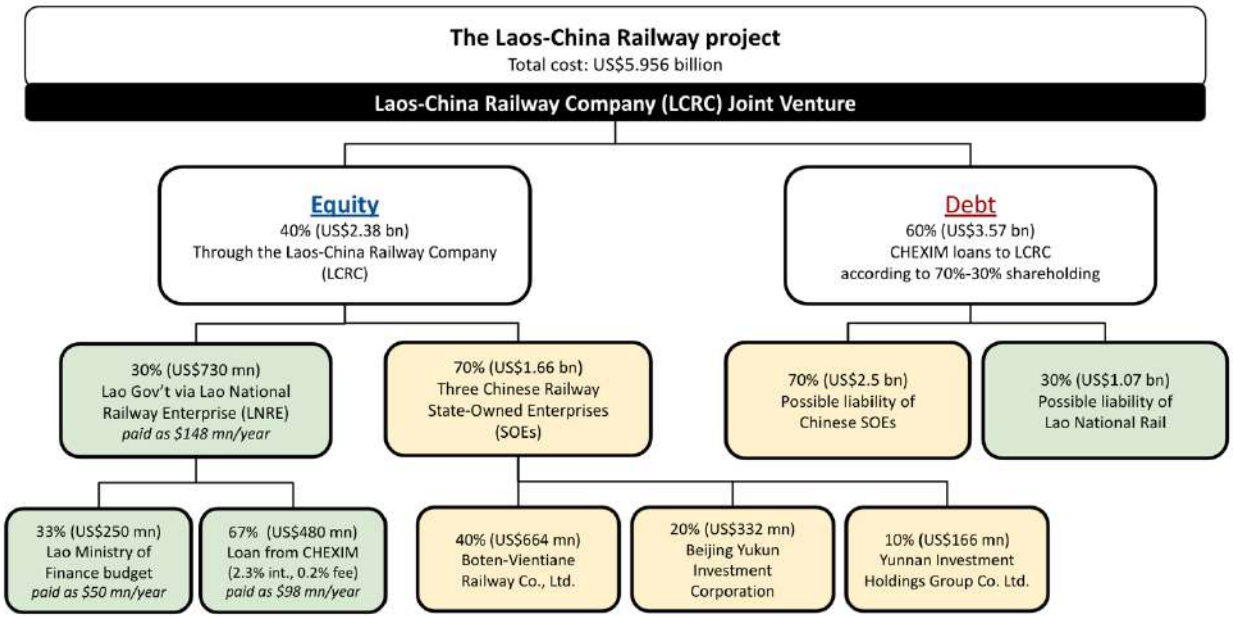


Figure 3.2. Laos–China Railway Financing Structure; the green boxes represent Lao capital (however, 67 percent of Lao equity is debt-financed through a CHEXIM loan); and the yellow boxes represent Chinese capital.

The US$5.95 billion project is financed by both equity (40 percent) and debt (60 percent) through the LCRC—though the division between equity and debt is not always clear cut (see Figure 3.2). Forty percent, or US$2.38 billion, is equity-financed by the 70-30 shareholding split. Under "equity," US$1.66 billion was supplied by the three Chinese railway SOEs. Of this, 40

percent is from the Boten-Vientiane (Mowan) Railway Company (which is funded by four other railway companies), 20 percent is from Beijing Yukun Investment Corporation, and 10 percent is from Yunnan Investment Holdings Group Corporation.

The Lao equity is listed as an additional US$730 million to be provided through the Lao National Railway Company (LNRE) on behalf of the Lao government. This input from the Lao side comes from two sources. The first is US$250 million from the state budget, paid through the Ministry of Finance in US$50 million annual increments. The remaining US$480 million of Lao equity is debt-financed through a loan from China EXIM Bank to the Government of Laos because the latter did not have sufficient capital. Here, the distinction of equity becomes slippery—the equity stake is partially funded with a liability rather than an asset. This loan has a 0.2 percent service fee, a 2.3 percent interest rate, and a 25-year maturity with a 5-year grace period during the construction of the railway. The government plans to pay this loan in annual installments of US$98 million.

The remaining 60 percent of the US$5.95 billion project cost is debt-financed through a China EXIM Bank loan directly to the LCRC. It is a concessional loan with a 30-year maturity that includes a 5-year grace period during construction (2015-2021), meaning principal payments are scheduled from 2022-2046. This loan, for 60 percent of the project, was made to the joint venture rather than SOEs or directly to the Lao government. Chinese sources cite this investment structure as an attempt to make the project feasible, despite financial difficulties on the Lao side. The Chinese government, citing it as a beneficial loan policy for the LCR, capped interest rates at no more than 3 percent per annum. In comparison, the interest rate on railway construction investment in China is approximately 4.9 percent per year.



			Percent of total project cost	
	Chinese SOEs		**28%**	**$1.666 billion**
	Gov't of Laos budget		**4%**	**$0.250 billion**
	Gov't of Laos loan-financed		**8%**	**$0.480 billion**
	Repayment period	20 years		
	Interest rate	2.3%		
	Maturity	25 years		
	Grace period	5 years		
"Equity"			**Total equity (40%):**	**$2.38 billion**
Debt	**LCRC Joint Venture**		**18%** (if Lao gov't is liable)	**$1.071 billion**
			42% (if SOEs are liable)	**$2.499 billion**
	Repayment period	25 years		
	Interest rate	3.0%		
	Maturity	30 years		
	Grace period	5 years		
			Total debt-financed (60%):	**$3.57 billion**
			Total project financing:	**$5.956 billion**

Table 3.1. Breakdown of railway project financing and loan details.

The railway financing arrangements demonstrate that China is not concerned with debt-trapping nor solely with profit maximization. Many "Chinese debt-trap" reports claim the railway costs to the *Lao government* are US$6 billion, or roughly one-third of the country's annual GDP. However, the Lao government's responsibility only constitutes 12 percent of the total project cost (4 percent from the Lao budget and 8 percent from a CHEXIM loan to the Lao government). In comparison, Chinese sources provided US$1.666 billion in upfront capital and committed to raise the additional US3.57 billion through Chinese banks. Through direct capital input and Chinese loans to the joint venture, Chinese sources are contributing US$5.24 billion of the nearly US$6 billion project, not including the US$480 million loan from China EXIM Bank to the Lao government.

Furthermore, Chinese loans to joint ventures and SPVs are not necessarily the responsibility of the host government. According to my interviews, the structure of the LCRC

serves to distance the Lao government from direct financial responsibility because the joint venture, not the shareholders, borrowed the US$3.57 million. The liability for this loan is technically split along the 70-30 shareholder ratio of the LCRC, hence the possible liability for both SOEs and the Lao government. However, if the loan defaults, there is no precedent for assuming the Lao government would become responsible for the joint venture debt or the majority SOE debt.

Malik et al. (2021) classify the railway as a "problem project" due to Laos' implicit debt responsibilities. They suggest that, even with no formal guarantee of repayment from the central Lao government, when the borrowing entity (in this case the joint venture) is wholly or partially state-owned the state may need to bail it out. By including entities that are wholly or partially owned by the host government, the report differentiates between explicit and implicit guarantees. Malik et al. (2021) suggest that even if there is no explicit sovereign guarantee on the loan, the significance of the deal or bilateral relations may offer an *implicit* guarantee, an issue I return to later. However, while governments do sometimes bail out SOEs, PPPs, and SPVs, it is a stretch to suggest that all loans to such entities are *implicitly* guaranteed by the government. Lao railway officials considered the financing and management structure—which ensured that project risks were separate from the government balance sheet—as a point of pride. Additionally, Chinese overseas investment typically bundles loans for unprofitable projects, which allows profit generated from other projects to be written off due to losses on the railway. This financial engineering process allows the railway to gain credit, even when other international banks would reject it. While financial engineering practices have certainly proved predatory in the past (the most obvious being the 2008 financial crisis), my point is that this instance of engineering is not necessarily geopolitically predatory.

There are more compelling logics, specific to China, to explain why Chinese entities front the majority of capital. In addition to the deferral undervaluation of capital, as I show in the next section, Beijing pressured SOEs to proceed with construction despite delays in the arrival of Chinese finance capital.

China's spatiotemporal fix

Many scholars have convincingly argued that China's international lending and aid is largely propelled by commercial interests (Bräutigam 2013; Chen 2018; Johnston and Rudyak 2017; Li et al. 2014; Morgan and Zheng 2019; Tan-Mullins, Mohan, and Power 2010; Woods 2008; Yeh, 2016). Others suggest that Chinese foreign investments are focused on a mercantilist model of trade, investment, and concessional financing (Bräutigam, 2009; Zhang, 2021). Projects appear mercantilist because the Chinese state supports commercial ventures without directly steering them (Mohan and Tan-Mullins, 2019). For example, the railway loans were issued on the condition that project contracts had to be awarded to Chinese SOEs. This meant that Chinese capital for the railway primarily circulated within Chinese supply chains, expanding or creating a market for goods, services, and labor from China. The 2015 cooperation agreement prioritizes Chinese contractors, noting that Lao subcontractors and labor that are qualified to work on the project will be considered for hire if Chinese contractors deem the company competent.

According to a recent ABD study, there is a high probability that the railway will not be profitable in the coming years (Lane 2020) and "there is no obvious revenue or clear commercial demand for the [LCR] in Lao PDR." For Lane (2020), it is not commercially logical to use an expensive railway to connect a country of six million people to Kunming or Singapore. However, what many mainstream economic analyses miss is how debt acts as a means of

accumulation through deferral over time. Capital easily embraces "unproductive" or "unprofitable" activities because it begets more capital through speculation and debt. As Mitchell (2020: np) questions,

> what if large infrastructure projects have another relationship to time? What if they are built not to speed things up, but to introduce a delay? What if the virtue of infrastructure is not the acceleration of time, but the ability to place the future further away?

Harvey's (2003) dual meaning of "fix" is apt here. Railway capital is literally fixed in place—on the land and in the tracks, concrete, and train cars. It is also a spatiotemporal "fix"— a solution to the ongoing crises of capital that occurs through temporal deferment and geographical expansion. Over-accumulated capital must be moved elsewhere, lest it be devalued and cause a recession or depression. For decades, China absorbed surplus Western capital. Western surplus capital extracted huge profits from China's massive and cheap labor force, eventually transforming China into "the world's factory." This culminated in China's own overaccumulation crisis beginning in the 2000s, which required a spatial fix through geographical expansion (Harvey, 2003). Since surplus labor, materials, and capital could not be absorbed within China's borders, it had to "go out" to be absorbed elsewhere. Many scholars have argued that the BRI is a key strategy to address chronic over accumulation within China (Akhter; 2018; Apostolopoulou, 2021; Carmody, Taylor, and Zajontz, 2021; Taylor and Zajontz, 2020).

In addition to linking spaces, railways facilitate capital's expansion into the future. Harvey (2003: 109) defines the temporal fix as "displacement through investment in long-term capital projects … that defer the reentry of capital values into circulation into the future." The railway and BRI infrastructures offer China an opportunity to address chronic crises of domestic

overaccumulation of capital and avoid domestic devaluation (Wang, 2021). As Mitchell (2020: np) argues,

> [i]nvestment acquires its value not from the speed that brings things closer together, but from the delay that pushes things into the future. The infrastructure project is a device for stretching forward the passage of time. It is an apparatus for the creation of delay.

The delay through large infrastructures allows credit to extend far into the future. While the railway may eventually generate revenue, it is also engaged in a system of shareholding that allows claims on future values. The railway's real value comes from the delay that pushes the devaluation of capital into the future. Additionally, in a project like the railway, the loans will likely be restructured to extend repayment terms, offering further deferral. In this way, huge amounts of credit abroad support China's national development at home. Devaluation comes at the expense of the borrower, rather than of the creditor. This perspective helps us understand why the railway does not need to make short or even medium-term profit—it just needs to export surplus capital from China to avoid the effects of devaluation.

Mediating institutions

This "fix" in Laos was made possible by the commercial and state support for SOEs and the joint venture financing structure. A more immediate form of delay—that of capital for construction—illuminates this point and the complexity of China's global expansion. Many Chinese railway contractors considered Laos a safe place to invest because the railway is a BRI project with state support from both sides. However, since the Lao government was unable to put up their equity capital in full, loans for construction were not released from China EXIM Bank. Both Lao and Chinese laborers complained that they were not paid for months on end. The

capital for land compensation was also not available when construction began (see Chapter Five). When I asked bosses at construction sites about this, they said (with few details) that the money would come, but there were problems with the "Lao side."

I soon learned what was meant by the "Lao side." Chinese loans often have strict commercial conditions (in contrast to Western governance conditions) (Mohan, 2016). One such condition was that the Lao government provide US$250 million[39] up front before China EXIM Bank would release the remaining US$480 million. This condition was instituted by the bank to mitigate risk for Chinese investors, but it became a major roadblock to the project's funding. Due to capital limitations, the Ministry of Finance renegotiated the terms of capital input for equity to US$50 million per year for the five years of construction. In response, China EXIM Bank adjusted the capital-land ratio of Laos' equity input, agreeing to accept more land and less cash.[40] As a result, construction proceeded while both land compensation payments and laborers' wages were delayed for months, if not years.

The actual capital challenges of loan delay greatly affected Chinese SOEs and subcontractors, who ended up using their own resources to begin and maintain project construction. The Laos–China Railway Company joint venture awarded six engineering, procurement, and construction contracts to Chinese SOEs. These six SOEs were each assigned a geographical section of the railway and supervised subcontractors and materials suppliers on the ground. Capital for construction flowed through this hierarchy: first into the joint venture, then to

[39] This US$250 million would include land for the railway as well as all costs for compensation for expropriated land (I discuss the Lao state's capital challenges for compensation in Chapter Five).

[40] While I have not been able to acquire official documentation, my interviews were corroborated by the work of Wanjing (Kelly) Chen (2020).

the SOEs, and finally to the ground-level contractors. Since credit did not arrive on time, the joint venture and SOEs placed a significant financial burden on lower-level contractors. This did result in a sort of "trap," but not a geopolitical one. Lower-level contractors were "trapped" into putting up their own capital to keep operations running. One translator for a subcontracting company explained,

> I have not been paid in months. It is not so bad for me because in China we are used to waiting a few months or until the end of the year to be paid. But Lao people quit because they cannot wait.[41]

China's domestic development trajectories and political economy drive the "global China" phenomenon and support projects that are only partially focused on profit (Lee, 2017). This means that SOEs (which do try to maximize profit) can also take risks in their investments that a strictly profit-seeking enterprise could not. Long- and short-term deferrals and delays are possible because the nature and structure of both SOEs and the joint venture allows them to tolerate long-term risk or transfer it to lower-level actors. The commercially-oriented, yet state-embedded position of SOEs meant that construction proceeded despite the financial challenges.

Chinese capital and investment are, of course, not monolithic and have varying goals and interests. SOEs are engaged in both financing and construction of the railway and act as "part and parcel of the marketization of the Chinese state" (Yeh, 2016: 280). Though SOE motivations to engage in construction originated in Beijing and are connected to a wider "Chinese dream," they also face barriers on the ground, such as labor or capital shortages, local protests, or local corruption. In both construction and finance, the position of Chinese banks and SOEs blurs lines

[41] See Chen (2020) for a detailed analysis on the implications of the capital delay within Chinese labor camps and for railways laborers.

between d/Development (Yeh, 2016), geopolitics, and commercial interests (Mohan, 2021). Mohan and Tan-Mullins (2019: 1370) argue that "China's geopolitical ambitions are also geoeconomic and the country's hybrid state/private enterprises are ideally suited for infrastructure initiatives which combine state-backed finance with relatively closed tendering of construction contracts." Chinese finance continues to operate through a diverse set of actors without a cohesive strategy. To challenge the often-homogenous lumping of "China" and "Chinese state" interests, we must contrast Beijing's desires with the experiences of SOEs and subcontractors. Chinese SOEs are not wholly under the control of a central state or a grand strategy, but also do not solely pursue profit motives (Jones and Zou, 2017).

V. Conclusion

The financing behind the Laos–China Railway is indicative of the current moment in China's capitalist expansion through infrastructure frontier-making and d/Development. Mainstream discourse about the railway often depicts China as plowing through Laos. However, actually following the capital reveals a more complicated situation. The notion that Beijing's grand BRI strategy is intentionally creating nefarious conditions for debt-trap diplomacy or "hidden" debt is based only on fear. Though the railway itself will not be profitable, it is not intended to be a debt trap. Rather, it fulfills global China's logics of encompassing accumulation.

This chapter makes two contributions to Lee's concept of encompassing accumulation. First, large infrastructures and the BRI serve as a "spatiotemporal fix." Debt provides an outlet for overaccumulation by delaying the devaluation of domestic Chinese capital. We must think of capital temporally—beyond expanding across space, it also expands into the future. The deeply intertwined relationships between finance, debt/credit, and railways alongside China's current

crises of overaccumulation reveal that the railway and other large BRI initiatives are intended to sidestep domestic devaluation of capital.

Second, this deferral is possible due to the involvement of Chinese SOEs and the use of PPPs and joint ventures. These entities can either take on long-term risk or transfer risk to lower-level actors (as with subcontractors and laborers waiting on rail finance to come through). Because SOEs have both political and economic support, they have more tolerance for risk and more power to offload it. The commercial interests of Chinese SOEs and banks have enabled not only a spatial, but also an explicitly temporal fix for China's domestic capital. As such, I contribute to scholarship on global China by highlighting the multiplicity of actors and interests, and the lack of a centralized grand strategy on the part of "China."

China's attempts to navigate the problems of surplus capital have implications for other countries. On one hand, it motivates additional capital flows (Chapter Four) but, on the other, it displaces people from their land and livelihoods (Chapter Six). Finance capital and credit increase the flows of fictitious and speculative capital (Harvey, 2003). As the proposed economic corridor is rendered legible for other projects, these forms of capital are already beginning to materialize through real estate and investment. In the next Chapter, I examine the corridor and economic zone to theorize the processes that motivate speculative capital, namely corridorization, spectacle, and imaginative labor.

CHAPTER FOUR
CORRIDORIZATION, SPECTACLE, AND SPECULATION: REINVENTING ZONES OF OPPORTUNITY

I. Introduction

Travelers crossing the Boten-Mohan border from China into Laos pass through the "Belt and Road Lane" before descending concrete steps to the golden stupa marking the Lao border station (Images 4.1 and 4.2). A billboard greets visitors entering Laos: 磨丁:泛亚铁路老挝首站国际化的枢纽新城 "Boten: The first international hub and new city of the Trans-Asian Railway in Laos." Boten Special Economic Zone (SEZ) is the "first stop" in Southeast Asia on the Laos China Economic Corridor (LCEC) and Laos' largest project to date in terms of capital investment. It is a highly speculative space, envisioned and marketed as an international city that will host high-rise apartments and as many as 300,000 to 350,000 residents by 2035. Not yet a reality, laborers on the ground enact the zone through cycles of mundane, long work hours interspersed with lively performances of a city yet-to-be when VIPs or investors are in town. Boten has been (re)branded as a global city, propped up by the spectacle of imagined futures.





Image 4.1 (left). Exiting China to enter Laos along the Belt and Road Lane at the Boten-Mohan border crossing (Source: the author, 2019).
Image 4.2 (right). The miniature replica of That Luang stupa (the original is located in Vientiane) marking the Boten border crossing. (Source: the author, 2019)

A model displaying the future Boten SEZ sits in the main lobby of the zone developer's luxury hotel.[42] Visitors can press buttons to illuminate different areas of the model (Image 4.3), conjuring up, in Tsing's (2005: 58-59) words, "a world more dreamlike and sweeter than anything that exists." It is an imaginative tool that enacts a particular vision of the future; the model encourages guests, potential investors, and real estate buyers to imagine themselves as part of Boten's future development. Indeed, the ambition and scale of the SEZ project necessitate miniaturization to help participants—the laborers, salespeople, investors, buyers, and officials—to imagine their place within it. The model also defines the scope and parameters of the future—Boten is contained by a bounded vision, not open to further imagining. With a click of a button, the planned areas come to life: a central business district, agriculture, livestock and manufacturing parks, a cultural center, a five-star resort, golf course and tourism zone, an education institution, public health center, business and trade area, financial institutions, post and telecommunication, and warehouse and distribution logistics areas. This miniature replica is a tangible tool for imagining a specific future, imposing a pre-defined scope to contain and constrain.

[42] JingLan Hotel (景兰大酒店，磨丁) is located in the heart of Boten and owned by Yunnan Haicheng Group, the zone's primary developer.



Image 4.3. Model of Boten SEZ located in the JingLan Hotel, which is owned by the zone's primary developer, Haicheng Group. (Source: the author, 2018)

During Xi Jinping's visit to Vientiane in November 2017, the governments of Laos and China signed a cooperation framework to create the LCEC. The promise of railway connectivity transformed Boten and the LCEC into flagship infrastructures under the BRI. Despite past failures of corridors and zone models, they have reemerged as tools of development and accumulation in northern Laos. Boten is just one of the new or revamped economic zones within the LCEC. Following Xi's visit, a front-page headline in the *Vientiane Times* (2018) declared that the railway would "open doors for the establishment of SEZs" to attract and diversify foreign investment and reduce reliance on natural resources. However, as of 2020, investment remained China-centric, and the Lao government began to recommend agricultural intensification along the railway, and had approved 82 new mining projects to increase state

revenue and pay debts. The Ministry of Finance noted that "revenue from the exploitation of natural resources and concessions" could generate billions of US dollars in taxes from the two largest mining companies, LanXang Minerals and Phu Bia Mining. The mining prospects suggest an extractive frontier; however, frontiers are "also sites of creative, if often ruinous, production" (Cons and Eilenberg, 2019: 2). Frontiers "mark the construction of a new space of accumulation" (Watts, 2014: 194). Cons and Eilenberg (2019: 2) argue that frontier scholarship frontier must investigate "the various forces and processes that are assembled to reinvent these spaces as 'zones of opportunity.'"

This chapter examines the processes through which spaces are reinvented as zones of opportunity. It draws together theoretical insights about the corridor "from above," ethnographic perspectives from the streets of Boten, the visual and grandiose presentations of the city, and the performances of "miniature spectacle." First, I explore corridorization as a process of infrastructure frontier-making characterized by both enclosure and opening. Second, I review the precursors to the LCEC to argue that the spectacle of the BRI and the promise of infrastructure made the LCEC possible, despite the corridor model's past failures. The next two sections focus the zone that emerged with the infrastructural corridor. I first trace the revival of Boten from a defunct casino town to an aspirational global city, SEZ, and hub for licit accumulation. The final section is a grounded ethnography of the workers engaged in the infrastructural becoming. Labor is attracted to Boten by grandiose visions of what the city will become. However, once in the zone, daily life oscillates between drudgery and the production of small-scale events (miniature spectacles) to create a mirage of luxurious Boten for visiting elites and VIPs.

Etymological underpinnings

Stepping back, what is a corridor and what is spectacle? The etymology of the word corridor suggests their particular shape and purpose. The word originated from the Latin *currere* meaning to run, alluding to both speed and expansiveness. In 16th century Italian, *corridore* denoted a place for running. Interestingly, the meaning shifted in 16th to 18th century French military vocabulary to describe a "continuous path around a fortification" and similarly in Italian, "a gallery or long passage in a building or between two buildings."[43] In the early twentieth century, the connotation of fortification *around* gave way to an understanding of corridors as "strip[s] of territory of one state *through* another to give access, typically to the sea." Corridors, adopting a bird's eye view, contain nodes of connection, and themselves become forms of connection as well as nodes of disruption across space and borders. A corridor not only channels and connects, but also contains.

While I conceive of the corridor and zone together, I also treat the zone on its own, or, to draw on the *Vientiane Times* headline above, as a "door" to the corridor. Both the corridor and zone are discursive and material frontier spaces that create conditions for investment. The dual movement characterizing corridorization and the infrastructure frontier simultaneously encloses space for potential "development" and investment, while opening it to certain types of capital, "development," or exploitation. These processes render a particular enclosed space open for investment by containing it an imposing particular visions of the future. For example, the miniature model of Boten both encourages and directs what is possible within the contained space. Considering corridors from various vantage points is essential for understanding their shape and purpose (both material and imaginative).

[43] etymonline.com/word/corridor

Additionally central to this chapter, the search for financial capital to fund large-scale infrastructure construction and invest in new "zones of opportunity" depends on spectacle. *Spek*, the proto-Indo-European root of both spectacle and speculation, means "to observe." Both spectacle and speculation stir the senses and hold the interest of the spectator. They are accompanied by feelings of excitement or exhilaration derived from the act of viewing, observing, or visualizing. The word *spectacle* is also connected to visual conjuring and sensational images intended to awe. Early meanings of speculation, too, were centered on holding attention and rapt consideration. By the mid-15th century, the English meaning of speculation shifted to the "pursuit of the truth by means of thinking." In the 18th century, the definition of speculation reoriented around capitalism, with the first use of "buying and selling in search of profit from [the] rise and fall of market value" being recorded in 1774.[44]

Spectacle: a visually striking performance or display; a performance or an event that is very impressive and exciting to look at; a sight, showing, performance, display

From Latin:
spectaculum: "a public show, spectacle, place from which shows are seen,"
spectare: "to view, watch, behold"
specere: "to look at"
which was adopted in Old French:
spectacle: "sight, spectacle, Roman games" (13c.)
following by Middle English
spectacle or a "specially prepared or arranged display"

Speculation: 1) the act of forming opinions about what has happened or what might happen without knowing all the facts; 2) the activity of buying and selling goods or shares in a company in the hope of making a profit, but with the risk of losing money

From Latin:
speculationem: "contemplation, observation"
speculat: "observed from a vantage point;" *speculari* "'watchtower;" from *specere* "to look"

[44] This definition and the table that follow are derive from the Oxford English Dictionary and Etymology Online Dictionary.

and was updated in Latin:
specular: ""to spy out" or "to examine"
as well as in French
speculation: "close observation, rapt attention"
which travel to Middle English, late-14th century:
speculacioun: "intelligent contemplation, consideration; act of looking"
shifting in the mid-15th century to:
speculation: "pursuit of the truth by means of thinking."
and again in the 18th century:
speculation: "buying and selling in search of profit
from the rise and fall of market value."

Table 4.1 Etymology of spectacle and speculation.

In contemporary English, spectacle and speculation are still rooted in observation and anticipation, to see what is yet to be. Spectacle references visual and imaginative work, while speculation conjures a belief in future prosperity. Likewise, investment, infrastructure, and frontier all require looking forward, imagination, spectacle, and anticipation.

Speculation is more than calculation: "[i]t proceeds by making value uncertain and then projecting unseen ethical orders using technologies of imagination that can help navigate this uncertainty" (Bear, 2020: 2). Bear's technologies of imagination encourage reflection on the imaginative work needed to produce a vision of the future worth speculating on and investing in. Bear (2020: 8) contends,

> we speculate by using various technologies of imagination … including promotional brochures, branding, international agency reports, political visions, government inquiries, net present value calculations, risk analyses … [t]hese are deployed to anticipate the future; to stimulate its emergence; and to control it.

Spectacle spurs speculation. In Boten, this happens through models, plans, slogans, state-backed visions, marketing materials, and performances. Large spectacles of advertising and a hyperbolic capitalist sales-talk produce images of the future to attract regional capital and bolster legitimacy.

Holding people's attention requires rhythms and cycles, pauses amidst the often-frenzied calculus of speculation. Investment, by its very nature, entails imagining, wagering, and speculating on an uncertain future (Tsing 2000; Beckert 2016). Rippa, Murton, and Rest (2020: 84) write that "[l]ong before their actual construction starts, such projects[45] already work as a promise for future prosperity and connectivity and lend legitimacy to logics of the 'state' in areas historically difficult to access and hard to govern." These projects both serve *as* a promise and work *on* promises. In this way, frontier-making entails imaginative work (Tsing, 2005: Cons and Eilenberg, 2018). For Tsing (2003: 5102), the frontier is not a place in itself but an "imaginative project capable of molding both places and processes."

Spectacle encourages speculation, and together, they make capitalist frontiers (Tsing, 2003). Finance capital must perform an "economy of appearances"—the self-conscious making of spectacle needed to gather investment funds (Tsing, 2005: 57). For example, in Tsing's (2005) work on Borneo, Canadian mining companies routinely "conjur[e] the spectacle of hidden treasures and huge finds in order to attract investment funds" needed to actually begin prospecting. The real estate market and zone development within China are similar—spectacle (often state-driven) is conjured before profit is demonstrated. Frynas et al. (2017: 233) argue that "shared aspirations and expectations alone may make for material political and economic outcomes even when they become visibly divorced from reality." In Laos, an economy of appearances initiated by corridorization renders the broader landscape "productive" and "investable." The spectacle and anticipation of connectivity suggest prosperity, though no one

[45] Here, they refer to highly visible, new large-scale infrastructures of dams, railways, and highways.

has yet prospered. Infrastructural hype acts as an index of progress, development, and modernity, stirring expectations and inspiring anticipation, despite past failures (Anand, Gupta, and Appel, 2018; Harvey, Jensen, and Morita, 2017).

II. Corridorization: Channeling flows, containing flows

Corridors have a variety of purposes. They enable visions of hyperconnectivity and the movement of people, capital, and things. A number of Chinese language sources note that the purpose of the LCEC is to channel: "People flow, flow of materials, capital flow, information flow" ("人流、 物流、资金流、信息流") (Fang, 2019: 86). Corridors are shaped to facilitate certain movements, investments, and flows. They flatten space, often for state control, and operate as a technology of enclosure (Rippa, 2020). Corridor discourses emphasize the importance of the market and private sector for development. The material outcomes of such visions entail a network of hard infrastructures meant to stimulate the economy and boost GDP. Such infrastructures typically include roads, railways, ports, and special economic zones (like Boten) linking vast areas to trade, regional integration, and economic development.

Corridorization, however, is about more than connectivity. It entails an iterative process of enclosure and opening—a dual movement that simultaneously encloses space but opens it to certain types of capital, "development," or exploitation. As such, corridorization is also a process of frontier-making, as it renders space open for investment, while directing it along a certain enclosed space. Like the miniature model of Boten, the corridor contains and channels, managing what is possible within a given space. Corridorization thus not only imposes space within its limits, but also directs the movement of capital, resources, and people. The corridor as a

container and channel creates different spatial configurations and operates across multiple scales spanning regions, states, and localities.

Corridors did not originate with the BRI, though they are a key component of it. A long history of connective infrastructures preceded and informed the BRI.[46] Trade routes and pathways have crisscrossed northern Laos for centuries. The BRI builds on an economic corridor model that was introduced in the 1990s to connect South, East, and Southeast Asia. The LCEC's precursors, namely the Greater Mekong Subregion (GMS) program and Yunnan province's North Plan, have been brought under the BRI umbrella.

Corridor plans discursively frame northern Laos as a frontier—a space to be remade for production, accumulation, and regional integration. For this reason, the two main Greater Mekong Subregion (GMS) corridors in Laos—the Northern Economic Corridor (NEC) and East-West Economic Corridor (EWEC)—were built along roads and near borders to better direct and contain flows of capital and people. The NEC (Road No. 3 through Luang Namtha and Bokeo Provinces) connects China, Laos, and Thailand, while the EWEC (Road No. 9 through Savannakhet) connects Thailand, Laos, and Vietnam. Unlike these corridors, the LCEC will cut through the center of northern Laos, far from the borderlands. It follows Route 13 (the main paved north-south highway), the Laos–China Railway, and the new Expressway from Vientiane through Luang Prabang, Oudomxay, and Luang Namtha provinces. Such models frame the corridor as a development tool, highlighting economic growth and investment potential in northern Laos. Corridors also integrate multiple large infrastructures into a networked megaproject to initiate or bolster trade and investment along transit routes. In Laos, the

[46] See Chapter Two for more detailed analysis on the GMS corridors in Laos as precursors to the BRI.

government views the corridor as an opportunity to facilitate investment flows and expand transit routes beyond existing regional centers such as Bangkok, Kunming, and Ho Chi Minh City.

The LCEC provides a platform for other infrastructures, BRI projects, and increased investment from and integration with China. As such, corridorization produces an infrastructural land rush whereby the possibility of connectivity spurs new streams of investors spanning agriculture, business, urbanization, tourism, and manufacturing.[47] The LCEC has sparked the imaginations of investors, officials, and laborers and has (re)rendered the land investable. The "re" acknowledges that this land is far from marginal; the railway passes through some of Laos' most populated and resource-rich regions. Some projects in the corridor, such as the existing special economic zones, the railway, or agricultural investments, long preceded any notion of a corridor, providing the material geographies on which the revived corridor visions were built. Corridorization thus reconfigures space by encouraging investments in infrastructures, zoning technologies, land concessions, and industries such as mining and agriculture. As I note in this chapter's introduction, the corridor is both discursive and material. Neither the material nor the discursive necessarily precedes the other—they are mutually reinforcing.

[47] To borrow Li's (2014: 594-595) use of *rush* instead of *grab* because "what is distinctive about the intensified interest in global farmland since 2008 is its temporality and scope, not the mechanisms, processes or impacts of land acquisition, which have a long history. The virtue of "rush" is to put it in a series with other land rushes, gold rushes and crop booms" (Alden Wily 2012; Hall et al. 2011). The characteristic feature of a rush is a sudden, hyped interest in a resource because of its newly enhanced value, and the spectacular riches it promises to investors who get into the business early. Hence, rush. Do it now before others spot the value, and the profit margins decrease. Fund managers call this the "first mover advantage" (Daniel 2012: 705).

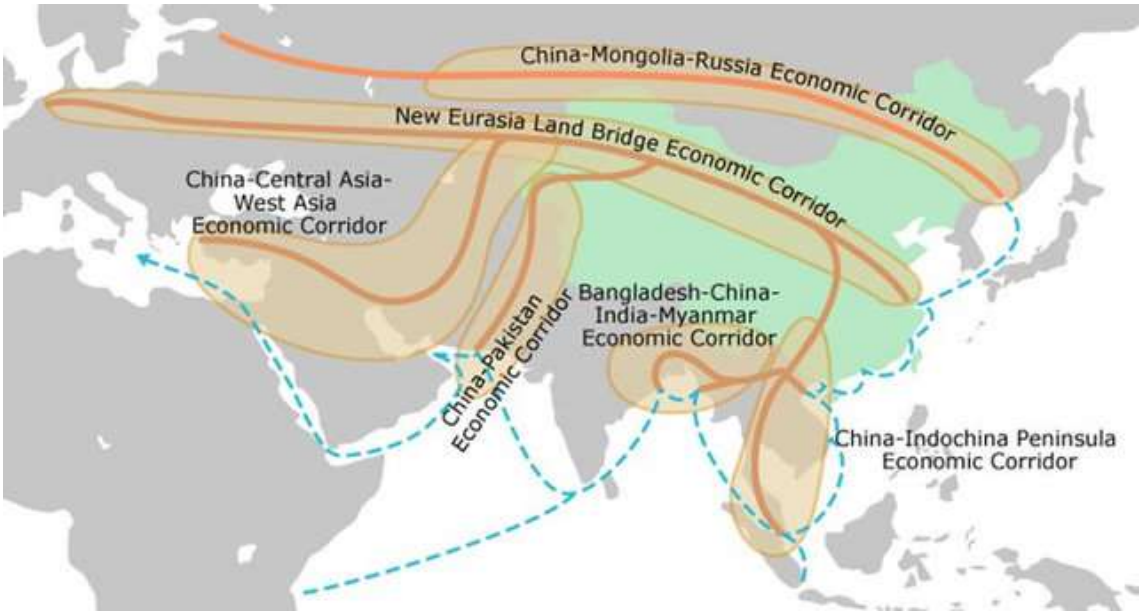
State visions, campaigns, and support

Ong's (2011) insights on hyperbuilding are especially relevant for the corridor and zone, as both are deeply rooted in state aspirations. She suggests that infrastructural transformations are never exclusively tools of global capitalism but also connected to the state. Ong (2011: 224) writes, "[h]yperbuilding is about the world aspirations of the state" and must be connected to the "national environment and aspirations." Both Laos' and China's future-oriented visions of connectivity are part of the spectacle reviving past corridor plans. Corridorization, in this case, has high-level support from both central and provincial governments. The LCEC is framed as a vital component of the BRI, with SEZs being critical for rapid growth. During a PRC Ministry of Commerce sponsored workshop for Lao government staff, a director from Tianjin TEDA reaffirmed that, "for the host country, the construction of SEZs must be a state act. It is beyond imagination to exclude government involvement during construction."[48]

Corridorization often entails joint government efforts. From the Lao perspective, the corridor is an integral step to becoming a "land-linked" country, a goal not achieved by earlier corridor and infrastructural proposals (see Chapter 2). The idea of the corridor is produced and formalized through high-level state framings and agreements. Such agreements tend to reproduce mainstream development discourses centered on improvement and growth that position corridors as a means to boost the overall economic development of a country or region and improve the lives of local people. The corridors are based around large-scale transport infrastructures and adjoining urban and industrial expansion; however, myriad investments and marketization extend beyond these linear transport infrastructures.

[48] Workshop for Lao government staff in Tianjin, China on the "Construction and Management of Development Areas for Laos, 2018," sponsored by the PRC's Ministry of Commerce.

In November 2017, during Xi Jinping's visit to Laos, the two countries signed a Memorandum of Understanding (MOU) to "Jointly Promote the Construction of Laos–China Economic Corridor" and issued a joint statement proposing to "build a China-Laos economic corridor starting from Yunnan Province of China, relying on China-Laos railway and passing through several important node areas." The following month, Chinese Foreign Minister Wang Yi cited the upcoming "10th anniversary of the establishment of the China-Laos comprehensive strategic partnership" to promote "China-Laos Economic Corridor cooperation, especially on the construction of China-Laos Railway as an impetus" (*Xinhua*, 2018). In 2019, the Chinese government sent the Lao government the LCEC draft cooperation framework for a range of sectors from energy and agriculture to mining and tourism. Later that year, at the second international BRI forum in Beijing, Lao president Boungyang Vorachith signed the LCEC development framework 2019-2030, which outlines a broad arena of economic cooperation and integration between northern Laos and Yunnan including transportation and logistics, energy resources, agriculture, processing and manufacturing, investment and finance, cultural exchanges, and tourism. As the North Plan illustrated, corridorization requires both central- and provincial-level conjuring. The present LCEC plan began at the central level but now has been assigned to provincial actors. For example, the Yunnan Province Development and Reform Commission will enact the "Implementation Plan for the Construction of Yunnan Province's Services and Integration into the China-Laos Economic Corridor (2020-2025)" (云南省服务和融入中老经济走廊建设实施方案, 2020-2025). This plan promotes industrial parks and tourism zones in the corridor through railway, highway, and waterway connectivity.



Map 4.1. Belt and Road corridor imaginary. (Source: https://research.hktdc.com/en/article/MzYzMDAyOTg5)

Geopolitically, the corridor signals the Chinese state's resolve to transform their border with Laos into a primary overland route to the Southeast Asian market. This expands the geoeconomic potential in state capitalism's addiction to exploiting "unexplored" and "unlikely" terrains. Despite the failures of the GMS and North Plan, economic corridors and zones have been repackaged as a form of win-win development and positioned at the core of the BRI (Liu and Dunford, 2016). In his 2013 speech introducing the BRI, Xi Jinping highlighted six major economic corridors underpinning the entire initiative: the China-Indochina Peninsula, China-Mongolia-Russia Economic Corridor, New Eurasian Land Bridge, China-Central Asia-Western Asia Corridor, China-Pakistan Economic Corridor, and the Bangladesh-China-India-Myanmar Economic Corridor (see Derudder, Liu and Kunaka, 2018). He emphasized the need to "improve the transregional logistics network and promote connectivity of policies, rules and standards so as to provide institutional safeguards for enhancing connectivity." The BRI, with its sweeping

depictions of corridors radiating out from China, has revived the corridor model. The China-Indochina Peninsula Economic Corridor (CIEC)—of which the LCEC is an essential part—connects Southwest China from Kunming and Naning with countries on the Indochina Peninsula. Today, the 2500-kilometer CIEC consists of nine cooperation areas: infrastructure, industrial parks, agriculture, tourism, livelihoods, finance, technology development, and human resources training (Fang, 2019). Both the Lao central government and Chinese investors believed the northern provinces to have a high potential for agribusiness, mineral resources, and ecotourism, and so the central government asked provincial governments to develop plans to share with foreign investors.



Image 4.4. A page from the Haicheng company brochure for Boten, highlighting the high-level political backing of the project.

Chinese projects affiliated with the central government or a national development campaign easily obtain investment because they offer buyers and developers a sense of security. In order to attract primarily Chinese investors, the Chinese state has supported Boten as a priority BRI project, encouraging investment as part and parcel of development. As a popular Chinese-language article on zone investment heralds, "[f]or Chinese companies interested in investing locally, the preferential policies of Boten Special Zone are brewing a powerful business opportunity. (而对于有

意前往当地投资的中国企业而言，磨丁特区的政策优惠正在酝酿起一股有力的商机). The large marketing brochure that investors receive while in Boten foregrounds the high-level bilateral agreements between the Lao and Chinese governments, featuring prominent photos of top politicians shaking hands. The caption indicates to readers that the two countries signed the "Common Overall Plan for the Construction of the Mohan-Boten Economic Cooperation Zone in Laos, China" on 31 August 2015 (MoFA, 2015). On 28 November 2016, they signed the "Master Plan for the Common Development of the Mohan-Boding Economic Cooperation Zone in Laos, China." One photo (left) shows Xi Jinping with Choummaly Sayasone, the former Lao President and General Secretary of the Lao People's Revolutionary Party (LPRP). The other photo (Figure 4.4) depicts Thongloun Sisoulith, Laos' current president and former Prime Minister and Foreign Minister shaking hands with Li Keqiang, the premier of the State Council of the PRC. The heading advertises the BRI as win-win cooperation between the two countries ("一带一路"倡议两国合作共赢) and brands Boten the "development engine of China-Indochina Peninsula Economic Corridor" (中国一中南半岛经济走廊的发展引擎).

Simultaneously, the Lao government enacted preferential policies such as eliminating taxes on building materials and imported goods, multi-year tax incentives, cheap land, significant investor autonomy, and Lao citizenship for those who invest more than US$10 million. The real estate salespeople working for Haicheng are familiar with national policies on both sides of the border, which they deploy as part of the economy of appearances. Investors are not only investing in real estate but also place faith in the state, state-owned enterprises, and future development visions. Thus, states contribute to spectacle and speculation by presenting a bustling corridor and burgeoning border as both a development imperative and an investment opportunity.

In sum, the process of corridorization brings infrastructure to the so-called frontier to make it available for speculation and investment. Space is enclosed and then re-imagined to be open for investment. Past corridor visions are revived with strong state backing, offering security for developers and investors. However, unlike past corridors, the LCEC focuses on tourism, real estate, and investment opportunities that are connected to the railway. Economic zones and, increasingly, urban areas are often initiated in corridors and viewed as necessary for their "success." Zones are portrayed as a safe longer-term investment opportunity backed by strong state support. The next section delves into Boten Special Economic Zone (SEZ) to frame corridorization as an iterative spectacle that positions frontiers as rife with opportunity.

III. Seeing the world from Boten



Image 4.5. Graphic rendering of Boten's imagined future skyline that is included in Haicheng's marketing materials. (Source: Haicheng)

"A city *is* rising out of the jungle," remarked my Lao colleague Siphong, eyes wide as we approached Boten. It was July 2019 and the summer air was heavy and thick with the dust kicked up by dump trucks buzzing between construction sites. We soon heard the familiar sound of explosives used to level the mountainous landscape and create alternating patches of razed red earth among dense green forests. Boten, renamed "Boten Beautiful Land," is being rebuilt by a Chinese real estate developer for primarily Chinese investors. Established in 2003, Boten was

one of the first SEZs in Laos and, like most SEZs, offers trade, tax, and investment incentives. The SEZ, spanning 1,640 hectares, is located in Luang Namtha province, just across the border from China's Xishuangbanna Dai Autonomous Prefecture and the small town of Mohan, Yunnan. It is part of the larger 3,430-hectare Mohan-Boten Economic Cross-border Cooperation Zone. This was Siphong's first visit to the zone: "I've never seen anything like this. It's not Laos anymore," she stated in disbelief. Indeed, many of the buildings tower above those found in the capital, Vientiane, and the widespread use of the Chinese currency, language, and time zone have prompted intense debates about sovereignty and overlapping state power (Nyíri, 2012; Tan, 2012; Laungaramsri, 2019). The issues of sovereignty aside, she was awed by the ornate city skyline emerging from the expansive area of flattened orange earth.

A brief history

As a border and frontier area, Boten has undergone dramatic changes over the past two decades. It has evolved from remote border crossing, to booming casino town, to bust border town, and now an active construction site and city in-the-making. Prior to and through the 1980s, Boten was a small border village, peripheral to state reach. Only a small gatehouse stood near the border crossing (see Image 4.6 of the border in 1986 and 1993). After Laos' economic opening and the rekindling of diplomatic relations with China in the late-1980s, Boten became more important. Boten-Mohan was the primary international border crossing between China and Laos in the early-1990s.

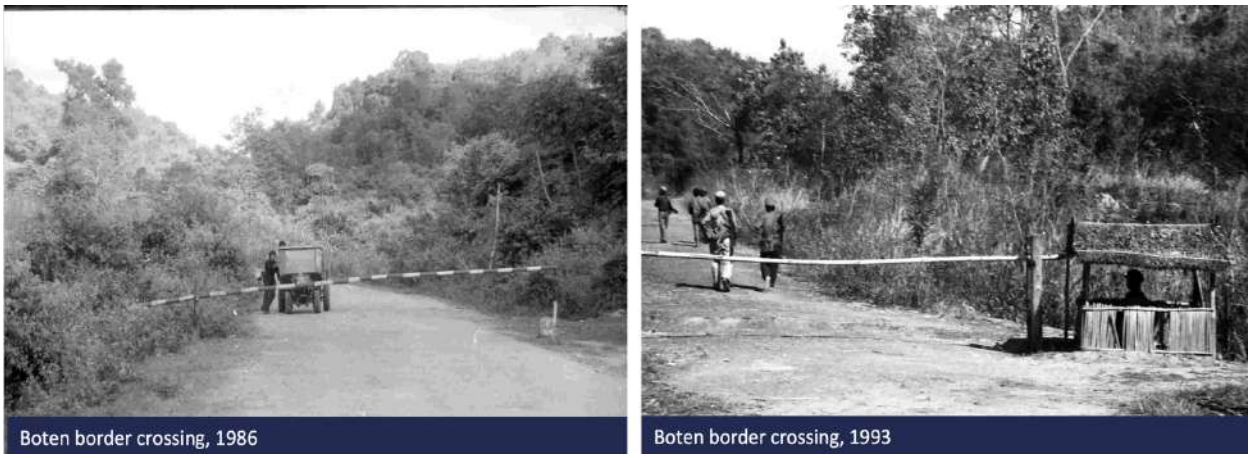


Image 4.6. The border gate in Boten in the 1980s and 1990s. (Source: Historical archives, Vientiane, Laos)

By 1995, the Luang Namtha district authorities had designated a small commercial area along the road to encourage trade with China (Nathan Associates, 2003). This sparked the first of multiple resettlements and reconstructions. The existing shops, homes, and restaurants were razed and rebuilt the following year on a strip of land that ran parallel to the main road. In 2003, Boten was designated one of Laos' first SEZs by a government experimenting with a market-oriented economy. The local community—a Tai Lü ethnic group that farmed the land—was relocated in the early-2000s. Creating the corridor required the erasure of previous livelihoods and the razing of small homes and agricultural land to make way for the small commercial area along the dusty two-lane highway (Image 4.7 for the expansion of Boten from 1985 to 2020). The original village of Boten was relocated approximately 18 kilometers south to the village of Nateuy in Luang Namtha province as well as approximately 6 km south on the main highway to Bopiat village, which is now known by the Chinese workers I often visited with as 新家 (*xīnjiā*) or "new home/village."

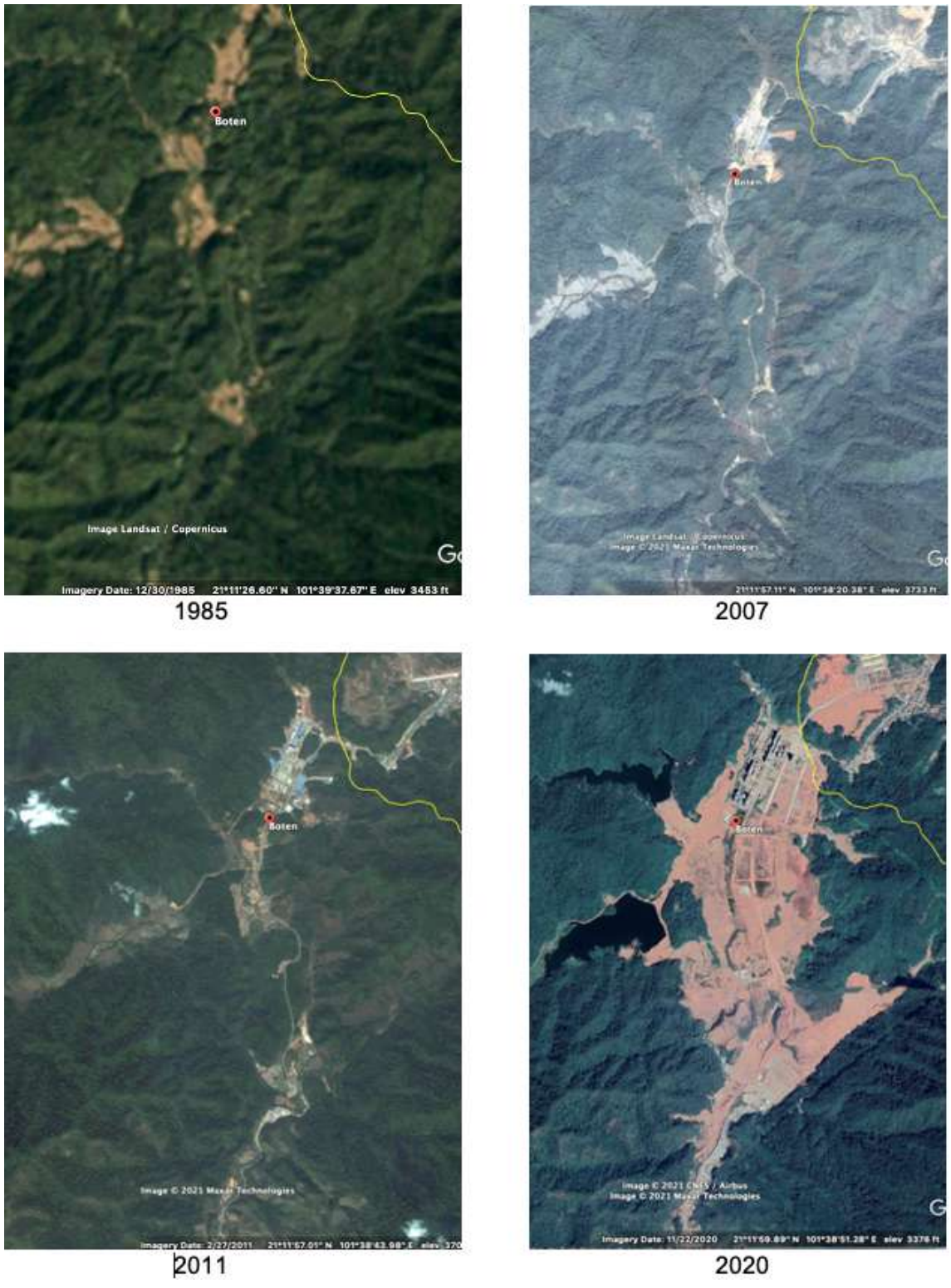


Image 4.7. Satellite imagery from 1985, 2007, 2011, and 2020 showing that land has been progressively razed since Boten was dubbed an SEZ. The latest round of investment has called for the bulldozing of a vast area surrounding the original village. (Source: GoogleEarth assembled by the author, 2020)

In Boten's first zone iteration, spectacle—particularly around illicit activities—was deployed as a tool for accumulation. Gambling was illegal in neighboring China and Thailand, making Boten an appealing and accessible place for people from both countries to visit casinos. Not unlike present-day corridor visions, Boten at that time facilitated the movement of people and capital between places. In northern Laos, past efforts to rapidly establish new urban nodes centered around casino tourism, attempting to replicate the gambling economies of Singapore and Macau. Boten was one of two major casino towns built along the previous GMS NEC. Both zones have since been criticized for detrimental impacts on local residents including, but not limited to, forced displacement, erasure of existing livelihoods, gambling problems and asset losses, and violent crimes (see Sims, 2017). Like the earlier displacement of people, this shows how corridors not only enclose but also "erase" any people, livelihoods, and places that may impede the directed movement of other people, capital, materials, or resources. Boten, the casino hub, was first developed into an SEZ by Fuk Hing Travel Entertainment Group. The private Hong Kong developer and investment company leased the land for 30 years, with the option to renew it twice, to build hotels, casinos, bars, and massage parlors. "Boten Golden City" officially opened in 2007 and attracted thousands of tourists and gamblers from China and Thailand in its heyday.

The Golden City quickly developed a reputation of lawlessness and violence; it was rife with crime, prostitution, gambling. The small outpost was flush with as many as 4,800 Thai, Chinese, and Lao visitors at a time (Nyíri, 2012). People could cross the border without a visa, and money lenders, loan sharks, and sex workers also took up residence. Chinese citizens with gambling debts also began to disappear. As one zone employee who had only been in Boten for a

year explained, “we don’t know many details, but everyone who works here knows the rumors about the gambling and murders.” By early 2011, reports of indebted Chinese gamblers being held hostage or murdered led to its shutdown. With pressure from Beijing, the two governments intervened. China cut telecommunication and electricity services to the zone, while the Lao government banned all casinos and visa-free entry. The booming border town went silent. As one Chinese woman who has run a shop in Boten since the boom days in 2009-2011 put it, “I don’t know if we will ever have so many people come here again.”

I saw what she meant on my initial visits to Boten, which felt more like a dusty construction site. However, I returned to the one square kilometer (if not less) of Boten streets over multiple visits between 2017 and 2020 and walked with the people who inhabit these few blocks today. On each passing visit, the streets took on new life and momentum. My first trip in 2017 was not unlike Rippa’s (2021) description of Boten in 2016 as in ruins and a state of suspension for those working in the zone as they waited for development. However, with subsequent visits the construction site morphed into a small city and a very lived in space. The evenings were increasingly lively and late as I spent time circulating between the “old” and “new” Boten for dinner, drinks, games, or karaoke with various company employees, who were breathing life into the visions of a global city.

Visualizing “Boten Beautiful Land”

Contemporary Boten has been rendered investable through four visions: licit activities, international connectivity, the promise of an ecological and prosperous global city, and development for Laos. As Tsing (2005: 74) reminds us, “[w]hen the spectacle passes on, what is left is rubble and mud, the residues of success and failure. People with other stakes and stories

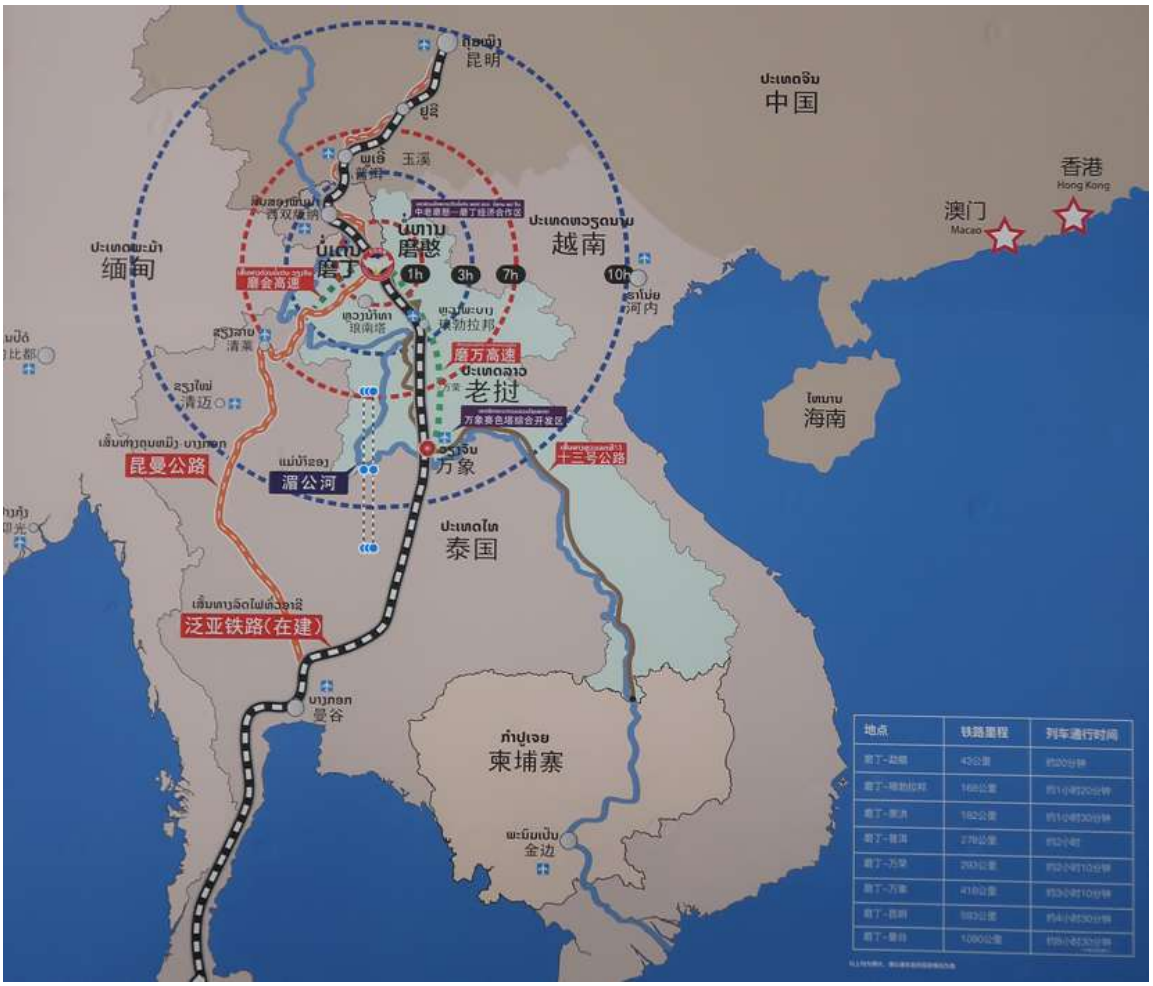
will have to pick up the pieces." The zo ne was only revived because of the international and regional connectivity offered by the railway and corridor. Today, the Golden City has become "Boten Beautiful Land"—envisioned as an urban hub city with high-rise apartments and a new airport. Boten became a high-level project after the initial 2010 agreement to construct the Laos–China Railway. In April 2012, a 50-year land lease, with options to extend, was awarded to Yunnan Haicheng Industrial Group (海诚集团) and the Lao government established preferential development and investment policies.[49] The two governments also signed an Agreement for Joint Construction of the China-Laos (Mohan-Boten) Cross-border Economic Cooperation Zone (ECZ) in 2015. While Haicheng won the contract for the SEZ in April 2011, reconstruction only began after four years of planning and negotiation. In 2016, they signed another agreement to accelerate urban development with the goal of building a city for 300,000+ people, complete with education and health facilities, a central business district and financial center, tourist attractions, and a logistics and duty-free area. These projects have been subcontracted to various Chinese construction companies with big plans and budgets, including Power China and Sinohydro. Haicheng initially attracted subcontractors and investors by advertising Boten as the first stop on the railway and a gateway to SEA.

On that hot summer afternoon in 2019, Siphong and I arrive in town. We decide to stop by the sales office for an update on the construction and expansion. Boten's "technologies of imagination" (Bear, 2020), the models, brochures, branding, and visions, are centralized in this

[49] Established in 2000, Haicheng is headquartered in Kunming with subsidiaries in Xishuangbanna and Pu'er and over 2,000 employees. Its business activities span five sectors: real estate development, tourism, hotel operations, property services, and construction/engineering. They have moved toward a dual strategy of real estate and tourism, a model the company claims to have proudly refined elsewhere, particularly in their newer international work.

office. The air-conditioned room's walls are decorated with the logos of companies who have already invested. I hear my name and turn around to see Duixun, who I met on my second visit to the zone; he is responsible for attracting both residential and commercial investors from China. He waves and quickly walks past with potential investors or apartment buyers—it is hard to tell the difference except with the highest-level investors who are accompanied by an entourage. Duixun donned a trendy pair of round wire-rimmed glasses and his uniform, a light blue collared shirt, and dark pants. He looked sharp and was self-assured in the script he recited for each potential real estate buyer or investor, selling them the appearance of success. After all, in the economy of appearances, speculation on real estate relies not on demonstrated occupancy, but "assessments of desirability and growth … [and] attractiveness" (Tsing, 2005: 75). Investors make decisions based on appearances: "[t]hey cannot afford to find out if the product is solid; by then their chances for profit will be gone" (Tsing, 2005: 75).

After his clients leave, I introduce Duixun to Siphong. Duixun shares, in broken Lao language, that he too is a local, having grown up in Mohan before moving to Jinhong and Kunming. He ushers us into the main showroom, located in an older building that will eventually be demolished to make way for new high-rises. The tinted glass door swings open to reveal the miniature model of the new Boten. Duixun proudly proclaims, "here is the city model; we expanded it since you were here." Above the model, a large regional map depicts Boten at the center of concentric circles denoting travel times to major urban areas. Hong Kong and Macau are marked with conspicuous stars.



Map 4.2. Map of mainland Southeast Asia with Boten at the center. The map shows travel times from the zone and the railway line (black and white line) running from China to Singapore. (Source: Haicheng's sales office in Boten SEZ, 2019)

The concentric circles surrounding Boten are reminiscent of the pre-imperial mandala style representations of kingdoms across Southeast Asia (See Map 4.2). The mandala (Wolters, 1968) and the "galactic polity" (Tambiah, 1977; 2013) models were proposed to differentiate Southeast Asian and European conceptions of the state. Stuart-Fox (1994; 1997) describes the history of the kingdom of Lan Xang in modern-day Laos as a mandala.[50] Boten was never

[50] Wolter's explains that (1999: 17) "the mandala represented a particular and often unstable political situation in a vaguely definable geographical area without fixed boundaries and where smaller centres tended to look in all directions for security. Mandalas would expand and contract

located at the center of the 14th-century kingdoms; it would have been at the edge of Champa or Angkor and likely was part of Scott's zomia—an area of state avoidance (see Hjorleifur Jonsson, 2010 for critiques of this perspective for mainland SEA).



Map 4.3. Overlapping mandalas of 14th-century Southeast Asian kingdoms of Lan Xang, Lanna, Sukhothai, Khmer, Champa, and Ayutthaya, represented in a similar form of concentric circles that locate Boten as an important center on the regional map. (Source: Wikipedia)

Back in the showroom, a promotional video loops on a 15-foot screen. Its images breathe life into the tiny model streets before us. The video shows people wearing suits hurrying to work, children attending school, trains pulling into the station, and visitors sitting by the lakeside to watch Lao dance performances. These images help the sales team sell the promise of a bustling future, of trade centers and tourism of elephant camps, an ethnic village, hot-air balloon rides, and resorts. Miniaturization and the video render the world-to-be perceptible through imaginative and representational work (Pemberton, 1994; Varutti, 2011). As modes of Chinese tourism have drawn on the miniature to inspire "civic seeing" through display of material culture of ethnic

in concertina-like fashion. Each one contained several tributary rulers, some of whom would repudiate their vassal status when the opportunity arose and try to build up their own networks of vassals."

minorities (Varutti, 2011: 1), so the miniature here is meant to inspire. Images, maps, and models reduce and contain particular visions that encourage speculation and consumption.

Chinese overseas investment has begun to use special economic zones for city development and consumptive infrastructures, rather than solely as productive spaces like manufacturing or technology parks. As Keller Easterling (2014: 25) writes:

> The zone has not always been the world's global urban addiction. Once relegated to the backstage, it has, in the space of a few years, evolved from a fenced-off enclave for warehousing and manufacturing to a world city template. Yet the wild mutations of the form over the last thirty years only make it seem penetrable to further manipulation.

Since Haicheng Group took over the design and construction of Boten, the zone has been envisioned not just as a model city, but also a model BRI project and the largest inland port on the Indochina Peninsula. Duixun describes the developer's version for the city-in-the-making using a laser pointer to indicate features on the 25-foot model. He explains that the SEZ consists of four industry clusters: "currently, major construction is on the Northern Commercial and Finance Center, tax-protected area, logistics park and train station, business center, and scenic spots."

The casino border town is long gone and the current developers emphasize the licit nature of activities and investment. Zones often became hubs of illicit activity and spaces of extraterritoriality (Meehan et al., 2021; Holden 2017; Nyíri, 2012), however, such illicit capital paved the way for the current licit strategies, which are part of China's effort to legitimate overseas investment as desirable, legal, and win-win. The BRI brings licit urbanization in the form of real estate, tourism, and vast logistics hubs. Both the Lao and Chinese governments underscore Boten's "strategic location" at the border and within a BRI corridor. Haicheng and

the Lao government have explicitly endorsed licit activities and have upheld the 2011 casino ban. According to Vice Chairman of Haicheng Group, Zhang Jian, the zone will play a key role in trade and logistics, noting that:

> in order to seize the strategic opportunity of the BRI, we are planning Boten and participating in railway construction near the Boten section. In the future, we hope to undertake more capacity transfers such as domestic machinery assembly, light industrial textiles, and food processing. Various types of employment training have also been designed to solve local employment problems and achieve a win-win situation.

Over dinner, the Director of Boten's Merchant's Bureau explained that so many investors are interested in the zone that his office regularly asks them to wait for construction to finish. Even in everyday conversations, zone promoters (whether company or state) suggest that investors are beating their doors down. As Campbell (2015: 98) shows in Brazil, so Boten demonstrates that "the dynamics of contemporary capitalism depend as much on the *appearance* of wealth, easy money, and triumphant commoditization as on their material realization."

The zone is often considered a blank slate for urban development (Bach, 2019) or a city without history (Oakes, 2019). Like many Chinese SEZs (in and out of China), Boten is modeled on Shenzhen SEZ (Yueng et al., 2009; Bräutigam and Xiaoyang, 2011). On the streets of Boten billboards line the only highway running south from the border, advertising the grandiose emergence of a global city, one to rival Shenzhen. Before designing the zone, Haicheng's team visited Hong Kong, Shenzhen, Chiang Mai, and Luang Prabang for inspiration. They aimed to craft Boten as a modern mega-city rooted in an imagined, idyllic Southeast Asia (DiCarlo, 2020a). Haicheng's advertisements follow suit, crafting a spectacle for investors and tourists alike. A promotional tagline on the cover of the thick marketing brochure proclaims, "磨丁新城

新财富” or “New fortune/wealth in Boten new city.” The zone has become a space of anticipation, boasting promises of regional connectivity and modernity rooted in local concepts of nature and culture.

Haicheng’s sales campaign is primarily targets investors in Yunnan province. The Merchant’s Bureau was in the process of contacting nearly one hundred carefully screened potential investors. “These are not only trustworthy investors,” the director explains, they also “pay attention to Southeast Asia and follow developments in the Mohan-Boten Economic Cooperation Zone and have come to Boten SEZ to meet with my office.” Other investors, introduced through Chinese government agencies, typically made appointments with the Merchant’s Bureau before visiting. Residential investors and individuals arrive in Boten on their own accord after learning about the project through ongoing marketing campaigns.

Many apartments had been sold and plans existed to expand the marketing campaign throughout China if sales ever slowed. However, it appeared the word had spread since many people I spoke with were visiting from Liaoning province in northeast China. These prospective buyers sought an apartment in a warm location and were also excited about Laos’ lower cost of living. Many learned about Boten as an investment opportunity via the internet and the circulation of Haicheng’s early marketing campaigns. Investors answered the call of headlines like, “Seize the opportunity of the flourishing age to create the miracle of the border city between China and Laos” (把握盛世之机，创造中老边境城市奇迹). In one of Haicheng’s brochures, a spectacle of fireworks illuminates a Disney-like castle with a cityscape in the background (Image 4.8).



Image 4.8. A page from one of Haicheng's brochures advertising Boten as a new international city with a spectacle of fireworks behind a Disney-like castle and cityscape in the background. (Source: Haicheng)

Marketing materials for "Boten Beautiful Land" repeat refrains of "vitality and tranquility" and "ecology and economy" (Table 4.2). A series of poetic advertisements accompany photos of Lao villages, elephants, and mountain landscapes. Aligned with Chinese state discourses on ecological civilization and appealing to Chinese middle-class tastes, the zone-city offers modernity surrounded by lush forests and "authentic culture." Such discourses appeal to buyers and investors from China while also highlighting the lack of similar investment opportunities within China.

走进磨丁时间—— 静谧与活力交融之下的枢纽新城	**Enter Boten Time— A new hub city blending tranquility and vitality**
倘若给她贴上一个单一的标签、会显得既不客观又不准确。磨丁绝非纯粹的旅游区域、也并非冷峻的工业化基地。	If she is given a single label, it would appear neither objective nor accurate. Boten is by no means a pure tourist area, nor a grim industrial base.
磨丁宛如仙境的热带雨林化身成绿色海洋荡漾于此。在繁茂原始森林的掩映下、现代化高楼显得格外有活力，磨丁这座城市将原始风情和现代风范巧妙地融为了一体、具有视觉冲击力的妙趣景象跃入眼帘。	Boten is like a fairyland, tropical rainforest transformed into a green rippling ocean. Under the canopy of lush virgin forest, the modern high-rise buildings are particularly vibrant. The city of Boten cleverly blends original and modern styles into one, with visually striking impact.
从拂晓到黄昏、再到暮、地平线上的磨丁一直在平衡着生态自然与建设发展之间的尺度。森林、楼、要有；生态、经济、都要。	From dawn to dusk and back to morning twilight, Boten on the horizon balances ecological nature and construction development. There must be forests and tall buildings; both ecology and economy.

Table 4.2. Advertisement of Boten shared on WeChat by Haicheng Group.

The zone as palimpsest

While Boten is portrayed as a tabula rasa, the rubble of past infrastructures layer onto its visions of modernity. Here, infrastructures are not just the pipes, concrete, and materials of the old casino town, but also the local and regional topological and cultural contexts that existed before SEZ construction. Facets of these contexts are replicated in the new city architecture and deemed essential to reviving Boten. Some, like the casinos transformed into shops and workers' residences, are hidden. Others are made visible through architectural layering that accentuates certain cultural and ecological aesthetics—Buddhist temples and a replica Lao village are revived. Haicheng Group's use of these layers makes Boten a palimpsest—something reused or altered that bears visible traces of earlier forms.

Boten's design is an amalgamation, a multicultural mix meant to render Boten investable as a global city. In Boten, you can "have it all": high-rises and villages stand alongside pristine nature. Infrastructure generates meaning (Larkin, 2008; Harvey and Knox, 2012; Larkin, 2013),

and architectural aesthetics evoke awe or desire that engender new norms in city-building (Ghertner, 2015). While Shenzhen's built environment was designed to reflect globality and a modern China (Cartier, 2002), Boten uses both modern and vernacular architecture.[51] The plain, box-like high-rises packed tightly in the central business district are adorned with architectural flourishes emphasizing their Southeast Asian-ness.

Like Taman Mini in Indonesia (Pemberton, 1994),[52] Boten authorizes the present and future by claiming legitimacy over the past. Haicheng draws on designs they consider to be regionally and historically relevant: the sweeping roofs of Lao-Thai temples, the Buddhist lotus flower, ethnic Dai architecture, and French colonial buildings. Each develops a sense of the exotic or authentic. Here, architecture overlaps with and reproduces the previous infrastructure to promote the city-to-be as one of "economy and ecology; tranquility and vitality." Architecture, both its design and its representation, generates visions for the future by reinscribing infrastructure of the past.

[51] See Vellinga 2011 for a discussion on critical anthropological approaches to vernacular architecture.

[52] A theme park outside of Jakarta initiated by President and Mrs. Suharto in the 1970s, also known as "Beautiful Indonesia in Miniature" (Taman Mini "Indonesia Indah").

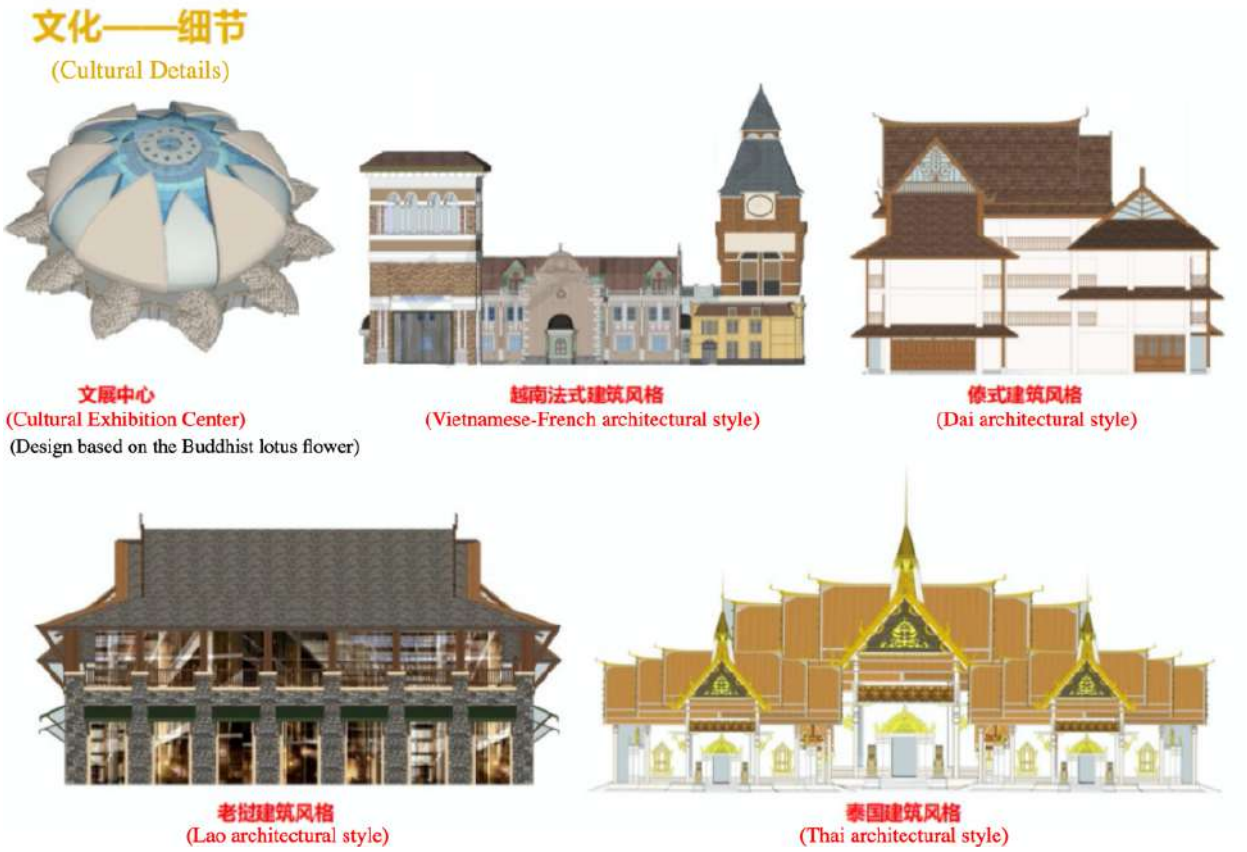


Figure 4.3. Architectural design plans and styles created by Haicheng. (Source: Haicheng, translations by author).

Village architectures signify proximity to culture and nature. In my interviews, Haicheng employees, potential investors, and homebuyers (from China) all expressed a desire to live in a clean environment. However, this desire conflicted with the ongoing construction, removal of vegetation, and leveling of land. I inquired about this conundrum with members of Haicheng's tourism team who suggested we visit Ban NanThong, a recently completed reproduction of a Lao village. This, they said, could provide the nature and culture that Haicheng so often advertised.



Image 4.9. A roadside sign pointing east to Boten's city center and west to NanThong tourist village. (Source: the author, 2020)

In 2019–2020, Haicheng's tourism team constructed the "authentic" Lao village as a tourism site for primarily Chinese tourists to learn about traditional salt production, weaving, and other local handicrafts. While thousands of hectares of trees and the original Lao village of Boten have been removed, the hills above the city remain forested to house the tourism site. I traveled with the Haicheng team to visit the village. The beat-up jeep rattled as we ascended the hillside on the newly cleared dirt road. The staff were excited, as this was their first time sharing the site with someone outside the company. As we drove away from the city center, excited chatter filled the vehicle. We were all relieved to have some time in the forest, away from the unrelenting drone of construction.

Once at the site, we meandered up a stone pathway—which, I am told, was built by "four strong men from Sichuan province"—and crossed a narrow wooden bridge over a small lake. We arrived at the ten *huean,* traditional Lao homes made of bamboo and wood, which are surrounded by recreational spaces for tourists to eat and drink, play games, relax, or hike. The

team in charge of apartment sales was eager to showcase "authentic reconstruction" of a Lao village—though this was their first experience in one. They rattled off information about the village and the benefits of living in the uniquely "local" clean and green environment of Laos. Like other cultural theme parks (see Pemberton 1994), the exhibit showcases different cultural groups from across the country and makes claims about what counts as "authentic." While these parks are often projects of nationalism, in Boten, the spectacle is both a (two)-state project and an investment sales pitch. Haicheng hired Lao people from Luang Namtha province to live in NanThong and demonstrate traditional crafts such as weaving, basket-making, and brewing for tourists. The main attraction is a replica of the old salt factory complete with local production techniques. The original cracked concrete pump house stands next to a new open-air pavilion where the salt-making demonstrations are held. The architecture mimics the infrastructures removed for SEZ construction in the early-2000s; NanThong is an exhibition space of local culture, but also separate from it. Like China's simulacra housing complexes that emulate non-Chinese aesthetics like Versailles and Jackson Hole (Oakes, 1998), the Lao village has been converted into a simulacrum to be consumed. As with reproductions of Western architecture in China (Bosker, 2013) or tourist yurts in Inner Mongolia (Evans and Humphrey, 2012), the design choices imitate Southeast Asian aesthetics to position Boten as a locally and culturally embedded city.

The images of nature and local culture adjacent to a booming city do powerful work. Rather than solely reduced scale, miniatures and replicas are defined "by the loss of some of the features of the original: details, volume, smell, colour, etc." (Varutti, 2011: 3). While estranged from their original context, layers of meaning are revived through spectacle to render the city-in-the-making investable. Architectural flourishes, replicas, and the juxtaposition of villages and

high-rises point to the multiple imaginaries of Laos desired by potential investors, homebuyers, and tourists from China. Yet static cultural appeals—those that idealize Laos as simple and rural—are contested (Lees, 2008; Su, 2011a). For example, That Luang stupa is considered Laos' most important religious and national monument. The original, in Vientiane, stands in an esteemed location above the city, while the replica at Boten's border is lost among trucks and overshadowed by half-built high-rises.



Image 4.10. A temple under construction with Boten's city center in the distance. (Source: Haicheng Marketing, 2020)



Image 4.11 A billboard on Boten's main thoroughfare declares: "This is the Shenzhen Special Economic Zone in 1979. Different times, the same great cause." (Source: the author, 2019)

As the billboards along Boten's main thoroughfare declare: "This is the Shenzhen Special Economic Zone in 1979. Different times, the same great cause," the dust-caked signs and the adjacent vacant buildings diminish the spectacle and undercut the assertion that this is "the new Shenzhen." The worker's dorm is an old hotel with moldy rooms and broken furniture, and the new duty-free shop was once a nightclub. The ruins of grandeur crumble on every block. The palimpsest requires more than inspiring poems and computer-generated graphics of fictional skylines to impress visiting investors. The zone promoters work hard to push a particular vision of Boten, despite their lived experiences. It is through this imaginative labor that the corridor truly materializes.

IV. Making mirages: Life between the spectacular and mundane

This section focuses on the lulls, hype, and hangover that laborers experience to produce (and sustain) the spectacle of Boten centers the labor needed to enact it. In centering labor required to enact the corridor, I highlight the distinction between imaginative and material labor. Speculation requires "future-oriented affective, physical, and intellectual labor that aims to accumulate capital for various ends" (Bear, 2020: 2). Laborers come to Boten seeking prosperity and capital accumulation promised by the job advertisements back in China. The workers from China arrive expecting a glistening Boten but quickly learn that their job is to perform the spectacle. This "mundane/everyday spectacle" is produced in the banal life of laborers and the performances they enact for elites and VIPs. Without a fully realized vision of Boten, the cycles between non-spectacular labor and iterative performative work are crucial to making the space investable.

Everyone living in the SEZ—Haicheng employees, casual laborers, shopkeepers, restauranters, hoteliers, and the staff of karaoke bars and massage parlors—is involved in its construction and development. Many of the Chinese Haicheng workers came to Laos with a vision for their life and work. Their views were rooted in the spectacular and grandiose images of Boten presented to them in job advertisements and marketing materials. They too speculated on Boten and, of course, the city was not as advertised. As Ellis (2021: 96) writes, "contemporary work on infrastructure trades on its analyses of enchanting hopes as well as of mundane technical operations." The experiences of Haicheng employees—what they thought they came to do, how they experienced Boten, and what they ended up doing—illuminate the gap between the lofty visions of the city and the mundane grounded experience. Yet, they labor to keep the spectacular vision alive.

Between 6:00 and 7:00 am every weekday, Boten's four street-blocks come to life. People navigate the three main streets which are now filled with shops, restaurants, bars, massage parlors, and old dorms and hotels. On the east side of the main highway lie the "old" Boten, and some of the leftovers from the casino boom of the late-2000s. Its windowless structures are made of corrugated metal and garage-like doors. To the west of the highway, both sides of the "new" street are lined with tall concrete buildings, most of which currently serve as worker housing. The ground floors of these buildings house the shops where many people in Boten work: restaurants, duty-free stores, hotels, bars, and massage parlors. Each day, on these few streets, people weave between work and personal time—intersecting in some instances and completely separate in others. Tourists, typically from China, may stop on tour busses or road trips, but only for a night.

One morning, I situate myself at a small tea shop in the new area, nodding to the increasingly familiar faces who pass by on their way to work and observing the hustle and bustle. The parade of people begins early with construction workers and lower-level laborers. They are up with the sun—their pants are thick, baggy, and covered in red earth. Before walking to their worksites, they stop at the shop to buy a tiny plastic-bagged breakfast. The smell of *baozi* and steaming hot *cha jidan* (tea eggs) fills the air. On the street corner, young Lao men, primarily from Luang Namtha province, wait for someone to offer them an informal day labor job. They had already eaten *khao piak,* or rice noodle soup, at home and now must wait on the corner. A private security detail is walking the streets. Their gaze is not unlike mine; we note the various passersby and their movements. Despite our many prior greetings and informal conversations, we keep watchful eyes on each other

Around 8:30 am, the "look" of the crowd begins to change. The young 20-something Chinese employees of the Yunnan-based developer who report to the office at 9:00 am are rushing to work. They are smartly dressed in suit jackets and blouses; some women wear low heels and skirts. Traces of dust cover their office attire despite their attempts to beat it out at the end of each day—a reminder that they live in a construction site. After the younger employees have arrived, bosses meander out for a late breakfast. They have meetings at the street-side restaurants, busily and quickly chatting. Indeed, none of my meetings with officials and leaders in the zone took place in their offices; we met either at the company's "high-end" hotel or around lazy Susans covered in food. As the night rolls in, some company employees gather for beers, others return to their rooms to collapse onto hard beds, and a few leave the zone headed either to their home in Laos or (on the weekend) across the border to China. Despite the significant capital and state support to redefine the border space as a global city, these workers are the current face of Boten.

Yongwen, more openly than most, "hates working in Boten" and reminded me of it nearly every time we spoke. When we first met, he had only worked in the city for three months and had moved for the money (US$750 per month). In his mid-20s, he wears thick glasses and has a tall, lanky frame forcing him to hunch when he talks with people. He often complains that the stiff uniform shirts are uncomfortable and impossible to keep clean in his small, dingy room and on a construction site. One afternoon we go to the old hotel, a decrepit building with molded walls, broken furniture, and remnants of past zone lives. The fact that some employees live in the old rooms furthers Yongwen's disdain for Boten. He narrates his arrival to Boten. After growing up in what he describes as an idyllic childhood in the tourist area of Dali, Yunnan he moved to Chengdu for university. While studying (loosely in his description), he opened a bar and spent

much of his time playing bass guitar in a band and arranging concerts. He saw himself as more rebellious and adventurous than his peers. His experience putting on shows and running the bar is how, he explained, he landed a job on Haicheng's tourism team. He decided to come to Boten because he wanted to live abroad in an exotic location where he could continue to do the work he enjoyed. He also saw Boten as a chance to escape the big city of Chengdu and return to nature. He expected Laos to be rural and offer time for him to explore. He also hoped to experience Lao traditions and life in Southeast Asia. To Yongwen's disappointment, "Boten is like any Chinese city … There is only Chinese language, mostly Chinese food, and we stay with our work teams all day. I only know a few Lao people who can speak Chinese." He often notes the irony in wanting to escape Chinese cities by moving to Laos to *build* one. Yongwen had become a disciplined subject, following dressing codes and cutting his hair. He was constantly on call, at the mercy of the work and his bosses.

Laborers like Yongwen create the mirage of Boten that was sold to them. As part of the tourism team, Yongwen's work includes assisting with marketing, physically building scenic areas, planning for infrastructure needs, and arranging shows and dinners when the company hosts important guests or meetings. During one weeklong meeting—the "2019 Laos–China Tourism Year Cross Border Exchange Conference" (2019 老中旅游年一跨境交流推介大会)—Yongwen worked 16-18 hours per day. He had dark circles under his eyes and had been smoking more cigarettes than usual. "It is nonstop when VIPs or important guests are here," he says exasperated. He must be available all day and well into the night to ensure the guests are entertained—in his words, "babysitting." VIP events are centered around the JingLan Hotel (景兰大酒店，磨丁) in the heart of Boten. According to Tsing (2005), investment depends on creating a performance of possibilities and prosperity, and laborers like Yongwen regularly

perform when VIPs are in town. The city roars to life with the flick of a switch. That week I often saw him, head down and cigarette in hand, briskly walking from one event to the next. Or, if he was with guests, he charmingly ushered them around. However, once the guests left town, the mirage of a lively city faded. The next day, the coffee stand in the hotel lobby was gone and when I asked employees about it, they looked at me as if it had never existed. Gone too was the open-air hotel restaurant preparing steak, imported seafood, and roasted vegetables. The large patio that had been filled with clinking glasses and raised voices was now cordoned off and dark. Haicheng employees returned to quietly eating cafeteria food at tables, often alone and exhausted. The feeling of a hangover (and actual hangovers) blanketed the hotel after the event. Many workers live in this rhythm, snapping between hyper-charged and vacant. The hype, lulls, and hangover reveal the iterative cycle of labor that goes into producing the zone.

Like Yongwen, Meilin arrived in Boten with high hopes, having never been to Laos (or out of China for that matter). Unlike Yongwen, she moved to Boten *because* of its urban potential. Her trendy shoes, dresses, and jewelry pointed to the cosmopolitan life she desired but clashed with the dusty construction-site-street where she lived. And yet, she was committed to making urban Boten a reality. Before coming to the SEZ, Meilin worked in cosmetics and fashion sales in Kunming. She was in her mid-30s—a bit older than the typical 20-something Haicheng employees—and was hired to lead an import/export team based at Boten's duty-free shop. "My favorite part of my job is shopping for beauty products from Australia and Thailand. Most of my orders come from Thailand." She hesitated, with a look of disappointment, "though right now we do not get many customers, but I still have to sell everything and that is very difficult."

To better explain how she met her sales quota, she suggested I join her for a day across the border in Mohan, China. From what I gathered, we would have lunch and go to the post office. I met Meilin near the golden stupa at the Lao border crossing the next morning. She was friendly with the border guards on both sides and had clearly made this trip many times. One of her staff, a 23-year-old young man named Wang Lei, joined us. Both wore backpacking packs that seemed excessive for a short lunch trip. We casually chatted with the Chinese official checking my passport and within minutes were walking down the large gray staircase on the Chinese side of the border station and onto the main road to Mohan. Meilin casually explained that crossing the border by foot had become a primary part of her export/import job. Because in-person sales at the duty-free shop were slow, she had begun to sell the duty-free items to customers in China through platforms like WeChat and Alibaba. This, however, required getting the products into China to ship to the buyers. Because transactions were small scale, she could cross the border with backpacks full of duty-free items. The clerk at the post office seemed unperturbed and familiar with the somewhat meticulous drill. After the items were packaged and shipped, we went for lunch. Over our meal at a small Hui restaurant, Meilin lamented that this was not the luxury sales work she had imagined. Often in good spirits, she said she still enjoys her work but is tired of crossing the border for tedious and illegal transactions. Ideally, she wanted to work part-time from her home in Kunming and part-time in Boten since she still held out hope for the city's bustling future.

While many employees were young and had never spent time outside of China, a handful who had lived in Laos for school were hired as translators. Zhang, for example, took a job as a translator and salesperson for Haicheng to gain an edge professionally. In his words, "I think working overseas will get you a much better experience than in China because you meet more

people and learn how to work and deal with things in ways that are different than in China." He views her time as a difficult, but worthy, investment in her future and career. Though he had only worked in the zone for one year, he had spent two years in Vientiane studying the Lao language. "I would have never known about Boten if I did not study here. Every time I traveled from China to Vientiane by road, I stayed in Luang Namtha and saw that the place was developing quickly." He applied to work for Haicheng in Boten to move closer to his home in China (Jinhong, about three hours north of Boten). Because he already had a bachelor's degree and spoke Lao, it was not difficult to land the position in Boten. He believes, like many of the employees and Chinese visitors, that "this place [Boten] and the railway can help Laos develop and grow like China did in the past."

In the evenings, however, I noticed a shift in our conversations. During working hours, Zhang focused on development—either for herself professionally or for Laos economically. Once the sun set and the din of construction faded into muffled KTV songs, she lamented the precarity of his life in Boten. He had no official work contract nor work permit and was therefore working in Laos illegally. This is the case with many lower-level employees who simply cross the border as tourists. He also has no insurance because of the "in-between" nature of the project. Even though Lao law requires companies to cover health costs, to take advantage of this benefit, the worker must visit a hospital or health center in Laos. "But all of us Chinese workers would rather go to a hospital in China because it is safer, we are so close to the border (closer than Vientiane), and we speak the same language." Though the job advertisement alluded to stable work, income, and time for vacation to see Laos, Zhang felt "like a temporary worker." He describes his work schedule as erratic, oscillating between feeling completely exhausted one week and utterly bored the next. "Today, I don't have anything to do, and this place is so boring.

Tomorrow maybe we will work 12 or more hours in one day." This inconsistency is reflected in the salary: "… so I get paid by the day when I'm needed, and if they don't need me, I don't get paid. And if they do [need me] then I get paid for a day, but the day can be as long as they decide." Yongwen, too, had similar complaints about being hired as a full-time employee but being treated as provisional.

Cyclical labor collapses, only to be performed again. This cycle between the mundane and spectacular is possible because of the imaginative labor of workers. Even as some find dissatisfaction, even exasperation, in the repetitive production of miniature spectacle, the promise of Boten captures their hopes and imaginations. The possible futures of what this place *could* offer continued to affect long-time zone dwellers. A Chinese woman who had lived in the zone for ten years running a small roadside shop told stories of the casino boom and the subsequent bust. During that time, Boten was practically vacant and her store only stayed open because it was one of the few on the Lao side of the border. Today, her business has picked up substantially, yet she remained skeptical that the "latest plans" would come to fruition. Even with her doubts, she had no intention of leaving—the promises of Boten hold her captive. Her resolution to stay highlights the cycles of spectacle. The scales and places where promises take place are layered: from material to imaginative, in the offices, streets, and shops and even on the bodies and in the minds of the workers.

V. Conclusion

Returning to the miniature model I described at the beginning of this chapter, infrastructure frontier-making requires tools for imagining what the future could be while also defining and containing the scope of that vision, such as the miniature to imagine the grand. In

this chapter, through the corridor and Boten, I argue that corridorization is a form of frontier-making that relies on spectacle that drives actors (laborers, investors, and the state alike) to speculate on an imagined future. An approach to corridorization shows that although the railway is a linear connective infrastructure, the reach of the economic corridor goes far beyond the tracks. Spatially, it encloses and the zone in order to open it to certain types of capital and investment. Relationally, as it shaped and is shaped by the lives of laborers enrolled to construct the corridor.

This chapter offers three vantage points: a theoretical corridor view "from above," the spectacle of simultaneous pristine nature and global city used to market and promote the zone, and finally, grounded perspectives of the Chinese company workers who both imaginative and materially labor to produce the city-yet-to-come. Each section operates with a particular iterative rhythm: of opening to enclose, of erasure to revive, of cyclical labor of collapse and performance. By untangling the imaginative work of frontier-making through the production of corridors and zones, I show that corridorization of northern Laos operates as a tool of simultaneous enclosure and opening. Once "opened," space is reinvented through spectacle and speculation motivated by the infrastructural promise of the railway.

The ethnographic insights woven throughout the chapter reveal zone and corridor visions and anticipation, as well as ways contemporary capitalism is built on spectacle and anticipation. Returning to arguments in Chapter Three, the frontier-making effects of corridorization and spectacle create "zones of opportunity," that also act as spatiotemporal fixes for Chinese capital. Infrastructure frontier-making is fixed both temporally (as I show in Chapter Three) as well as spatially in land and in infrastructure. In sum, spaces are reinvented as zones of opportunity through such performance, spectacle and, the imagining of the corridor as "open for investment."

The next chapter turns to issues of land, which, like processes of corridorization, much be enclosed in order to be "opened" for construction.

拆 (pinyin: *chāi*): to demolish, dismantle or tear down



Image 5.1. A home and small, roadside shop in Oudomxay province marked by construction workers for demolition with the character 拆: to demolish, dismantle or tear down. (Source: the author, 2019)

Driving north through the winding mountains of Oudomxay province, my colleague Phetsavanh leans over to ask what the large, red symbol spray-painted on the passing houses means (Image 5.1). It had begun to appear more frequently on this stretch of road, which I took as a given knowing that railway construction would soon pass directly through a number of these villages. Phet's question reminded me that my past years in China—where I've often seen 拆 (pinyin: chāi) spray-painted on buildings and infrastructures marked for demolition—has perhaps desensitized me not only to its presence but also to other possible meanings in Laos. We decided to stop and ask about it.

The woman who lives in the building in the image, which doubles as a roadside shop, graciously invited us in from the hot afternoon sun. She confirmed that, like so many other houses we saw along the way, hers was marked by construction workers for removal to make way for the Laos–China Railway (LCR), which according to the Ministry of Public Works and Transport, will impact over 3,800 hectares of land (800 ha temporarily and 3,000 ha

and at least 4,411 families on the 414-kilometer route. Additional land beyond the track is used for access roads, worker housing, stations, and nearby development zones. Indeed, the LCR Concession Agreement between the Government of Laos and the Laos–China Railway Company designates no less than 1,000 hectares for "station development zones" in Muang Xai and Vientiane and no less than 500 hectares in Luang Prabang and Vang Vieng, four of the largest stations on the route. The shop owner, like most people we met in the surrounding villages, did not know when to expect demolition, nor compensation for lost property. She supposed she would move in with nearby family when it happens, and that the railway "may help Laos finally develop."

At other "marked" houses on our drive and the numerous interviews that followed, villagers were clear that land and vague compensation and valuation processes were their main concerns, citing dusty roads, business competition, and minor conflicts as secondary and tertiary difficulties during the construction phase of the LCR. Further up the road, we arrive at a village where tall railway pylons cut through and tower over the agricultural land on the east side of the community. During interviews, multiple perspectives emerged on the railway, the influx of laborers to build it, and how Laos will benefit. Some people conveyed their excitement for the railway, as well as recent benefits of increased business for local shops and markets. At the same time, even though construction was well-underway, and a large labor camp was built just over the hill, no one in the village has been compensated for lost land. As a result, "every single month we have a meeting at the village office between the rail company and the *Nai Ban* [village chief or leader] and affected villagers to negotiate and ask for the compensation; they've done this for two years and still nothing."

The character 拆 is only recently recognizable in the Lao context, but its meaning and the politics and bureaucratic processes surrounding land and displacement are all too familiar. The next two chapters focus on railway land and compensation. They present views of how the railway manifests in specific places through planning and regulations and local experiences during construction to develop theorizations on Belt and Road infrastructures and Chinese overseas investments in ways that bring the "global closer to the ground" (Tsing, 2005), showing multiple scales of the "Lao" side of railway construction.

CHAPTER FIVE
ENGINEERING ENCLOSURES:
ON LAND GOVERNANCE, COMPENSATION, AND UNDERVALUATION

I. Introduction

The curtains were drawn and doors shut in a top-floor office in Laos' capital, Vientiane. Holding a weak green tea, I sat in a low leather couch across from a kind-eyed older Lao man. A single lamp warmly lit the room from a far corner. This scene stood in stark contrast to the typically fluorescent-lit group meetings that I had become accustomed to when visiting government offices. Though we were clearly alone, the Lao senior official and Politburo member leaned close to me to whisper, "the country is getting smaller and smaller … because *we* [referencing the upper echelons of the Lao state apparatus] are selling it off." Normally, I must consider the discourse *not* present in my interviews, but in this case, the senior official said the unspoken parts out loud. His statement highlighted the tensions between state goals for economic growth through large-scale infrastructure projects and a deeply felt sense that the Lao elite were selling away the country in the name of "development" that many Lao citizens never see.

Land is one of the most contentious issues in Laos and it is rare to hear a high-level official directly criticize state decisions regarding land use. However, this senior official continued his critique of the railway project: "both [China and Laos] agreed in principle" to the project in question, but "China is so clever … we have to accept [land loss] even though many things will change." He was not alone in his concern about losing land to large investments and development projects. However, unlike most other officials I spoke with, his concern extended beyond the railway track—he worried about land for future construction and, eventually, new economic zones, stations, and projects that "we cannot yet anticipate." Despite his concerns that the Lao state was selling off the country, he conceded, "we have to capitalize land to make [the

railway] economically efficient … most land is not used for economic purposes in Laos, it is still *free*."

What exactly is *free* land? The term 'free' carries a number of meanings, but three were prominent throughout my field notes. Free can mean: 1) unpeopled, empty, or unused, 2) not limited or controlled by the power of another, or 3) something that requires no payment. Each definition applies to the railway, as land is envisioned as available for investment or infrastructure at little cost. The Lao government's need to "sell" off the land, however, is due to the state's lack of capital for large infrastructure development and the need to draw on foreign investment. The acute lack of capital to secure loans meant that the Lao government not only borrowed money but also contributed to the railway project by expropriating land and implementing a land compensation process that necessitated devaluation.

The Lao government has exchanged and appropriated land for infrastructure since the 2000s. For the railway, the official above explained, developers and investors "just need land; this is not new." His project counterparts from China echoed this sentiment: "[Laos has] land, but not capacity and technology." Since 2006, the Lao state set out to "Turn Land into Capital" (TLIC), a program developed at the 8th Party Congress. The goal of TLIC was to offer land as capital instead of, and due to a lack of, cash: land became finance, "free" land was capitalized. This approach enabled the Lao government to implement the railway project, which is both an outcome and spatial manifestation of TLIC.

Much land in Laos, however, is full of people, value, and uses —it does not really come "free." As such, acquiring land for railway construction was not as simple as selling vacant lands or transferring land to the railway company with no concern for existing uses. At the same time, contrary to popular depictions of Chinese projects bulldozing people and places, the host

country, in this case the Lao government, was instrumental in making land "free." It is precisely because lands are not free (in every sense of the word) that the Lao state must *engineer enclosures*.

Enclosure, broadly, refers to the act of delimiting land in order to bypass people's common rights to use it for agriculture (Thompson, 1975). It transforms "unutilized or waste" land held in common into private property. Much research has examined how processes of enclosure, primitive accumulation, and accumulation by dispossession unfold in contemporary Southeast Asia (Hall, Hirsch, and Li, 2011; Hall, 2012; Li, 2014a). My use of the term *enclosure* highlights the hybrid nature of property relations in Laos. The Lao constitution asserts that all land is "owned" by the people and managed on their behalf by the state. However, the citizens' land is often actively enclosed for state projects like infrastructure development. This chapter details how the Lao state acquires and undervalues land by creating ambiguity around so-called "priority projects" and by selectively applying land regulations and legal-institutional mechanisms during the railway land valuation and compensation process.

Enclosure, undervaluation, and infrastructure frontier-making

Infrastructure frontier-making requires various mechanisms to "free up"—meaning to both unpeople and undervalue—land. Infrastructure development entails significant changes to property relations. Questions of land help me to expand my theorization of the infrastructure frontier by considering how land is assembled for railway construction and anticipated future value creation. In this case, the railway renders land available and investable through legal-institutional mechanisms for compensation and processes of commodification, such as measurement and valuation. This occurs *discursively* through constructions of northern Laos as a

frontier space offering investment opportunities for the economic good of the country and *materially* as the Lao state assembles land as a resource. However, as Hall, Hirsch, and Li (2011: 4) argue, land "exclusion is not a random process, nor does it occur on a level playing field. It is structured by power relations."

To understand how land is rendered an investable resource, I look to the preceding stages of land purchases, such as valuation or demarcation techniques (Goldstein and Yates, 2017; Li, 2014b; 2017). This chapter builds on recent scholarship on the more-than-economic practices and techniques that "render land investable" (Li, 2014b; 2017; Goldstein and Yates, 2017; Fogelman and Bassett, 2017; Le Billon and Sommerville, 2017). Drawing inspiration from Tania Li (2014), I examine how land surrounding the railway was prepared for investment. Li contends that the very "resourceness" of land is "not an intrinsic or natural quality. It is an assemblage of materialities, relations, technologies and discourses that have to be pulled together and made to align" (Li, 2014b: 589). Similarly, Le Billon and Sommerville (2017) argue that "landing capital" involves powerful narratives, institutional transformations, and labor and infrastructures.

I draw from Li's focus on the technologies and techniques that render land investible, specifically—calculability, the creation of value, tools, expertise, and discourse. Li (2014; 2017) emphasizes the uniqueness of land; in a Polanyian (1944) sense, it is a fictitious commodity. As Damodaran (2002: 93) notes, land cannot be "rolled up" and "taken away" upon purchase, like commodities produced for the market. Andreucci et al. (2017) and Felli (2014) also consider land a pseudo-commodity; for land to be *made* an asset or commodity requires a host of properties and processes that differentiate it from other market-bound products. In other words, land is not a "natural category" (Upadhya, 2020: 5) nor a "stable commodity ready for investment" (Goldstein and Yates, 2017: 2011). Rather, various inscription devices must be deployed to make it legible

(Li, 2014b: 590). To assemble land as a resource requires legitimated[53] exclusion that reshapes land both materially and symbolically.

Goldstein and Yates (2017: 209) note that a host of institutions, social relations, legal structures, and technologies must be assembled *before* land is made available for investment. Rather than centering land grabs or expropriation, they focus on "the work that is done to shift land into the realm of value production" (Goldstein and Yates, 2017: 209). As I discussed in the Introduction, the concept of value is key in theorizing the frontier, while undervaluation is a central part of infrastructure frontier-making. Much Marxian work examines this relationship, including the spatial fix, or capitalism's "insatiable" drive to expand and seek out cheaper resources, often in marginal or frontier areas, to accumulate more surplus value (Harvey, 1975; 2001; Tsing, 2005: Patel and Moore, 2018). This fix is possible because space has been abstracted into a commodity as it is made measurable, valuable, and exchangeable (Lefebvre, 1991). However, the exchange value (price) of a commodity—in this case, the amount paid in land compensation—is not equivalent to the commodity's use value.

To create surplus value, state-led mechanisms minimized the exchange value of land to make it available for railway construction and investment. Since the government did not have sufficient capital for the railway project, it priced land arbitrarily. The undervaluation of land involved establishing new institutions, introducing regulatory reform to fast-track infrastructure projects, streamlining land acquisition procedures, and augmenting state capacity. The state reduced its capital input, enabled rapid construction, and rendered land available for present construction and future investment. The planners and officials who determined compensation

[53] According to Hall, Hirsch, and Li (2011), legitimation is "understood as justifications of what is or of what should be and appeals to moral values, legitimations are of signal importance in supporting different forms of exclusion."

values were positioned as experts and were charged with engineering enclosures to expropriate "state" land. This leads us to a classic question: "land compensation for whom?"

Engineering enclosures entailed: 1) a discursive component that justified the state's swift expropriation of land, 2) an institutional-legal component enabled by uneven power relations, and 3) an inscription of value that did not consider potential use values. These processes required state power, both on the ground to measure the resources deemed worthy of compensation and in offices where officials scrambled to keep the budget low. The remainder of this chapter examines how and why the Lao state engineered enclosures. In the following two sections, I consider how the state justified undervaluing land. Section two explores the Lao state's role in land compensation and its discursive construction of the frontier as a "priority project." The next section reviews (post)socialist property relations in Laos through the lens of hybridity. The fourth section focuses on how the resulting legal-institutional arrangements for compensation benefited the state. Finally, the fifth section details how land was undervalued and under-compensated to make way for infrastructure construction.

II. The role of the Lao state and "priority project" discourse

Capital shortage and the Lao state's role in the railway

The Laos government maintained its equity stake in the railway through land expropriation and compensation. The Lao government's budgetary commitment for the railway project was not available in a lump sum before construction began because it exceeded what the Ministry of Finance was able to front without loans. Instead, the government agreed to contribute US$50 million per year for five years to the project budget. However, since this amount did not cover its equity, land and compensation oversight was also included in the concession agreement

with the Chinese government. Government responsibility to expropriate land for construction is similar in China, where the railway ministry and construction companies rely on local governments to do the work of expropriation and compensation. However, when taken abroad, this tactic exemplifies a classic concession strategy for a capital poor state.

In addition to the Lao state, the Chinese state via SOEs participates in the undervaluation and enclosure of land by creating the conditions and necessity for land expropriation. The Chinese SOEs believed that if land expropriation and compensation were organized by each company involved, the process would be costly, slow construction, and encourage scrutiny and local pushback. Therefore, a number of newly-established Lao bureaucracies were responsible for land acquisition, compensation, and resettlement.

The railway concession agreement between the Government of Laos and the Laos–China Railway Company specifies that the Lao government will:

> (i) implement land acquisition and resettlement;
> (ii) sign Land Lease Agreements with the Concessionaire, and/or issue the land certificate and land maps for the Railway Corridor, and complete the registration of the Land Use Rights for the benefit of the Concessionaire before handover of such land;
> (iii) hand over relevant land and provide the Land Use Rights to the Concessionaire.

The agreement goes on to hold the Lao government responsible for all land acquisition, clearing and demolition, resettlement, and rehabilitation. The Lao government implemented the "turning land into capital" (TLIC) strategy. As a spokesman for the newly-created Land Development Services State Enterprise explained in 2006, just after TLIC was announced,

> "We can check if there is available land in any area … We act as the coordinator between private businesses and government authorities, and we can access local authorities better than private investors can do by themselves."
>
> The enterprise also undertakes contract work to develop land in areas influenced by the government's relocation of people, and those who are affected by the construction of new industrial zones, new cities, highways, railways, bridges, airports, hydropower dams, mines, tourism facilities and other developments. They also provide services to customers for land registration, including the sale, exchange and transfer of land use rights, and land leases or concessions. They provide expert advice and consult on land services, such as land policy, land laws, surveys, design and the development of information systems.
>
> "We make land registration faster and more transparent. … We get fast results as we understand the procedures and we have good connections." [54]

Officially, land compensation issues are guided by Decree 192 (2005) and its replacement, Decree 84 from 2016. According to Decree 84, the Ministry of Natural Resources and Environment (MoNRE) is responsible for compensation and resettlement. However, in practice, compensation measures are outlined in a Resettlement Action Plan (RAP) prepared by the leading company, while MoNRE monitors (often loosely) RAP implementation. Companies often liaise more closely with other ministries—for example, a hydropower project would primarily communicate with the Ministry of Energy and Mines (MoEM), and a road construction project would work with the Ministry of Public Works and Transport (MPWT). MoNRE is left uninformed on project progress or potential issues.

The railway differs from earlier TLIC projects regarding land compensation. First, the Lao state, not a company, is overseeing land compensation, while in past projects (e.g., roads,

[54] *Vientiane Times.* 2006, November 15. New tool for land development; Cited in Dwyer, 2011.

mines, and dams), a private company or investor was responsible for compensation and resettlement. Together, local government and private developers (foreign and domestic) determined how to interpret formal and customary tenure rights, and subsequently, how to allocate compensation (Dwyer, 2017). Outcomes were influenced by investors' resources and risk tolerance, communities' abilities to assert their collective and individual interests, and local authorities' interpretations of Lao laws and locally available documents.

Another difference with the railway is its spatial pattern which (as with roads) makes it difficult to organize villages as a singular unit. Typically, project resettlement either moves whole villages or a few households within a village. For example, the company that developed the Nam Theun 2 hydropower project relocated 4,500 households that were concentrated in the areas that the dam flooded. In contrast, the railway spans 600km along the entire northern corridor of the country. Many homes not in the immediate path of railway tracks, but still affected by construction, did not qualify for compensation. Even when land was temporarily taken during construction and degraded to an unusable condition, villagers were not compensated since the land was "returned" to them (see Chapter Six).

Discourse of the priority project

To quickly consolidate control of land, the state discursively constructed the railway as a "priority project" which would promote "development" and investment. Priority project discourse is often used uncritically to describe a project driven by major economic or political imperatives. Priority projects capture the attention of national governments and become forces unto themselves, and have also been identified as key entry points for Western business actors into non-Western markets. Priority projects also have elite or political backing or immense

capital support, making them "too big or important to fail." In Laos, countless media outlets declared the Vientiane-China rail link to be a priority project (see *The Nation Thailand*, 2013).

The term is particularly salient in the context of Chinese overseas investment and the Belt and Road Initiative (BRI). Many Chinese infrastructures across continents have been labeled priority, strategic, or high-level. The ubiquitous but hollow concept has been applied to diverse BRI infrastructures including: the Moscow-Beijing Eurasian high-speed transport corridor (Silvius, 2018), the Jakarta-Bandung high-speed rail (Salim and Negara, 2016), the Sino-Thai Railway (Lauridsen, 2019), China-Pakistan Economic Corridor energy projects including the Karot Hydropower Station (Ali et al., 2016), and the Addis Ababa-Adama (Nazareth) expressway (Ampwere, 2019).

In both Lao and Chinese, the railway is referred to as a "priority project"—ໂຄງການບູລິມະສິດ (*khongkaan boulimasit*) or 重点工程 (*zhòngdiǎn gōngchéng*). It is positioned as critical for Laos' national development, the Pan-Asian Railway network, and general connectivity across Southeast Asia (and has been engulfed into the BRI). Government officials understood the stakes of the priority project and were motivated to implement a smooth railway land compensation process. When the railway Environmental and Social Impact Assessment (ESIA) passed without review, those working in the Ministry were told that the government could not afford to be delayed by red tape. In interviews, Lao officials often refused to comment on certain projects, calling them "untouchable." I was told that when a project is so big: "there is no alternative," "it is already happening, what can we do," or "it is too high level to stop," so there was no reason to risk discussing it with a foreign researcher. Other times, officials had been instructed not to talk about it.

A "priority project" is a development and investment imperative, with strong backing from elites, that is meant to serve as a model for future infrastructures or regulatory processes. The high-level government mandate means that the project cannot be publicly questioned, at least directly. Because it symbolizes modernity and state legitimacy, it *will* be implemented—at any cost. As priority projects gain momentum and symbolic power, new regulatory frameworks are devised to speed up implementation procedures, appease powerful actors, and establish new norms by circumventing or waiving existing legal frameworks. Framing the railway as a priority project enabled the state to promote the project as a public good, imperative to the country's development (which all citizens "should want").

The priority project discourse, combined with the state's role as land arbitrator, facilitated state processes that engineered enclosures that valued land at lower rates. However, to understand how the state produced such disparate (under)valuations, we must examine land and property relations in Laos. The next section offers historical context to 1) complicate notions of "free" and "state" land, 2) review the role of state power in land expropriation, and 3) explain existing tenure and property arrangements.

III. Hybridity and the political economy of land in Laos

> "*All land use and access are based on the observation that all land use and access require exclusion of some kind*." (Hall, Hirsch, and Li, 2011: 4)

> *"Before, the nature of land was different and we used it. Now that it's a commodity, people with power, the ones with good government connections, accumulate it."* (Interview, 2019)

> *With respect to state land used for the Railway, the GoL shall provide such land free of charges, land rental fees and any other fees. With respect to the land for the Railway, which is not state land, the GoL shall be*

> *responsible for the acquisition of such land by way of replacement with state land in a reasonable way and providing such land to the Concessionaire for the construction and operation of the Railway.*
> (Laos–China Railway Concession Agreement)

Guided by the socialist principle of *state* land, the Lao government has created multiple (at times overlapping) property regimes to maintain its authority, while also attempting to foster a vibrant land market and recognize local uses. But, what is *state* land? According to Lao Prime Ministerial Decree 88 (2008) on the Implementation of the Land Law, state land refers to all land, including natural resources, within the territory of the Lao PDR, excluding any land for which a land title has been issued to an individual or juridical entity. The Lao Constitution (2003; 2015) explains that land and natural resources are considered national assets that belong to the people of Laos, for whom the state "protects the property rights (such as the rights of possession, use, usufruct, and disposition) and the inheritance rights of organisations and individuals" (Constitution, 2003: Article 17).[55] The government grants use rights to citizens and concession rights to foreigners or companies for a specified length of time. Land expropriation is, in a sense, written into law as the state's responsibility. The concept of state land is invoked to facilitate large acquisitions, often for foreign led projects.

This section examines the hybridity of land and tenure types that have developed over time through economic reforms and Party-state power, to clarify how land was undervalued and expropriated. Hybrid land use rights are a product of Laos' particular political-economic system,

[55] The 2015 Constitution was amended to include not only land, but "[a]ll lands, minerals, water sources, atmospheres, forests, natural products, aquatic and wild animals, and other natural resources [as] national heritage, and the State ensures the rights to use, transfer and inherit it in accordance with the laws" (Article 17).

rooted in authoritarian state power and the transition to a market economy in the 1980s.[56] Like other "fuzzy" post-socialist property rights (Sturgeon and Sikor, 2004), the line between state and non-state land is exceptionally blurry in Laos. Indeed, in (post)socialist and postcolonial contexts, property relations are often ambiguous as competing actors vie for legitimacy (Sturgeon and Sikor, 2004; Sikor and Lund, 2010). Sturgeon and Sikor (2004) note that 'fuzzy' property rights from post-socialist economic reforms in Asia and Europe significantly differ from neoliberal understandings of exclusive, private property and often allow elites to exploit their position and grant resources to investors.

To conceptualize the hybridity of land relations and local use rights in Laos, which operates under state capitalism and a strong Party-state, we must first examine how land has been historically viewed and used by the government since colonial control ended in 1954. Land is assembled not only by tools that make it legible, but also through its meanings and purposes for different actors (Li, 2014b). In the pre-communist years under the Royal Lao Government (RLG), land was not considered a commodity nor a form of capital. After independence, notions of national sovereignty were tied to land and natural resources, and only Lao citizens could own land (see Baird, 2019). The 1958 Land Law restricted foreign use to temporary concessions under five hectares.

After Laos became a one-party communist state under the *Pathet Lao* in 1975, land was nationalized and transferred from the King to the people (Boupha, 2002; Evans, 2002). Land was briefly collectivized—a change the Party viewed as essential to socialist transformation (Bourdet, 1995). The state attempted to control land through resettlement and land allocation and

[56] In 1986, the central government introduced economic reforms under the 1986 New Economic Mechanism (NEM), which signaled the country's transition to more market-oriented approaches and pursuit of foreign investment.

offered tax incentives to create cooperatives (Lund, 2011). However, collectivization was short-lived—limited to the late-1970s—and unsuccessful, as it was never mandated and less than 40% of farmers joined cooperatives (Evans, 1999). Since 1975, the Party-state/government has defined the meaning and use of land and local tenures. Immediately following the founding of the Lao PDR, the government began an intense resettlement of upland peoples from the peripheries to areas closer to government control. In 1978, rural collectivization initiatives were implemented, supposedly to increase agricultural productivity. Even during these (mostly forced) collectivizations, the government maintained that land was controlled by state institutions, but owned by the people. However, as Hall, Hirsch, and Li (2011: 38) explain, it did not occur "to the extent as in Vietnam or Cambodia;" instead, land in Laos "belongs to the state de jure but is held and managed de facto under an array of locally and culturally specific arrangements and customary practices."

The government's push for collectivization dissolved in the late-1980s, with the introduction of the 1986 New Economic Mechanism (NEM) signaling the country's transition to more market-oriented approaches. As Laos transitioned toward a market economy, land became its primary currency (Rigg, 2012; Bourdet, 2000). The 1980s and 1990s saw a property regime centered on use rights for local, state, and private purposes—the foundation of the current tenure regime. This approach clarified property rights and tenure security instead of centering redistribution, in part because many farmers lost earlier tenure documentation during and after the war. At the same time, a turn toward large-scale and transnational investments only amplified questions about the recognition and formalization of smallholder land rights. Various policies and tools have been implemented to recognize and formalize smallholder land rights, including land title and use certificates.

Tenure and land titling

Tenure securitization only ramped up after the 1986 shift toward a market economy. A number of state and development initiatives have attempted to clarify use and ownership rights and improve smallholders' access to land through, for example, land formalization and titling to give farmers a more secure, state-recognized claim to land that they already hold. The Property Law (1990), Contract Law, and Inheritance Law, as well as the 1991 Constitution, formalized villagers' longer-term tenure, though land continued to be formally managed by the state. In 1997, the Department of Land, within the Ministry of Finance, announced the Land Titling Programme (LTP), through which the government began land titling efforts to "modernize" land administration processes, clarify property, and provide tenure security (Vandergeest, 2003; Lastarria-Cornhiel, 2007).

Titling efforts began in areas around Vientiane, taking the form of land titling efforts, land and forest allocation projects, and state-allocated land for investment or development projects. Peri-urban efforts occurred between 1997 and 2003, with rural titling only beginning in 2003. The national Land and Forest Allocation (LFA) program was the government's first attempt to systematically classify and allocate use rights for rural communities and to differentiate communal land from land for state use. Rural areas were progressively demarcated for specific uses (e.g., forest, agriculture, conservation) and village boundaries were formalized, making land increasingly legible while still recognizing communal and private land use. On the surface, the LFA helped people make land claims; however, it "was equally an instrument enabling government and donors to cohere in the production of property and governable subjects" (Lund, 2011: 893). The LFA often granted temporary land use certificates (Soulivanh

et al., 2004). Because the program spanned more than 5,000 villages (Ingalls et al., 2018), old LFA plans offer some of the only documentation of local land claims across Laos. LFA categorizations remain relevant in identifying property uses and rights and continue to guide land planning (Dwyer, 2013b).

The country's first Land Law (2003) spelled out land-use rights. It created a range of land categories and associated rights: agricultural, forest, water, construction, industrial, communication, cultural, national defense, and security. Importantly, it outlined the structure for land use management and registration, land titles, and land use certificates. Today, the state recognizes three types of land tenure:

i) land titles (*bai ta din)* through the Land Titling Program,
ii) temporary land use certificates (TLUC) through the Land Use Planning and Land Allocation Program (LUP/LA), and
iii) land leases for private concessions for investment and development efforts or government resettlement programs.

Land categories	**Property types** (According to the 1990 Law on Property)	**Land uses** (According to the 2003/2019 Land Law)	**Tenure types**
1. State 2. Private 3. Communal	**Article 2. Forms of Property** 1. State property 2. Collective property 3. Individual property 4. Private property 5. Personal property Collective property is divided into two further categories: 1. property belonging to co-operatives 2. property belonging to other collective organizations	- Agricultural - Forest - Water area - Construction - Industrial - Communication - Cultural - Nat'l defense/security - Construction (added in the 2019 Land Law)	- Land title *(individual, communal, legal entity, organization)* - Land use certificate - Land lease/concession - State land title

Table 5.1. Land, property, and tenure types as defined in Lao law.

Land titles (*bai ta din*) offer the most secure form of tenure in Laos. They formalize property rights by demarking boundaries and registering land. A land title issued by the provincial or city Land Management Authority is considered official evidence for permanent land use rights, while a "land use certificate" is evidence of temporary land use rights for agricultural or forest land. These, however, are primarily granted in urban and peri-urban areas. The amount of titling for rural land is very low, with only three percent of agricultural parcels covered (Hett et al., 2020). Additionally, the land title does not necessarily prove ownership of structures built on the land, but grants individual households "permanent land use rights."[57] While communal land titling in Laos appears progressive (Baird, 2013), there are limitations in practice. Anderson (2011: 1) suggests that the continued oversight of communal land in Laos, even when titled, resembles a "delegated management model" since the state maintains claims of ownership on behalf of the community.

The three general types of land that can be titled are state, private/individual, and collective (Ingalls et al., 2018). However, tenure types are inconsistent. The 2009 Ministry of Justice's master plan (which will become a "rule of law" by 2020) included efforts to clarify this ambiguity, but the distinctions are still blurry. For example, the definition of state land, according to law, includes all land that is not titled as individual or communal land. Decree 88, Article 3 states: "communal land is land that has been granted to the community by the state for communal use, individual land is land that has been granted to individuals for their use, and state land is the land that remains." The distinction between state and communal land is also

[57] Decree 88 on Land Titling (2006) formalized provisions for village communal land titles, but the government took seven years (2013) to issue its first communal land titles for agricultural and forested land to villages that were resettled due to the Nam Theun 2 dam and reservoir (Lastarria-Cornhiel, 2007; Liu and Sigaty, 2009; LIWG 2012; 2013; Sayalath et al. 2011; Seidel et al. 2007).

confusing, as the latter is sometimes labeled “state” so that the government can allocate it for agribusiness and resource concessions (Dwyer, 2007; Baird 2011; Kenney-Lazar, 2018).

Land concessions

Land concessions play an increasingly important role in the transformation of land into an asset for investment and national development. Following the NEM, the government began to grant land and resource concessions to private (often foreign) companies in exchange for either infrastructure construction or the development of resources. In the 1990s, this relationship was most common in the timber industry—timber was exchanged for roads—but by the 2000s, it expanded to agribusiness and mining. The 2003 Land Law significantly expanded the maximum size of land concessions available to foreign investors to 10,000 hectares.

In 2006, the government implemented a strategy of turning land into capital (TLIC) to further facilitate foreign investment in the name of economic growth. TLIC emerged from the early concessions of the 1990s and 2000s and continued the approach of exchanging land or resources for the development of infrastructure. Land in Laos was progressively commodified through government leases and concessions, often to foreign investors, for projects including infrastructure, urban development, and resource extraction (Kenney-Lazar, Dwyer, and Hett, 2018). TLIC projects generally prioritized agricultural intensification and commercialization, investment in commodity-oriented export sectors, and concession-based land investments. Between 2000 and 2009, the Lao government allocated 1.1 million hectares (ha)—5% of the country’s land—to state land leases and concessions for domestic and foreign investors in agriculture, forestry, mining, infrastructure, and manufacturing projects. Of these, 299 deals (199,015 ha) were with Chinese investors, and 1,705 deals were with Lao citizens (181,477 ha).

Sixty percent of the Chinese deals are in northern Laos (29% are in central Laos and 11% in southern Laos) (Schönweger et al., 2012).

However, because TLIC was never an official policy, there is no clear understanding of how exactly it is intended to work. As a result, the "land types on which concessions and 'cooperative' investment are predicated are anything but stable" (Dwyer, 2013b: 329). TLIC resulted in multiple forms of land commodification such as land concessions, leases, and titling that facilitated the transfer of state land to the private sector. Although land concessions legally provide investors with state land to use, this land is generally already in use, managed by rural communities for agricultural production, forest products, and ecosystem services.

The concept of state land and the promotion of land-based investments since the 1980s have informed the recognition and formalization of tenure rights. The convoluted TLIC processes and the Lao state's understanding of land have led to multiple, at times contradictory, property regimes serving different purposes (e.g., attracting investment while attempting to maintain the rule of law). As a result, state actions and regulations often appear *ad hoc* even when written rules exist. The hybridity of property in Laos offers a structural explanation to normalize the state's land expropriation. The next section outlines how the state relied on this hybridity to revise legal-institutional structures and render land available for the railway.

IV. Legal-institutional mechanisms and a lack of calculability

This section considers how state power operates, directly and indirectly, through legal frameworks and institutions to expropriate and undervalue land, one aspect of Li's (2017) heterogenous assemblage that renders land available. I first discuss how overlapping, sometimes ambiguous regulations concerning large infrastructures, coupled with the hybridity of property

rights, enabled flexible state authority. Second, I highlight the direct effects of tools like the railway concession agreement and special policies on undervaluing land. Finally, I review the bureaucracies created to oversee compensation to illustrate the actors engaged in valuation of land for compensation.

"Abuse through ambiguity"

Ambiguity and a lack of calculability enabled flexible authority during the land compensation process. Overlapping, and at times vague, regulations coupled with the hybridity of land and property enabled the government to cherry-pick regulations, exercise piecemeal authority, and exert significantly more maneuverability. As one Lao official complained, "The government is rushing investment too much while there is weak legislation around it, the laws to regulate it are not in place … and because those laws were not in place, now half the country is gone." Vagueness muddles the process of land expropriation, making it difficult to question its legitimacy. People who lose land are left with very few ways to contest it.

Thus, in contrast to Li's (2014) argument that technologies render land investible through ensuring its calculability, I suggest that the point is to create a *lack* of calculability. Land was rendered available through indirect, more-than-economic means, that created a lack of calculability within an already overlapping regulatory environment. Drawing on the concept of "abuse through vagueness," which Kenney-Lazar, Dwyer, and Hett (2018: 7) apply to their analysis of TLIC, I argue that vagueness is intentional, even throughout attempts at formalization. According to Kenney-Lazar, Dwyer, and Hett (2018), various actors, from investors to officials in different government offices and citizens, interpreted TLIC differently. The vagueness of TLIC and lack of specific regulations fostered abuse by officials and investors

alike, who could manipulate the vagueness often to their economic benefit. To end patterns of abuse through vagueness:

> Formalization should specify what types of projects qualify as TLIC; what steps should be followed to implement them and hold them accountable; and various methods for ensuring that the economic value of TLIC projects is fairly distributed, both to communities at TLIC project sites and to the broader society at large. (Kenney-Lazar, Dwyer, and Hett 2018: v)

Even after hundreds of land concessions for development projects in Laos, compensation and resettlement procedures remain convoluted and controversial (Pathammavong, Kenney-Lazar, and Sayaraj, 2017; Green and Baird, 2016). Ambiguity persists over which laws actually apply to railway construction and land compensation. Two additional regulations, Decree 84 and the Railway Law, were added to the existing land compensation regulations specifically for the railway. However, while priority projects may *instigate* new regulations, there is no guarantee that these regulations will actually be applied. In the sections that follow, I trace the origins of Laos' legal regulations on land and compensation, as they were developed in conjunction with two priority projects: Nam Theun 2 (a World Bank project) and the Laos–China Railway (a BRI project).

Land compensation regulations for Nam Theun 2 Hydropower Project

In an interview on railway land regulations, a long-time Asian Development Bank (ADB) economist based in Vientiane reminded me that the Nam Theun 2 (NT2) was also a priority project: "By rolling out Nam Theun 2, we opened the door for others to play." In his view, NT2, Laos' largest dam, paved the way for future big-budget, large-scale priority projects with high-level support. NT2 was touted as transforming institutions and improving public debate:

"proponents hoped that through strengthening the national legal framework, the country would move toward more inclusive and socially and environmentally responsible development" (Singh, 2018: 217). Influenced by NT2, Lao laws and decrees were enacted or updated to improve transparency and accountability around social and environmental project outcomes. The World Bank considers NT2 a successful model of sustainable development and poverty alleviation and uses it to bolster support for other dam projects around the world. According to the World Bank report *Doing a Better Dam*, NT2 provided "an opportunity to develop policies and tools that will strengthen the government's capacity to manage the country's natural resources in a sustainable manner, promote biodiversity, and protect ethnic minorities" (Porter and Shivakumar, 2011: 7). However, as Singh (2018) shows, the far-reaching institutional impacts were severely overestimated and quickly became obsolete after the project was finished.

Although NT2 was supposed to serve as a global, regional, and national *model* by the World Bank, it became an *exception* (Singh, 2018: 224). The regulations developed for the project failed spectacularly in terms of their sustainability aims (Shoemaker and Robichaud, 2018). Additionally, the legal features and institutions designed for NT2 were so project-specific that they did not apply to other situations in Laos. It was a classic case of World Bank intervention—development finance loans predicated on imposed regulatory conditions (in this case, to improve Laos' social and environmental laws for infrastructure development).

Prime Ministerial Decree 192 (2005) on Resettlement, Compensation and Grievance Mechanisms for Project Affected People was one such NT2 condition. Decree 192 was the first of its kind in Laos and has been the basis for all resettlement and compensation since 2005 (though it is often applied in an *ad hoc* way). Laos' National Land Management Authority (NLMA) was also formed in 2005, following an initial flood of foreign investment into rural land

concessions. Decree 192 formalized compensation for land loss regardless of land title, setting a high bar for compensation standards—a point of pride among those who believe the priority project inspired regulation. It was also the first legal document to differentiate between people directly and indirectly affected by projects. Article 5 on eligibility for compensation, resettlement, and rehabilitation assistance includes:

> 1. All individuals and entities residing or making a living within the area to be acquired for a project as of the formally recognized cut-off date would be considered as project affected persons (APs) for purposes of entitlements to compensation, resettlement, and rehabilitation assistance.
> 2. People who are not living within the project areas, but have land and buildings in the project areas, are also entitled to compensation, resettlement, and rehabilitation assistance.

An "outgrowth" of NT2 (Dwyer and Ingalls, 2015), Decree 192 is evidence that international actors and donors, such as the World Bank or ABD, influence Laos' national policies. The ABD assisted with the drafting of Decree 192 (GTZ Study 11), which was not only a conditionality to access the loan from the ADB's Environmental and Social Program (ESP) (Loan No.1867-LAO), but also for the World Bank's approval of NT2 (Dwyer, 2017; Ironside, 2017). The conditionality allowed international donors to pressure the Lao government to adopt social and environmental safeguards. However, donor-driven policies have led to conflicting legal frameworks and overlapping administrative boundaries that the state used to enhance its agenda.[58]

[58] For example, Suhardiman and Giordano (2014) show that international donors influence national policies and legal frameworks in Laos through projects. They argue that the Lao state used legal plurality to facilitate private finance in the hydropower sector "without alienating the more cautious foreign actors and donors with whom it also wants to engage" (Suhardiman and Giordano, 2014: 978).

Since NT2, Decree 192 has applied to privately financed and multilateral development projects. However, as a GTZ (now GIZ[59]) policy study notes, for "other projects little is really done to address the compensation issue, and it is the lack of staff and funds and agreed mechanisms that prevent the Government from closely monitoring the situation" (GTZ, 2011: 19). Decree 192's implementation is "patchy" and officials cite it as "cumbersome and expensive for developers" (Ironside, 2017: 17). Compensation remains *ad hoc,* determined on a project-to-project basis (Dwyer, 2017). This is evidenced by the fact that when some communities stood up to a developer, they got additional compensation or better resettlement conditions.

Land compensation regulations for the Laos–China Railway

The Lao government's framing of the Laos–China Railway as a model for future projects echoes the discourse around NT2, particularly in improving land compensation and resettlement regulations. During LCR implementation, several laws related to land and construction were revised or written. Here, I focus on two: Decree 84 on compensation and resettlement and the Railway Law. From the signing of the railway MoU in 2010, through construction which began in 2016, and continuing as of writing, a flurry of laws and decrees related to land, compensation, expropriation and investment promotion have been amended or drafted. With increasing regulatory overlap, it was often unclear which legal order had jurisdiction. Table 5.2 lists the regulations pertaining to land appropriation and compensation that were developed before and after the signing of the LCR MoU.

[59] GIZ or the Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH is the German Corporation for International Cooperation. It was formally GTZ or Deutsche Gesellschaft für Technische Zusammenarbeit

Existed prior to confirmation of LCR project (pre-2010		Finalized during LCR planning (2010-2015) *2010=LCR MoU signed			Finalized during LCR implementation (2016-present) *2016=LCR concession agreement signed
Constitution					
2003	Constitution	2015	Constitution (*revised from 2003*)		
Laws					
2009	Law on Investment Promotion	2013	Law on Environmental Protection (*revised*)	2021	Law on Public (State) Compensation
2003	Law on Land	2012	Law on Construction	2019	Law on Land *(revised)*
1999	Law on Roads			2019	Law on Railways
1999	Law on Environmental Protection			2018	Law on Resettlement
1997	Law on Mining			2016	Law on Investment Promotion *(revised)*
1996	Law on Water Resources				
Decrees					
2010	Decree 699 on Water & Environmental Compensation/Resettlement from Dev. Projects	2013	Decree 707 Guidelines for Public Involvement in the EIA for Investment Projects	2016	Decree 84 on Compensation and Resettlement of People Affected by Development Projects (replaced Decree 192)
2010	Decree on Environmental and Social Impact Assessment				
2009	Decree 135 on State Land Lease and Concession				
2005	Decree 192 on Compensation and Resettlement of People Affected by Development Projects				
2005	Decree 88, Implementation of Land Law				

Table 5.2. Lao laws and decrees pertaining to land and compensation. In the hierarchy of Lao law, the constitution is the most powerful, followed by laws, then decrees.

Decree 192 from NT2 was revised and replaced by Decree 84 in 2016; however, key differences distinguished these policies and their corresponding projects. One change in Decree 84 lies in the documents that qualify a person for land compensation. Another difference is that Chinese-backed projects tout no-strings-attached (cf. Western development). The main railway financier (China EXIM Bank) employed a deferential approach, relying on host country

guidelines for project implementation. So, unlike Decree 192, Decree 84 was not forced on the government by a lender. An officer at the Ministry of Planning and Investment (MPI) emphasized the importance of the railway and smooth construction, noting that "if projects cause impacts, then they can become very complicated, so compensation is very important, and the government is trying to improve it with the new Decree 84" (Interview, 2019). According to a researcher from the same Ministry, "if they [projected-affected people] are not well compensated then we also risk increasing poverty and not graduating from LDC [least-developed country] status" (Interview, 2019).

Decree 84 could have signaled a more uniform compensation policy. However, the differences between Decrees 192 and 84 further complicate the compensation processes (See Appendix for Analysis of Decree 84). For example, Article 8.4 requires documented proof of land use rights to qualify for compensation. Yet, as of 2011, there was "a lack of clear differentiation between public use and economic activities by investors/joint ventures/concessionaires" (GTZ, #11: 22) across all legal documents related to land and appropriation. This was not remedied in Decree 84, in which the "project owner" could be the state, a private enterprise, or a joint venture. The fact that the project owner in in charge of land compensation and resettlement raises concerns over competing interests between the project and local outcomes. According to existing decrees, investors collect information on affected people and prepare compensation plans, despite the high likelihoods of conflicts of interest. Proposals for compensation and mitigation of social and environmental effects may not best serve affected groups, but rather ensure maximum profits. Often neutral institutions (in many countries, the government) assess the land value to determine compensation. However, because railway compensation constitutes a significant portion of the Lao government's equity, it has similar

incentives to cut corners and reduce compensation costs. Officials confirmed in interviews that early attempts to plan the railway avoided heavily populated areas in order to reduce the compensation budget. Indeed, the railway concession agreement explicitly states, "[f]or the purpose of economizing on the total costs … the Parties shall study and agree on the specific coordinates and location of the land used for the Railway."

It is unclear whether Decree 84 will be applied across development projects or only be selectively applied like Decree 192. In 2018, just two years after Decree 84 was approved, the Lao National Economic Research Institute (NERI) recommended the government review and improve compensation policy because many people were not compensated for lands lost to special economic zones (*Vientiane Times* 2018). That year, on August 1st, the Law on Resettlement was signed, elevating some of Decree 84 into law. Revisions to the Land Law had been discussed since 2013 and passed in principle in 2019 but were not released publicly until July 2020.

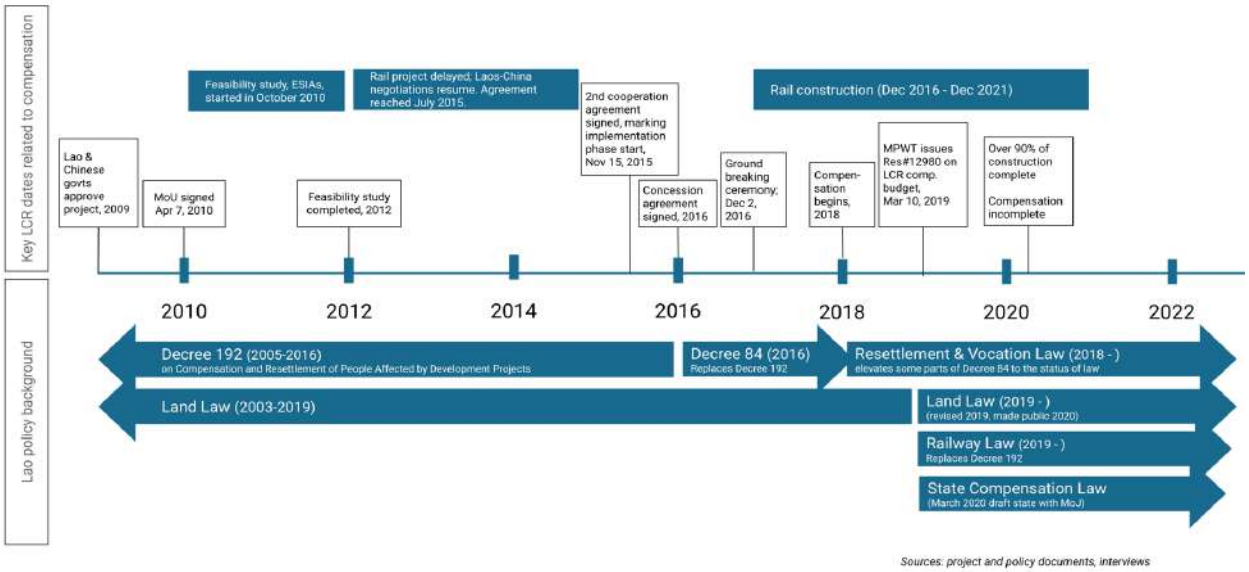


Figure 5.1. Railway timeline with key dates related to compensation, alongside new compensation, and land-related regulations.

The Law on Railways—which the Lao National Assembly (NA) approved in January 2019—can be read as a critique of the implementation of the LCR as it indirectly acknowledges many problems with land compensation for the project. The law sought to ensure timely and reasonable compensation (Vaenkeo, 2018). It outlined requirements for developers during planning, construction, maintenance, and operation, and required a feasibility study, baseline survey, and rehabilitation and repair plans. It also specified that the project should i) be for public purposes and benefit all people, ii) ensure that affected people have a place to stay before relocations and, iii) be transparent and fair to all relevant people.

Like earlier decrees on compensation and grievance mechanisms, it requires that compensation is disbursed *before* the land is developed—compensation should be fair and transparent and affected households cannot be left economically worse-off. Railway developers must submit approved compensation and resettlement plans before relocating people and beginning construction (Article 36). Article 37 stipulates—with fewer details—that the state can expropriate land for construction but should follow relevant guidelines for compensation and resettlement (which, in 2019, was Decree 84).

Despite the regulations I have detailed, compensation for the railway was not paid prior to construction. Rather, compensation processes were initiated two years after construction began. As late as June 2018, the Minister of Public Works and Transport, Dr. Bounchanh Sinthavong, reassured the National Assembly, "We will strive to begin compensation payments by the end of June" (*Vientiane Times,* 2018). A close review of these legal processes highlights the challenges in making sense of the often-shifting regulatory environment, particularly in the context of state-led priority projects. Priority projects shape regulations—whether as imposed

conditionalities or as purposefully confusing and flexible policies. In the state's expropriation of land, hybridity, and confusion coincide by design to circumvent calculability.

The railway concession agreement and "special policies"

Land is also made available by more direct means. Land concessions, for example, permit a broad use of land without taxes or other fees for a given time. For the railway, several project-specific agreements eased the transfer of land. The railway concession agreement between the Lao government and the Laos–China Railway Company (LCRC), for example, makes available and provides free land use rights to the concessionaire (the LCRC) for a 50-year concession period. The agreement provided:

> (a) the exclusive right of passage over, access to and egress from, use and possession of the land for the Railway Corridor from the Effective Date to the end of the Concession Period, free and clear of encumbrances;
> (b) the exclusive right of passage over, access to and egress from, use and possession of the land for the Construction Sites from the Effective Date until the end of the Construction Period as reasonably required from time to time by the Concessionaire, free and clear of encumbrances;
> (c) the right to use of Access Routes without interference from any third parties during the Construction Period and the Operation Period as reasonably required from time to time by the Concessionaire, exclusively or in common with third parties or subject to the rights of others (as the case may be) all rights of way, easements, licenses and all other permissions necessary to ensure that the Concessionaire can connect the Railway.

The Lao Government also established "special policies" regarding land, taxes, construction materials, imports, and foreign laborers for the railway. The first allows the Laos–China Railway Joint Venture to use three types of "state-owned" land in addition to its original

concession: 1) designated corridors, station boundaries and bridges, 2) construction sites, and 3) access points to utilities and national highways. Second, the Lao government agreed to waive business and value added taxes for joint ventures during railway construction. Third, resource charges for domestic construction materials, including soil and rocks, ore, and sand during construction were also waived. Fourth, import duties on foreign vehicles, materials, construction equipment, fuel, parts, and essential construction items were eliminated. Fifth, the Residence and Employment fees for visas, work, and residence permits were halved for Chinese citizens working on the railway. Finally, the Lao government encouraged joint venture companies to develop additional supporting projects around the railway, which would also qualify for the investment promotion benefits.

The institutional structure of railway land compensation and valuation

This section details the specific bureaucracies and processes created in 2015 and 2016 to formulate, guide, and monitor compensation. At the central level, two distinct yet interrelated committees were created to oversee and implement the railway project: the Railway Steering Committee (headed by the Ministry of Public Work and Transportation (MPWT)) and the LCR project management committee, headed by the Vice-Minister of the MPWT. Both draw on expertise in the Ministry of Natural Resources and Environment (MoNRE), Ministry of Agriculture and Forestry (MAF), Ministry of Planning and Investment (MPI), and Laos–China Railway Company. The steering committee was charged with: 1) coordinating with Chinese government officials and counterparts on the railway project; 2) guiding provincial and district

government agencies; and 3) regulating and enforcing legal frameworks to ensure the project was implemented safely and according to the law (MPWT, 2016).

Under the project steering committee, a project management committee ensured effective coordination between Lao government agencies (at the central, provincial, and local levels), the LCRC, and their Chinese counterparts (e.g., Chinese construction companies), led consultations across relevant government agencies, and assigned management responsibilities to provincial, district, local authorities, the Laos–China Railway Joint Venture, and subcontractors. Figure 5.2 illustrates the Lao agencies present on the project steering committee and management committee, as well as their tasks and responsibilities. Staff at the Department of Railway in the MPWT had almost no involvement with these committees or their mandates.

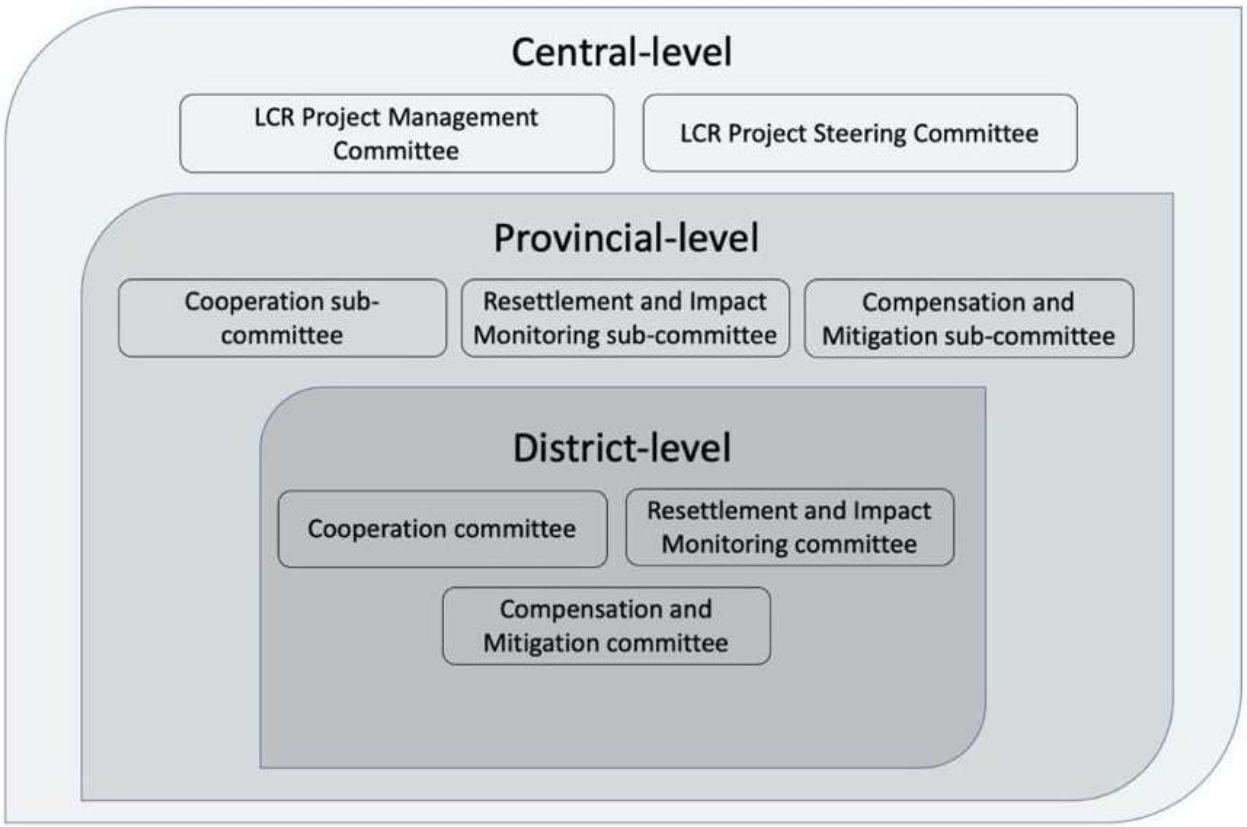


Figure 5.2. Laos–China Railway project management structure within the Lao government.

Provincial and district level officials on both committees allowed me to detail their work on the ground. On a hot July afternoon, I sat outside one such provincial railway office, waiting to interview the lead railway officer, Mr. Boua. He arrived late and ushered me into his frigid office. We sat at a table covered in piles of papers including legal decrees, contracts, and railway promotional materials. Noticing my interest in the documents, he pushed the glossiest one toward me—the document illustrating the hierarchy of the committees.

Mr. Boua carefully walked me through the institutions and processes established for railway land compensation. He explained that while all railway provinces follow the same compensation and resettlement policies, valuation and compensation rates vary widely. The provincial government was responsible for coordinating project implementation between the central and district governments, while the district government coordinated between provincial and village authorities. A chain of command for monitoring and evaluation was established: village authorities reported to district offices, which reported to provincial offices, which reported to the central government. Figure 5.3 provides an overview of the reporting and management structure, including the Cooperation Committee, Resettlement and Impact Monitoring Committee, and Compensation and Mitigation Committee, which were all established at both the provincial and district levels.

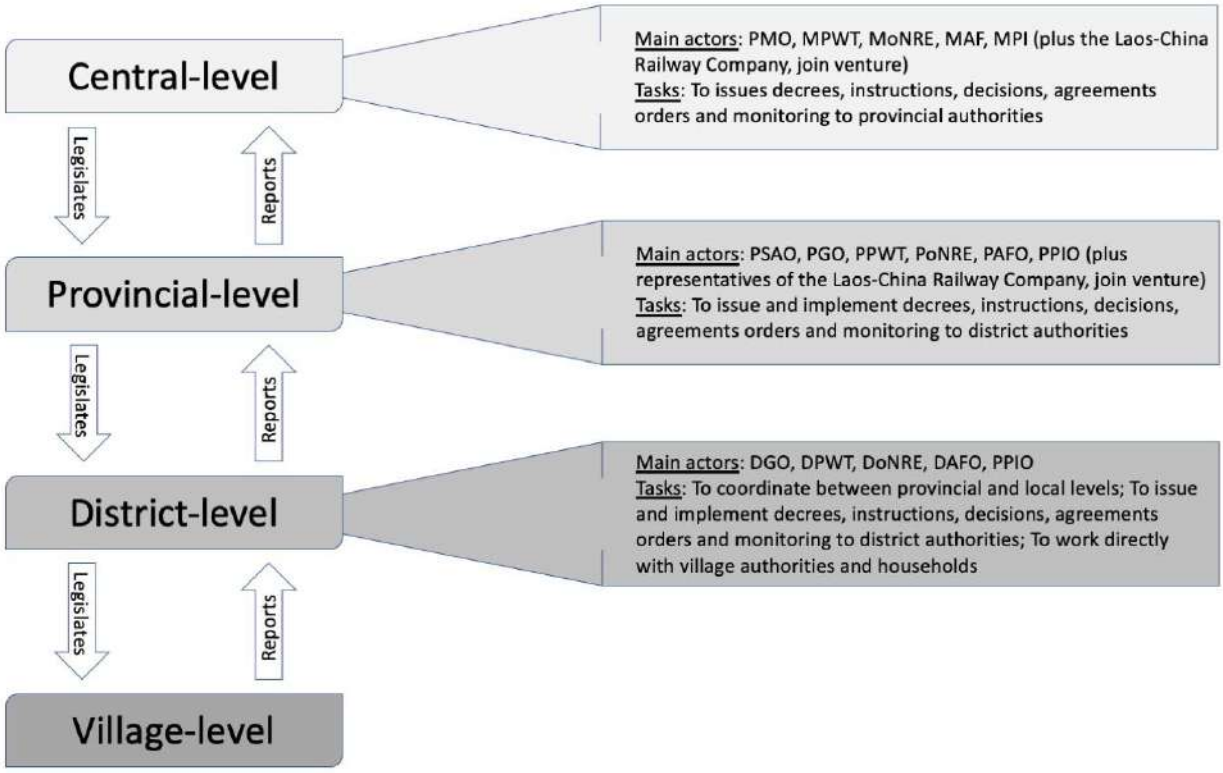


Figure 5.3. Laos–China Railway management and reporting structure within the Lao government.

Though the provinces were supposed to apply identical compensation and resettlement policies, valuation and rates varied widely in practice. Although Decrees 192 and 84 both offer guidelines for compensation, they lack implementation procedures and a uniform land valuation system. Rather, valuation is often determined by project-specific contracts. Provincial and district authorities formulated compensation rules and procedures for their province. Mr. Boua described the process:

> We had meetings among the five provinces that the railway goes through to discuss the broader picture of the railway and compensation and resettlement together and with the central committees. After we agreed on the big goals, each provincial committee went back to their province to do research to determine the right rates for the local area.

After the affected provinces submitted their compensation proposal plans, the Deputy Minister of Public Works' office compiled a central, uniform compensation plan (*Vientiane Times* 2017).

Even with a so-called centralized plan, in 2018, each province provided suggested compensation rates to the central committee—only Luang Prabang province has made this document public. This process established the unit price list for all types of affected property (e.g., fixed values for specific assets such as land, residential areas, fishponds, trees) to calculate total compensation amounts. However, the actual rates paid varied between and within provinces, districts, and even villages.

Luang Prabang's Compensation and Mitigation Committee (led by PPWT, PoNRE and PAFO) exemplified how various provincial compensation committees formulated and implemented compensation rules, procedures, and mechanisms. In Luang Prabang's Chomphet district, technical staff from provincial and district offices met to agree on the unit prices.[60] The price list accounted for different types of land (e.g., lowland, upland), its proximity to main roads, and the land's condition (e.g., leveled or sloped). Once prices were set, the provincial government sent the list to the Provincial and National Assemblies for approval. When approved, the provincial governor issued Agreement no.13 (January 2018) and Agreement no.78 (July 2018) endorsing the unit prices. The second agreement accounted for additional features like housing, residential construction, type of toilet, rice warehouses and fences, and irrigation canals.

After the agreement was issued, provincial and district level Compensation and Mitigation Committees visited affected households to collect information on the residential structures, land, crops, trees, and other affected assets. During these visits, households met with

[60] In this case, offers from PAFO, PoNRE, PPWT, PPIO, DGO, DAFO, DPWT, and DoNRE along with representatives from two other districts (Xieng-Nhgeun and Luang Prabang capital) discuss valuation for Luang Prabang province.

the compensation committee to: 1) identify land and other properties lost to the railway; 2) calculate compensation using the approved unit-price list, and 3) sign a document agreeing with the final calculation. The household should then open an account with the Banque Pour Le Commerce Exterieur Lao (BCEL)—Laos' main state bank—so the government could transfer compensation funds directly through the Ministry of Finance.

These revisions to law and governance and new committees for compensation were driven, to an extent, by the "priority project" discourse and had implications for how the land was rendered available and inscribed with value.

V. Land (under)valuation

"How much do you think this land is *really* worth?" asked Fong, my research assistant, as we walked away from a heart-wrenching interview. The woman, who had no family land to fall back on, did not receive enough compensation to buy new land and was holding out in her home until the final moments. She told us, "We were already compensated for our house that was damaged and some of the cost to move, but I do not feel satisfied with the money they provided, it was 2,500,000 kip [US$275.00]." This was less than what she paid to build her house and was totally insufficient to buy new land and build again. She explained, "We were the first family in the village," and had to alter the steep sloping hills to build homes and plant crops. She pointed to her home:

> I had to hire people to make the land flat to build a house; this already cost about 3,500,000 kip (US$385.00). If I compare this to what I got [from compensation], it was not enough, and it is not even equal to what I spent to build my house when we came here years ago.

The processes underpinning the creation of land value often precede land appropriation through the market (Goldstein and Yates, 2017). Compensation processes, as Baird (2019) notes, have the power to adjust the financial valuation of land or resources. In Laos, government rates devalued the land, especially when compared to private developers' payouts. As one Ministry-level official confirmed, "if the government is responsible [for compensation] then people get the 'medium value' for land. But if private companies are responsible then they get market value" (Interview, 2019). Land compensation for the construction of the 450 Year Road in Vientiane also demonstrates the influences of infrastructure development on land price variation and speculation (Pathammavong et al., 2017). Prior to 450 road, the market value per square meter of land in that area was US$1.10/$m^2$. The government set the land compensation rate project at US$3.43/$m^2$, however, once the state acquired the land for the project it re-sold it to private developers for US$130/$m^2$. After the land was purchased and some parts developed, the "market value" jumped to $300/$m^2$.

Valuation along the railway relied on technical expertise to determine "appropriate" government rates. On the ground, village leadership and local officials facilitated household land compensation through a multitude of micro-interactions, conversations, and negotiations over many years of construction. Even before construction or the compensation committee, village leaders informed villagers of the railway construction and directed them not to farm or graze in certain areas. Local authorities, communities, and affected households were not included in—or even aware of—the deliberations. They only learned of these processes when provincial or district officials visited the villages to calculate actual compensation values based on land use after the price lists had been determined. Several interviews highlighted how socioeconomic status and government connections led to inequity and inconsistency in the amounts paid. For

example, outside of Vang Vieng, poorer, less powerful households received 17,000 kip/m^2 (US$1.90/$m^2$).[61] One woman who lost 2.5 ha of lowland land in Luang Prabang province heard that land near a road would be compensated at 7,000 kip/m^2 and 5,000 kip/m^2 if far from a road. However, more powerful households (rich and/or with official connections) got as much as 240,000 kip/m^2 (US$26-27/$m^2$). Villagers were aware of the central contradiction in compensation: the government purchased land at state rates, but citizens must then find new plots to purchase at "market rates." Table 5.3 presents land classifications and their respective unit price per square meter.

Types of land	**Unit cost per m^2**
1. Upland	
1.1 Levelled land	LAK 15,000
1.2 Sloping land	LAK 4,000
2. Lowland	
2.1 Close to main road	LAK 41,000
2.2 Linked to small street	LAK 21,000
2.3 Remote land not linked to any streets and roads	LAK 16,000

Table 5.3: Selected unit price of different types of land. Source: Luang Prabang Provincial Governor (2018).

According to a Lao national employed at a Western embassy: "the Lao are doing bad for the Lao because we don't have a standard, comprehensive, or calculated approach." Household payments differed based on provincial unit prices and how they were applied to each household's land. The calculated amounts did not capture the complexity and heterogeneity of seasonal changes in crops and farming systems. Moreover, current compensation practices totally excluded any land that was affected by construction (e.g., soil pollution through chemical and cement penetration) but was not directly along the railway track.

[61] Currency conversation calculated based on 2018-2019 rates.

Because unit price discussions did not include local authorities and affected households, compensation rates did not necessarily correspond with pricing realities on the ground. Indeed, as Li (2014: 594 argues, various inscription and classifying devices that assemble land as a resource render "some things visible while occluding others." Lowland paddy valuation offers one example of inaccurate and unjust pricing. The provincial and district Compensation and Mitigation Committees in Luang Prabang (and possibly elsewhere) only included visible items (e.g., type of crops, fishponds, trees) when collecting data for valuation. This meant that officials did not account for seasonally-rotated crops. Though rice was growing during the valuation, other (cash) crops like maize and vegetables would be planted in the same field after the rice harvest.

The table below presents a simple compensation calculation for a farmer with one ha (10,000 m^2) of paddy land, using the applied unit-price of 16,000 Kip/m^2 and a minimum productivity of 3 tons/year/ha. It sets the price of unmilled rice at 8,000 Kip/kg or 8,000,000 Kip/ton. Each year, the farmer could also produce 500 kg of maize (with an average price of 5,000 Kip/kg) and 200 kg of vegetables (with an average price of 3,000 Kip/kg).

	Calculation formula	**Total (**Kip**)**	**Total compensation**
Expected land price	10,000m^2 x 16,000 Kip	160,000,000	160,000,000
Opportunity cost	3 x 1 x 8,000,000 x 5	+ 120,000,000	280,000,000
Crops not visible (maize)	500kg x 5,000 Kip /kg x 5	+ 12,500,000	292,500,000
Crops not visible (vegetables)	200kg x 3,000 Kip /kg x 5	+ 3,000,000	295,500,000

Table 5.4. Example compensation calculation, including opportunity costs of potential cash crops.

The farmer in this example received 160 million Kip (US$17,582) for one hectare of paddy land. However, if the rotation crops were included, he would have received 295.5 million Kip (US$32,473)—a difference of 135.5 million Kip (US$14,890).

According to the Luang Prabang Provincial Governor (2018) Agreement No. 78 from 12 July 2018, the formula to calculate compensation for paddy land includes the expected land price, plus the opportunity cost associated with not using the land each year, multiplied by five years:

Expected land price + productivity (ton/year/ha) x affected land area x unmilled rice (price/ton) x 5 (years)

Per this formula, a household that lost 1 ha of lowland paddy would be compensated 800 million Kip (US$87,912). However, interviews revealed that all affected households received much less than the formal compensation amount. While the amount received was partially based on the formula, it did not incorporate the five years of opportunity costs. Affected households in a village in Luang Prabang province received only one-fifth of the designated compensation amount. This points to a larger theme of "missing funds" alluded to in my interviews. A 2004 GTZ land policy study also found that:

> Payments of compensation funds by the investor to local authorities, committees or agencies are marked by high leakages and skimming of funds. Few of these payments will actually reach the people in need of compensation. Therefore, it needs to be defined what mechanisms could be applied for direct payment to the beneficiaries, e.g., through an ad-hoc committee with representation of the target groups and after wide public consultation.

I was curious if the Chinese SOEs constructing the railway faced setbacks due to delayed compensation. As I toured what would become the largest train station in Laos with a manager of

the Chinese construction company, I asked about land prices in Luang Prabang province. Mr. Zhou, an engineer from China Railway Company No. 8, explained that the area had previously been used for agriculture, so compensation amounts were determined by the location of the land (near or far from a road) and the crop that was produced (mainly teak or pineapple). A *laoban* (boss or manager) at from one of the Chinese construction companies (which are not directly involved in compensation processes, reiterated the published compensation rates:

> Villagers will receive about 41,000 kip/m^2 for paddy or upland rice on centrally-located land and about 20,000 kip/m^2 for land near the road. As of November 2019, villagers had not been paid for land, but had been paid for existing products, estimated to be 4 tons/hectare/year for paddy rice. They will pay for the [rest of the] land soon.

In a nearby village, farmers received compensation for teak trees, though the flat rate they received proves that the compensation did not consider their exchange values over time.

Villagers' land rights are opaque and easily subordinated to national development plans. One woman I met at a Hmong village had received compensation for her house (two years after construction began) but had received nothing for her land. She had used the plot as a subsistence garden and also planted an orchard of 100 citrus trees from which to sell products at the local market. The land is now an entrance to a railway tunnel. She explained:

> My income decreased dramatically … just before the railway project started construction in my area, I could earn income from the fruit of about 10,000,000kip (US$1,099) or more per year. Now we cannot get income from this anymore. I do not know how I will get the compensation for this loss. We do not have clear information on what will happen or what we should do. I once heard that for fruit trees with [a] 5-year [or longer] lifespan, they will calculate one tree to be worth about 70,000 kip (US$7.69); but I am not so sure I will even get this compensation for our loss.

These examples allude to the uneven power relations between the state and landholders. Mr. Boua's official five-step process—meet, confirm, evaluate, sign, pay—neglects the lived experiences of villagers during construction and the long waiting period for compensation. Chapter Six narrates these encounters from the perspectives of local people who experienced land loss directly.

VI. Conclusion

Infrastructure projects often require vast amounts of land for construction and capitalist expansion. As such, they almost always require land acquisitions, which involve public and private actors, including powerful elites. Land acquisitions are an essential component—not a byproduct—of economic corridors and infrastructure megaprojects. Infrastructures are increasingly central to the commodification of land as they contribute to restructured social relations and laws and project an image of the future that legitimizes acquisitions. A host of institutions, social relations, legal structures, and technologies are assembled before land becomes available for investment (Goldstein and Yates, 2017). As this chapter has shown, land for the railway was assembled through a combination of discourse, state power, hybrid property relations, and techniques for undervaluation. Together, these processes "shift land into the realm of value production" (Goldstein and Yates, 2017: 209) and render it investable (Li, 2014b).

As this chapter demonstrated, the infrastructure frontier is made through the undervaluation of land and the restructuring of land governance and property relations. Particularly through compensation mechanisms, land is rendered available for present construction and future investment. As Li (2014: 600) concludes: "[i]n ways both intended and unintended, these actors, grids and devices assembled land as a resource available for global

investment. But to actually enroll investors … more work needs to be done" (see Chapter Four on corridorization and spectacle).

This chapter also challenges a strictly capitalist ontology of property by showing how land is rendered calculable and countable through a politics of ambiguity. In many capitalist contexts, land is already widely thought of as private property and investible (Blomley, 2004). In contrast, I build on Li's (2014; 2017) argument that social and cultural relations define land as a resource to highlight the hybrid and blurry nature of property under (post)socialist authoritarian governance and how state power subtly renders land free. This perspective encourages reflection on the uneven power relations embedded in hybrid property relations.

Finally, undervaluation for the purpose of building infrastructure and future capital accumulation occurs at the expense of the local population. In the following chapter, I position the insufficient compensation amounts as a sort of forceable removal without overt force. Hybrid land tenure meant that once people were expropriated, the only relevant value was market value. Large projects along the infrastructure frontier rarely intend to "keep" existing livelihoods and economies. Rather, they are replaced by larger productive or extractive industries for purposes of accumulation. While this may bring some new employment, business, or other income-generating opportunities for existing residents, the costs are borne through physical displacement and displacement of their former livelihoods.

INTERLUDE.

Disappearances and the UN Special Rapporteur visit

It is impossible to fully grasp the next chapter without understanding the undercurrent of fear that surrounds development projects and human rights issues around land, property, and the Lao state. A March 2019 visit of the UN Special Rapporteur on Extreme Poverty and Human Rights to Laos illustrates these points. The rapporteur, Philip Alston, was officially invited by the Lao government to do a national assessment of human rights and poverty. In my conversations with the UNSR team, they speculated that the Lao government extended the invitation to the rapporteur due to pressure from bilateral funding partners, and did not understand the extent of the investigation. Months before their visit, his team contacted and interviewed academics, NGO workers, and activists across the country. In preparation for their research focused on large-scale infrastructure investments, they conducted preliminary interviews with researchers and NGO workers on how projects helped or harmed the country and people living in proximity to them. As I worked with a land rights organization to draft a number of case studies, it became clear that this visit and the resulting report would evoke negative government reactions.

It is common for UN visits to entail large meetings with officials from various ministries as well as civil society actors. These meetings are divided so that neither group feels restricted in their commentary by the other's presence. During Allston's time in Laos he met with government officials, local communities and some civil society actors. However, most civil society and activist actors were adamant that they would not meet Allston in Laos. They feared that should the UN report criticize the Lao government at all, then their names would be added to a list of threats to the state. The UN team thus organized meetings in Bangkok for those unwilling to publicly attend the Vientiane group meetings. The civil society meeting in Vientiane was thin and mostly attended by those involved in human rights. The meeting in Bangkok attracted some people from Laos who travels to the Thai capital, as well as Lao people living in Bangkok, either by choice or in exile. Their fear of an honest, yet cutting report materialized a few month later. In the final report, Allston summarized the Lao government's development policy through foreign investments, particularly in land, as failing to reduce poverty or inequality. Parts of the report pointed to the use of the country's resources as a means of generating rents for the government.

In response, the Lao government denounced the report as "baseless allegations."

In August 2019 just months after the Bangkok meetings with Allston, Lao human rights activist based in Bangkok, Od Sayavong, went missing. He was a refugee in Thailand and part of the Free Laos group, a network of Lao migrant workers and activists in exile based in Bangkok and neighboring provinces who peacefully advocate for human rights and democracy in Laos. Many in Od's network point to his participation in the Special Rapporteur meetings as the reason for his disappearance. Allston said in a public response: "If an enforced disappearance occurred in part as a reprisal for Od's engagement with the UN system, it would be a violation of his human rights, requiring immediate action. Everyone should have unhindered access to and communication with the UN in the field of human rights." To date, Od is still missing and little more information has come to light.

This is not a stand-alone case. Multiple people have disappeared over land issues and for criticizing the government in Laos. The most prominent case is that of community development worker Sombath Somphone, who was abducted off the Vientiane streets in 2012. Others have been convicted and sent to prison for criticizing the government, based on a 2014 decree that prohibits online criticism of government and the party. As a result, for example, Houayheuang Xayabouly was arrested in 2017 and convicted for condemning the government's slow response to floods; Sangkhane "Thitsy" Phachanthavong was arrested in 2020 for calling out state corruption on social media; and in March 2016 Somphone Phimmasone, Lod Thammavong, and Soukane Chaithad disappeared upon return to Laos from work in Thailand where they criticized the Lao government on social media (after making public television confessions, they were sentenced to 12, 18, and 20 years respectively). I share these stories to echo a point once conveyed to me by a Lao woman who works for land rights: "People cannot be activists, but we feel that way," meaning they cannot outwardly identify as such by often feel there are important issues that need attention. The dearth of information and undercurrents of fear limit the space for contestation, and lead people to feel they are helpless and unable to voice concerns or problems surrounding priority projects. Indeed, as I have learned, the situation in Laos differs from neighboring countries, and dissent, public discourse, or actions that question state authority in any way have negative consequences.

CHAPTER SIX
LIFE ON THE TRACKS:
SUSPENSION, WAITING, AND INTERSECTING TEMPORALITIES OF INFRASTRUCTURE

I. Introduction

The air was already wet with heat at 7:00 am as I strolled along the Mekong River on a bright June morning before a meeting with a planning official. We had scheduled it early so I could catch a van to one of my fieldsites in a village a few hours north and arrive for dinner. I did not realize it at the time, but the contrasts of this day would stand out and shape my thinking as I continued to tack between rural villages-cum-construction sites and investment planning and government offices. The material differences between the two locations were obvious. In the Vientiane morning I sipped tea seated on an ornately carved teak chair in a too-air-conditioned room. Later that evening I enjoyed sticky rice, *laab gai*, and beers seated in a circle of five on the dusty floor of a small home in a Khmu village. More than the contrasting spaces, however, what stood out most on this day were the divergent temporalities experienced by my interlocuters, who discussed different infrastructural "speeds" and "suspensions" in connection to the construction of the Laos–China railway.

In the white-walled and large-windowed office, the state planning official spoke in terms of project timelines and project plans, of steps to ensure timely completion of construction and a smooth transition to operation so that the railway would become a worthwhile investment. Many such officials and planners spoke in terms of "project time"—in which projects are conceptualized, planned, implemented, and completed—and viewed the railway as yet to come. Media and reports on the railway also regularly speak in terms of project time, highlighting the percentage of construction complete at that moment: "Nearly 80 percent of the construction of the China-Laos railway has been completed," said Lao Deputy Prime Minister Sonexay

Siphandone (*Xinhua* 2019); "The Luang Prabang railway station … is currently about 45 per cent complete," reported the *Phnom Penh Post* (2021). Percentages and dates that showcase benchmarks and steps accomplished are primary public metrics of infrastructure projects. From this perspective, the railway felt very much "out there" in two ways: first, as a list of tasks to check off and second, as a vision for the future rather than a material fact. Often, when I asked officials about the railway and how it would impact their life, my question was met with a pause, a shrug, then a sweeping statement about either the national economy or China. With its promises of connectivity and modernity, the railway positions most people in Laos as spectators waiting to see if it will deliver on promises made by the government: to integrate Laos into the regional and global economy and lift local people out of poverty. This state of anticipation constitutes a broader imagined future for the country, which is not necessarily part of daily life.

That night, however, in the small Khmu village situated within the new railway corridor, there were no checklists or schedules, and the railway was anything *but* out there. Clanging metal and the hum of dump trucks—the sounds of project time realized—accompanied the setting sun. Rather than awaiting a promised future with no present consequences, those in the path of construction experienced railway time as an intimate state of suspension in their very backyards as, for example, land, homes, burial areas, and farms were no longer accessible and residents had to wait for information, some form of redress, or compensation for their losses. Ambiguity in project plans elongated local experiences of suspension, which were compounded by the fact that the railway project had disrupted traditional land use years prior to the start of construction.

A provincial railway coordinator in Luang Namtha confirmed that authorities in his districts first informed residents about the project in 2010, when the original MoU was signed:

"We told people not to carry out any construction or grow crops on land earmarked for the railway corridor to avoid losses" (*Vientiane Times,* April 2017). However, much of the land that people had been instructed to cease farming on had still not been used for the project. In some places, land has sat unproductive for three or more years as those who lived on or used it waited for impending construction. When construction did begin in 2016, so did another round of waiting—this time for compensation money for homes that were demolished and agricultural land used for construction. Well into 2020, compensation had not been paid in its entirety. Many reports cite that more than 4,000 families will be directly affected by construction (RFA 2016; Ren 2018; DiCarlo, 2020b; Suhardiman et al., 2021). In a moment of vast under-reporting of affected families that contrasted previous official reports, on 23 June 2020, the *Vientiane Time*s published that over 131 billion Kip (a little more than US$14 million) had been paid to only 218 of the 321 affected families. The 131 billion Kip and 218 households remain far below the original planned compensation targets. Just a week later, on 30 June 2020, another *Vientiane Times* headline read: "Compensation offered by railway to landowners hits obstacles." The article vaguely explained that the railway steering committee had encountered problems and "had not yet been able to provide compensation as planned." My interviews as late as March 2020 confirmed that across provinces, people were still waiting for compensation.

Not only compensation, but planning and construction have stalled and started multiple times since the early-2000s. Prior to 2016, when construction began, the project had been delayed so many times that many people did not think the expensive and expansive project would ever come to fruition. Even at the time of the groundbreaking ceremony, doubt that it could be completed by the target date in December 2021 was pervasive. Many people assumed it would be another Laos "PDR" project—the acronym for People's Democratic Republic jokingly

referred to as Laos "Please Don't Rush"—reflecting the slow-moving bureaucratic processes and projects so common in the country. However, in the initial years of construction this epithet was quickly replaced with the notion that the railway was built with "China speed." Many of my interlocutors have since looked on in awe of the train cars that sit at the site of the future Vientiane station, finally indicating that this project has indeed materialized.

There are two types of suspension that occur—one related to the infrastructure planning and construction, and another delay in the suspended temporalities of the people living the construction of the infrastructure. Whether the railway speeds through construction or is hung up, there are other temporalities at play that manifest in the surrounding social worlds—of anticipation, suspension, waiting, and liminality—that more aptly capture the multifaceted on-the-ground experiences of large-scale infrastructure projects. Construction would not be possible without the very suspension and removal of the lifeworlds there prior. When understood as a social process, suspension has distinct rhythms and conditions of possibility. It occurs when a project and the conditions that make its development possible are suspended, slowed, redirected, or hit roadblocks, and in turn suspend the lives of people immediately surrounding them. In contrast to projects like the Kaeng Sua Ten Dam in Thailand, which was never built but threatened eviction for four decades (Carse and Kneas, 2019), a different sort of suspension emerges through the railway as throughout active construction people are left waiting for information, compensation, and new land.

This chapter looks at the material and lived experiences of railway construction across northern Laos placing these temporalities at the forefront of analysis. Attention to the construction of megaprojects on the ground and their temporal effects within the villages they displace de-centers straightforward conceptions of project time and infrastructure development,

showing how multiple temporalities overlap—as construction roars ahead while lives affected by it are held in a liminal state. In other words, lives, social worlds, and livelihoods are held "betwixt and between" so railway construction can proceed quickly. In this way, the railway acts as a sort of "liminal technology" (Suboticki and Sørensen, 2018), as the railway suspends local contexts and reshapes them to fit project time needs. For example, in many cases project supervisors do not have access to capital for land compensation, yet they are under a strict and narrow timeline to complete construction; so, people are left waiting for one aspect of the project that is delayed, while other aspects storm ahead. Unlike studies on infrastructural suspension that look at moments of breakdown (Schwenkel, 2015), this chapter explores the lives suspended due to megaprojects as they start, stop, and leave people in the lurch throughout their construction. It does so by first examining suspension and waiting in the villages and homes that have been directly affected by construction of the railway between 2018–2020, as many people in the path of construction were left hanging with limited knowledge or means of redress if they encountered problems or lost access to their land.

Second, this chapter draws connections between current infrastructure construction and past development-led displacements, as people often made sense of the promise and failure of the railway through sometimes quite similar instances of previous infrastructure development or displacement.[62] Drawing together these experiences illustrate how people use past instances of displacement to explain and understand present states of waiting. People must navigate not just the implications of one megaproject, but rather the intersecting traces and consequences of

[62] Dispossession and displacement have long histories in Laos, involving legacies of war, state-led development projects, village consolidation, and resource extraction. In addition, megaprojects, those especially large and visible infrastructures, in particular, are inherently displacing (Gellert and Lynch 2003).

multiple infrastructural disappointments and displacements over time. In other words, experiences of past displacement intersect with the present ones and inform how people negotiate with and experience the new projects. Considering this intersection illuminates how people experience and view large-scale infrastructure projects like the railway with fear, while others look to these projects with anticipation, and still others are resigned to their effects. It also elucidates the shifting, and at times contradictory, views of locals about infrastructure and draws attention to their uneven experiences of development based on class and ethnicity.

I argue that infrastructural suspension unfolds across multiple timescapes as suspended presents intersect with lived experiences of suspended pasts. In other words, infrastructural temporalities of suspension intersect across lifetimes. I then consider the power of waiting for differently positioned citizens. By focusing on the temporalities of infrastructures and situating them alongside histories of displacement, I complicate straightforward narratives of infrastructure-led development and project time to suggest that overlapping temporalities make the infrastructure frontier possible as people feel powerless and unable to contest projects.

Connecting literature on suspension and waiting with ethnographic insights from the railway corridor, this chapter demonstrates how local perspectives are shaped by long periods of waiting, uncertainty around land, knowledge that past projects did not materialize, and feelings that participation and redress are not possible, in three main sections. The next section, "From railroad time to infrastructural temporality," surveys two widely held views in the literature on railways and infrastructure development: 1) a belief in linear progress and 2) the assumed space-time compression of transportation infrastructures. I rebut both views and suggest that infrastructure is more productively understood through multiple and overlapping temporalities. Drawing inspiration from Carse and Kneas's (2019) notion of the "suspended present." the

subsequent section, “Lives suspended,” illustrates how the railway creates states of prolonged waiting. Here I am interested in the drawn-out moments and years of railway development through which life is suspended as people wait for an unknown and unclear future. In the next section, “Intersecting infrastructural temporalities: Suspended presents meet suspended pasts,” I expand on their notion of the suspended present by drawing connections to past experiences of displacement that inform stances toward the railway. My analysis follows Carse and Kneas (2019: 20) in presenting an examination centered on the suspended present as one that considers “how actors draw on a sense of historicity that is de-linked from that promoted by infrastructure planners and builders”

II. From railroad time to infrastructural temporality

Since their advent, railroads have engendered a particular temporality, one with tight schedules and precise timekeeping. From Japan to Italy and Frame, railroads are known for strict clock-time keeping (Tsuji, 2006). Railroads were the genesis of time zones, as the introduction of “railroad time” was the first regionally standardized time system, beginning in 1840 with the Great Western Railway in England. Railroads have also been theorized as shrinking both space and time (Lardner, 1850; see Geurts, 2019), often conceptualized in terms of time-space compression (Harvey, 1989) or, drawing on Marx (1973), the annihilation of space by time (Schivelbusch, 1977). Wolfgang Schivelbusch (1978: 40) pronounced the railroad a “destroyer of experiential space and time” as it reshaped European landscapes and economies throughout the Industrial Revolution. In 1843 Heine observed that “even the elementary concepts of time and space have begun to vacillate. Space is killed by the railways, and we are left with time alone … Now you can travel to Orleans in four and a half hours, and it takes no longer to get to

Rouen … I feel as if the mountains and forests of all countries were advancing on Paris. Even now, I can smell the German linden trees; the North Sea's breakers are rolling against my door" (cited in Schivelbusch 1978: 34). The distance between locations as measured in time is reduced, thus speeding up the circulation of people and things. Time is thus conceived in relation to space, terrain to be covered more quickly.

Projects like railways are framed by particular material and temporal visions that aspire toward frictionless capitalism and signal a politics of the present as constantly restructured by anticipation for the future. They are steeped in promises of progress, change, and modernity, which encourage people to envision a future world and their life possibilities in it (Anand, Gupta, and Appel, 2018; MacLean 2017; Reeves 2017). To achieve this vision, projects are mapped out and conceived in a stepwise process. In this sense, both development (Rostow, 1960) and infrastructure projects are imagined as unfolding linearly with clear economic ends. Both railway time and project time present time as standardized, linear, homogenous, measurable, and decontextualized (Adam, 1995; Adam, 2004), the language of planners.

Time, however, is not so straightforward, as various conceptions of it intersect, abut, and get confused. The temporal turn offered important insights on capitalist modernity and inequality (Bear, 2016), developing social theories on time that show it to be multifaceted, complex, entangled, and uneven (Adam, 1998; Bear, 2014; Sharma, 2014; Bear, 2016). Geographers and anthropologists have long engaged in debates on time and temporality. Massey (1994: 4), for example, critiqued the idea of time-space compression as socially undifferentiated and a means by which capital attempts to erase the sense of the local. As the world "speeds up" and is "spreading out" these processes must be placed in local context and understood as "meeting places" of social relations. Similarly, anthropologist Tim Ingold (1993: 154) focuses on local and

social contexts through lived experience. He proposes a perspective on the temporality of place, arguing that landscape is "constituted as an enduring record of—and testimony to—the lives and works of past generations who have dwelt within it, and in so doing, have left there something of themselves."

Infrastructure studies have only begun to critically engage with temporality (see Anand et al., 2018; Carse and Kneas, 2019; Joniak-Lüthi, 2019; Rippa, 2021). Drawing on both Massey (1994) and Ingold (1993), Joniak-Lüthi (2019: 6) conceptualizes infrastructures as "*places* in which specific social relations intersect and accumulate over time, forming unique social-material-political terrain." I am interested in this mosaic temporal terrain, not as a snapshot in time but as accumulating and intersecting temporalities that accompany infrastructures. I use the notion of temporality to explore the lived experiences of infrastructure as it is not simply time, but a state of being or relation with time. Temporality stresses the socially constructed nature of time, the "circumstance in which time is perceived as a problem or as a structure … a formula which takes many forms and particularizations" (McKeon, 1974: 124).

While railroad time and project time remain potent social and political forces, they posit realities that we should not accept at face value, as infrastructures are not always defined by progress, linearity, and forward movement. Instead, these versions of time diverge significantly from the more recent ways in which scholars have begun to theorize infrastructural temporalities. Shaped by notions of futurity, relations between people and infrastructure regularly result in deferral, ruination, suspension, abandonment, and repurposing (Stoler, 2013). In this light, infrastructure is anything but straightforward and is instead defined by complex temporality (Appel, 2018: 19). For example, developing the concept of "infrastructural time" Appel (2018: 44) demonstrates that infrastructure is more than material and spatial as it builds both time and

temporalities. She differentiates between teleological developmental time, which is based on progress and linearity, and infrastructural time—in her case "oil time"—which consists of "repetition and cyclicality; serial frontiers; abandonment, decommission, and ruins." Infrastructural time, she suggests, is best understood as folding over on itself as it "oscillates and stutters as progress and relapse coincide" such that projects do not arrive but rather advance and retreat (Appel, 2018: 45).

Other scholars have complicated project time through concepts of *timescapes* and *chronotopes*. Barbara Adam's (1998) "timescapes" are analytically useful to describe how project time articulates with other practices of time as social worlds are brought into being with and through infrastructural processes. A cluster of temporal relations and the embodied practices and approaches to time that accompany them, timescapes stress the contextual temporal features of life. Adam (1998: 10) notes that "other scapes such as landscapes, cityscapes and seascapes mark the spatial features of past and present activities and interaction of organisms and matter, timescapes emphasise their rhythmicities, their timings and tempos, their changes and contingencies." Building on this, Bear (2016) suggests that a timescapes perspective is useful to trace human practices of time and how they intersect with social and other nonhuman rhythms—here, the temporalities of infrastructure. Lord, Drew, and Gergan (2020) use timescapes to connect three timescales within social science literature on hydropower in the Himalaya: the politics of anticipation, life cycles of hydro-projects, and geological time. Similarly, Anand, Gupta, and Appel (2018) suggest that applying the concept of the chronotope[63] to infrastructure

[63] Russian theorist and scholar Mikhail Bakhtin (1984) first introduced the chronotope as a means to evoke thinking around time and space as merged rather than separate, as space-time configurations (Lawson, 2011).

positions projects as both spatial and temporal; they are never finished but unfold over multiple moments across uneven temporalities. As Anand, Gupta, and Appel, (2018: 17-18) write:

> "Once we conceptualize infrastructures not just in terms of the different places that they connect, but as spatiotemporal projects—as chronotopes—then we can open up new ways of thinking about the temporality and spatiality of infrastructure. As opposed to the 'finished' product of a planner's map, if we think of infrastructures as unfolding over many different moments with uneven temporalities, we get a picture in which the social and political are as important as the technical and logistical."

In addition, a popular strand of infrastructure literature focuses on the often-unfulfilled promise of infrastructure (Anand, Gupta, and Appel, 2018), as well as incomplete or unfinished projects (Carse and Kneas, 2019). Within this scholarship, a focus on ruins, waste, and decay reveals how imagined futures fail to come to fruition as infrastructures age, fall apart, or require maintenance and, at times, produce unexpected outcomes (Grant, 2019; Lam, 2019; Rippa, 2019). Gupta (2018: 27) describes incomplete projects, the "ruins of the future," that exist between "hopes of modernity and progress embodied in the start of construction, and the suspension of those hopes in the half-built structure." As Boyer (2018: 6) put it, "ruination is a constant companion of infrastructure," particularly in the global South. Ruins, disappointments, and displacements thus persist and can result from the infrastructural landscape.

To bring the often-overlooked temporalities of infrastructure to the forefront, I look to Carse and Kneas's (2019) typology to interpret the temporalities of unbuilt or unfinished infrastructures. One type, the "suspended present," illuminates the transformations of daily life associated with experiences of infrastructural delay. Gupta's (2018) theorizing on suspension and ruination is helpful as it urges our thinking away from a narrative of completion, defining suspension not as a transient property or state in between but as a condition in itself. Rather than

decay and destruction indicating an end point as a project ages or fails, I locate rubble in the very construction of the railway, in the often-overlooked spaces and suspended times that transform a home to a construction site seemingly overnight.

The following section weaves together the suspended present with a critical view on waiting, revealing the uneven implications of infrastructure. I ethnographically narrate accounts of waiting through four characters—Dorn, Foua, Hong, and Phouthong. Each of their homes are located within the railway corridor and they have lived multiple years suspended between railway construction and the social worlds engendered by the dusty and uncertain materiality of construction. Dorn lives in Luang Prabang province; Phouthong and Foua live in Vientiane province, both within an hour of Vang Vieng; and Hong is farther north in Oudomxay province.

III. Lives suspended

"We've waited too long for compensation, three people died already!" joked Dorn. "They cannot wait. *Bai gon* [so long or goodbye]!" She slapped her knee and laughed heartily at her grim but true joke—three of her neighbors had indeed passed away since local officials informed her village that a portion of it would be used for railway construction. Not far from the future Luang Prabang station, I sat with her Khmu family in the warm morning sun, playing peek-a-boo with her two tiny grandchildren as they ran in and out of the house yelling *saibaidee* (hi!) and *sok dee* (good luck!), asking if I had candy. Dorn is a retired farmer. She made clear that, because she is no longer engaging in the rhythms of her fields, waiting now dominated her day. She was waiting for land compensation, and waiting to know when her family could farm on their land. As we spent warm afternoons walking the village together, she showed me where local officials told her to expect construction. She was quick to point out that her family was still

in the lurch concerning their approximately 2.5 hectares of affected land where they grew teak and another 1.5 hectares of rice fields. “We lost both the rice and teak areas and have not been able to use them for three, almost four years. I have been waiting for compensation that whole time.” Her husband, who joined us on that day’s walk, added that the construction company had not yet used the land. He continued, “because I don’t have a rice field now, I don’t have a job. I just stay at home with the family and help with the grandchildren. We have to buy rice because we cannot grow it.” They lamented that due to the high price of rice, they were not able buy all the food they needed with their children’s low salaries. However, he added, “I will not buy new land once I get compensation because my children work for the government now and they do not have time to do agriculture and I am getting too old.”

Over the past three years, they met with officials about compensation and land loss only a handful of times and all in group meetings. At these meeting, they received partial information on timelines, land values, and construction plans that the provincial offices were still working out. Dorn said that, at first, each meeting felt hypothetical—she did not really believe they would lose land because the plans were so unclear and they kept changing. However, with construction and restrictions on land, Dorn began to call the railway and land offices in Luang Prabang. She had done so multiple times over the past two years to ask for compensation for lost rice cultivation. “We get the same answer, ‘please wait’.” According to Dorn, the officials she spoke with said no more than this because they likely did not know much more themselves. As much as she called to check in, she did not expect the person in the office to have news for her. Yet, she continued to call. Dorn narrated simultaneous senses of resignation and hope in their waiting. “I have no choice; we have to wait. But I continue to call because they might pay us someday.” Her most recent encounter with local railway officials, which took place the day before our walk,

offered hope that compensation might come through soon. She explained that "[the officials] came to the village to ask me to sign compensation papers. I think they were bank documents but I'm not sure. But I think it is good news." She sounded weary, particularly of the lack of knowledge and amount of time that had passed without information.

We meandered between home gardens dotted with wildflowers to the house of her neighbor, who agreed to talk with us about his farmland. He handed me a short stool, next to his on the front stoop of his home. Railway construction affected most of his farmland—a garden and a rice field. "We did not get new land, but we will get money. We have just not received it yet." He echoed Dorn's sentiment saying, "I just have to wait. I will accept whatever they offer. It is a government project. There is no choice." Dorn interjects: "This project is very important. If they don't pay you, it's no problem for them. We cannot ask for more money. The land belongs to the government, when they need it, they can get it. When there are no projects then you can use the land forever. If there are some projects from the government then you have to return the land." Her statement points to a sense that she felt powerless to entirely guide her own life. As Swartz (1975) argues, prolonged waiting positions the time and life of those kept waiting as less valuable than those imposing the wait or not required to wait.

Villagers often described construction in terms of their lack of choice and incomplete information. "It is the government's plan to develop the country and people should participate. If we have good enough conditions when we move—meaning we get appropriate compensation and good agricultural land—then people will be happy to move and help the country develop. But we have few details on this," said Dorn's husband. Often, they lacked information on how to engage in bureaucracy, e.g., to obtain information, permits, or permissions, that would allow them to resolve ongoing feelings of suspension. Dorn's neighbor motioned to the other side of

the road, saying that they lost much more land there, but they were unsure of how calculations would take place: “Maybe by the trees? But I don’t know how much per square meter. He shrugged and concluded: “I do not know what [the government’s] real plan is and when they will come, but if they ask us to move, we have to move.” In this sense, waiting can be punitive when one does not know how long one will be kept waiting (Swartz, 1975). And so, Dorn continued to call district offices because she felt there is little else that she was able to do, but she wanted to do something. As I departed that afternoon, I risked a joke, wishing that no one else would pass away from all the waiting. She quickly snapped back “No, no we will get money soon and even travel on the train,” she paused in reflection, “Well, for a few months we can survive the wait … but not years.”

Similar cases of waiting abound throughout the corridor. Approximately 150 kilometers south of Dorn’s village in a rural part of Vientiane province, Phouthong and I sat on a hill overlooking rail construction. A male farmer in his 60s, he pointed out the 1.5 ha of land that he gradually lost to the railway. “I watched my rice fields get smaller and smaller through the construction process.” Construction halted his ability to farm and the local government instructed him to wait for more information on when and how he would receive compensation. He explained, “when the local government came to inform us about the project, they only said, ‘wait, wait… ’; it has been two years without any update.” He went on, “I feel very annoyed with waiting now.” People do not express joy or comfort in waiting, instead describing it as unpleasant, uncertain, and tedious. Opacity in processes raised additional challenges for many affected people who were unsure which institutions they could communicate with when problems arose. Phouthong did not know how to contact them and why he had not yet received compensation when he gave up farmland long ago. He concluded that he could do little else than

talk with his village leader. Exasperated by his experience and the little information he could offer, he suggested that the next day we visit his family members who might know more. The next morning, we drove to a neighboring Hmong village that appeared poorer than Phouthong's village and was next to a new railway tunnel. His cousin was bent over a tub of water preparing a freshly-killed chicken, as her three children ran around the hillside. She received compensation for her house two years after construction on the tunnel began. However, she had not yet received redress for the agricultural land where she planted the family garden for sustenance as well as fruit trees from which she sold products at the local market.

As these experiences illustrate, making people wait can lead to frustration and worry. I became fixated on one particular Hmong village in rural Vientiane province, curious what had become of a multi-year debate over a grave site. "Who knows? Today it could be here and tomorrow it could be gone," said Foua, a father of six and near-lifelong resident of the area, via text as we prepared for my visit the following week for his sister's wedding. He was referring to a grave that stood in the way of the railway tracks that I continued to inquire about since first hearing of the village's struggle over who would move it—the village, the local government, or the construction company—and when. When I returned to the village the next week to attend the wedding and follow up on the past few months of construction, Foua suggested we meet at a location on the main road before driving to the gravesite at the edge of a village. Villages here are clustered tightly along the road with different ethnic groups geographically divided. The side of the road Foua lives on is ethnic Hmong, south toward Vang Vieng is Lao, and north on the main road is Khmu. It was a typical January afternoon in 2020—the sun was high in a cloudless sky and the cooler winter air was a reprieve from the sweltering heat that would soon arrive again in March and April. As if on cue, I saw Foua's familiar smiling eyes and weathered cheeks

under a baseball cap as his motorbike rolled around the corner. His daughter sat behind him and his son in front, their necks craned for the *falang* woman that sometimes hung around their home. Foua motioned for me to follow him.[64] We drove up a steep rocky path and stopped briefly in front of his house, where spare car parts and furniture covered in a film of dust lay around the grassless yard. I waved to his mother who quickly tasked us with helping to defeather fifty chickens for the wedding festivities. As we plucked feathers, Foua updated me on his sister's celebratory preparations for the evening. Our conversation was punctuated by the reverberations of trucks passing on the road below the house.

Once all the chickens were deemed sufficiently clean, Foua, the kids, and I drove out to the railway for sunset. I had walked and biked these sections of the soon-to-be tracks numerous times, making note of the agricultural and forest land uses there. While the tracks had yet to be laid, the cement of the retaining walls was dry and land where the track will run had been razed. We stood atop the 20-foot retaining walls that, at this section, ran along both sides of the track, slanted at a 35-degree angle. Beyond the gulch that was the future site of tracks, the rolling green hills were illuminated by the setting sun; behind us rose the tall, limestone karst ridges characteristic of this region. The kids were yelling and birds chirping. Foua and I paid quiet respect to a now indiscernible burial ground, our destination that evening.

In the summer of 2019, as most of the railway pylons were built and land cleared at this section of railway track, a once-auspiciously positioned grave lay in the path of the tracks. A mound of earth that excavators meticulously dug around the grave was all that remained of the forested hillside until a solution to move it could be reached. One difficulty arranging for the removal of the grave was the prevalence of geomancy in the region. Geomancy involves a belief

[64] *Falang* or *farang*, refers to Western, often Caucasian, foreigners.

in the powers imbued in landscape and leads to the "selection of auspicious burial sites through interpretation of the mountain landscape" which is a key part of Hmong ritual (Johnson 1985: 14; see Tapp 1986b). In Hmong culture, digging up graves can have treacherous consequences for the soul of the deceased and their family. "For us, even if they asked us to dig up the body, we cannot do it. We do not want it. It has been like this for such a long time and is bad to do," Foua started to explain. "We believe in ghosts and spirits, so we bury people. And it is very bad to move a body. We *can* do something, but if they move [a body] like that then we must use a story and shaman and have to kill an animal." He spoke with more urgency, "We believe that even if the body is dead, its soul is still there. So even if we move the coffin and body, the soul will still be there. Because we don't want the soul to get hurt, destroyed, or lost, we have to have a shaman [for a ceremony]. If we do that [well], then fine. But if not, then the sons of the dead person will become sick or die. That's why we really don't want anyone to touch or move [the body]." There was palpable tension throughout his story, and I was reminded of O'Neill's (2012: 515) observation that "[i]nfrastructure … can injure both the living and the dead, rendering their personhood wounded and disjointed." The mound has become a physical manifestation of powerlessness and of disregard for the deceased and their rituals surrounding death. It also stood as a daily reminder of the unknown—when and to where the grave would be moved. It is a reminder of an inability to act and that the only possibility is to "wait and see."



Image 6.1. The railway workers who cleared land for the tracks initially carved around this mound of earth, which local villagers informed them contained a Hmong gravesite. The one coffin had been interred for nineteen years. (Source: the author, 2019)

On this cool evening as the sun set behind the hills, there was no trace of the once-forested gravesite, nor the mound of earth. When the coffin was finally removed, an excavator quickly razed the land until it was identical to the hard, flat red earth that surrounded it. The sons of the deceased bought a cow and a pig for a shamanic ceremony to assist the spirit as it moved to a new place of rest. “Through the shaman we explain to the soul what happened and apologize for moving the body … we have golden paper … it’s like money for the spirit to entice it to follow the body to the new [burial] place.” While the Hmong in this village accepted that the coffin would be moved and this ceremony performed, they refused to do the digging. The railway constructions workers (who were mostly Chinese) also refused and instead hired a small group of Khmu people from a village north on the road to excavate and re-bury the coffin elsewhere. “I don’t know why the Chinese workers did not dig it up themselves,” reflected Foua,

"but if they want to make the railway a little bit wider, then they have to get rid of many more [gravesites]. This is what we really, *really* don't like." The village leaders asked the railway company to pay approximately 10 million kip (US$1,100) to cover the cost of animals to slaughter for the rituals to keep the soul unharmed. They, however, only received 5 million Kip (US$550) and the family had to contribute the rest of the money for the shamanic ceremony, which they eventually raised. When unearthed, the nineteen-year-old coffin was still intact, and the Khmu villagers moved it to land that the government designated as a large burial site for both ethnic Hmong and Khmu (both ethnic groups bury their dead while many Lao are cremated). Foua looked in the direction of the new burial plot, located about a kilometer north of us on a forested hillside; "there are so many graves there now, both Hmong and Khmu, we all bury in that place." His voice trailed off as he started to walk down to the old gravesite.

As we walked back to our motorbikes, Foua pointed across the tracks to a lone house with walls made of bamboo and an aluminum roof and shared another story of suspension. "The family over there won't clear out, even after the construction and digging began." He looked to the house now perched on a ledge that juts past the retaining walls, hovering 50 feet from the tracks, now disconnected from the village. In the surrounding villages, he explained, most houses that moved for the train are ethnic Khmu, many of whom received some compensation, though only a low amount for their house and nothing for agricultural land. This Hmong family, Foua explains, plans to move but cannot without the compensation that the government promised. As of February 2020, they had yet to. Unlike other households, they do not have family land nearby to move to. "That's why they haven't moved and stay there even with construction. But it is very hard to get in their house." To cross the retaining wall, they have to go down to where the wall is low and walk. And if they want to go by motorbike, they have to drive [1 to 2 kilometers] to the

passage for trucks and cars. They have been able to stay because "when the Chinese came, they said they just wanted enough land for the railway. That's why this family can stay now." The house is a visible form of suspension, perched on an open and dusty ledge, the family waiting until they are forced to move and waiting for the compensation to be able to do so—whichever comes first.[65]



Image 6.2. Construction of railway pylons above agricultural and village land in Oudomxay province. (Source: the author, 2020)

Later that year I returned to a number of villages located farther north on the railway corridor in Oudomxay province. Here, railway pylons tower over agricultural land on the east

[65] Not unlike China's "nail houses" (钉子户) in in the sense that that have selected not to vacate until compensated to do so.

side of the community and construction workers are just starting to connect the pylons to lay the tracks high above the village (Image 6.2). It is one of the most dramatic views of construction intersecting with a village life and agricultural land. Chickens scurry around the thick gray concrete that dwarfs the small thatch-walled houses. The pylons are stacked tightly together because the track will be elevated in this section. The railway company claims this will minimize effects to the community and environment. However, villagers say otherwise as they are acutely attuned to the new dusty concrete landscape of the village and the rhythm of development—a rhythm marked by swift project construction and not so swift sharing of information or compensation.

Hong, a 47-year-old man who grew up here, accompanied me on a number of walks through his village. Even though construction is well underway, and land was used to build a large labor camp just beyond the hill, villagers have yet to be compensated for lost land. However, waiting does not mean that people are idle (Brun, 2015). Active waiting among displaced peoples, asylum seekers, and the poor, for example, is well-documented (Chu, 2010; Hage, 2009a; 2009b). Hong explained that every single month they requested a meeting between the provincial railway office, the *naiban*, and affected villagers in an attempt to discuss and negotiate compensation. “We’ve done this for two years and still nothing.” Rather than a stagnant state, waiting here is both variable and dynamic. Marcel (1967) describes active waiting as a consistent monitoring of the likelihood that an event of waiting will pay off based on how long one is prepared to wait. As Dorn explicitly stated above: she will wait a few more months *not* years. Similar to her sentiment, Hong doubted that anything will come of his village’s monthly requests for meetings. He instead views them as means to engage more actively with the project in hopes that it will allow him to better calculate his future plans. “We keep asking so

they don't forget us, and so we know what to do," even though he has limited hope that it will make a difference after two years. Waiting on the one hand entails a certain passivity, but Hong and Dorn also demonstrate a sort of agency that, while limited, affords them the hope that keeps them waiting.



Image 6.3. A woman washes materials from wedding festival in her village's main stream, alongside which railway pylons have been constructed. (Source: the author, 2019)

My time with Hong highlighted another reason why people hold out hope: an important difference between permanent land expropriation and temporary land use during construction. Temporary use of land for construction initially provided many people the assurance that once construction was complete, they could again access their land. Most people with "temporary use" land lost access to some or all of their agricultural land. Because officials never explained what the land would be temporarily used for, there was an assumption that when returned to villagers and smallholders it would be the same as they left it. However, another man in Hong's village whose land near a tunnel was designated for temporary construction use complained that this was not the case. He and his wife, an older Khmu couple, showed us the documents that determined the amount of compensation. When local officials came to his village to sign land use and appropriation documents, he agreed to give up one of his three sections of rice paddy land for temporary construction use. However, three months later when he went to prepare his fields for cultivation, he saw that construction workers had dumped rocks from the tunnel excavation on all three parcels of land. He immediately called the district land officer who instructed him to get paperwork from his village chief to confirm his complaint; only then would they review the case. After weeks, he submitted the correct paperwork and got a response. I asked his wife what they would do with the land when they get it back. She bemoaned, "Oooh there is nothing we can do with it. It does not look like paddy [rice] anymore. It is all big rocks and boulders, and they are too heavy for us to move." After waiting weeks, a local land official visited the village to check on construction and confirm the complaint. Upon showing the official, he too asked what they plan to do with the land. Hong responded, "I cannot do anything with the land, I would like to sell it to the project." He has since attempted unsuccessfully to renegotiate his paperwork to

include the sale of all three parcels of land. However, the local official says they will pay for the first third and they have to wait until the committee discusses the remaining two-thirds.

Partial knowledge about construction and partial compensation exacerbates the challenges of waiting, yet at the same time, the lack of certainty facilitates a sense of hope or expectation. As Bourdieu (2000: 228) explains, the art of "making people wait, of delaying without destroying hope, of adjourning without totally disappointing, which would have the effect of killing the waiting itself, is an integral part of the exercise of power." The railway generates hope and the promises of infrastructure for the people it holds in suspension. For Dorn, Foua, Hong, and Phouthong, the suspended present encouraged them to wait while they held out hope. Hong, for example, understood that construction workers would only use his land during construction and then return it after. Phouthong's cousin received some compensation, leading her to believe that compensation was happening as promised, albeit slowly. Foua saw efforts taken to move the gravesite as a sign that local village customs will be respected and remained optimistic that the railway would not dramatically alter his home. Dorn continued to make phone calls to local officials who politely answered and asked her to continue to wait. As commonly happens within bureaucracy, these individuals' waiting involved the expectation of something to come. At the same time, the ambiguity that surrounded their waiting—its duration, rates of compensation, where to move, or when one can use land—generated senses of anxiety, ambivalence, and resignation alongside hope. And yet despite a sense of resignation, Dorn and Hong tried to make known their presence and status as waiting. Like Brun's (2015) case of agency-in-waiting, people may feel trapped by present outcomes, but are still able to structure their experiences of extended uncertainty and waiting by actively trying to counteract them.

Differentiation and the power of waiting

The suspended present here reveals an exercise of power over people's lives. Through attention to temporalities of suspension and waiting, we can critique and account for inequality as people's ability to plan and direct their lives varies across social groups (Bear, 2016). Temporal insecurity is a crucial element in experiences of inequality (Comaroff and Comaroff, 2001; Mains, 2007; Vigh, 2008; Auyero, 2012). Literature on waiting encourages reflection on power. In Bourdieu's (2000: 228) words: "absolute power is the power to make oneself unpredictable and deny other people any reasonable anticipation, to place them in total uncertainty by offering no scope to their capacity to predict … The all-powerful is he who does not wait but who makes others wait." For example, for officials outside the village who do not experience the intersecting rhythms of infrastructure construction and of seasonal agriculture, these concerns are easily overlooked. "Of course, construction can proceed, and compensation can begin later … if we wait [railway] construction will take too long," said the head of one of the provincial Laos–China Railway offices in June 2019. His statement demonstrates that waiting is not acceptable for those driving infrastructure projects and that certain people wait differently. According to Levine (1997) the "waiting game" determines who waits up front and in the back of the line, and who does not wait at all. He suggests a number of rules that dictate the game: the powerful control who waits, time can be given as a gift, waiting can be a method of control, people wait for what they value, the longer people wait for something the greater the status of the waited-upon, and money can buy a spot at the front.

A common experience of the poor or less powerful, waiting produces dependency and subordination (Auyero, 2012) as it generates or reinforces feelings of powerlessness, precarity, and vulnerability. In Laos, less privileged or marginalized people in terms of ethnicity and class

know suspension most intimately. Dorn, Foua, Hong, and Phouthong are all from minority ethnicities—either Hmong or Khmu rather than the dominant lowland Lao. They all live in small, thatched-walled houses and have spent most of their lives relying on subsistence agriculture. They also expressly stated a sense of powerlessness in relation to railway construction. In each of their villages, they were instructed not to talk about the project and encountered bureaucratic roadblocks, such as additional paperwork, when they tried to negotiate their position. As Phouthong recapitulated: "I am only an ordinary person, and if the government approved these projects we have to follow."

At the same time, they were each aware that this was not the case for everyone. "Rich people already benefit," said Hong as we sat tucked between yellow backhoes on freshly churned up red earth with a group of Lao construction workers who kindly indulged my questions on a lunch break. One jumped in to clarify that the real problem is that people will receive different renumeration rates depending on their connections with provincial and district level officials. "For compensation, if you are rich and have knowledge then you get maybe 200,000 Kip (US$22) per square meter" as opposed to 17,000 Kip (US$1.87). He explained that people who are powerful are able and know how to ask for more money. More nods and "*men leo*" (a phrase of affirmation) echoed around the circle. As elsewhere in the world, political, social, and economic capital varies, and elites have an advantage in defining land compensation protocols (Green and Baird, 2016). Many people in Vientiane are part of the dominant Lao ethnic group who, as Petit (2017) shows, often have connections to political elites and for this reason have succeeded in opposing other projects. Since railway land compensation discussions began, spaces of negotiation and contestation have slowly surfaced but those who have most effectively negotiated their position have done so through individuals with political connections.

A state-run newspaper published on this process in detail (a surprise given the contentious nature of these issues) and reported that in both Oudomxay and Vientiane provinces residents "have yet to be properly compensated for the loss of their land and other property following construction of the Laos–China Railway" because they refused compensation on the grounds that the rate was too low or inaccurately accounted. Their refusal results not in effective resistance to construction or even better compensation, but rather additional delay in any compensation at all. A similar case emerged in Vang Vieng, when a new city project was put on hold because it affected the land of a number of local elites. In both instances, people with personal connections to those in power were able to resist the construction of large infrastructure projects. This is increasingly apparent with railway land compensation. For example, on 22 January 2020, members of the Provincial People's Assembly (PPA) in Vientiane Capital raised issues about land compensation for infrastructure projects, including the railway, Vientiane Expressway, and the Mekong Riverbank Erosion Protection project. This area surrounding the capital is largely inhabited by the dominant Lao ethnic group. Mr. Vilaysan Phommixay, PPA member from Xaysetta district in the capital, made a public statement on compensation, explaining that "railway construction is near villagers' land, but the compensation rate is very low. For example, the land calculation in Dongmaikhai village, in some areas is calculated to be 5,000kip [per square meter], while some areas are 10,000kip. In this case, what should we do? If we ask villagers to move, how can they afford new land as the calculation is very low? How should we find the solution for this issue?" These are many of the same arguments I heard years prior in more marginal areas of the country in the Khmu and Hmong villages that Hong, Dorn, Foua, and Phouthong call home. However, rather than take their issues to the provincial assembly, as ethnic Lao in the capital were able to do, they were barred from significant

interaction with railway construction, leaving them waiting, often resigned and fraught. And yet, so long as waiting was determined to be meaningful or necessary, people wait (Brun, 2015).

I suggest that calculations to determine *how* and *how long* to wait entail not only the suspended present and positioning within social and political hierarchies, but also past experiences of infrastructure-led displacement. In the next section I go back in time with people affected by railway construction as they reflect on past displacements as a way to make sense of current disruptions and states of suspension from the railway.

IV. Intersecting infrastructural temporalities: Suspended presents meet suspended pasts

Across northern Laos citizens make sense of current disruptions and states of infrastructural suspension and waiting by reflecting on prior experiences of displacement. As mentioned in the introduction to this chapter, Carse and Kneas (2019) suggest that analyses of infrastructural suspension also draw on particular actors' sense of historicity. Because people negotiate the present using experiences of the past, we must account for infrastructural pasts. From this perspective, we can begin to view infrastructures in terms of liminality built on not one project or timescape but multiple experiences of waiting and suspension.

On a hot afternoon in a van that is too large for just two people, Bouchan and I were en route to a village near the Luang Prabang station construction site. Our drive was punctuated by potholes. For a few minutes we sailed over smooth dark new pavement, then Bounchan's driving turned acrobatic to avoid treacherous potholes. The inconsistency along the road spoke volumes to him, and as he braked and swerved around passing potholes his irritation grew. His frustration was channeled not at the usual suspect of "China" for all the trucks that tear up the roads or the Lao government's poor road maintenance. Instead, Bounchan sees the railway as perpetuating

"more of the same." "The train has similar problems as hydropower. The people have to move!" he yelled over the Thai pop that blared on the van's many extra jury-rigged speakers. He scoffs at the idea that the railway will bring modernity and development, questioning what that even means for his home: "We are already developed in Luang Prabang city." He is discouraged by the conflicting views he hears from his fellow Lao. "We should know better," he starts "but some people do not have strong opinions." Reflecting on tensions surrounding Laos' latest and largest project, he estimated that:

> People feel 50-50 about the train. The first 50% probably do not know anything about it; they are happy because they have never seen a train before, and they have never traveled by train. The other 50%, they already know what *could* happen in the future, because we have had situations like this before. This is like me; I am not happy with the train because we may lose a lot. My family lost land before, and we did not see the development that the government promised. But some other people [cannot anticipate] what will happen in the future; it is hard to imagine.

Bounchan points to important tensions in how local people understand and experience large-scale infrastructure projects—they could be beneficial, but histories of displacement, states of waiting, and unfulfilled promises of development tell them otherwise.

Throughout my fieldwork, I encountered a pattern across the provinces where I conducted interviews: as I inquired about new infrastructure construction related to the railway, local Lao speculated on the future promises of the railway by telling stories of past decay, dispossession, or disappointment. For some, this is not their first experience of displacement; they have lost land or been moved due to village consolidation programs, agribusiness, large-scale infrastructures, and other resettlement schemes. Repetitive dispossession is possible because as Petit (2017) argues, Lao state authorities enforce decisions for megaprojects and

agribusiness with no regard for previously granted resettlement rights. While explanations for state-led development normalize the liminality of displacement, actual dispossession is always disruptive.

Often the very people who will lose land indicated that the railway would bring progress and modernity to their villages. This can be attributed to the fact that displacement is made to seem inevitable and even necessary for development (Gellert and Lynch, 2003). However, after multiple failed promises, this inevitability begins to fade as multiple suspensions and prolonged states of waiting reinforce senses of precarity and frustration. Multiple dispossessions over time have resounding societal effects. The precarity of not knowing where one can or will live in a generation erodes senses of place and community as well as confidence in the promise of infrastructures.

Past displacement and resettlement beyond infrastructure

People are often more engaged in contesting land loss and displacement if they have past experiences of resettlement and dispossession. I would thus be remiss to neglect historical drivers of displacement, dispossession, and resettlement. Displacement, often by the state, has been used not only to implement infrastructure and development projects (e.g., hydropower projects, roads, the railway), but also occurred as a result of war, conflict, and rural development policy (Evrard and Goudineau, 2004). The Indo-China War (1946–1954) and the American (Vietnam) war (1955–1975) were the first events to effect major changes in population movement in Laos; the prior period of French colonialism saw no major population shifts. In the first study of internal resettlement in Laos conducted for the UN, French anthropologist Yves Goudineau (1997: 11) found that more than half of the villages in Laos were moved during the

30 years of conflict. Taillard (1989: 95) estimated that in 1958 27,000 people were displaced, which increased to 90,000 in 1960, 125,000 in 1962, and as many as 730,000 during the 1973 ceasefire.

After the LPRF came to power in 1975, over 300,000 people fled to Thailand (Stuart-Fox, 1986: 52), and from there many went to France and the United States, though some eventually returned to Laos at the behest of the Thai government. Walking back to Foua's house, he noted that many of the people resettled in this area had returned to Laos during waves of forced repatriation from Thailand around 2009. After the close of the American War in 1975, many of the Hmong who assisted the United States sought asylum in Thailand, fearing retribution by the Lao government. From there, many applied for and obtained asylum status in the US until the Thai government clamped down on international organizations' contact with Hmong refugees in 2007. Despite the position of many human rights organizations, the UN, and US that refugees would not be safe upon return to Laos, the Thai government nonetheless instituted repatriation and deportation efforts in 2009. During that time, they provided US$350–400 per person and used thousands of Thai troops to assist in the "voluntary" resettlement and repatriation, often in "focal sites," or areas selected by the government along main routes, streams, and plains to relocate displaced people (according to the Lao government (1998) each site should hold an average of 16 villages and 5,200 people).

Such sites are how villages like Foua's came to be—in his case a cluster of Hmong villages that had been resettled there after returning from Thailand. The echoes and effects of village relocation, war, living as a refugee only to return to a less-than-welcoming country undoubtedly affect how people experience infrastructural suspension. Today, they wait for an unknown future that could entail another form of forced displacement that will again be labeled

"voluntary." However, as Evrard and Goudineau (2004: 947) aptly point out: "the distinction between "voluntary" and "involuntary" resettlement makes no sense in the Lao context … most of the cases do not really fall into either category, because they are a mixture of forced and voluntary resettlement." This follows in Foua's case, as he simultaneously holds out hope that the railway will not change their village and resents the project for relocating their dead.

From 1975 to the end of the 1980s, the government began active internal relocation of ethnic minorities from remote, mountainous regions to the lowlands, often for security concerns (Ireson and Ireson, 1991). However, resettlement also involved nearly all the ethnic groups across the Lao countryside. Internal resettlement has occurred for various reasons—security, opium eradication, access, cultural integration and nation building, and the reduction of swidden agriculture—by means of village consolidations, land and forest allocation programs, and focal sites[66] that concentrate ethnic minorities (Baird and Shoemaker 2007). After 1985, rural development policy was intended to transfer populations to establish new communities from the highlands to the lowlands, to stop swidden agriculture, and to "improve livelihoods." The negative effects and "failure" of these resettlements are now well-documented (Baird and Shoemaker, 2007; Evrard and Goudineau, 2004; Laungaramsri and Sengchanh, 2018). Goudineau (1997) documented impacts such as disease, high infant mortality, poor access to services, and reduction in rice cultivation following the transition from upland to lowland agriculture. In addition, livelihoods become increasingly precarious and families with less or no land suffered disproportionately from resettlement (Laungaramsri and Sengchanh, 2018)

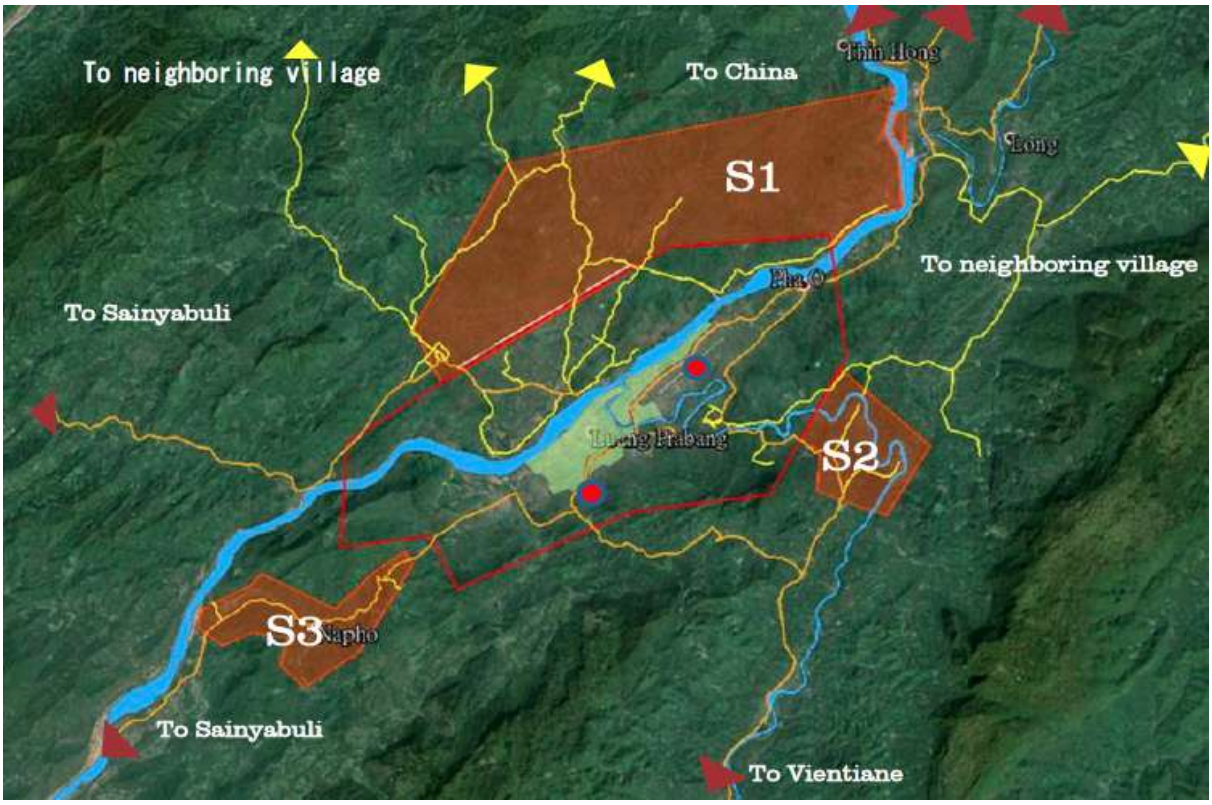
[66] Focal Sites are a part of the Lao government's rural development program, defined as a means to provide development and assistance to concentrated groups of ethnic minorities in a more cost-effective and efficient manner (GoL, 1998). A form of population management, often ethnic minorities were moved to more accessible areas with the purpose of cultural and economic integration with the Lao Leum or lowland Lao (Baird and Shoemaker, 2008).

Today, a helplessness from past displacements echoes through the ways people make sense of their current suspension, unclear if they will again have to move home and hearth. A family of six in one of the Hmong villages north of Vang Vieng exemplified this tension as the father described how they had been moved from the forest for village consolidation. This often involved "voluntary resettlements" of ethnic minorities from the highlands to lowlands and closer to roads. Now, after building their home, farm, and lives, they are again being pushed out, this time by rail construction. In the words of a woman who had once been resettled in the lowlands and recently lost farmland to the railway: "If the government does not feel happy that we are staying here, they can send us back to the forest! If they send us to the forest, we will just go. I feel I do not have rights." Similarly, Foua's cousin lamented that "before the government asked us to move from the forest to stay here [near the road] … and now there will be a project [the railway] and you will ask us to move out again? Ok so, we should just go back, stay in the forest again then and leave the homes we made?"

The following stories take place in locations that currently face railway-related dispossession and displacement that have gone through similar evictions in the past. As a result of earlier experiences of suspension, displacement, and decay, interviewees' reactions to the railway are not straightforward and instead vary between resignation, ambivalence, and indignation. Some people will do more to contest land loss and displacement if they have past experiences of displacement, while those without previous experiences of displacement echo "we want to be developed" and are more willing to move.

First a dam, then a zone

It had been a rainy week in Luang Prabang province. The sound of the crickets was so deafening that it muffled the background noises of roosters and human voices. The village was small and poorer than others in the area. Chomphet district in Luang Prabang province lies north across the Mekong River from Luang Prabang city, yet it is a far cry from the French colonial architecture, temples, and expensive restaurants in Laos' main tourist city and UNESCO World Heritage site of Luang Prabang. The US$10 cocktails and US$100+ per night air-conditioned hotel rooms with swimming pools just across the river are a painful contrast to the 3x3-meter low, dark family huts, which become unbearably hot and easily flooded during the rainy season. The railway will pass through part of this district and, in anticipation for the railway, it was selected for the construction of a massive special economic zone (SEZ) known as Luang Prabang New City or Diamond SEZ. According to the project's Conceptual Planning and Urban Design report, three sites surrounding old Luang Prabang city will be used for urban and tourism development (Map 6.1). At the time of my fieldwork, there was railway and station construction in S1 and S2. District officials informed villagers across S1 of the new city plans. While every household I spoke with was aware of the railway, many people had not seen construction yet. In S2, railway tracks and one of the largest stations are under construction.



Map 6.1. Outline of planned special economic zones and development areas surrounding Luang Prabang City. The area inside the red line encompasses the protected area of the UNESCO Ancient City. (Source: Phousy Group)

The *naiban* (village chief) of a village in S1 invited us to sit with him on low wooden chairs under a dirt-floor pavilion to discuss the railway and new city plans. He oversees 339 people across 66 households in this 500-hectare village. He began our conversation by explaining that his village has a unique perspective on new infrastructure projects due to its previous resettlement experience. "This village is quite different, a special case, because we were already resettled in 1995. We used to live near the main stream of the Mekong River. We were told that because we do too many agricultural activities, that we are damaging the forest. So, the provincial-level offices decided to move us to protect the water upstream [from Luang Prabang city] and preserve the forest. We think it was because they want to build more dams there." Their

old land is about three hours away by poorly maintained dirt road and the government re-categorized it as a protection forest, meaning that agriculture is no longer permitted there.

Upon moving to the new village (their current location), they shifted their farming practices because of poorer soil quality and limited water supply. In addition, the new land was completely forested when they arrived, so they had to clear timber to build homes. The *naiban* pointed out the irony in this because they were told by the provincial and district authorities that one reason they were required to move was because of heavy deforestation in their original village. They did not receive any additional government assistance in clearing land or rebuilding their village, but once they were resettled, a European Union funded project assisted through road construction and irrigation. The land they live on today is significantly smaller and does not produce as much food as they had in the early-1990s. The *naiban* suggests that this is because there were already villages here. Rather than comparable land, the local government mapped the area and divided it between the new villagers and those already living here "So our land here is very small and limited." They were informed in 2019 that they would again have to move for new city development related to the railway. The village chief planned to refuse another move, which is rare. More often, villagers expressed a sense of powerlessness.

A neighboring village that has never been resettled demonstrates the opposite phenomenon. The 91 households primarily engage in agriculture and comprise *Lao Leum* (or lowland Lao, the dominant ethic group in Laos) and known to have strong Party affiliations. During a focus group, I sat in a circle of red plastic chairs with twelve men identified as village leaders. In contrast to the instances of displacement discussed above, this group refers to a different history that has engendered their deep support for state-led development projects in their district. During our introductions, some of the eldest of the group estimates that this village

has been there for 600 years, while other state that they received the land they have now through the government. In response to a question on land for the SEZ, the eldest explains, “We do not need to worry about land because land is property of the state. Whenever the government wants land, they can take it, but they will not do that here. There are other places to use.” He expresses a sense of security that was not common in other villages. Their pro-zone stance is also full of excited anticipation rather than the anxiety of the neighboring village that was previously resettled. He believes that if the SEZ succeeds, they will see more roads and maybe even a hospital, hotels, and schools. The week prior, the district governor visited for local Party meetings to share two pieces of infrastructural “good” news—that the new Mekong Dam would be built along with a road to Xayaboury to improve the village’s development and bring more trade. As we concluded the conversation, they referenced more infrastructural success—the railway—and praised the government for coordinating such a massive project.

First a zone, then a corridor, then rail*way *tracks

Not far from Hong’s village, areas of Luang Namtha Province near the border with China where the railway passes have groundwater that is rich in salt content. A local salt factory and the workers who lived in the village alongside it are illustrative of the effects of multiple infrastructure displacements and disruptions. The salt factory has been moved three times due to infrastructure construction. It was originally located in Boten village near the border with China, and was first relocated when the first round of development began in the early-2000s, when Boten was designated a special economic zone (SEZ) by the Lao government. However, this village along with a nearby small ethnic Tai Lü village, were relocated yet again as the next round of development began in the 2010s. They were moved approximately 6 km south on the

main highway to *Bopiat* village.[67] Bopiat is known by the Chinese workers I often visited as 新家 (xīnjiā) or "new home/village." This not-so-new village grew in population when Boten village and the salt factory were relocated to Bopiat. Just a year later on 9 August 2004, the ABD released a Resettlement Plan for Bopiat Village, Namtha District to make way for the GMS's Northern Economic Corridor (NEC). The NEC planned to upgrade 228 km of national highway, and Bopiat was within the Chinese-funded section of the road. The report stated that damages to community infrastructures such as irrigation or drainage would be restored to the satisfaction of those in the village. At that time the population of Bopiat was 80% of the Panna ethnic group, as well as a handful of other ethnic minorities. The salt factory workers and most villagers did not feel direct resettlement effects of the NEC. However, as a community they were aware of the road improvements, construction workers, resettlement teams, and precisely who and what land was affected, albeit minimally.

[67] *Bopiet* or *Bopied* are the romanizations of Boten in Lao. I use *Bopiat* here to differentiate between Boten the SEZ and *Bopiat* the village 6 km south on Route 13. I also do so because the ADB used this for their resettlement documents in that village.



Image 6.4. Railway pylons as they begin to make their way through and over Bopiat Village. (Source: Carl Zoch, 2018)

Fatefully, the salt factory's last move positioned it in the path of the railway tracks (Image 6.4). Local officials pitched the elevated tracks as a selling point to assure villagers that the railway would sail above their community with minimal disruptions to land, homes, and livestock. At a Lao hot pot dinner in 2019, two women from the village, one who worked at the salt factory, grumbled about the subsequent relocation. As they did so, they couched their concerns in outcomes from past factory moves and the NEC resettlement plans. The women lamented that even elevated tracks will cut across the village and they worry that it will become noisy, dusty, and busy. Just as railway planners assure people of minimal impact, so the ADB (2004) reported that only 17 people of 336 in the village would be affected by NEC construction.

Most recently, the salt factory was given a year's notice by the provincial railway committee to relocate. "The factory moved many times in the past. If we were not in the path of the train, we planned to expand, build more furnaces. But it's a problem. We can't expand

because if we invest in the building it will be destroyed, and we will lose a lot of money" (Salt Factory Owner). The factory owners asked for a guarantee that they will not be relocated again in the future but did not receive it. At the time of my last visit, they were still awaiting timelines, information, and a new location, and they continued to work as usual because many people in the village depend on the factory for their livelihoods. As a recent short film on the factory summarizes, their lives are, at least for now, on hold.

With the announcement of the railway, the salt factory looked to the project as a way to access foreign markets. Paradoxically, the railway may be the very infrastructure that shuts them down, just as the roads and corridors that were meant to alleviate poverty end up doing quite the opposite. It is not only the railway, but also the tourist attractions established for it that will affect the salt factory. Most notably, a model salt factory was set up in Boten SEZ (near the location of the first salt factory) as a tourist attraction and wants access to the saline water from the original factory so it can conduct salt-production demonstrations. Boten's attractions underscore the fact that new cities, even those advertised as built from scratch, are never constructed on untouched space but depend on and are layered with historical, cultural, and material artifacts (DiCarlo, 2020b). So, not only will the factory be required to move again, but the groundwater on which the business depends may be dramatically reduced. This experience follows one of what Howe et al. (2016: 548) call a paradox of infrastructure, ruin, which "suggests that even as infrastructure is generative, it degenerates."

V. Conclusion

Grand narratives of linear development and future promises mask multiple infrastructural temporalities. This is the case surrounding Laos–China Railway construction, where with cars

already at the station, planners, officials, and many observers largely overlook temporalities outside of project plans. However, as I learned after spending time in villages affected by construction, such often-overlooked temporalities are dominant in the eyes of community members. This chapter rethinks infrastructure through multiple temporalities, challenging linear notions of project time and railway time. Rather than a teleology defined by progress and completion (Graham and McFarlane, 2014), infrastructure is an open-ended process, one characterized by multiple temporalities and open futures (Gupta 2018). Infrastructures consist of many more moments and temporalities than the straightforward notion of project time or the shrinking of space for the circulation of people and things (Appel, 2018). Instead, infrastructure entails multiple temporalities across planning, construction, and implementation as well as operation, maintenance, and breakdown. It expands, elongates, and complicates temporalities by holding people in suspension and waiting, sometimes across lifetimes or over multiple generations. Carse and Kneas (2019: 11) contend that through attention to these "multiple, often entangled forms of temporal reckoning, experience, and practice, the researcher can elucidate important sociomaterial relationships and processes that a narrow focus on project time would obscure." By bringing the complexity of time to the forefront of railway construction, I highlight the diverse temporalities bound up in the experience of one project and tie them to the social worlds that emerge from and are reshaped by infrastructure.

With this in mind I have made three arguments. First, waiting and suspension are useful concepts to reflect on the lives characterized by the complexities of infrastructural time. Indeed, expectation, delay, and waiting are bound up in the ways people experience and perceive infrastructure. Waiting is a particular experience of time, the result of power relations, and a key feature of the suspended present. Experiences of waiting for infrastructure vacillate between

angst and hope as projects pave over lives and land with promises of growth and development. Ethnographic accounts of waiting illuminate the deeply felt experiences of displacement, doubt, and resignation, that are coupled with some form of hope that large infrastructure engenders. Yet, the more people waited, felt overlooked, and had bids for help ignored, the more acutely they felt construction in their villages.

Second, the uneven outcomes of waiting further entrench class and ethnic differences. Construction holds citizens in a liminal state to varying degrees with wide-ranging implications for people's lives, homes, and livelihoods. Turner (1969: 359) defines liminality as being "neither here nor there … between the positions assigned and arrayed by law, custom, convention and ceremony … liminality is frequently likened to death, to being in the womb, to invisibility, to darkness …" Here liminality keeps some people in the dark, unable to ask questions, contest compensation plans, or counter land loss.

Third, in addition to deferring a promised future, infrastructural suspension also stirs up the past for those who have been previously displaced or dispossessed. I suggest that the suspended present intersects with what I call the suspended past, or experiences of past infrastructural suspension and displacement. Non-infrastructural types of displacements are also key to this argument. It is these suspended pasts that people draw on to make sense of their current state of waiting. In other words, past displacements inform stances toward infrastructure as suspension reworks experiences of the present, past, and future. In sum, this chapter advances an understanding of infrastructure as multitemporal process layered with histories of displacement that reveals how experiences of waiting for infrastructure are at once an experience of the present and the layered past.

Chapter Seven
Conclusion

As I concluded the writing of this dissertation, the Laos–China Railway too was nearing completion. Rolling stock had just arrived in Laos from China. The week before my dissertation defense there was an inauguration ceremony at the recently-completed Vientiane Capital railway station to unveil the gleaming, new passenger cars that were painted the red, blue, and white of the Lao flag. The ceremony offered a reminder that, in some ways, this project is just beginning and that there will be numerous implications and impacts to come as the railway begins operation. In this way, the infrastructure frontier is never fully "made;" it is ongoing, even as trains start to roll down the tracks. Infrastructure frontier-making is thus not linear and does not transform from "blocked" to connected and thus productive as it is so often imagined. Rather the frontier is made and remade by capital and the state through infrastructure.

This dissertation developed a multi-scalar analysis of one complex country context that global China encounters, presenting a case of China's rise as a political-economic actor in Southeast Asia and within broader South-South development. Through three inter-related projects—Laos' first railway, Boten economic zone, and the Laos–China Economic Corridor—I examined the legacies, relationships and contexts that have produced the current moment of China's outward investment in the Lao context. My pursuit of a frontier approach highlights complex causes and motivations for transformations, refusing to reduce answers to singular causes. This is because the forces that have produced global China's expansion are often multiple and multifaceted. As I suggested in the introduction, complexity is characteristic of global China and requires nuanced tools and frameworks to untangle the logics, practices, and motivations of Chinese capital. Rather than a single global force with local impacts, China and

Chinese projects are coproduced with Lao state and non-state actors and through multiple, sometimes contradictory forces.

The purpose of this dissertation was thus to study the processes and tensions that make the infrastructure frontier that enabled the railway and corridor. I aimed to understand how such massive projects with long histories of going unbuilt actually come to fruition in a moment of "eventful capitalism." Throughout the chapters, I examine the logics and forces—material, imaginative, and speculative—of infrastructure frontier-making. Such forces shape northern Laos as it is simultaneously enclosed to be spectacularly re-imagined and reopened as an infrastructure frontier. These forces also "boomerang" or ripple back to Chinese actors to affect and shape their actions as well.

Dynamics of infrastructure frontier-making

The chapters in this dissertation have presented the historical, empirical, and imaginative production and reproduction of the infrastructure frontier in Laos. Each chapter builds on Chapter Two, which excavated Laos' infrastructural history to illuminate the deep logics of "unlocking" Laos and "value creation" (*mise en valeur*) though connective infrastructures. The making of Laos' infrastructure frontier relied on histories of frontier imaginaries, and the centrality of infrastructure since precolonial times as a means for both external and internal actors to position Lao territory as a bridge, buffer, or tool for accumulation. The notion of value creation through infrastructure has been reproduced throughout Laos' contemporary history—in the Lao governments' attempts to "turn land into capital," through the ADB's corridor networks, and today through BRI projects of the railway, corridor, and economic zone.

A discursive and material phenomena, the infrastructure frontier is a capitalist project that is both built and yet-to-be built. It ebbs and flows and is assembled by a diverse and incoherent set of actors and imperatives. The railway as a project of infrastructure frontier-making directs our thinking toward questions concerning capital accumulation, land, and spectacle. The infrastructure frontier is made through the undervaluation of land; the discursive repetition of the need to unblock Laos; spectacle and performance to attract capital; and both Lao and Chinese state-support.

Common themes in infrastructural dynamics have resonated across chapters. For example, Chapter Three and Chapter Four centered on accumulation, each showing how investment in large infrastructures relied on speculating on an unknown future. Chapter Four and Chapter Five both focused on how space is made available—in one case, for construction, and in the other, investment and speculation. Chapter Six and Chapter Four ethnographically demonstrated multiple experiences of exploitation, for both Lao villagers and Chinese workers on the ground. The mundane labor of Chinese workers in Boten, the local Lao villagers left waiting for compensation, and the delay for Chinese railway workers in receiving pay were all forms of exploitation.

Both accumulation and undervaluation are central to infrastructure frontier-making. Corridorization for accumulation and engineering enclosures through undervaluation each rendered space available and investable. For example, Chapter Five shows how the Lao state was able to undervalue land through techniques and conditions that create a lack of calculability. These included ambiguity surrounding land laws, the hybridity of property relations in Laos, and legal-institutional mechanisms set up to conduct land valuation and compensation. My exploration of the relationship between undervaluation and the infrastructure frontier revealed

that both Lao and Chinese actors engaged in this process. In addition to imagining the frontier as empty, it must be made into a "free" resource—meaning both cheap and unpeopled. Here, in pursuit of the creation of surplus value, state-led mechanisms minimized the exchange value of land in order to make it available for railway construction and investment. Corridorization (Chapter Four) also acted as a technology of enclosure. It did so, however, through an iterative process of enclosure and opening—a dual movement that simultaneously encloses space while opening it to certain types of capital, "development," or exploitation. Both Chapters Four and Five illustrated that infrastructure frontier-making entails enclosure in order for the frontier to be reopened to certain forms of capital and authority.

Many scholars have noted how frontiers are products of technology and imagination. I suggest that once contained, one way the infrastructure frontier is made is through spectacle and imaginative work. Chapter Four revealed multiple sides of infrastructure frontier spectacle—miniatures, marketing, and performance—that all contribute to the imaginative work of infrastructure frontier-making. Miniatures, from cultural replicas to models of the city yet-to-be, offer a tool to imagine the grand. Often, they encourage investors and visitors alike to emplace their aspirational visions within the model—an investor conjuring a booming cityscape, or a tourist accessing "authentic" Lao culture. Marketing materials also present a Boten worth wagering on, positioning the zone as the next Shenzhen with strong Lao and Chinese state support. Finally, the spectacle of the infrastructure frontier is actively produced by Chinese laborers, who bring the miniatures and marketing materials to life for potential investors and visitors to the zone. These performances, however, collapse only to be repeated.

The importance of examining the multiple temporalities of infrastructure another theme that runs through the chapters. Railway headlines continue to emerge on the project, stating that

it will "slash costs and travel time." However, as this dissertation demonstrated, infrastructures produce multiple, distinct temporalities, of delay, suspension, deferral, as well as "China speed." By bringing the complexity of time to the forefront of railway construction, I highlighted the diverse temporalities bound up in the experiences of one project. For example, Chapter Three demonstrated a temporal fix for capital in which investment in large infrastructure delayed crises of capital devaluation through the long time horizons of such investments. I discussed an additional delay in Chapter Three: that of the arrival of capital for construction, which left SOEs, subcontractors, and laborers under pressure to continue construction without pay. Furthermore, Chapter Six ethnographically explored a different type of delay in the suspended temporalities that people living the construction of infrastructures experienced. It drew on personal histories that illustrated how people use past instances of displacement to explain and understand present states of waiting. Rather than foregrounding dispossession or displacement, I explored how displacement and temporalities work together. Examining the temporal effects of infrastructure on the ground illuminated how people navigated suspension through both active and passive forms of waiting. Finally, the multiple temporalities in this dissertation served to decenter linear notions of infrastructure and development, and revealed how infrastructural temporalities of anticipation, suspension, waiting, and liminality manifested and overlapped.

A key objective in this dissertation was to analyze the motivations and methods of China's current mode of development through infrastructure. My findings and theorization of the infrastructure frontier thus have wider applicability outside of Laos. Building an ethnography of the infrastructure frontier, I contributed to Lee's (2017) argument that Chinese capital operates under a logic of encompassing accumulation, which extends beyond pure profit maximization. The railway, while not profit maximizing, is also not a case of debt trap diplomacy. Instead, I

argue it is a means of spatiotemporal fix for over-accumulated capital within China. Large infrastructures are so expensive, and financing timelines so long that they offer a temporal fix for Chinese capital that would otherwise devalue. Furthermore, throughout these chapters, I demystify and complicate dominant notions of China's global expansion.

Rather than a regional or geographical phenomenon or political monolith processes of global China are better viewed as a set of investments, practices, and discourses. Studying global China as a field of power and "event" (Lee, 2017) enables more nuanced analyses that break down and then draw together multiple scales. China's infrastructural actions are not coordinated by a centralized state, but rather take share through diffuse Chinese actors with varied interest; they are, in turn, shaped by the host contexts within which they operate. In addition, a view on global China illuminates not only the spatial but the temporal fixes to its resource bottleneck and capital overaccumulation. Rather than the result of a master strategy, the railway has become a reality through the at times messy and heterogenous mix of Chinese planners, banks, and railway consortiums, as well as elite and state support within Laos.

Future directions from the local to the geopolitical

This dissertation was a first step in a larger research agenda on global China. As Tim Oakes (2021) wrote about the BRI: "It was only ever meant to be a vague idea, a notion, a gesture, the beginning of a sentence waiting to be completed by someone else. It was an invitation. And perhaps this is why it has generated such an exuberant response. We all love filling in the blank." However, blank spaces have power and who or what "fills in the blank" of the BRI is not straightforward and is often in flux. Considering the black spaces generated by the infrastructure frontier directs our thinking toward new questions. Based on my research and

findings that I was not able to include in this dissertation, there are a number of fruitful areas of inquiry to explore Oakes' (2021) provocation, two of which I conclude with below.

Hinterlands of the infrastructure frontier

Zooming in to a local, grounded perspective, I am interested in the expanding shape and space of the corridor as hinterlands are drawn into new circuits of production and accumulation. Thinking with the frontier literature in political ecology raises questions on how the infrastructure frontier will shape the production of resources in Laos. The Lao government has selected a handful of sectors to develop for the corridor: cattle, niche commercial crops such as pineapple, and mining, particularly of bauxite. The infrastructure frontier makes efforts to extend resource hinterlands and accumulation to new spaces (c.f., Klinger, 2017; Tsing, 2005), while also furthering economic and security interests concerned with resource access in China (Li and Lye, 2009; Muldavin, 2012; Muldavin, 2013). Rowedder (2020) has already written that China will profit from the railway project at the expense of Laos' long-term development, and that it will detrimentally impact Laos' major agricultural production areas, thus not only affecting thousands of villagers along the route but also reducing potential for agricultural development. Although this is yet to be seen, he raises an important point about how the infrastructure frontier will initiative swift forms of agrarian transformation. The manifestation of the corridor points to ways that areas of rural Laos are and will be drawn into new circuits of production, commodification, and accumulation via a broad, and at times competing, array of actors. My interviews with local officials and villagers alike suggested important further research and considerations on how infrastructures may draw hinterlands into new agrarian futures.

Infrastructural competition

My research also pushed me to zoom out to consider the geopolitical landscape of infrastructure development. By this I do not mean China's geopolitical ambitions, but rather how other actors engage within the corridor space or attempt to compete with China. For example, the Laos–China Economic Corridor proposal's stated aim is to deepen cooperation across a range of sectors from mining and logistics to cultural exchange and ecological protection. While the corridor model is far from novel in Laos and for China, the notion of a "new" corridor has been enrolled in geopolitical discourse and practice. By envisioning space as open for development, it creates competition to invest in the corridor. This has since set the Lao government, foreign embassies and companies, and international institutions abuzz as they seek out ways to "benefit" and "participate" in the corridor. In other words, the abstraction of the corridor acts as an infrastructure itself through which planners, companies, states, local authorities, and international institutions alike pursue infrastructural projects or agendas. Thus, as (geo)political relations between China and Laos connect the corridor, so subsequent corridor infrastructures rearticulate new geopolitical relations.

In addition, companies from Laos and neighboring countries have been eager to engage in this space to ensure that "it does not become Chinese." Amata, a Thai company with Japanese funding, scandalously "stole" a dry port proposal from Haicheng (the developer of Boten), and presented it to the Lao government, relying on their already positive relations with leaders in Vientiane. Furthermore, international organizations working in Laos have very recently begun to describe the LCEC as a landscape for poverty reduction and development. A UN FAO officer, for example, asked me for all the information I have on the railway, SEZs and the LCEC to help the UN FAO plan for a new initiative to "alleviate poverty and end hunger," using the corridor as

the "development unit" on which to build their intervention. This is a puzzling choice of locations, as the corridor covers some of the least poverty-prone, most accessible parts of the country. However, this choice of locations becomes less puzzling when viewed from the perspective of infrastructural competition.

It is impossible to deny that a global competition in the field of infrastructure has emerged. The scaling up of global infrastructure investment is on the rise. In June 2021, the G7 articulated a commitment to compete with China's BRI through the *Build Back Better World* (B3W) initiative. While B3W offers an intent to compete with China, it pales in comparison to the BRI, and has no concrete funding plans. Nevertheless, it highlights the geopolitical nature of infrastructure. The challenges of funding that come with this plan entail the target of using private capital for risky investments. In this way, China's infrastructure frontier may pave the way for other actors. They, however, likely do not have the same temporal tolerances for risk and delay that Chinese actors have had.

Moving forward

In March 2020, I drove my motorbike on the winding roads of Northern Laos through the five corridor provinces one last time, from Vientiane to the border at Boten SEZ. The borders had closed due to COVID-19, and the zone had returned to what I had originally known it to be in 2017: a quiet construction site. The performances and spectacle were shut down and tourists were not crossing the border. Many Chinese laborers were also not permitted to cross and were "stuck" home in China, unable to return to their jobs in Boten. COVID-19 shifted China's infrastructural momentum around the world. However, the view from the ground was not one of projects grinding to a halt. Because of the "priority" nature of the railway and the zone, some

workers were able to return quickly that spring, despite the government closure of all borders at the end of March 2020, which remain closed to this day in November 2021.

As my research came to an end, I spent my remaining days at the border in Boten before returning to Vientiane. My time in the then far-from-spectacular border zone with the few Chinese company workers and friends who remained was a sobering reminder of the power of the unexpected. In terms of infrastructure at least, unexpected global crises—whether financial crises, geopolitical competition, or a pandemic—will continue to shape global infrastructure ambitions. My hope is that this dissertation encourages alternative views on Chinese infrastructures and investments, how they manifest outside of China's borders, and the lives they affect. Ethnographic perspectives on China's global engagement offer a more nuanced reading compared to the often-geopolitical narratives emanating from offices in DC or Beijing, complexifying the actors involved, their motivations, and the effects of infrastructure. Examining the spatial and temporal processes of infrastructure frontier-making, on the ground and as global processes, thus complicates dominant narratives on global China, as it is currently taking shaping in material, imaginative, and, at times, spectacular forms.

.

BIBLIOGRAPHY

Acker, Kevin, Deborah Bräutigam, and Yufan Huang. 2020. Debt Relief with Chinese Characteristics. Working Paper No. 2020/39. China Africa Research Initiative, School of Advanced International Studies, Johns Hopkins University, Washington, DC.

Adam, Barbara. 1995. *Timework: A Social Analysis of Time*. Cambridge, UK: Polity Press.

Adam, Barbara. 1998. *Timescapes of Modernity: The Environment and Invisible Hazards*. London and New York: Routledge.

Adam, Barbara. 2004. *Time*. Cambridge, UK and Malden, MA: Polity Press.

Adams, Nina S. and Alfred W. McCoy (editors). 1970. *Laos: War and Revolution*. New York: Harper Colophon Books.

ADB (Asian Development Bank). 1997, February. Technical assistance for the Chiang Rai - Kunming road improvement via Lao PDR project.

ADB (Asian Development Bank). 2004a. Ready for business ADB Review December 2004.

ADB (Asian Development Bank). 2004b, August 9. Updated resettlement plan for Bopiat Village, Namtha District, Luang Namtha Province. Report for the Greater Mekong Subregion: Northern Economic Corridor Project in the Lao People's Democratic Republic.

ADB (Asian Development Bank). 2005 Proposed loan and Asian Development Fund grant: Lao People's Democratic Republic Forest Plantations Development Project, Asian Development Bank.

ADB (Asian Development Bank). 2006 The Mekong region: foreign direct investment ADB Institute, Manila.

ADB (Asian Development Bank). 2010. Connecting Great Mekong Subregion Railways: A strategic framework. Mandaluyong City, Philippines: Asian Development Bank.

ADB (Asian Development Bank) 2014. Performance evaluation report (project number 34321, loan number 1989): Greater Mekong subregion, northern economic corridor project in the Lao People's Democratic Republic. Manila: Independent Evaluation Department.

ADB (Asian Development Bank). 2016. Review of Configuration of the Greater Mekong Subregion Economic Corridors." Mandaluyong City, Philippines. Available from: https://www.adb.org/sites/default/files/institutional-document/214361/configuration-gms-corridors. pdf.

Adler, Patricia A. and Peter Adler. 1994. Observational Techniques. In The Handbook of Qualitative Research, edited by N. D. Lincoln, pp. 377–92. Thousand Oaks: SAGE.

Aidoo, Richard, and Steve Hess. 2010. Beyond the rhetoric: Noninterference in China's African policy. African and Asian studies 9(3): 356-383.Andersen, Kristen E., 2011. Communal tenure and the governance of common property resources in Asia: Lessons from experiences in selected countries. *Land Tenure*: 1–45.

Akhter, Majed. 2018. Geopolitics of the Belt and Road: Space, State, and Capital in China and Pakistan. In *Logistical Asia: The Labour of Making a World Region*, edited by Brette Neilson, Ned Rossiter, and Ranabir Samaddar. Palgrave Macmillan.

Alami, Ilias, Adam D. Dixon, Emma Mawdsley. 2021. State Capitalism and the New Global D/development Regime. *Antipode*, 53(3): 1294–1318.

Aldrich, Robert. 2002. Imperial mise en valeur and mise en scène: Recent works on French colonialism. *The Historical Journal*, 45(4): 917–938

Alff, Henryk. 2016. Flowing Goods, Hardening Borders? China's Commercial Expansion into Kyrgyzstan Re-examined. *Eurasian Geography and Economics*, 57(3): 433–456.

Ali, Ifzal, and Ernesto M. Pernia. 2003. Infrastructure and poverty reduction-what is the connection? Asian Development Bank. Availabor from: http://hdl.handle.net/11540/613.

Ali, Waheed, Li Gang, and Moshin Raza. 2016. China-Pakistan economic corridor: current developments and future prospect for regional integration. *International Journal of Research*, 3(10).

Anand, Nikhil. 2011. Pressure: The PoliTechnics of water supply in Mumbai. *Cultural Anthropology*, 26(4): 542–564.

Anand, Nikhil, Akhil Gupta, and Hannah Appel. 2018. *The Promise of Infrastructure*. Durham, NC: Duke University Press.

Andreucci, Diego, Melissa García-Lamarca, Jonah Wedekind, and Erik Swyngedouw. 2017. "Value grabbing": A political ecology of rent. *Capitalism Nature Socialism* 28(3): 28–47.

Andrews-Speed, Philip, Mingda Qiu, and Christopher Len. 2016. Chinese Engagement in Southeast Asian Energy and Mineral Resources: Motivations and Outlook. *Eurasian Geography and Economics* 57(3): 316–342.

Apostolopoulou, Elia. 2020. Tracing the links between infrastructure-led development, urban transformation, and inequality in China's Belt and Road Initiative. *Antipode*, 53(3): 831–858.

Appel, Hannah. 2018. Infrastructural Time. In *The Promise of Infrastructure*, edited by Nikhil Anand, Akhil Gupta and Hannah Appel, pp. 4–61. Durham and London: Duke University Press.

Ascensão, Fernando Jorge Portela Martins. 2020. Environmental risks, challenges and opportunities along the African Belt and Road Initiative." In *China and the New Silk Road*, pp. 105–120. Springer, Cham.

ASEAN (The Association for Southeast Asian Nations). 2004. ASEAN Document Series. Jakarta, Indonesia: The ASEAN Secretariat.

ASEAN (The Association for Southeast Asian Nations). 2010. ASEAN Document Series. Jakarta, Indonesia: The ASEAN Secretariat.

Auyero, Javier. 2012 *Patients of the State: The Politics of Waiting in Argentina*. Durham, NC: Duke University Press.

Bach, Jonathan. 2016. China's infrastructural fix. Limn 7. Available from: http://limn.it/chinas-infrastrucutral-fix/

Bach, Jonathan. 2019. "What Kind of Model? Thinking about the Special Economic Zone and the Socialist City." *Made in China Journal,* 2: 72–77. Available from: https://madeinchinajournal.com/2019/07/23/what-kind-of-model-thinking-about-the-special-economic-zone-and-the-socialisty-city/

Baird, Ian G. 2010. Land, rubber and people: Rapid agrarian changes and responses in Southern Laos. *Journal of Lao Studies*, 1(1): 1–47.

Baird, Ian G. 2011. Turning Land into Capital, Turning People into Labour: Primitive Accumulation and the Arrival of Large-Scale Economic Land Concessions in Laos. *New Proposals: Journal of Marxism and Interdisciplinary Inquiry*, 5(1): 10–26.

Baird, Ian G. 2013. "Indigenous Peoples" and land: Comparing communal land titling and its implications in Cambodia and Laos. *Asia Pacific Viewpoint*, 54(3): 269–281.

Baird, Ian G. 2014. The global land grab meta-narrative, Asian money laundering and elite capture: Reconsidering the Cambodian context. *Geopolitics,* 19(2): 431–453.

Baird, Ian G. 2019. Changes in Understandings of Land in Laos: From State Sovereignty to Capital Mobilization. Kyoto Review of Southeast Asia, 25. Available from: https://kyotoreview.org/issue-25/land-in-Laos–from-state-sovereignty-to-capital-mobilization/#note-15448-3a.

Baird, Ian G. and Bruce Shoemaker. 2007. Unsettling Experiences: Internal Resettlement and International Aid Agencies in Laos. *Development and Change*, 38(5): 865–888.

Baird, Ian, Bruce Shoemaker and K. Manorom. 2015. The people and their river, the World Bank and its dam: Revisiting the Xe Bang Fai River in Laos. *Development and Change*, 46(5): 1080–1105.

Bakhtin Mikhail. 1984. *Problems of Dostoevs's Poetics*. Minneapolis, MN: University of Minneapolis Press.

Balakrishnan, Sai. 2019. *Shareholder Cities: Land Transformations Along Urban Corridors in India.* University of Pennsylvania Press.

Barajas, Julien Isaac. 2019. Is it 'Lao' or 'Laotian'? In Laos, There's a Big Difference. Culture Trip. Available from: https://theculturetrip.com/asia/laos/articles/is-it-lao-or-laotian-in-Laos–theres-a-big-difference/

Barney, Keith. 2009. Laos and the making of a 'relational' resource frontier. *The Geographical Journal,* 175(2): 146–159.

Barney, Keith, and Kanya Souksakoun. 2021. Credit crunch: Chinese infrastructure lending and Lao sovereign debt. *Asia & The Pacific Policy Studies*, 8(1): 94–113.

Barry, Andrew. 2013. *Material Politics: Disputes Along the Pipeline*. New York: Wiley Blackwell.

Baulch, Bob, and John Hoddinott. 2000. Economic mobility and poverty dynamics in developing countries. *The Journal of Development Studies*, 36(6): 1–24.

Bear, Laura. 2014. Capital and time: Uncertainty and qualitative measures of inequality. *The British Journal of Sociology*, 65(4): 639–649.

Bear, Laura. 2016. Time as Technique. *Annual Review of Anthropology*, 45 (1): 487–502.

Bear, Laura. 2020. Speculation: a political economy of technologies of imagination. *Economy and Society*, 49(1): 1–15.

Beckert, Jens. 2016. *Imagined Futures: Fictional Expectations and Capitalist Dynamics*. Harvard University Press.

Blomley, Nicholas. 2014. Disentangling property, performing space. In *Performativity, Politics, and the Production of Social Space*, edited by Rose-Redwood and Glass. London: Routledge.

Bolton, John. 2018. Remarks by National Security Advisor Ambassador John R. Bolton on the The Trump Administration's New Africa Strategy. Delivered on December 13 at the Heritage Foundation, Washington, D.C. Available from:

https://trumpwhitehouse.archives.gov/briefings-statements/remarks-national-security-advisor-ambassador-john-r-bolton-trump-administrations-new-africa-strategy/

Borras Jr, Saturnino M., and Jennifer C. Franco. 2011. Political dynamics of land-grabbing in Southeast Asia. Amsterdam: The Transnational Institute.

Bosker, Bianca. 2013. *Original Copies: Architectural Mimicry in Contemporary China.* Honolulu: University of Hawaii Press.

Boupha, Phongsavath. 2002. *The Evolution of the Lao State.* Delhi: Konark.

Bourdet, Yves. 1995. Rural Reforms and Agricultural Productivity in Laos. *The Journal of Development Area*, 29(2): 161–182.

Bourdet, Yves. 2000. *The Economics of Transition in Laos: From Socialism to ASEAN Integration.* Cheltenham: Edward Elgar Publishing.

Bourdieu, Pierre. 2000. *Pascalian Meditations*. Stanford, CA: Stanford University Press.

Bouté, Vanina and Vatthana Pholsena, editors. 2017. *Changing Lives in Laos: Society, Politics, and Culture in a Post-Socialist State.* Singapore: National University of Singapore Press.

Boyer, David. 2018. Infrastructure, potential energy, revolution. In *The Promise of Infrastructure*, edited by Anand, Gupta, Appel. Durham, NC: Duke University Press.

Braudel, Fernand. 1958. Histoire et sciences sociales: la longue durée. *Annales: Histoire, Sciences Sociales*, 13(4).

Braudel, Fernand. 2009. History and the social sciences: The longue durée. *Review* (Fernand Braudel Center), 32(2): 171–203.

Bräutigam, Deborah. 2020. A Critical Look at Chinese "Debt-trap Diplomacy": The Rise of a Meme. *Area Development and Policy*, 5(1): 1–14.

Bräutigam, Deborah and Tang Xiaoyang. 2011. African Shenzhen: China's Special Economic Zones in Africa. *The Journal of Modern African Studies,* 49 (1): 27–54.

Bräutigam, Deborah. and Jyhjong Hwang (2019) China-Africa Database Research Guidebook. Baltimore, MD: Johns Hopkins University School of Advanced International Studies China Africa Research Initiative.

Brenner, Neil. 2004. *New State Spaces: Urban Governance and the Rescaling of Statehood.* Oxford: Oxford University Press.

Brun, Catharine. 2015. Active waiting and changing hopes: Toward a time perspective on protracted displacement. *Social Analysis*, 59(1): 19–37.

Byler, Darren. 2020. Infrastructural power, Hong Kong, and global China. China Made Brief #6. Available from: https://chinamadeproject.net/china-made-brief-6/

Burawoy, Michael. 2000. *Global Ethnography: Forces, Connections, and Imaginations in a Postmodern World.* Los Angeles: University of California Press.

Burlette, Julia Alayne Grenier. 2007. French influence overseas: the rise and fall of colonial Indochina. LSU Master's Theses, 1327. Available from: https://digitalcommons.lsu.edu/gradschool_theses/1327

Callaghan, Mike, and Paul Hubbard. 2016. The Asian Infrastructure Investment Bank: Multilateralism on the Silk Road. *China Economic Journal,* 9: 116–139.

Campbell, Jeremy M. 2015. *Conjuring Property: Speculation and Environmental Futures in the Brazilian Amazon.* Seattle, WA: University of Washington Press.

Carmody, Pádraig. 2020. Dependence not Debt-trap Diplomacy. *Area Development and Policy,* 5(1): 23–31.

Carmody, Pádraig, Ian Taylor, and Tim Zajontz. 2021. China's spatial fix and 'debt diplomacy' in Africa: constraining belt or road to economic transformation? *Canadian Journal of African Studies/Revue canadienne des études africaines*, 1–21.

Carse, Ashley. 2017a. Keywork: Infrastructure. In *Infrastructures and Social Complexity: A companion*, edited by Penelope Harvey, Casper Jensen, and Atsuro Morita, pp. 27–40. London and New York: Routledge.

Carse, Ashley. 2017b. An Infrastructural Event: Making Sense of Panama's Drought. *Water Alternatives*, 10(3): 888–909. Available from: http://www.water-alternatives.org/ index.php/alldoc/articles/vol10/v10issue3/387-a10-3-13/file.

Carse, Ashley and David Kneas. 2019. Unbuilt and Unfinished: The Temporalities of Infrastructure. *Environment and Society*, 10(1): 928.

Cartier, Carolyn. 2002. Transnational Urbanism in the Reform-Era Chinese City: Landscapes from Shenzhen. *Urban Studies*, 39(9): 1513–1532.

Cassis, Youssef. 1994. Banks and banking in Switzerland in the nineteenth and twentieth centuries. In *The Handbook on the History of European Banks*, edited by M. Pohl. Edward Elgar, Publishing.

Chan, K. 2010. Harmonious Society. *International Encyclopedia of Civil Society*, pp. 821–825.

Chauveau, Jean-Pierre. 1985. Mise en valeur coloniale et développement : perspective historique sur deux exemples ouest-africains. In *Paysans, experts et chercheurs en Afrique noire*, edited by Boiral P., Lanteri J.F., Olivier de Sardan J.P, pp. 143–166, Paris: Karthala.

Chellaney, Brahma. 2017. China's Debt Trap Diplomacy. Project Syndicate 23 January. Available from: www.project-syndicate.org/commentary/china-one-belt-one-road-loans-debt-by-brahmachellaney-2017-01?barrier=accesspaylog (accessed 28 January 2021).

Chen, Muyeng. 2018. Official Aid or Export Credit: China's Policy Banks and the Reshaping of Development Finance'. Global China Initiative Working Paper No. 001. Boston, MA: Global Development Policy Center.

Chen, Muyang. 2020. Beyond Donation: China's Policy Banks and the Reshaping of Development Finance. Studies in Comparative International Development, 55: 436–459.

Chomphet LCR Cooperation Committee. 2019. Working progress report No. 003 for Jan-Feb 2019 in Chomphet district. Chomphet district: LCR Cooperation Committee.

Chu, Julie. 2014. When infrastructures attack: the workings of disrepair in China. *American Ethnologist*, 41(2): 351–367.

Cleary, David. 1993. After the frontier: Problems with political economy in the modern Brazilian Amazon. *Journal of Latin American Studies*, 25(2): 331–349.

Comaroff, Jean and John L. Comaroff. 2001. *Millennial Capitalism and the Culture of Neoliberalism.* Durham, NC: Duke University Press.

Cons, Jason, and Michael Eilenberg, editors. 2019. *Frontier Assemblages: The Emergent Politics of Resource Frontiers in Asia*. Hoboken, NJ: John Wiley & Sons.

Cooper, Frederick. 1998. Modernizing Bureaucrats, Backward Africans and the Development Concept. In *International Development and the Social Sciences*, edited by Frederick Cooper and Randall Packard. Berkeley and Los Angeles, CA: University of California Press.

Côte, Muriel, and Benedikt Korf. 2018. Making concessions: Extractive enclaves, entangled capitalism and regulative pluralism at the gold mining frontier in Burkina Faso. *World Development,* 101: 466–476.

Cowen, Michael, and Robert W. Shenton. 1996. *Development Doctrines*. London: Routledge.

Creak, Simon. Sport as politics and history: the 25th SEA Games in Laos. *Anthropology Today,* 27(1): 14–19.

Creak, Simon, and Keith Barney. 2018. Conceptualising party-state governance and rule in Laos. *Journal of Contemporary Asia*, 48(5): 693–716.

Croissant, Aurel, and Philip Lorenz. 2018. *Comparative Politics of Southeast Asia. An Introduction into Government and Political Regimes*. Cham: Springer.

Cronon, William. 2009. *Nature's Metropolis: Chicago and the Great West*. WW Norton & Company

De Haan, Arjan. 2010. Will China change international development as we know it? *Journal of International Development,* 23(7): 881–908.

Damodaran, Vinita. 2002. History, landscape, and indigeneity in Chotanagpur, 1850–1980. *South Asia: Journal of South Asian Studies*, 25: 77–110.

Darian-Smith, Eve and Philip C. McCarty. 2017. *The Global Turn: Theories, Research Designs, and Methods for Global Studies.* University of California Press.

Davis, Muriam Haleh 2010. Restaging mise en valeur: "Postwar Imperialism" and the Plan de Constantine. *Review of Middle East Studies*, 44(2): 176–186.

DeBoom, Meredith J. 2020. Who is afraid of 'debt-trap diplomacy'? Geopolitical narratives, agency and the multiscalar distribution of risk. *Area Development and Policy*, 5(1): 15-22.

DeBoom, Meredith J. *Forthcoming.* Radioactive strategies: Uranium infrastructures, African agency and the longue durée of nuclear geopolitics in Namibia. In *The Rise of the Infrastructure State: How US-China Rivalry Shapes Politics and Place Worldwide*, edited by Seth Schinder and Jessica DiCarlo. Bristol UK: Bristol University Press.

Del Testa, David 2005. Automobiles and Anomie in French Colonial Indochina. France and "Indochina": *Cultural Representations*, 63–77.

Deloncle, Pierre. 1930. La mise en valeur du Laos. In *Laos: Dieux, Bronzes et Montagnes*, edited by J. Renaud, pp. 146–147. Paris, FR: Alexis Redier.

Derudder, Ben, Xingjian Liu, and Charles Kunaka. 2018. Connectivity along overland corridors of the belt and road initiative. World Bank. Available from: https://openknowledge.worldbank.org/handle/10986/30609

DiCarlo, Jessica. 2020a. Development as palimpsest: Infrastructures revived in Boten's architecture. *Roadsides*, collection no. 004.

DiCarlo, Jessica. 2020b. Mind the Gap: Grounding development finance and safeguards through land compensation on the Laos–China Belt and Road corridor. Global China Initiative Working Paper 013. Boston University, Global Development Policy Center.

Diener, Alexander C. 2015. Parsing mobilities in Central Eurasia: Border management and new silk roads. *Eurasian Geography and Economics*, 56(4): 376–404.

Dodson, Jago. 2017. The global infrastructure turn and urban practice. *Urban Policy and Research,* 35(1): 87–92.

Doig, Will. 2018. *High-Speed Empire: Chinese expansion and theFfuture of Southeast Asia*. New York: Columbia Global Reports.

Dwyer, Michael B. 2007. Turning land into capital. A review of recent research on land concessions for investment in the Lao PDR. Part 1 and 2, Vientiane.

Dwyer, Michael B. 2011. *Territorial affairs: Turning battlefields into marketplaces in postwar Laos*. Doctoral dissertation, University of California Berkeley.

Dwyer, Michael B. 2013a.That Luang Marsh project timeline and associated timeline of the Turning Land into Capital policy (Annex).

Dwyer, Michael B. 2013b. Building the politics machine: Tools for resolving the global land grab. *Development and Change*, 44(2), 309–333.

Dwyer, Michael. 2017. Land and Forest Tenure in Laos: Baseline Overview 2016 with Options for Community Participation in Forest Management. UN-REDD PROGRAMME.

Dwyer, Michael B. 2020. “They will not automatically benefit”: The politics of infrastructure development in Laos’ Northern Economic Corridor. *Political Geography*, 78: 102118

Dwyer, Michael, Micah Ingalls and Ian Baird. 2016. The Security Exception: Development and Militarization in Laos’ Protected Areas. *Geoforum*, 69: 207–217.

Dwyer, Michael B. and Thoumthone Vongvisouk. 2019. The long land grab: market-assisted enclosure on the China-Lao rubber frontier. *Territory, Politics, Governance*, 7(1), 96–114.

Easterling, K. 2014. *Extrastatecraft: The Power of Infrastructure Space.* New York: Verso.

Eilenberg, Michael. 2012. *At the Edges of States; Dynamics of State Formation in the Indonesian Borderlands*. Brill.

Eilenberg, Michael. 2014. Frontier Constellations: Agrarian Expansion and Sovereignty on the Indonesian-Malaysian Border. *The Journal of Peasant Studies*, 41(2): 157–183.

Enns, Charis and Brock Bersaglio. 2020. On the coloniality of "new" mega-infrastructure projects in East Africa. *Antipode,* 52(1): 101–123.

Evans, Christopher and Caroline Humphrey. 2002. After-Lives of the Mongolian Yurt: The 'Archaeology' of a Chinese Tourist Camp. *Journal of Material Culture*, 7(2): 189–210.

Evans, Grant. 1999. *Laos: Culture and Society.* Chiang Mai, Thailand: Silkworm Books.

Evans, Grant. 1988. Agrarian change in communist Laos (No. 85). Institute of Southeast Asian.

Evans, Grant. 2002. *A short history of Laos: The land in between*. Chiang Mai, Thailand: Silkworm Books.

Evrard, Olivier and Yves Goudineau. 2004. Planned resettlement, unexpected migrations, and cultural trauma in Laos. *Development and Change*, 35(5): 937–962.

Faith, Nicholas. 1990. *The World the Railways Made*. London, UK: The Bodley Head.

Fan, Cindy C. 1997. Uneven Development and Beyond: Regional Development Theory in Post-Mao China. *International Journal of Urban and Regional Research*, 21(4): 620–639.

Fang, Wen (方文). 2019. 中老经济走廊建设论析 (Analysis of the construction of the China-Laos Economic Corridor). *Pacific Journal*, 27(3): 86–98. DOI: 10.14015/j.cnko.1004-8049.2019.03.008

Felli, Romain. 2014. On Climate Rent. *Historical Materialism*, 22(3–4): 251–280.

Flyvbjerg, Bent. 2009. Survival of the unfittest: Why the worst infrastructure gets built, and what we can do about it. *Oxford Review of Economic Policy*, 25(3): 344–367.

Flyvbjerg, Bent, Massimo Garbuio, and Dan Lovallo. 2009. Delusion and deception in large infrastructure projects: two models for explaining and preventing executive disaster. *California Management Review*, 51(20): 170–194.

Fogelman, Charles and Thomas J. Bassett. 2017. Mapping for investability: Remaking land and maps in Lesotho. *Geoforum*, 82: 252–258.

Foreign Relations of the United States (FRUS) : 1952-1954 Diplomatic Papers. 1982. Volume 13, Part 2. December 10, 1954: Document 1374, page 2358. Washington, D.C.

Fournel, Paul. 2013. *Besoin de vélo.* Média Diffusion.

Frynas, Jędrzej George, Geoffrey Wood, and Timothy Hinks. 2017. The resource curse without natural resources: Expectations of resource booms and their impact. *African Affairs*, 116(463): 233–260.

Fuchs, Jeff. 2008. The tea horse road. *The Silk Road,* 6(1): 63–71.

Fukuyama, Francis. 2015. Why is democracy performing so poorly? *Journal of Democracy,* 26(1): 11–20.

Gellert, Paul K. and Barbara D. Lynch. 2003. Mega-projects as displacements. *International Social Science Journal*, 55(175): 15–25.

Geurts, Anna P.H. 2019. Trains, bodies, landscapes: Experiencing distance in the long nineteenth century. *The Journal of Transport History*, 40(2): 165–188.

Ghertner, Asher. 2015. *Rule by Aesthetics: World-Class City Making in Delhi.* Oxford University Press.

Giersch, Charles Patterson. 2006. *Asian Borderlands: The Transformation of Qing China's Yunnan Frontier*. Cambridge, MA: Harvard University Press.

Glassman, Jim. 2010. *Bounding the Mekong: The Asian Development Bank, China, and Thailand.* Honolulu, Hawai'i. University of Hawai'i Press.

Godley, Michael, R. 1987. Socialism with Chinese Characteristics: Sun Yatsen and the International Development of China. *The Australian Journal of Chinese Affairs*, 18: 109–125

Godley, G. McMurtrie and Jinny St. Goar. 1991. The Chinese roads in Northwest Laos 1961-73: an American perspective. In *Laos: Beyond the Revolution*, edited by Joseph J. Zasloff and Leonard Unger, pp. 285–314.

Goldstein, Jenny E. and Julian S. Yates 2017. Introduction: Rendering land investable. *Geoforum*, 82: 209–211.

Gonzalez-Vicente, Ruben. 2011. The internalization of the Chinese state. *Political Geography*, 30: 402–411.

Goodfellow, Tom, and Zhengli Huang. 2021. Contingent infrastructure and the dilution of 'Chineseness': Reframing roads and rail in Kampala and Addis Ababa. *Environment and Planning A: Economy and Space*, 53.(4): 655–674.

Goodman, David. 2004. The campaign to "Open up the West": national, provincial-level and local perspectives. *The China Quarterly*, 178: 317–334.

Goudineau, Yves. 1997. Main report. In *Resettlement and Social Characteristics of New Villages: Basic Needs for Resettled Communities in the Lao PDR*, vol. 1: 5–42. Vientiane: UNESCO-UNDP.

Government of the Lao PDR (GoL). 1998. The Rural Development Programme, 1998–2002: The Focal Site Strategy, Sixth Round Table Follow-Up Meeting'. Vientiane: GoL.

Government of Lao PDR (GoL). 2003. Law on Land.

Government of Lao PDR (GoL). 2005. Decree 192 on Compensation and Resettlement Management in Development Projects.

Government of Lao PDR (GoL). 2010b. Ministry of Planning and Investment. Draft Seventh National Socio-Economic Development Plan (2011–2015). Abridged Version. Unofficial Translation.

Government of Lao PDR (GoL). 2013. Environmental Protection Law. Vientiane: National Assembly.

Government of Lao PDR (GoL). 2016a. 8th Five-Year National Socio-Economic Development Plan (2016-2020). Vientiane: Ministry of Planning and Investment.

Government of Lao PDR (GoL). 2016b. Government Decree on Resettlement and Compensation. Vientiane: Ministry of Natural Resource and Environment

Government of Lao PDR (GoL). 2016c. Decree 84 on Compensation and Resettlement Management in Development Projects.

Government of Lao PDR (GoL). 2018. Law on Railways. Vientiane: National Assembly.

Government of Lao PDR (GoL). 2019. Decree No. 21/PM on Environmental Impact Assessment. Vientiane: Prime Minister Office.

Graham, Stephen, and Colin McFarlane, editors. 2014. *Infrastructural Lives: Urban Infrastructure in Context.* London, UK: Routledge.

Grant, Andrew. 2019. Cosmic Infrastructure. *Made in China Journal*, 4(2): 108–115.

Graeber, David. 2011. *Debt: The First Five Thousand Years.* New York: Melville House.

Green, Nathan and Ian Baird. 2016. Capitalizing on compensation: Hydropower resettlement and the commodification and decommodification of nature–society relations in southern Laos. *Annals of the American Association of Geographers* 106(4): 853–873.

Gunn, Geoffrey. 1990. *Rebellion in Laos: Peasant and Politics in a Colonial Backwater*. Boulder, CO: Westview Press.

Gupta, Akhil and James Ferguson 2002. Spatializing States: Toward an Ethnography of Neoliberal Governmentality. *American Ethnologist*, 29: 981–1002

Gupta, Akhil. 2018. The Future in Ruins: Thoughts on the temporalities of infrastructure. In *The Promise of Infrastructure*, edited by Nikhil Anand, Akhil Gupta, and Hannah Appel. Durham, NC: Duke University Press.

Gurung, Phurwa. 2021. Challenging Infrastructural Orthodoxies: Political and Economic Geographies of a Himalayan Road. *Geoforum*, 120: 103–112.

Guy, Camille. 1923. Review of La mise en valeur des Colonies françaises, by Albert Sarraut. *Annales de Géographie*, 32e(177): 265–271

Hage, Ghassan. 2009a. Waiting out the crisis: On stuckedness and governmentality. *Anthropological Theory,* 5: 463–475.

Hage, Ghassan. 2009b. *Waiting*. Melbourne University Publishing.

Hall, Derek. 2011. Land control, land grabs, and Southeast Asian crop booms. *The Journal of Peasant Studies,* 38(4): 837–57.

Hall, Derek, 2012. Rethinking primitive accumulation: Theoretical tensions and rural Southeast Asian complexities. *Antipode*, 44(4): 1188–1208.

Hall, Derek, Philip Hirsch, and Tania Li. 2011. *Powers of exclusion*. Singapore: National University of Singapore Press.

Hameiri, Shahar, Lee Jones, and Yizheng Zou. 2019. The development insecurity nexus in China's near abroad: Rethinking cross border economic integration in an era of state transformation. *Journal Contemporary Asia,* 49(3): 473–499.

Harriss, John. 2009. Drivers of development over the next 30 years: some speculation. *Journal of International Development*, 21: 772–775.

Hart, Gillian. 2001. Development critiques in the 1990s: culs de sac and promising paths. *Progress in Human Geography*, 25(4): 649–658.

Hart, Gillian. 2002. Geography and development: development/s beyond neoliberalism? Power, culture, political economy. *Progress in Human Geography,* 26(6): 812–822.

Hart, Gillian. 2004. Geography and development: critical ethnographies. *Progress in Human Geography,* 28(1), 91–100.

Hart, Gillian. 2006. Denaturalizing dispossession: Critical ethnography in the age of resurgent imperialism. *Antipode*, 38(5): 977–1004.

Hart, Gillian. 2009. D/developments after the Meltdown. *Antipode* 41(S1): 117–141.

Harvey, David. 1975. The geography of capitalist accumulation: a reconstruction of the Marxian theory. *Antipode*, 7(2): 9-21

Harvey, David. 1982. *The Limits to Capital*. Chicago: University of Chicago Press.

Harvey, David. 1989. *The Condition of Postmodernity: An Enquiry into the Origins of Cultural Change*. Oxford: Blackwell.

Harvey, David. 2001. Globalization and the "Spatial Fix". *Geographische Revue,* 2: 23–30.

Harvey, David. 2003. *The New Imperialism.* Oxford, UK: Oxford University Press.

Harvey, Penelope and Hannah Knox. 2012. The Enchantments of Infrastructure. *Mobilities* 7(4): 521–536.

Heslop, Luke A. 2020. A journey through 'infraspace': The financial architecture of infrastructure. *Economy and Society,* 49(3): 364–381.

Hett, Cornelia, Vong Nanhthavong, Savanh Hanephom, Anongsone Phommachanh, Boungnong Sidavong, Ketkeo Phouangphet, Michael Epprecht, Juliet Lu, Annie Shattuck, Micah Ingalls, Rasso Bernhard, Souphaphone Phathitmixay, Chanthavone Phomphakdy, and Andreas Heinimann. 2020. Land deals in the Lao PDR: A characterization of investments in land and their impacts. Bern: Bern Open Publishing.

Hirsch, Philip. and Natalia Scurrah. 2015. The Political Economy of Land Governance in the Mekong. Vientiane: Mekong Land Governance Project.

Hirschman, Albert O. 1957. Economic policy in underdeveloped countries. *Economic Development and Cultural Change*, 5(4): 362–370.

Hirsh, Max. 2017. Simulating global mobility at Shenzhen 'International' Airport. In *Learning from Shenzhen*, edited by Mary Ann O'Donnell, Winnie Wong and Jonathan Bach. Chicago, IL: University of Chicago Press.

Hofman, Irna. 2016. Politics or Profits along the 'Silk Road': What Drives Chinese Farms in Tajikistan and Helps Them Thrive? *Eurasian Geography and Economics,* 57(3): 457–481.

Holden, Chris. 2017. Graduated sovereignty and global governance gaps: Special economic zones and the illicit trade in tobacco products. *Political Geography*, 59: 72-81.

Horn, Sebastian, Carmen M. Reinhart, and Christoph Trebesch. 2019. China's overseas lending. National Bureau of Economic Research. NBER Working Paper 26050, http://www.nber.org/papers/w26050

Howe, Cymene, Jessica Lockrem, Hannah Appel, Edward Hackett, Dominic Boyer, Randal Hall, Matthew Schneider-Mayerson, Albert Pope, Akhil Gupta, Elizabeth Rodwell, Andrea Ballestero, Trevor Durbin, Farès el-Dahdah, Elizabeth Long and Cyrus Mody. 2016. Paradoxical Infrastructures: Ruins, Retrofit, and Risk. *Science, Technology and Human Values,* 41(3): 547-565.

Hu, Jintao. 2005. Zai Shengbuji Zhuyao Lingdao Ganbu Tigao Goujian Shehuizhuyi Hexie Shehui Nengli Zhuanti Yantao Shangde Jianghua (Talk Delivered to Provincial Main Leading Cadres In Seminar about Enhancing Capacity to Build a Socialist Harmonious Society.

Ingalls, Micah, Jean-Christophe Diepart, Nhu Truong, Daniel Hayward, Tony Neil, Chanthavone Phomphakdy, Rasso Bernhard et al. 2018 *State of Land in the Mekong Region*. Bern Open Publishing

Ingold, Tim. 1993. The Temporality of the Landscape. *World Archaeology*, 25(2): 152–174. Available from: https://www.sv.uio.no/sai/forskning.

Innes-Brown, Marc, and Mark J. Valencia. 1993. Thailand's resource diplomacy in Indochina and Myanmar. *Contemporary Southeast Asia*, 332–351.

Ireson, Carol J. and W. Randall Ireson. 1991. Ethnicity and Development in Laos. *Asian Survey*, 31(10): 920–37.

Ironside, J. 2017. The Recognition of Customxary Tenure in Vietnam. Mekong Regional Land Governance Project: Vientiane. Available from: http://mrlg.org/wp-content/uploads/2017/10/ The-Recognition-of-Customary-Tenure-in-Viet nam_FINAL.pdf

Ivarsson, Søren, 2008. *Creating Laos: The Making of a Lao Space Between Indochina and Siam, 1860-1945* (Vol. 112). NIAS press.

Janssen, Peter. 2015. Laotian deputy premier aims to firm up $7B project by June. *Nikkei Asia*, 4 March.

Jepson, Nicholas. 2021. Hidden in Plain Sight: Chinese Development Finance in Central and Eastern Europe. *Development and Change,* 52(5): 1222–1250.

Jerndal, Randi and Jonathan Rigg. 1999. Making space in Laos: constructing a national identity in a ‘forgotten’ country. *Political Geography*, 17(7): 809–831.

Jeong, Jihyeon. 2015. Ethnic Minorities in China’s Western Development Plan. *Journal of International and Area Studies*, 22: 1–18.

Jessop, Bob 2006. Spatial fixes, temporal fixes and spatio-temporal fixes. In *David Harvey: A Critical Reader*, edited by Noel Castree and David Gregory, pp. 142–166. Oxford, UK: Blackwell.

Johnson, Charles. 1985. *Dab Neeg Hmoob, Myths, Legends & Folktales from the Hmong of Laos.* St. Paul, MN: Macalester College, Department of Linguistics.

Johnston, Lauren, and Marina Rudyak. 2017. China's 'innovative and pragmatic' Foreign Aid: Shaped by and now shaping globalisation. *China's new sources of economic growth*: 431.

Jones, Lee and Yizheng Zou 2017. Rethinking the Role of State owned Enterprises in China s Rise. *New Political Economy*, 22(6): 743–760.

Jones, Lee and Jinghan Zeng. 2019. Understanding China's 'Belt and Road Initiative:' beyond 'grand strategy' to a state transformation analysis. *Third World Quarterly*, 40(8), 1415–1439

Jones, Lee and Shahar Hameiri. 2020 Debunking the Myth of 'Debt-trap Diplomacy' How Recipient Countries Shape China's Belt and Road Initiative. Asia-Pacific Program. Chatham House.

Joniak-Lüthi, Agnieszka. 2019. "Introduction: Infrastructure as an Asynchronic Timescape." *Roadsides* 1: 3-10. DOI: https://doi.org/10.26034/roadsides-20190012.

Joniak-Luthi, Agnieszka. 2020. A road, a disappearing river and fragile connectivity in Sino-Inner Asian borderlands. *Political Geography*: 78: 102122.

Jonsson, Hjorleifur. 2010. Above and beyond: Zomia and the ethnographic challenge of/for regional history. *History and Anthropology*, 21(2): 191–212.

Kakwani, Nanak, and Ernesto M. Pernia. 2000. What is pro-poor growth? *Asian development Review*, 18(1): 1–16.

Karnow, Stanley. 1994. *Vietnam: A History* (Vol. 122). Random House.

Keay, John. 2005. *Mad About the Mekong: Exploration and Empire in South East Asia.* Harper-Collins Publishing.

Kelly, Alice B. and Nancy Lee Peluso. 2015. Frontiers of commodification: State lands and their formalization. *Society and Natural Resources*, 28(5): 473–495.

Kenney-Lazar, Miles. 2012. Plantation rubber, land grabbing and social-property transformation in southern Laos. *The Journal of Peasants Studies*, 39(3-4): 1017–1037.

Kenney-Lazar, Miles. 2018. Governing dispossession: Relational land grabbing in Laos. *Annals of the American Association of Geographers*, 108(3): 679–694.

Kenney-Lazar, Miles and Kelly Kay. 2017. Introduction: Value in capitalist natures. Capitalism *Nature Socialism,* 28(1): 33–38.

Kenney-Lazar, Miles, Michael Dwyer, and Cornelia Hett. 2018. Turning Land into Capital: Assessing A Decade of Policy in Practice. A Report Commissioned by the Land Information Working Group (LIWG).

Keovilignavong, Oulavanh and Diana Suhardiman. 2017. Characterising private investments and implications for poverty reduction and natural resource management in Laos. *Development Policy Review*, 36(S1): 341359.

Kiik, Laur. 2016. Nationalism and Anti-ethno-politics: Why 'Chinese Development' Failed at Myanmar's Myitsone Dam. *Eurasian Geography and Economics*, 57(3): 374–402.

Kislenko, Arne. 2004. A Not So Silent Partner: Thailand's Role in Covert Operations, Counter-Insurgency, and the Wars in Indochina. *Journal of Conflict Studies*, 24(1).

Klinger, Julie Michelle. 2018. *Rare Earth Frontiers: From Terrestrial Subsoils to Lunar Landscapes.* Ithaca, NY: Cornell University Press.

Klinger, Julie Michelle and Joshua S.S. Muldavin. 2019. New geographies of development: grounding China's global integration. *Territory, Politics, Governance*, 7(1): 1–21.

Kratz, Agatha. 2015. One Belt, One Road: What's in it for China's economic players? In *One Belt, One Road: China's Great Leap Outward*, pp. 8–10.

Kratz, Agatha, Allen Feng, and Logan Wright. 2019. New Data on the 'Debt Trap' Question. Rhodium Group, April 29. Available from: https://rhg.com/ research/new-data-on-the-debt-trap-question/.

Lagendijk, Vincent. 2020. Streams of knowledge: river development knowledge and the TVA on the river Mekong. *History and Technology,* 35(3): 316–337.

Lai, Karen PY, Shaun Lin, and James D. Sidaway. 2020. Financing the Belt and Road Initiative (BRI): Research agendas beyond the "debt-trap" discourse. *Eurasian Geography* and Economics 61(2): 109–124.

Lam, Tong. 2019. Futures and Ruins: The politics, aesthetics, and temporality of infrastructure. *Made in China Journal,* 4(2): 78–83.

Lampton, David M., Selina Ho, and Cheng-Chwee Kuik. 2020. *Rivers of Iron: Railroads and Chinese Power in Southeast Asia.* Berkeley, CA: University of California Press.

Lane, Jonathan. Andrew. 2020. Reevaluating the economic benefits of the Lao People's Democratic Republic (Lao PDR)– People's Republic of China high- speed rail and its implications for fiscal stability of the Lao PDR. ADB Institute Working Paper, No. 1181.

Lardner, Dionysius. 1850. *Railway Economy: A treatise on the new art of transport, its management, prospects and relations*. London, UK: Taylor, Walton and Maberly.

Larkin, Brian. 2008. *Signal and Noise: Media, Infrastructure, and Urban Culture in Northern Nigeria*. Durham, NC and London: Duke University Press.

Larkin, Brian. 2013. The politics and poetics of infrastructure. *Annual Review of Anthropology,* (42), 327–343.

Lastarria-Cornhiel, Susana. 2007. Who Benefits from Land Titling? Lessons from Bolivia and Laos. International Institute for Environment and Development. Gatekeeper Series 132. Available from: http://pubs.iied.org/14553IIED.html

Laungaramsri, Pinkaew and Souksamone Sengchanh. 2018. Negotiating post-resettlement livelihoods: the Chinese special economic zone and its impact in northwestern Laos. *Canadian Journal of Development Studies / Revue canadienne d'études du développement*, DOI: 10.1080/02255189.2019.1524748

Laungaramsri, Pinkaew. 2019. China in Laos: Enclave Spaces and the Transformation of Borders in the Mekong Region. *The Australian Journal of Anthropology*, 30(2): 195–211.

Lauridsen, Laurids S. 2019. Drivers of China's Regional Infrastructure Diplomacy: The Case of the Sino-Thai Railway Project. *Journal of Contemporary Asia*, 50(3): 380–406.

Lawson, James. 2011. Chronotope, story, and historical geography: Mikhail Bakhtin and the space-time of narratives. *Antipode,* 43(2): 384–412.

Lawson, Victoria. 2014. *Making development geography*. London and New York: Routledge.

Le Billon, Philippe and Melanie Sommerville. 2017. Landing capital and assembling 'investable land' in the extractive and agricultural sectors. *Geoforum*, 82: 212–224.

Lee, Ching Kwan. 2014. A Chinese developmental state: miracle or mirage? In *The End of the Developmental State?*, pp. 128-151. Routledge.

Lee, Ching Kwan. 2017. *The Specter of Global China: Politics, Labor, and Foreign Investment in Africa.* Chicago, IL: University of Chicago Press.

Lees, Loretta. 2001. Towards a Critical Geography of Architecture: The Case of an Ersatz Colosseum. *Ecumene*, 8(1): 51–86.

Lefebvre, Henri. 1991. *The Production of Space.* Oxford and Cambridge, MA: Blackwell.

Lengsavad, Somsavat. 2012. Speech to the National Assembly on the Laos–China Railway.

Leukens, David. 2019. Thailand hopes to have bullet trains running by 2023. CNN.

Levine, Robert. 1997. *A Geography of Time*. New York, NY: Basic Books.

Li, Chenyang and Liang Fook Lye. 2009. China's policies towards Myanmar: A successful model for dealing with the Myanmar issue? *China: An International Journal*, 7(2), 255–287

Li, Tania M. 2005. Beyond "the state" and failed schemes. *American Anthropologist*, 107(3): 383–394.

Li, Tania M. 2007. The Will to Improve: Governmentality, Development, and the Practice of Politics. Durham, NC: Duke University Press.

Li, Tania M. 2014a. *Land's End: Capitalist Relations on an Indigenous Frontier*. Durham, NC: Duke University Press.

Li, Tania M. 2014b. What is land? Assembling a resource for global investment. *Transactions of the Institute of British Geographers*, 39(4) 589–602.

Li, Tania M. 2017. After development: surplus population and the politics of entitlement. *Development and Change*, 48(6): 1247–1261.

Li, Tania M. 2018. Rendering land investible: Five notes on time. *Geoforum*, 82: 276–278.

Li, Ming Hua, Lin Cui, and Jiangyong Lu. 2014. Varieties in state capitalism: Outward FDI strategies of central and local state-owned enterprises from emerging economy countries. *Journal of International Business Studies*, 45(8): 980–1004.

Linter, Bertil. 2020. Laos the latest China debt trap victim. Asia Times, September 14. Available from: https://asiatimes.com/2020/09/Laos–the-latest-china-debt-trap-victim/

Liu, Hong, editor. 2006. *The Chinese Overseas*. Abingdon: Routledge Library of Modern China.

Liu, Michael and Todd Sigaty. 2009. Legal Analysis of Communal Land and Communal Title in the Lao PDR. Available from: http://rightslinklao.org/eng/index.php?option=com_docman&task=cat_view&gid=69&Itemid=70

Liu, Weidong and Michael Dunford. 2016. Inclusive globalization: unpacking China's Belt and Road Initiative, *Area Development and Policy*.

Liu, Zhigao, Michael Dunford and Weidong Liu. 2020. Coupling national geo-political economic strategies and the Belt and Road Initiative: The China-Belarus Great Stone Industrial Park. *Political Geography*, 84: 102296.

LIWG (Land Information Working Group). 2012 Draft Report on Policy Overview on Community Land Registration and Titling. Department of Land, National Land Management Authority. Available from: http://www.laolandissues.org/wp-content/uploads/2011/12/ Report-Policy-Overview-on-CLRT-LIWG.pdf

LIWG (Land Information Working Group). 2013. First community land titles in Laos. 28 January. Available from: http://www.laolandissues.org/2013/01/28/firstcommunity-land-titles-in-laos/

Lord, Austin, Georgina Drew, and Mabel Denzin Gergan. 2020. Timescapes of Himalayan hydropower: Promises, project life cycles, and precarities. *Wiley Interdisciplinary Reviews: Water.*

Lu, Juliet N. Tapping into rubber: China's opium replacement program and rubber production in Laos. *The Journal of Peasant Studies,* 44(4): 726–747.

Lu, Juliet N. 2021. *Grounding Chinese Investment: Encounters between Chinese Capital and Local Land Politics in Laos.* Doctoral dissertation, University of California Berkeley.

Lu, Juliet N. and Oliver Schönweger. 2019. Great expectations: Chinese investment in Laos and the myth of empty land. *Territory, Politics, Governance*, 7: 61–78.

Luang Prabang Provincial Governor. 2018. Agreement No.78 dated 12 July 2018 on Unit Price to compensate the affected households from 80 Km Laos–China Railway project in Luang Prabang. Luang Prabang Province: Luang Prabang Provincial Governor.

Lund, Christian. 2011. Fragmented sovereignty: land reform and dispossession in Laos. *The Journal of Peasant Studies*, 38(4): 885–905.

Lyttleton, Chris. 2017. Stimulating Circuits: Chinese Desires and Transnational Affective Economics in Southeast Asia. In *Chinese encounters in Southeast Asia: How people, money and ideas from China are changing a region*, pp. 214–233. Seattle & London: University of Washington Press.

MacLean, Ken. 2017. Unbuilt Anxieties: Infrastructure Projects, Transnational Conflict in the South China/East Sea, and Vietnamese Statehood. *TRaNS: Trans-Regional and -National Studies of Southeast Asia*, 4(S2): 36–85.

Mains, Daniel. 2007. Neoliberal times: progress, boredom, and shame among young men in urban Ethiopia. *American Ethnologist*, 34(4): 659–673.

Malik, A., Parks, B., Russell, B., Lin, J., Walsh, K., Solomon, K., Zhang, S., Elston, T., and S. Goodman. 2021. Banking on the Belt and Road: Insights from a new global dataset of 13,427 Chinese development projects. Williamsburg, VA: AidData at William & Mary.

Marcus, George E. 1995. Ethnography in/of the World System: The Emergence of Multi- Sited Ethnography. *Annual Review of Anthropology*, 24: 95–117.

Marcel, Gabriel. 1967. Desire and Hope. In *Readings in Existential Phenomenology*, edited by Nathaniel Lawrence and Daniel O'Connor. Englewood Cliffs, NJ: Prentice-Hall

Marx, Karl. 1973. *Grundrisse*. New York: Vintage.

Massey, Doreen. 1994. *Space, Place and Gender.* Minneapolis, MN: University of Minnesota Press.

Massey, Doreen. 2005. *For Space.* London and Los Angeles: Sage.

Mawdsley, Emma. 2007. China and Africa: Emerging Challenges to the Geographies of Power. *Geography Compass*, 1(3): 405–421.

Mawdsley, Emma. 2008. Fu Manchu versus Dr Livingstone in the Dark Continent? Representing China, Africa and the West in British broadsheet newspapers. *Political Geography*, *27*(5), 509–529.

Mawdsley, Emma. 2015. Development geography 1: Cooperation, competition and convergence between 'North' and 'South.' *Progress in Human Geography*, 41(1): 108–117.

McCarthy, John Fitzgerald. 2006. *The fourth circle: a political ecology of Sumatra's rainforest frontier.* Stanford University Press.

McCoy, Alfred W. 1970. French Colonialism in Laos, 1893-1945. In *Laos: War and Revolution,* edited by Nina S. Adams and Alfred W. McCoy, pp. 67–99. New York: Harper Colophon Books.

McDonald, Kristin, Peter Bosshard and Nicole Brewer. 2009. Exporting dams: China's hydropower industry goes global. *Journal of Environmental Management*, 90(3):294–302.

McKeon, Richard. 1974. Time and temporality. *Philosophy East and West*, 24(2): 123–128.

Mitchell, Timothy. 2014. Introduction: Life of Infrastructure. *Comparative Studies of South Asia, Africa, and the Middle East*, 34(3): 437–9.

Mitchell, Timothy. 2020. Infrastructures work on time. e-flux. Available from: https://www.e-flux.com/architecture/new-silk-roads/312596/infrastructures-work-on-time/

MoFA (The Ministry of Foreign Affairs of the People's Republic of China). 2015. Xi Jinping Holds Talks with General Secretary of the Lao People's Revolutionary Party and President Choummaly Sayasone of Laos Available from: https://www.fmprc.gov.cn/mfa_eng/topics_665678/jnkzsl70zn/t1293103.shtml

Mohan, Giles, and Marcus Power. 2009. Africa, China and the 'new' economic geography of development. *Singapore Journal of Tropical Geography*, 30(1): 24–28.

Mohan, Giles. 2013. Beyond the enclave: Towards a critical political economy of China and Africa. *Development and Change*, 44(6): 1255–1272.

Mohan, Giles. 2016. Emerging Powers in International Development: Questioning South–South Cooperation. In *The Palgrave Handbook of International Development*, pp. 279–296.

Mohan, Giles. 2021. Below the Belt? Territory and Development in China's International Rise. *Development and Change*, 52(1): 54–75.

Mohan, Giles and May Tan-Mullins. 2009. Chinese Migrants in Africa as New Agents of Development? An Analytical Framework. *The European Journal of Development Research*, 21: 588–605

Mohan, Giles, and May Tan-Mullins. 2019. The geopolitics of South–South infrastructure development: Chinese-financed energy projects in the global South. *Urban Studies*, 56(7): 1368–1385.

Monson, Jamie. 2011. *Africa's Freedom Railway: How a Chinese development project changed lives and livelihoods in Tanzania.* Bloomington & Indianapolis: Indiana University Press.

Monstadt, Jochen. 2009. Conceptualizing the political ecology of urban infrastructures: insights from technology and urban studies. *Environment and Planning A*, 41(8): 1924–1942.

Morgan, Pippa, and Yu Zheng. 2019. Tracing the legacy: China's historical aid and contemporary investment in Africa. *International Studies Quarterly*, 63(3): 558–573.

Muldavin, Joshua. 2012. Land from the tiller: China's role in global processes of land dispossession. Paper presented at the Second International Academic Conference on Global Land Grabbing sponsored by Land Deals Politics Initiative (LDPI), Ithaca, NY, October 17–19.

Muldavin, Joshua. 2013. From rural transformation to global integration: Comparative analyses of the environmental dimensions of China's rise. *Eurasian Geography and Economics*, 54(3), 259–279.

Murton, Galen. 2017. *Border Corridors: Mobility, Containment, and Infrastructure of Development between Nepal and China.* Doctoral dissertation, University of Colorado Boulder.

Murton, Galen. 2020. Roads to China and infrastructural relations in Nepal. *Environment and Planning C*, 38(5): 840–847.

Murton, Galen, Austin Lord, and Robert Beazley. 2016. "A handshake across the Himalayas:" Chinese investment, hydropower development, and state formation in Nepal." *Eurasian Geography and Economics,* 57(3): 403–432.

Murton, Galen and Austin Lord. 2020. Trans-Himalayan power corridors: Infrastructural politics and China's belt and road initiative in Nepal. *Political Geography,* 77: 102100.

Nader, Laura. 1972. Up the anthropologist: Perspectives gained from studying up. *ERIC.*

Nathan Associates Inc. 2003. T.A. No. 3817–Lao: Preparing the northern economic corridor, final report (Vol. 1). Lao PDR: Nathan Associates Inc. CPCS Upham Corporation, Communication Design and Research Institute.

The Nation Thailand. 2013. Vientiane-China rail link now a priority project, 24 September.

Nguyen, Thi Dieu. 1999. *The Mekong River and the Struggle for Indochina: Water, War, and Peace*. Greenwood Publishing Group.

The North Plan (Planning for Industrial Economic Development and Cooperation in Northern Part of Lao People's Democratic Republic, 2008-2020), mid-term draft for opinions. 2008, May. Northern Laos Industrial Economic Development and Cooperation Planning Preparation Group.

Novoa, Andre. 2015. Mobile ethnography: emergence, techniques and its importance to geography. *Human Geographies – Journal of Studies and Research in Human Geography,* 9(1): 97–107.

Nyíri, Pál. 2012. Enclaves of improvement: Sovereignty and developmentalism in the special zones of the China-Lao borderlands. *Comparative Studies in Society and History*, 54(3): 533–562.

Nyiri, Pál . and Danielle Tan, editors. 2017. *Chinese Encounters in Southeast Asia: How People, Money and Ideas are Changing a Region*. Seattle: University of Washington Press.

O'Neill, Kevin Lewis. 2012. There is no room: Cemeteries, personhood, and bare death. *Ethnography*, 13(4): 510–530.

Oakes, Timothy. 1998. *Tourism and Modernity in China.* London and New York: Routledge.

Oakes, Timothy. 2004. Building a Southern Dynamo: Guizhou and State Power. *The China Quarterly,* 178: 467–487.

Oakes, Timothy. 2007. 'Welcome to Paradise!' A Sino-American Joint Venture Project. In *China's Transformations: The Stories beyond the Headlines*, edited by Lionel Jensen and Timothy Weston, pp. 240–264. Lanham, MD: Rowman & Littlefield.

Oakes, Timothy. 2012. Looking out to look in: the use of the periphery in China's geopolitical narratives. *Eurasian Geography and Economics*, 53(3): 315–326.

Oakes, Timothy. 2019. China's Urban Ideology: New Towns, Creation Cities, and Contested Landscapes of Memory. *Eurasian Geography and Economics,* 60(4): 400–442.

Oakes, Timothy. 2021. The BRI as an Exercise in Infrastructural Thinking. Transformations: Downstream effects of the BRI. Belt and Road in Global Perspective at the Munk School of Global Affairs and Public Policy.

Obe, Mitsuru and Marimi Kishimoto. 2019. Why China is determined to connect Southeast Asia by rail. *Nikkei Asia,* 9 January.

Oliveira, Gustavo, Galen Murton, Alessandro Rippa, Tyler Harlan, and Yang Yang. 2020. China's Belt and Road Initiative: Views from the Ground. *Political Geography*.

Ong, Aihwa. 2000. Graduated sovereignty in Southeast Asia. *Theory, Culture & Society*, 17(4): 55–75.

Ong, Aihwa. 2011. Hyperbuilding: Spectacle, Speculation, and the Hyperspace of Sovereignty. In *Worlding Cities*, edited by Ananya Roy and Aihwa Ong. Oxford: Wiley-Blackwell.

Pan, Chengxin. 2012. *Knowledge, desire and power in global politics: Western representations of China's rise.* London: Edward Elgar Publishing Limited.

Patel, Raj, and Jason W. Moore. 2017. *A History of the World in Seven Cheap Things.* University of California Press.

Pathammavong, Bounnhong, Miles Kenney-Lazar, and Ek Vinjay Sayaraj. 2017. Financing the 450 Year Road: Land expropriation and politics 'all the way down' in Vientiane, Laos. *Development and Change*, 48(6): 141–1438.

Paudel, Dinesh, Katharine Rankin, and Philippe Le Billon. 2020. Lucrative Disaster: Financialization, Accumulation and Postearthquake Reconstruction in Nepal. *Economic Geography,* 96(2): 137–160.

Paudel, Dinesh and Katharine Rankin. 2020. Decolonizing development: An agenda for Nepal geographies. *Studies in Nepali History and Society,* 25(1): 209–224.

Peluso, Nancy Lee and Christian Lund. 2011. New frontiers of land control: Introduction. *The Journal of Peasant Studies*, 38(4): 667–681.

Peluso, Nancy Lee. 2018. Entangled territories in small-scale gold mining frontiers: Labor practices, property, and secrets in Indonesian gold country. *World Development*, 101, 400–416.

Pemberton, John. 1994. Recollections from "beautiful Indonesia"(somewhere beyond the postmodern). *Public culture*, 6(2): 241–262.

Petit, Pierre. 2017. Land, state, and society in Laos: Ethnographies of land policies. *World Food Policy Journal,* 4(1): 83–104.

Phnom Penh Post. 2021, February 23. Luang Prabang railway station nearly 50% done. Asia News Network.

Pholsena, Vatthana. 2006. *Post-war Laos: The politics of culture, history and identity*. Institute of Southeast Asian Studies.

Pholsena, Vatthana and Ruth Banomyong. 2006. *Laos: From Buffer State to Crossroads.* Chiang Mai, Thailand: Mekong Press.

Polanyi, Karl. 1944. *The Great Transformation: The Political and Economic Origins of our Time*. Boston: Beacon Press.

Pongkhao, Somsack. 2005, December 12. ASEAN engineers resolve development initiative. Vientiane Times, Issue 241.

Radio Free Asia. 2016. High-speed Rail Project Will Force Thousands of Lao Families to Relocate. Available from: https://www.rfa.org/english/news/laos/high-speed-rail-project-will-force-thousands-of-lao-families-to-relocate-11222017143941.html

Radio Free Asia. 2018. China's fast track to influence: Building a railway in Laos, 27 May. Available from: https://www.rfa.org/english/news/special/laoschinarailway/

Randolph, R. Sean. 1986. *The United States and Thailand: Alliance Dynamics, 1950-1985.* Institute of East Asian Studies, University of California.

Rasmussen, Mattias Borg and Christian Lund. 2018. Reconfiguring Frontier Spaces: The territorialization of resource control. *World Development*, 101: 388–399.

Rathie, Martin. 2017. The History and Evolution of the Lao People's Revolutionary Party. In *Changing Lives in Laos: Society, Politics, and Culture in a Post-Socialist State*, edited by Vanina Bouté and Vatthana Pholsena. Singapore: NUS Press.

Ravallion, Martin. 2004. *Pro-poor growth: A primer*. Available from https://ssrn.com/abstract=610283

Ravallion, Martin, and Shaohua Chen. Measuring pro-poor growth. *Economics Letters*, 78(1): 93–99.

Reeves, Madeleine. 2017. Infrastructural Hope: Anticipating 'independent roads' and territorial integrity in southern Kyrgyzstan. *Ethnos*, 82(4): 711–737.

Ren, Zeng. 2018. Lao people's dream: Laos–China railway takes away poverty. *Vientiane Times*, 9 November, Issue 263.

Rigg, Jonathan. 1997. Land-locked Laos: Dilemmas of development at the edge of the world. *Geopolitics*, 2(1): 153–174.

Rigg, Jonathan. 2002. Roads, marketization and social exclusion in Southeast Asia. What do roads do to people? *Bijdragen tot de Taal-, Land- en Volkenkunde*, 158(4): 619–636

Rigg, Jonathan. 2005. Poverty and livelihoods after full-time farming: A South-East Asian view. *Asia Pacific Viewpoint*, 46(2): 173–184.

Rigg, Jonathan. 2012. *Living with Transition in Laos: Market Integration in Southeast Asia,* 2nd edition. London and New York: Routledge

Rippa, Alessandro. 2019. Infrastructures of Desire: Rubble, development, and salvage capitalism in rural China. *Made in China Journal*, 4(2): 103–107.

Rippa, Alessandro. 2020. *Borderland Infrastructures: Trade, Development, and Control in Western China.* Amsterdam University Press.

Rippa, Alessandro. 2021. From Boom to Bust—to Boom Again? Infrastructural Suspension and the Making of a Development Zone at the China-Laos Borderlands. In *Development Zones in Asian Borderlands*, edited by Mona Chettri and Michael Eilenberg. Amsterdam University Press.

Rippa, Alessandro, Galen Murton and Matthäus Rest 2020. Building Highland Asia in the 21st Century. *Verge: Studies in Global Asia*, 6(2): 83–111.

Riva, Natalia Francesca. 2015. *From Soft Power to "wenhua ruan shili": Theory and Practice in the Chinese Discourse on Soft Power*. Doctoral Dissertation . Cagliari, Italy: Università degli Studi di Cagliari.

Robbins, Paul. 2008. The state in political ecology: A postcard to political geography from the field. In *The SAGE Handbook of Political Geography*, pp. 205–218, edited by Cox, K.R., Low, M., & Robinson, J. Thousand Oaks, CA: Sage.

Robbins, Paul. 2012. *Political Ecology: A Critical Introduction*, 2nd edition. Malden, MA: Wiley-Blackwell.

Robequain, Charles. 1933. Le programme des grands travaux en Indochine Française. *Annales de Géographie,* 42(236): 205–209.

Robertson, Morgan M. and Joel D. Wainwright. 2013. The value of nature to the state. *Annals of the Association of American Geographers,* 103(4): 890–905.

Rose, Carol M. 2019. *Property and persuasion: Essays on the history, theory, and rhetoric of ownership*. Routledge.

Rostow, Walt Whitman. 1960. *The Stages of Economic Growth*. Cambridge, UK: Cambridge University Press.

Roy, Frédéric. 2007. La formation d'une conscience « indochinoise» chez les élites nationalistes laotiennes (1899-1949).

Rowedder Simon. 2020. Railroading land-linked Laos: China's regional profits, Laos' domestic costs? *Eurasian Geography and Economics*, 61(2): 152–161.

Ruwanpura, Kanchana N., Loritta Chan, Benjamin Brown, and V. Kajotha. 2020. Unsettled peace? The territorial politics of roadbuilding in post-war Sri Lanka. *Political Geography*, 76: 102092

Sadowsky, Jathan, and Anthony M. Levenda. 2020. The anti-politics of smart energy regimes. *Political Geography* 81: 102202

Saldaña, Johnny. 2015. An Introduction to Codes and Coding. In The Coding Manual for Qualitative Researchers, 3rd edition, pp. 1–31. Thousand Oaks: Sage Publications.

Salim, Wilmar and Siwage Dharma Negara. 2016. Why is the high-speed rail project so important to Indonesia? ISEAS Yusoh Ishak Institute Perspective Paper, 16.

Sarraut, Albert. 1923. *La Mise en Valeur des Colonies Françaises*. (Reprint, French Edition). London, United Kingdom: Forgotten Books.

Sauvant, Karl P. and Victor Zitian Chen. 2014. China's regulatory framework for outward foreign direct investment. *China Economic Journal*, 7(1): 144–163.

Saxer, Martin and Juan Zhang, editors. 2017. *The Art of Neighboring: Making Relations Across China's Borders*. Amsterdam: Amsterdam University Press.

Sayalath, Ekvinay, Vilaisi Phothilack, et al. 2011. Towards Communal Land Titles in Sangthong District. Available from:

http://www .snvworld.org/sites/www.snvworld.org/files/publications/final_report_on_communal_land_titling_sept26_2 011_small.pdf (accessed 15 April 2013).

Sayalath, Soulatha and Simon Creak. 2017. Regime Renewal in Laos: The Tenth Congress of the Lao People's Revolutionary Party. *Southeast Asian Affairs*. 179–200.

Schein, Louisa. 2000. *Minority Rules: The Miao and the Feminine in China's Cultural Politics.* Durham, NC: Duke University Press.

Schindler, Seth, and J. Miguel Kanai. Getting the territory right: Infrastructure-led development and the re-emergence of spatial planning strategies. *Regional Studies*, 55(1): 40–51.

Schindler, Seth, Jessica DiCarlo, and Dinesh Paudel. 2021. The new Cold War and the rise of the 21st century infrastructure state. *Transactions of the Institute of British Geographers*.

Schivelbusch, Wolfgang. 1977. *The Railway Journey: The industrialization of time and space in the nineteenth century*. Oakland, CA: University of California Press.

Schivelbusch, Wolfgang. 1978. Railroad space and railroad time. *New German Critique*, 14: 31–40.

Schönweger, Oliver, Andreas Heinimann, Micahel Epprecht, Juliet Lu, and Palikone Thalongsengchanh. 2012. Concessions and Leases in the Lao PDR: Taking stock of land investments. Bern and Vientiane: Centre for Developmebt and Environment (CDE) and University of Bern.

Schwenkel, Christina. 2015. Spectacular infrastructure and its breakdown in socialist *Vietnam. American Ethnologist*, 42(3): 520–534.

Scott, James C. 1998. *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed.* New Haven, CT: Yale University Press.

Scott, James C. 2009. *The Art of Not Being Governed: An Anarchist History of Upland Southeast Asia.* New Haven, CT: Yale University Press.

Seidel, Katrin, Khamla Phanvilay, Bounlath Vorachit, Lau Mua, Somthong Boupphachan, and Robert B. Oberndorf. 2007. Study Communal Land Registration in Lao PDR. Land Policy Study No. 6 under Lao Land Titling Project II. Lao-German Land Policy Development Project. Available from: http://www.mekonginfo.org/assets/midocs/0002525-environment-study-on-communal-land-registration-in-lao-pdrland-policy-study-no-6-under-lltpii.pdf

Shah, S. 2019. China's Belt-and-Road Initiative put a squeeze on Pakistan. The Wall Street Journal, 3 April. Available from: https://www.wsj.com/articles/chinas-belt-and-road-initiative-puts-a-squee ze-on-pakistan-11554289201.

Sharma, Sarah. 2014. *In the Meantime: Temporality and Cultural Politics*. Durham, NC: Duke University Press.

Shih, Victor. 2004. Development, the Second Time around: The Political Logic of Developing Western China. *Journal of East Asian Studies*, 4: 427–451.

Shivakumar, Jayasankar and Ian C. Porter. 2011. Doing a dam better: the Lao People's Democratic Republic and the story of Nam Theun 2 (NT2). World Bank.

Shoemaker, Bruce, and William Robichaud, editors. 2018. *Dead in the Water: Global Lessons from the World Bank's Model Hydropower Project in Laos*. University of Wisconsin Press.

Sidaway, James and Chih Yuan Woon. 2017. Chinese Narratives on 'One Belt, One Road (一带一路) in Geopolitical and Imperial Contexts. *The Professional Geographer.*

Sidaway, James D., Simon C. Rowedder, Chih Yuan Woon, Weiqiang Lin, and Vatthana Pholsena. Introduction: Research agendas raised by the Belt and Road Initiative. *Environment and Planning C: Politics and Space,* 38(5): 795–802.

Sikor, Thomas and Christian Lund. 2009. Access and property: a question of power and authority. *Development and Change*, 40(1): 1–22.

Sikor, Thomas, and Christian Lund, editors. 2010. *The Politics of Possession: Property, Authority, and Access to Natural Resources.* John Wiley & Sons.

Silvius, Ray. 2017. Chinese-Russian Economic Relationships in the Emergent Multipolar Global Political Economy. ISA Conference Paper.

Sims, Kearrin. 2017. Gambling on the future: Casino enclaves, development, and poverty alleviation in Laos. *Pacific Affairs*, 90(4): 675–699.

Singh, Sarinda. 2018. Nam Theun 2 and the transformations of institutions and public debate in Laos. In *Dead in the Water: Global lessons from the World Bank's Model Hydropower Project in Laos,* edited by Bruce Shoemaker and William Robichaud. University of Wisconsin Press.

Siow, Maria. 2021. If Laos fell into a Chinese debt trap, would it make a noise? South China Morning Post, 20 February. Available from: scmp.com/week-asia/politics/article/3122409/if-Laos–fell-chinese-debt-trap-would-it-make-noise

Smith, Neil. 2010. *Uneven Development: Nature, Capital and the Production of Space*. 3rd edition. Athens, GA: The University of Georgia Press.

Sneddon, Chris 2012. The 'sinew of development': Cold War geopolitics, technical expertise, and water resource development in Southeast Asia, 1954–1975. *Social Studies of Science,* 42(4): 564–590.

Sneddon, Chris. 2015. *Concrete Revolution: Large Dams, Cold War Geopolitics and the US Bureau of Reclamation*. Chicago and London: University of Chicago Press.

Soulivanh, Bouakham, Anothai Chantalasy, Phounsavat Suphida, Florian Lintzmeyer, and Florian Rock. 2004. Study on land allocation to individual households in rural areas of Lao PDR. German Technical Cooperation (GTZ). Vientiane, Laos.

Star, Susan Leigh. 1999. The ethnography of infrastructure. *The American Behavioral Scientist,* 43(3): 377–391.

Stoler, Ann Laura. 2013. *Imperial Debris: On Ruins and Ruination*. Durham: Duke University Press.

Streule, Monika. 2020. Doing mobile ethnography: Grounded, situated and comparative. *Urban Studies,* 57(2): 421–438.

Stuart-Fox, Martin. 1986. *Laos: Politics, Economics and Society*.

Stuart-Fox, Martin. 1993. Prospects for democracy in Laos. *Asian Studies Review*, 17(2):121–128.

Stuart-Fox, Martin. 1994. Conflicting conceptions of the state: Siam, France and Vietnam in the Late Nineteenth Century. *The Journal of the Siam Society*, 82: 135–144.

Stuart-Fox, Martin. 1995. The French in Laos, 1887-1945. *Modern Asian Studies*, 29(1): 111–139.

Stuart-Fox, Martin. 1997. *A History of Laos*. Cambridge, UK: Cambridge University Press.

Stuart-Fox, Martin. 1998. *The Lao Kingdom of Lan Xang: Rise and Decline*. Bangkok, Thailand: White Lotus Press.

Stuart-Fox, Martin 1999. The politics of ritual and remembrance: Laos since 1975. *Pacific Affairs*, 72(4): 610.

Stuart-Fox, Martin. 2008. The persistence of political culture in Laos and Cambodia. *Südostasien aktuell*, 3(3008): 34–58.

Stuart-Fox, Martin. 2009. The Chinese Connection. Southeast Asian Affairs, 141–169.

Sturgeon, Janet C. and Thomas Sikor. 2004. Postsocialist property in Asia and Europe - variations on 'fuzziness.' *Conservation and Society*, 2(1): 1–17.

Sturgeon, Janet. 2005. *Border Landscapes: The Politics of Akha Land Use in China and Thailand.* University of Washington Press.

Su Xiaobo. 2011a. Heritage Production and Urban Locational Policy in Lijiang, China. *International Journal of Urban and Regional Research*, 35(6): 1118–32.

Su, Xiaobo. 2011b. Rescaling the Chinese state and regionalization in the Greater Mekong subregion. *Review of International Political Economy,* 19: 501–527.

Su, Xiaobo. 2013. From frontier to bridgehead: Cross-border regions and the experience of Yunnan, China. *International Journal of Urban and Regional Research,* 37(4): 1213–1232.

Subotícki, Ivana and Knut H. Sørensen 2018. Liminal technologies: Exploring the temporalities and struggles in efforts to develop a Belgrade metro. *The Sociological Review*, 69(1): 156–173.

Suhardiman, Diana, and Mark Giordano. 2014. Legal plurality: An analysis of power interplay in Mekong hydropower. *Annals of the Association of American Geographers,* 104(5): 973–988.

Suhardiman, Diana, Jessica DiCarlo, Oulavanh Keovilignavong, Jonathan Rigg, and Alan Nicol. 2021. (Re)constructing state power and livelihoods in the Laos–China Railway project. *Geoforum*, 124(2): 79–88.

Summers, Tim. 2016. China's "new silk roads": Subnational regions and networks of global political economy. *Third World Quarterly*, 37(9): 1628–1643.

Sun, Yat-sen. 1920. *The International Development of China.* New York: Putnam.

Swartz, Barry. 1975. *Queuing and Waiting. Studies in the Social Organisation of Access and Delay*. The University of Chicago Press.

Taillard, Christian. 1989. *Le Laos: Stratégies d'un Etat-tampon*. Montpellier: Reclus.

Tambiah, Stanley Jeyaraja. 1977. *World Conqueror and World Renouncer: A Study of Buddhism and Polity in Thailand against a Historical Background.* Cambridge: Cambridge University Press.

Tan, Danielle. 2012. "Small is Beautiful": Lessons from Laos for the Study of Chinese Overseas. *Journal of Current Chinese Affairs*, 61–94.

Tan, Danielle. 2017. Chinese Enclaves in the Borderlands. In *Chinese Encounters in Southeast Asia: How People, Money, and Ideas from Chinese are Changing a Region*, edited by Pál Nyíri and Danielle Tan, pp. 136–156. Seattle: University of Washington Press.

Tan-Mullins, May, Giles Mohan, and Marcus Power. 2010. Redefining 'aid' in the China–Africa context. *Development and Change*, 41(5): 857–881.

Tang, Xiaoyang. 2020. Co-evolutionary pragmatism: re-examine 'China Model' and its impact on developing countries. *Journal of Contemporary China*, 29(126): 853–870.

Tapp, Nicholas 1986. The Hmong of Thailand: Opium People of the Golden Triangle. Indigenous Peoples and Development Series Report No. 4. London: Anti-Slavery Society

Tappe, Oliver. 2018. On the right track? The Lao People's democratic republic in 2017. In *Southeast Asian Affairs*, 169–184. ISEAS Publishing.

Taylor, Ian, and Tim Zajontz. 2020. In a fix: Africa's place in the Belt and Road Initiative and the reproduction of dependency. *South African Journal of International Affairs*, 27(3): 277–295.

Tenzon, Michele. 2019. Mise en valeur and repopulation in colonial rural development in French Morocco. In the *Routledge Handbook of Urban Planning in Africa*, edited by Carlos Nunes Silva. London: Routledge.

Teo, Hoong Chen, Alex Mark Lechner, Saut Sagala, and Ahimsa Campos-Arceiz. 2020. Environmental impacts of planned capitals and lessons for Indonesia's new capital. *Land*, 9(11): 438.

Thompson, Virginia. 1937. *French Indo-China*. Allen & Unwin, Ltd.

Thompson, Edward Palmer. 1975. *Whigs and hunters: The Origins of the Black Act*. New York: Pantheon Books.

Thongmanivong, Sithong, and Yayoi Fujita. 2006. Recent land use and livelihood transitions in northern Laos. *Mountain Research and Development*, 26(3): 237–244.

Tsing, Anna. 2000. The global situation. *Cultural Anthropology*, 15(3): 327–360.

Tsing, Anna Lowenhaupt. 2003. Natural Resources and Capitalist Frontiers. *Economic and Political Weekly*, 38(48): 5100–5106.

Tsing, Anna Lowenhaupt. 2005. *Friction: An Ethnography of Global Connection.* Princeton: Princeton University Press.

Tsuji, Yohko. 2006. Railway time and rubber time: The paradox in the Japanese conception of time. *Time and Society,* 15(2/3).

Tubilewicz, Czeslaw. 2006. *Critical Issues in Contemporary China: Unity, Stability, and Development*. New York, NY: Routledge.

Turner, Sarah, Christine Bonnin, and Jean Michaud. 2015. *Frontier Livelihoods: Hmong in the Sino-Vietnamese Borderlands.* Seattle: University of Washington Press.

Turner, Victor 1969. Betwixt and between: The liminal stage in rites of passage. In *The Forest of Symbols: Aspects of Ndembu Ritual*. Cornell University Press, Ithaca.

Upadhya, Carol. 2020. Assembling Amaravati: speculative accumulation in a new Indian city. *Economy and Society,* 49(1): 141–169.

USAID. 1966. Laos logistics: Preliminary survey. Oklahoma City, OK: Management Enterprises, Inc.

USAID. 1968a. United States Aid to Laos. US Government.

USAID. 1968b. Project appraisal report for the development of the Lao national road system—Vientiane-Luang Prabang Road.

Vandergeest, Peter. 2003. Land to some tillers: development-induced displacement in Laos. *International Social Science Journal,* 55(175): 47–56.

Vaenkeo, Souksakhone. 2018. Laos to regulate railway development, management. *Yunnan Gateway.*

Varutti, Marzia. 2011. Miniatures of the nation: ethnic minority figurines, mannequins and dioramas in Chinese museums. *Museum and Society*, 9(1): 1–16.

Vellinga, Marcel. 2011. The End of the Vernacular: Anthropology and the Architecture of the Other. *Etnofoor,* 23(1): 171–92.

Vientiane Times. 2006. New tool for land development, 15 November.

Vientiane Times. 2011. Laos–China Railway on Track, Despite Rumours, 20 May.

Vientiane Times. 2016. Government promises appropriate compensation in railway project.

Vientiane Times. 2017. We told people not to carry out any construction or grow crops on land earmarked for the railway corridor to avoid losses, 6 April.

Vientiane Times. 2021. Gleaming new train arrives ahead of railway opening, 18 October.

Vigh, Henrik. 2008. Crisis and chronicity: Anthropological perspectives on continuous conflict and decline. *Ethnos*, 73(1): 5–24.

Wajcman, Judy. 2008. Life in the fast lane? Towards a sociology of technology and time. *The British Journal of Sociology*, 59(1): 59–77.

Walker, Andrew. 1999. *Legend of the Golden Boat: Regulation, Trade, and Traders in the Borderlands of Laos, Thailand, China and Burma*. Honolulu, Hawai'i. University of Hawai'i Press.

Walker, Andrew. 2000. Regional trade in northwestern Laos: An initial assessment of the economic quadrangle. In *Where China meets Southeast Asia: Social and Cultural Change in the Border Regions*, edited by Grant Evans, Christopher Hutton, and Kuah Khun Eng, 122–44. Singapore: Institute of Southeast Asian Studies.

Wang, Xi. 2021. *Powering China: Industrial surplus, infrastructure overcapacity, and social reorganization in the post-opening up and reform era*. Doctoral dissertation, University of Colorado Boulder.

Wang, Hongying, and XueYing Hu. 2017. China's "going-out" strategy and corporate social responsibility: preliminary evidence of a "boomerang effect." *Journal of Contemporary China,* 26(108): 820–833.

Wanjing Kelly Chen. 2020. Sovereign Debt in the Making: Financial Entanglements and Labor Politics along the Belt and Road in Laos, *Economic Geography*, 96(4): 295–314.

Watts, Michael J. 2014. Oi

l frontiers: The Niger Delta and the Gulf of Mexico. In *Oil Culture*, edited by Ross Barret and Daniel Worden, pp.180–210. Minneapolis: University of Minnesota Press.

Watts, Michael J. 2018. Frontiers: Authority, precarity, and insurgency at the edge of the state. *World Development*, 101: 477–488.

White, Richard. 2011. *Railroaded: The Transcontinentals and the Making of Modern America.* WW Norton & Company.

White, Ben, Saturnino M. Borras Jr, Ruth Hall, Ian Scoones, and Wendy Wolford. 2012. The new enclosures: critical perspectives on corporate land deals. *The Journal of Peasant Studies,* 39(3-4): 619–647.

Whyte, Brendan. 2010. *The Railway Atlas of Thailand, Laos and Cambodia.* Bangkok: White Lotus.

Winichakul, Thongchai. 1994. *Siam Mapped: A History of the Geo-body of a Nation*. Honolulu: University of Hawai'i.

Wolters, Oliver William. 1968. Ayudhyā and the Rearward Part of the World. *Journal of the Royal Asiatic Society,* 100(2): 166–178.

Wolters, Oliver. 1999. *History, Culture, and Region in Southeast Asian Perspectives.* Ithaca, NY: Cornell Southeast Asian Program Publications.

Woods, Neal D. 2008. The Policy Consequences of Political Corruption: Evidence from State Environmental Programs. *Social Science Quarterly*, 89 (1): 258–271.

Woods, Kevin, Tom Kramer, and John Buchanan. 2013. Developing disparity: Regional investment in Burma's borderlands. Burma Policy Briefing Series. The Transnational Institute (TNI).

Woodworth, Max D. 2017. Disposable Ordos: The making of an energy resource frontier in western China. *Geoforum*, 78: 133–140.

Woodworth, Max D. and Agnieszka Joniak-Lüthi. 2020. Exploring China's borderlands in an era of BRI-induced change. *Eurasian Geography and Economics*, 61(1): 1–12

Xinhua. 2018. China, Laos promise to strengthen cooperation, ties. 16 December, Available from: http://www.xinhuanet.com/english/2018-12/16/c_137678468.htm

Xinhua. 2019. Lao gov't to get prepared to benefit from China-Laos railway, July.

Xinhua. 2021. China Focus: Xi declares China a moderately prosperous society in all respects, 1 July. Available from: http://www.xinhuanet.com/english/special/2021-07/01/c_1310038553.htm

Yeh, Emily T. 2013. *Taming Tibet: Landscape Transformation and the Gift of Chinese Development.* Ithaca, NY: Cornell University Press.

Yeh, Emily. 2016. Introduction: The geoeconomics and geopolitics of Chinese development and investment in Asia. *Eurasian Geography and Economics*, 57(3): 275–285.

Yeh, Emily T. and Elizabeth Wharton. 2016. Going West and Going Out: discourses, migrants, and models in Chinese development. *Eurasian Geography and Economics*, 57(3): 286–315.

Yueng, Yue-man, Joanna Lee, and Gordon Kee. 2009. China's Special Economic Zones at 30. *Eurasian Geography and Economics*, 50(2): 222–240.

Zhang, Hong. 2021. The aid-contracting nexus: The role of the international contracting industry in China's overseas development engagements. *China Perspectives*, 4: 17-25.

Zhao, Suisheng. 2014. A Neo-Colonialist Predator or Development Partner? China's Engagement and Rebalance in Africa. *Journal of Contemporary China*, 23: 1033–1052.

Appendix A.

Resolution 12980 of the National Assembly on compensation for the Laos–China Railway



ສາທາລະນະລັດ ປະຊາທິປະໄຕ ປະຊາຊົນລາວ
ສັນຕິພາບ ເອກະລາດ ປະຊາທິປະໄຕ ເອກະພາບ ວັດທະນະຖາວອນ

ກະຊວງໂຍທາທິການ ແລະ ຂົນສົ່ງ

ເລກທີ....12980.../ນທຄ

ນະຄອນຫຼວງວຽງຈັນ, ວັນທີ..10..6..2019

ຂໍ້ຕົກລົງ
ຂອງລັດຖະມົນຕີ
ວ່າດ້ວຍການນຳໃຊ້ເງິນປະມານຄ່າຊົດເຊີຍສິ່ງກໍ່ສ້າງ ຂອງໂຄງການກໍ່ສ້າງທາງລົດໄຟ ລາວ-ຈີນ

- ອີງຕາມ ດຳລັດຂອງນາຍົກລັດຖະມົນຕີ ສະບັບເລກທີ 295/ນຍ, ລົງວັນທີ 4/9/2017 ວ່າດ້ວຍການຈັດຕັ້ງ ແລະ ເຄື່ອນໄຫວ ຂອງ ກະຊວງ ໂຍທາທິການ ແລະ ຂົນສົ່ງ;
- ອີງຕາມ ແຜນງົບປະມານການເງິນຫົນຂອງລັດ ປີ 2019 ຂອງກະຊວງ ໂຍທາທິການ ແລະ ຂົນສົ່ງ;
- ອີງຕາມແຈ້ງການຂອງຫ້ອງວ່າການສຳນັກງານນາຍົກລັດຖະມົນຕີ ເລກທີ 626/ຫສນຍ, ລົງວັນທີ 11/4/2019.

ລັດຖະມົນຕີ ຕົກລົງ:

ມາດຕາ 1: ອະນຸມັດໃຫ້ໂອນເງິນງົບປະມານຄ່າຊົດເຊີຍຜົນກະທົບຂອງໂຄງການກໍ່ສ້າງທາງລົດໄຟ ລາວ-ຈີນ ໃຫ້ ແຂວງ ຫຼວງນ້ຳທາ, ອຸດົມໄຊ, ຫຼວງພະບາງ, ວຽງຈັນ ແລະ ນະຄອນຫຼວງວຽງຈັນ ຈຳນວນ:143.355.102.724 ກີບ ເພື່ອນຳໃຊ້ເຂົ້າວຽກງານຈ່າຍຄ່າຊົດເຊີຍທີ່ດິນໃຫ້ປະຊາຊົນ ຕາມເປົ້າໝາຍທີ່ກຳນົດໄວ້ ລາຍລະອຽດມີ:

1.ໂຄງການເວນຄືນທີ່ດິນ ແລະ ຊົດເຊີຍສິ່ງກໍ່ສ້າງ ແຂວງຫຼວງນ້ຳທາ: 8.624.002.800 ກີບ
2.ໂຄງການເວນຄືນທີ່ດິນ ແລະຊົດເຊີຍສິ່ງກໍ່ສ້າງແຂວງ ອຸດົມໄຊ: 47.473.180.963 ກີບ
3.ໂຄງການເວນຄືນທີ່ດິນ ແລະ ຊົດເຊີຍສິ່ງກໍ່ສ້າງ ແຂວງຫຼວງພະບາງ: 9.262.977.000 ກີບ
4.ໂຄງການເວນຄືນທີ່ດິນ ແລະ ຊົດເຊີຍສິ່ງກໍ່ສ້າງແຂວງ ວຽງຈັນ: 3.711.100.000 ກີບ
5.ໂຄງການເວນຄືນທີ່ດິນ ແລະ ຊົດເຊີຍສິ່ງກໍ່ສ້າງ ເມືອງນາໝາຍທອງ: 11.362.330.912 ກີບ
6.ໂຄງການເວນຄືນທີ່ດິນ ແລະ ຊົດເຊີຍສິ່ງກໍ່ສ້າງເມືອງໄຊທານີ: 62.921.511.049 ກີບ

ມາດຕາ 2: ເບີກຈ່າຍໃນແຜນງົບປະມານ ປີ 2019 ບ້ວງຄ່າຊົດເຊີຍສິ່ງກໍ່ສ້າງຂອງໂຄງການກໍ່ສ້າງທາງລົດໄຟລາວ-ຈີນ ເປັນເງິນຈຳນວນ: 143.355.102.724 ກີບ (ໜຶ່ງຮ້ອຍສີ່ສິບສາມລ້ານ ສາມຮ້ອຍຫ້າສິບຫ້າພັນ ໜຶ່ງຮ້ອຍສອງ ເປັນ ເຈັ້ດຮ້ອຍຊາວສີ່ກີບ).

ມາດຕາ 3: ມອບໃຫ້ກະຊວງໂຍທາທິການ ແລະ ຂົນສົ່ງ ແຂວງຫຼວງນ້ຳທາ, ແຂວງ ອຸດົມໄຊ, ແຂວງ ຫຼວງພະບາງ, ແຂວງ ວຽງຈັນ ແລະ ນະຄອນຫຼວງວຽງຈັນ ນຳໃຊ້ເງິນປະມານເຖິງກ່າວ ໃຫ້ຖືກຕ້ອງຕາມລັດຖະບັນຍັດ, ກົດໝາຍ ແລະ ລະບຽບການຂອງລັດ ພ້ອມນີ້ນຳໃຫ້ສະຫຼຸບລາຍງານ ຄືນຕໍ່ຄະນະຊີ້ນຳຂອງໂຄງການກໍ່ສ້າງທາງລົດໄຟ ລາວ-ຈີນ, ຄະນະກຳມະການຕິດຕາມ ແລະ ກວດກາ ຊຸກຍູ້ຄ່າຊົດເຊີຍສິ່ງກໍ່ສ້າງຂອງໂຄງການ ແລະ ເຈົ້າແຂວງ, ຂອງເຈົ້າແຂວງ ຜູ້ທີ່ນຳເພື່ອຊາບ ເປັນປະຈຳແຕ່ລະເດືອນ.

ມາດຕາ 4: ຫຸກພະແນກສ່ວນທີ່ກ່ຽວຂ້ອງ ຈົ່ງຈັດຕັ້ງ ແລະ ຈັດຕັ້ງປະຕິບັດຂໍ້ຕົກລົງສະບັບນີ້ໃຫ້ໄດ້ຮັບຜົນດີ.

ມາດຕາ 5: ຂໍ້ຕົກລົງສະບັບນີ້ມີຜົນສັກສິດ ນັບແຕ່ມີລົງລາຍເຊັນເປັນຕົ້ນໄປ.

ລັດຖະມົນຕີ

ດຣ ບຸນຈັນ ສິນທະວົງ

ຮອບປ່ຽງ:
- ນາຍົກ ໂຍທາທິການ ແລະ ຂົນສົ່ງ 5 ແຂວງ ງ ລ 1 ສະບັບ
- ກະຊວງ ແຜນການ ແລະ ການເງິນ 1 ສະບັບ
- ກະຊວງ ການເງິນ 1 ສະບັບ
- ຄະນະຊີ້ນຳຂອງໂຄງການກໍ່ສ້າງທາງລົດໄຟ ລາວ-ຈີນ 1 ສະບັບ

The LCR budget for land compensation by province, according to MPWT's 2019 Resolution No. 12980. The decision by the Ministry of Public Works and Transport to pay compensation to people affected by the Laos–China Railway Project (5 provinces) for a total amount of 143,335,120,724 Kip (143 billion Kip) or US$15million

	Lao Kip	**US$**	**Track length (km)**	**Affected villages**
Vientiane Capital	74,283,841,961 (74.28 billion)	$8,194,577 (8.19 million)	45	34
Oudomxay province	47,473,180,963 (47.47 billion)	5,236,975 (5.23 million)	126.6	41
Luang Prabang province	9,262,977,000 (9.27 billion)	1,021,839 (1.02 million)	80	28 (+3 towns)
Luang Namtha province	8,624,002,800 (8.62 billion)	951,351	16.9	4
Vientiane province	3,711,100,000 (3.71 billion)	409,387	145.5	60
Total:	**143,335,120,724 (143.3 billion Kip)**	**15,811,927 (15.8 million US$)**	**414 km**	**167 villages**

The previous compensation has already been paid 20.4% to 369 billion Kip, and in 2019 there are figures to be paid 450 billion Kip. Of this, a government budget of 250 billion kip this year has now been paid to the provinces under the program of 134 billion kip, with the remainder being applied for. In addition, there is a 200 billion kip Lao-China Railways budget for compensation this year. There are also 317 billion kip in grants from the Chinese government that compensate for the construction of four villages. Mr. Thanhboth also said that the amount already paid plus the figures for FY 2019 included 1.136 billion Kip from the total amount needed to recover a total of 2,492 billion Kip, which means that another 1,356 billion Kip is needed to be used for the compensation which the Government has already issued with a budget of Kip 500 billion. Bond to come to pay compensation. (*Lao Economic Daily*)

Appendix B.
Timeline of decisions surrounding the Laos–China Railway

December 1995: The Singapore-Kunming Rail Link (SKRL) Project was proposed at the 5th ASEAN Summit in Bangkok, Thailand, with Malaysia as the project coordinator; It was the primary action item for the ASEAN Mekong Basin Development Cooperation Programme

December 1997: ASEAN leaders agree at the Second ASEAN Informal Summit in Kuala Lumpur that the proposed SKRL "should be implemented by a consortium involving all ASEAN countries and that a decision be made about its implementation" (KL Consultant)

March 1997 to August 1999: Feasibility study of the six proposed routes within the SKRL, undertakes by a team of Malaysian consultants.

October 2000: Sixth meeting of the ASEAN Transport Ministries (ATM) in Bandar Seri Begawan, Brunei Darussalam support route recommendations.

November 2000: Fourth ASEAN Informal Summit in Singapore "endorsed a broad thrust of the feasibility study and directed that the project should be moved forwards"

2000: Seventh meeting of the ASEAN Transport Ministries (ATM) in Kuala Lumpur reiterated the importance of the SKRL, specifically in its connection to Europe through the Trans-Siberian railway network

November 2001: Seventh ASEAN Summit in Brunei Darussalam "reaffirmed the SKRL as a priority project, and endorse the routes agreed by the transport ministers"

2002-2003: Lao government proposes the railway project to the Chinese government.

2009: Laos and China agree to jointly develop the railways.

April 7, 2010: the Ministry of Public Works and Transport of Laos and Ministry of Railways of China signed the Memorandum of Understanding on Cooperation in Railways between Ministry of Railways of PR China and Ministry of Public Works and Transport of Lao PDR (MOU) in Beijing. Then, the Ministry of Railways of China organized relevant companies to carry out the preliminary work (and feasibility study)

May 2010: a pre-feasibility study of the Mohan (Boten); Vientiane Section was completed in May 2010 which highlights the following keys construction features (in "Terms of Reference")

October 4, 2010: a high-level mission of the Ministry of Railways of China visited Laos and the Summary of Conversations on Further Implementing the Cooperation MOU between Ministry

of Railways of PR China and Ministry of Public Works and Transport of Lao PDR was signed between two sides.

December 2010: leaders and experts of the Ministry of Public Works and Transport of Lao PDR together with an expert team headed by He Huawu, the Chief Engineer of the Ministry of Railways of China visited the line to compete the Feasibility Study. After the visit, the Memorandum of Understanding on Technical Scheme for Mohan/Boten-Vientiane Section in Central Corridor of Trans-Asian Railway was signed between two sides.

October 22, 2010: The Chinese design group of Boten-Vientiane railway and the relevant departments of Vientiane City exchanged opinions on the project at the Vientiane Public Transportation Hall

December 12-19, 2010: Expert groups of the Chinese Ministry of Railway carried out an in-depth site visit to the future construction areas to develop the "Memorandum of Understanding on Technical Scheme for Mohan-Boten Section in Central Corridor of Trans-Asian Railway."

2011: Talks held between Lao and Chinese leaders about the railway as a way to transform the country from landlocked to landlinked.

February 25, 2011: China's then Minister of Railways, Liu Zhijun, and who signed the LCR MOU, was fired on corruption charges.

2012: First Feasibility Study (General Report) on the New Boten-Vientiane Railway released by the China Railway Eryuan Engineering Group.

March 2015: It took years to reformulate the plans, deal and financing for the LCR. ""In the end, we agreed we jointly develop the railway in the form of a BOT [build, operate and transfer] project," former Deputy Prime Minister Somsavat Lengsavad, who was in charge of economic production and distribution, told the Nikkei Asian Review in March 2015. "Even after agreeing on the BOT, we had to study the financial arrangement -- how each side would contribute," said Somsavat, who is no longer a minister." (Janssen 2017)

November 13, 2015: The Agreement between the Government of the Lao People's Democratic Republic and the Government of the People's Republic of China on Cooperation in Railway Infrastructure Development and the Lao-Sino Railway Project; signed in Beijing, China.

2016: Somsavat Lengsavad left the Politburo.

July 2016: Second Feasibility Study (General Report) on the New Boten-Vientiane Railway done by the China Railway Eryuan Engineering Group So, Ltd. Also includes the "Certificate of Engineering Investigation."

December 25, 2016: Groundbreaking ceremony in Luang Prabang.

May 2017: Financing details become available.

April 2019: President Vorachit issued a presidential ordinance for the new Law on Railways. A 50-page law that defines principles, regulations, and measures to manage, follow up and inspect railway affairs. These are aimed at ensuring the effectiveness, efficiency, modernization, sustainability and environment-friendly development of railways, local daily Vientiane Times reported.

December 2, 2021: Projected opening of the Laos–China Railway Line; Lao National Day

ProQuest Number: 28776004

INFORMATION TO ALL USERS
The quality and completeness of this reproduction is dependent on the quality
and completeness of the copy made available to ProQuest.



Distributed by ProQuest LLC (2021).
Copyright of the Dissertation is held by the Author unless otherwise noted.

This work may be used in accordance with the terms of the Creative Commons license
or other rights statement, as indicated in the copyright statement or in the metadata
associated with this work. Unless otherwise specified in the copyright statement
or the metadata, all rights are reserved by the copyright holder.

This work is protected against unauthorized copying under Title 17,
United States Code and other applicable copyright laws.

Microform Edition where available © ProQuest LLC. No reproduction or digitization
of the Microform Edition is authorized without permission of ProQuest LLC.

ProQuest LLC
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106 - 1346 USA