

**INDUSTRIAL HERITAGE PRODUCTION IN TAIWAN:
A CREATIVE ECONOMY APPROACH**

By

Chao-Shiang Li

**A thesis submitted to the University of Birmingham for the degree of
DOCTOR OF PHILOSOPHY**

Ironbridge International Institute for Cultural Heritage

School of History and Cultures

College of Arts and Law

The University of Birmingham

Edgbaston

Birmingham B15 2TT

1 November 2017

UNIVERSITY OF
BIRMINGHAM

University of Birmingham Research Archive

e-theses repository

This unpublished thesis/dissertation is copyright of the author and/or third parties. The intellectual property rights of the author or third parties in respect of this work are as defined by The Copyright Designs and Patents Act 1988 or as modified by any successor legislation.

Any use made of information contained in this thesis/dissertation must be in accordance with that legislation and must be properly acknowledged. Further distribution or reproduction in any format is prohibited without the permission of the copyright holder.

Abstract

This thesis deals with Taiwan as a post-colonial nation, with an identity that remains somewhat ambiguous, from both internal and external perspectives. Specifically, in this thesis, the complexities of its Taiwan's multicultural legacies are explored through the presentation in industrial heritage sites. Industrial heritage in Taiwan is mainly the product of the Japanese colonial period between 1895 and 1945, which spans the first half of the twentieth century. This fifty-year colonial industrialisation is arguably Taiwan's most influential industrial heritage because it began a rapid process of modernisation that is continuing today.

The key to this process is the industrialisation that led to the development of main parts of the island, catalysed new communities and social patterns and structured daily life. These industrial locations have now become heritage sites for tourism and creative development. Moreover, the interpretation of these sites highlights the re-contextualisation of the Taiwanese legacy from both political and economic perspectives. However, these sites also reveal some highly problematic place-related aspects of the colonial narrative. This thesis examines how this heritage is produced in a society that remains connected to Japanese culture, a society in which industrial heritage is influenced by the increasing convergence between cultural tourism,

museumification (i.e. the process by which a particular heritage is recognised to the extent that it is turned into a museum) and commercialisation. Furthermore, new relationships are identified, which reflect the patterns and trends of wider economic, social and cultural changes. The thesis concludes by offering a deeper understanding of the valorisation of industrial heritage in Taiwan and its influence on broader Taiwanese narratives of geopolitics and global heritage agenda.

Acknowledgements

I would especially like to thank Professor Mike Robinson for his inspiration, guidance, insights, and encouragement throughout the research process and Dr Roger White for his invaluable advice and for introducing me to new ways of approaching the topic of industrial heritage / archaeology. I sincerely thank both of them, my supervisors, for their thoughtful responses to my preliminary conclusion.

I am grateful to all the participants for providing me with access to tremendously rich materials for investigation but also their generously sharing their thoughts and ideas in relation to my research.

Finally, I would particularly like to thank my wife, Wen-Ling. I would never achieve so far without her wholehearted support and companionship.

Contents

Abstract	i
Acknowledgements	iii
Contents	iv
List of Figures	x
List of Tables	xiii
Chapter 1 Introduction	1
1.1 Introduction	1
1.2 Aims and Objectives of the Research	9
1.3 The Context of Taiwan: An Overview	13
1.4 Overall Research Methodology	18
1.5 Organisation of the Thesis	19
1.6 Conclusion	22
Chapter 2 Industrial Heritage—Emerged Perspectives in the Global Context	25
2.1 Introduction	25
2.2 The Birth of Industrial Heritage	33
2.2.1 From Ruin to Legacy	36
2.2.2 Heritagisation of Industrial Sites	40

2.2.3 The Post-industrial Context	48
2.2.4 Economy, Tourism and Aesthetics	50
2.3 A Complex Legacy: Industrial Heritage in Post-Colonial Countries	53
2.3.1 The Category and Geography of Industrial Heritage	53
2.3.2 The Post-industrial Context of Industrial Heritage	65
2.3.3 Colonial Industrialisation: Modernity and Postcoloniality	69
2.3.4 Heritage-making Beyond the Post-colonial and Industrial Past	73
2.4 A Post-modern Context: Tourism, Commercialisation, Nationalism	77
2.5 Conclusion	82
Chapter 3 Japanese Industries, Taiwanese Industrial Heritage	87
3.1 Introduction	87
3.2 The Historical Context of Taiwan	90
3.2.1 Two Colonists and Two Kingdoms in the 1600s' Formosa	94
3.2.2 Taiwan During the Qing Dynasty	97
3.3 The Construction of the Heritage System in Taiwan	100
3.3.1 Concept of Culture Heritage in the Early Stages	101
3.3.2 Establishment of Cultural Authorities: the 1970s–1990s	105
3.3.3 Changing Administrations: Post-2000	107

3.3.4 The Framework of Cultural Heritage Preservation in Taiwan	112
3.4 Japanese Colonial Industrialisation in Taiwan	118
3.4.1 Japanese Colonialism in Taiwan	120
3.4.2 Colonial Economy: From Agrarian to Industrial	122
3.4.3 Taiwan on the Road towards Modernisation	131
3.4.4 Shifting Value of the Colonial Legacy	136
3.5 The Heritagisation of Japanese Industries in Taiwan	139
3.5.1 Post-War Industry Reshuffle and New Industrialisation	140
3.5.2 The Rise of Japanese Industrial Heritage Preservation in Taiwan	143
3.5.3 The Development of Taiwanese Industrial Heritage	148
3.6 Conclusion	151
Chapter 4 Methodology	154
4.1 Introduction	154
4.2 Research Philosophy and Paradigm	156
4.3 Research Approaches, Concepts, and Strategies	161
4.4 Research Questions	165
4.5 The Case Study: Fieldwork Approach	168
4.6 Data Collection and Fieldwork	175

4.6.1 Participant Observation	179
4.6.2 In-depth Interview	183
4.6.3 Data type and Source, and Data Analysis	189
4.7 Consideration of Ethical issues	191
4.8 Conclusion	195
Chapter 5 The Constructing of Industrial Heritage in Taiwan	197
5.1 Introduction	197
5.2 Key Drivers of Producing Industrial Heritage	198
5.2.1 Industrial Heritage by Default	199
5.2.2 New Directions in Entrepreneurship; Ambitions in Tourism	204
5.2.3 Industrial Heritage as a National Narrative	213
5.3 Governing Industrial Heritage: Emerged Forms	218
5.3.1 Operation Types: Museum, Creative Park and Tourist Attraction	229
5.3.2 Relations between Stakeholders	245
5.3.3 Towards an Authorised Industrial Heritage Discourse?	264
5.4 Conclusion	269

Chapter 6 Engaging with Taiwan’s Industrial Past	273
6.1 Introduction	273
6.2 Modes of Interpretation: Conformity or Creativity?	275
6.2.1 Industrial Heritage in the Foreground	276
6.2.2 Industrial Heritage as a Background	289
6.2.3 Different Management Structures and Strategy	301
6.3 Changing User Groups	309
6.4 The Industrial Aesthetics	317
6.5 Shifting Meanings, Shifting Identities	330
6.5.1 Globalised Rainbow as National-Building Approach	331
6.5.2 New Relationship between Colonial Past and Industrial Narrative	336
6.6 Conclusion	341
Chapter 7 Conclusion	343
7.1 Introduction	343
7.2 Industrial Heritage-Making in Taiwan	345
7.2.1 (Re) Framing Industrial Heritage Governance and Conversation	346
7.2.2 Industrial Heritage: A Microcosm of Taiwan’s Heritage Agenda	353
7.3 Taiwanese Industrial Heritage in the Global Context	358

7.3.1 Shifting Geopolitical Relation towards National Narrative	359
7.3.2 Understanding Industrial Heritage in the Global Context	363
7.4 Strengths of the Research and Limitations	368
7.4.1 Strengths and Future Directions	368
7.4.2 Research Limitations	376
7.5 Conclusion	378
Appendix 1: The List of Interviewees	385
Appendix 2: Summary of Selective Taiwan's Industrial Heritage Sites	387
Appendix 3: The Schedule of Interview and Fieldwork 2014–2016	398
Appendix 4: Abbreviations	403
Bibliography	404

List of Figures

Figure 1.1 The Chapter Structure of this Thesis	18
Figure 2.1 Statistics of Industrial World Heritage Sites	50
Figure 3.1 Relation of Ethnic Groups in Taiwan	93
Figure 3.2 Proportion of Ethnic Groups in Taiwan	93
Figure 3.3 Timeline of Heritage Development in Taiwan and Globally	112
Figure 3.4 Diagram of Cultural Heritage Categories in Taiwan	116
Figure 3.5 Map of Japanese Colonial Taiwan 1895–1945	119
Figure 3.6 Geography of Japanese-built Industrial Heritage in Taiwan	151
Figure 3.7 The Development of Industrial Heritage in Taiwan	147
Figure 4.1 The Research Design	169
Figure 5.1 The Commercialisation at Qiaotou Sugar Refinery	209
Figure 5.2 The Crowd in Huashan Creative Park	210
Figure 5.3 New Shopping Mall and Old Old Tobacco Warehouse at Songshan Creative Park	210
Figure 5.4 The Defaced Japanese Shrine Remains in Ciaotou Sugar Refinery	217
Figure 5.5 The Revised Text in a Display Panel at the National Science and Technology Museum Exhibition	222
Figure 5.6 The Front Page of National Taiwan Museum– Namem Park’s Leaflet	225
Figure 5.7 The Japanese Ceremony Event in the Gold Museum	225
Figure 5.8 A Quasi-Japanese Brands in Songshan Cultural and Creative Park	227
Figure 5.9 Japanese Ornament in the Gold Museum	227
Figure 5.10 Japanese Garden in Chiayi Forestry Cultural Park	228
Figure 5.11 The Display Board of the reuse of Pei-Pu Steam Power Station in	

National Museum of Marine Science and Technology	232
Figure 5.12 The Modern Architecture of National Museum of Marine Science and Technology	232
Figure 5.13 Pei-Pu Steam Power Station in 2004	232
Figure 5.14 Nanmen Factory Remains	232
Figure 5.15 The Special Exhibition of Taiwan's Japanese Shrine in Gold Museum	234
Figure 5.16 The Cat Bridge in Houtong	234
Figure 5.17 The Display Board of History of Huashan Creative Park	239
Figure 5.18 The Liquor Culture Museum in Taichung Creative Park	239
Figure 5.19 The Taipei Railway Workshop	249
Figure 5.20 The Aboriginal Exhibition in Lin-tien-shan Forestry Cultural Park	263
Figure 5.21 The Hakka Exhibition in Chu-hung-keng Oil Fields Park	263
Figure 6.1 Interpretive Panel of Songshan Creative Park	281
Figure 6.2 The Japanese Narrative in Wushantou Reservoir	281
Figure 6.3 The Exhibition for the POW Camp in the Gold Museum	282
Figure 6.4 The Gold Museum's Mining Tunnel Tour	282
Figure 6.5 The Presentation of Industrial Narrative	291
Figure 6.6 Gallery Shop of Songshan Cultural and Creative Park	292
Figure 6.7 Thematic Salt Sculpture outside the Taiwan Salt Museum	297
Figure 6.8 The Crystal Churches on the Former Salt Fields	297
Figure 6.9 The Ruined Coal Dressing Plant at Houtong	305
Figure 6.10 The Cat Bridge and Houtong Mining Landscape	306
Figure 6.11 The Public Art at Industrial Sites (1) Huashan Creative Park and Hualien Creative Park	321
Figure 6.12 The Public Art at Industrial Sites (2) Gold Museum	321

Figure 6.13 The Public Art at Industrial Sites (3) Houtong and Pier-2 Art Centre	322
Figure 6.14 The Public Art at Industrial Sites (4) Ciaotou Sugar Refinery	323
Figure 6.15 The Public Art at Industrial Sites (5) Chiayi Forestry Cultural Park	323
Figure 6.16 The Graffiti at Industrial Sites (1): Pier-2 Art Centre and Huashan Creative Park	326
Figure 6.17 The Graffiti at Industrial Sites (2): Huashan Creative Park	326
Figure 6.18 Wedding Photo-taking at Industrial Sites: Ciaotou Sugar Refinery and Huashan Creative Park	327
Figure 6.19 The Wedding Venues at Industrial Sites: Rende Sugar Refinery and Ciaotou Sugar Refinery	328
Figure 6.20 Poster of the Opera ‘Town of Gold’, Gold Museum	329
Figure 6.21 The Film-making at Industrial Sites: Rende Sugar Refinery and Ciaotou Sugar Refinery	330
Figure 7.1 Longshan Temple of Manka, Taipei City	372

List of Tables

Table 2.1 Thematic Sectors of Industrial Heritage	54
Table 2.2 Industrial Heritage Sites in UNESCO World Heritage List	60
Table 2.3 The Industrial Heritage Country List of TICCIH	64
Table 3.1 Regimes in Taiwan	91
Table 3.2 Gross Value of Production Recorded for Industry in Taiwan, 1921–1942	126
Table 3.3 Gross Recorded Value of Principal Types of Production, 1915–1942	131
Table 3.4 Japanese-built Industrial Heritage in Taiwan	148
Table 4.1 Interview Structure	187
Table 4.2 The Data-collection of Fieldwork and Secondary Materials	1900
Table 4.3 The Data-collection of In-depth interviews	190
Table 5.1 Experience of Saving Industrial Heritage from State-owned Enterprises	203

Chapter 1 Introduction

1.1 Introduction

Taiwan's diverse heritage reflects its history as a trading island, its colonial past, its rapid industrial development and its persistently ambiguous position within the geopolitics of East Asia. Unlike some parts of the world that have witnessed long periods of continuity and stability, Taiwan's heritage speaks of a place that has been heavily shaped by its colonial influences, very recent conflicts and shifting political and diplomatic relations. It was not until 1981, when Taiwan established a Council for Cultural Affairs and then, a year later, introduced its own Cultural Heritage Preservation Act, that a comprehensive system and policy framework for heritage was established. The National Heritage Register was introduced in 1983 as a way of authoritatively designating Taiwan's heritage. In the year 2000, there were some 460 heritage sites and items on the National Register. In 2017 this number stood at 2,346 (BOCH, 2107). In part, this increase reflects the undoubted success of the regulatory, policy and support framework for cultural heritage that has developed in Taiwan. But it also reflects an ongoing process of discovery and introspection among Taiwan's population as they seek to understand their past and navigate their future.

Rapid industrialisation during the Japanese colonial period was to transform Taiwan

and lay the foundations for its own industrial development after 1945. And, like many other nations, Taiwan has embraced the extensive industrial heritage left behind in the wake of the shift from a primary and secondary industrial base to a hi-tech and service sector economy. In the first decades of the last century, the Japanese, working with the idea of wholly assimilating Taiwan, invested massively in harbours, railways, power plants, a sewage system, many factories and building skills. It is easy to see the Taiwan of today as very being distant from any sort of European industrial revolution, but across the whole of the island, inside and outside urban areas, Taiwan's industrialisation was intensive and, by European standards, relatively recent. The wide variety of industrial heritage sites includes mining sites, railways, processing factories for timber, tobacco, sugar cane, salt, wine and beer, as well as associated storage and trading structures. The preservation and management of industrial heritage anywhere are problematic—the maintenance of equipment, complex health and safety problems, access issues and, in Taiwan, soaring humidity that encourages rapid vegetation overgrowth and corrosion. Today, Taiwan's industrial heritage is at the base of a growing and significant tourism and museum sector. Furthermore, former industrial sites are now embedded in the growth of the cultural and creative industries that are flourishing in Taiwan. But it is also highly symbolic of a major social and political transformation that has taken place over the last quarter of a

century or so and which has involved Taiwan coming to terms with its colonial history, with its own challenging recent past and with its ethnic and cultural diversity. Such matters also complicate the key question of how to repurpose often large industrial sites. This is a question that Taiwan is still addressing, with some creative results.

As of 2017, about 40 per cent of the registered heritage in Taiwan was built under Japanese rule. For industrial heritage, this figure rises to over 90 per cent. I am looking the way that industrial heritage has developed in Taiwan over the last two decades. It has represented a very rapid development. The rapid rise of Taiwanese industrial heritage is shown by the nearly 500 industrial heritage sites in Taiwan, a mountainous island with twenty-three million people. In addition, there are more than a hundred cultural parks and creative clusters, many of which are located in former industrial sites, in urban or rural areas. Even sites which are not registered are being looked at for further development. Communities are also seeking to preserve their industrial heritage from being torn down. The increasingly popular industrial heritage is defined by visitor numbers, though some sites are less attractive than others.

This study explores the construction of industrial heritage by examining the relationships between heritage governance, economic regeneration and identity recognition in contemporary Taiwan. It refers to the notions of industrial heritage

discourse, modernity and its valorisation, as well as discussing the reuse, representation and interpretation of industrial heritage in Taiwan. Furthermore, this thesis deals with the tensions and power relations in responding to the shifting attitudes and changes of user groups towards industrial heritage sites in Taiwan. The dynamic context draws upon data collected from twenty selected industrial sites around the main island of Taiwan. The relevant phenomenon is the evidence showing how Taiwan's industrial heritage sites have been designated, produced and consumed in the context of a rainbow coalition in which all modern spectrums are more or less represented. The discussions relate to issues including political ideology, geopolitical relation, (post)colonialism, nationalism, the appreciation of nostalgia, exoticism and aesthetics, and the reflection between authenticity and modernity. The industrial heritage sites are chosen as study cases according to whether they present multiple authorised approaches and embody different levels of interpretation between conformity and creativity.

Industrial heritage is still quite a novel concept as is the rest of cultural heritage. While the landscapes of cultural/industrial heritage have been constructed, they become contested, disrupted and transformed (Aitchison, MacLeod and Shaw, 2000: 19). Continuous, dialectical struggles of power and resistance among and between landscape providers, users and mediators transform these spaces, which in turn affect

their creators and users. At present, internationally, the “authorised heritage discourse” (Smith, 2006) of industrial heritage or heritage generally not only accumulates rich studies and practices in the West but also draws global attention, particularly in light of recent events in Asia, such as the growth of the list of Asian Industrial World Heritage Sites and the Declarations of Asian Industrial Heritage, made by the International Committee for the Conservation of the Industrial Heritage, TICCIH (2012) and modern Asian Architecture Network, mAAN (2011) respectively. The great empires of the twentieth century were also hugely important transnational and trans-ethnic political and technological entities. Far from being backwards, empires were intimately associated with particular new technologies (Edgerton, 2008).

The history of modern East Asia’s development provides a model of industrial growth through technology transfer and import substitution. Taiwan was a long-time recipient of aid from Western industrial nations and Japanese technical assistance as one of the ‘Four Tigers’, together with Hong Kong, Singapore and South Korea, in the 1970s, followed by the Philippines, Indonesia, Thailand and Malaysia in the 1990s. The development of industrialisation and civilisation, such as progress, science and rationality, allowed the state to develop techniques of moral persuasion before the Second World War to mobilise civil society into accepting a more authoritarian,

managed social system during and after the war in the twentieth century (Garon, 1997). Generally, the current techno-nationalist paradigm constituted a pillar of the global modernisation narrative built up by Japanese and Western academics (Samuels, 1994; Moore, 2013).

Japan, a strong, imperial state in the early twentieth century, including Taiwan among its colonies, represents the great twentieth-century exception to the West's dominance in technology. Japanese-owned and -controlled firms not only imported technology but began to generate technologies of their own. Taiwan, as one of the former Japanese colonies, has a legacy of colonialism and the formative years of international conservation policy remains rarely apparent in contemporary institutionalised approaches to industrial heritage and its governance after the Second World War. Moreover, the island, as one of the Asian industrial heritage representatives, building on an emergent discourse of difference, claims that the Asian region is different to the West in many aspects, most pointedly Europe, the global birthplace of the modern conservation movement. In broad terms, each type of heritage has different historical and philosophical perspectives towards authenticity, spirituality and historical significance, and that recognition should be given to culturally specific ways of reading or valuing industrial heritage.

After the idea of industrial heritage preservation was first introduced to Taiwan in the early 1990s (Li, 1994), until recent years' society generally concentrated for political reasons on the material of industrial heritage, mainly the industrial buildings instead of the industrial narrative. Considering the dispute on the 'One China Policy' and the continuous contest between Chinese and Taiwanese culture, the ascent of Taiwanese nationalism, cultural identity but also the advancing understandings of Taiwan have prompted society to further discover a full picture of generating modern Taiwan through exploring industrial heritage. These sites offer access to reviewing Taiwan's national identity discourse and reveal the problematic place-related aspects of the colonial past. Several scholars (Johnson, 1995; Light, 2001; Palmer, 1999; Pretes, 2003) have mentioned that the promotion of heritage sites is important in the construction of national identity as the viewing of heritage sites by domestic tourists offers glances of a nation's past. I aim to verify the above in this study by examining the situation of Taiwan's industrial heritage.

The complexity of heritage production in post-colonial Taiwan, "resulting from the intertwining social frameworks of diversified memories formulated from colonial residues or post-colonial structure" (Chiang, 2010), was revealed in the case study of a notable industrial heritage site in Taiwan. The collective memories (the Japanese colonial period in particular) and invented traditions (new activities reconnecting to

the industrial past) in Taiwan are being shaped through engaging the international industrial heritage agenda and its tourist consumption. Taiwan's industrial heritage is being valorised and transformed creatively into varied devices for various purposes, whether or not it conforms with interpretation or historical causality. Such acts undeniably deform history for heritage aims, and heritage is further corrupted by being popularised, commoditised and politicised (Lowenthal, 2005: 87). Industrial heritage has today become an economic, social and political tool in Taiwan. In addition, industrial heritage sometimes becomes a place of conflict by focusing on the profit of commercialisation and estate instead of industrial legacy and sustainable development.

Industrial heritage is a source and symbol of identity in Taiwan that has a special significance for people and places in periods of transition, when configurations and meanings are subject to interpretation and change. The reuse of industrial heritage both reflects and reinforces these meanings through its representations, in which governments always have considerable influence over the process. The ways in which the phenomena of heritage-making, conservation and development interact and generate constructive and destructive tensions is demonstrated by the case of Taiwan's industrial sites, which have a resonance beyond the disciplines. The island's changing political structures, multi-ethnic and linguistic diversity are interacting in

complex ways. Yet Taiwanese identity, nationalism and democracy are in a constant ebb and flow in this globalised rainbow coalition.

The study shows that in Taiwan the ways in which the various heritage conservation approaches are represented reflect important socio-political progress. As industrial heritage is culturally related and comparative, it can be represented in various ways by different agents of purpose promotion. The study attempts to understand the emerged industrial legacy within many differences, memories, ideals and transformations of modern Taiwan intersected with her Japanese history, Chinese narrative and even the minorities' voices. I then analyse how colonial industrialisation is reflected in industrial heritage sites and how it is anchored on a background of exploitation. The interpretation reveals the re-emergence and reimagining of Taiwan's industrial legacy from both political and economic perspectives.

1.2 Aims and Objectives of the Research

This study has generated several insights into how industrial heritage is interconnected with the socio-political dynamics governing Taiwan's contemporary state and society. With the trend of urban/regional revitalisation since the 1990s (Pyke and Sengenberger, 1992; Bianchini and Parkinson, 1994; Deutsche, 1996), there are an increasing number of industrial heritage sites, and these sites are endowed with an

economic function of regeneration in either the urban or the rural context but also generated from social, cultural and aesthetic aspects. Industrial heritage is also seen as a tourist attraction or interpreted from an aesthetical perspective. However, generally speaking, in Taiwan, based on its high-expectation of return on investment, industrial heritage is nowadays forced to reflect rapidly and get rewards efficiently within its ongoing process. Taiwan's industrialisation life cycle has taken place over an extremely short period since the first half of the twentieth century, without a consistent, long-standing collective memory back to the 1760s, as the West has. Industrial heritage seems to be made and promoted in this rising modern society in the past decade. Additionally, since the 2000s Taiwan's industrial heritage has played the vital role of being the hub for demonstrating cultural and creative industries, though some sites have been led by the museum sector. Owing to the different opinions between the public, professionals and policymakers in this field, the approaches of conducting industrial heritage are continued, controversial and diverse. Therefore, the study explores how the conception of industrial heritage, as well as the use of industrial heritage for various purposes, is rooted in Taiwan.

To an extent, the study shows the history of heritage preservation generally. This progression is linked to the rest of Taiwanese heritage as well as archaeological, aboriginal and intangible heritage. In this context of Taiwan's heritage, industrial

heritage is as important as its rapid rise for impressing on Taiwanese people the importance of caring about heritage. In this context, I examine the rapid development of industrial heritage in Taiwan in the context of its being both a post-colonial and a post-industrial nation and how this industrial heritage is approached by Taiwanese society. I aim to explore the ways in which Taiwanese industrial heritage is influenced by the increasing convergence between tourism, museumification and commercialisation, reimagined / reinterpreted through the heritage narratives based upon its colonial past by investigating the practice of industrial heritage sites while developing an intellectual framework with which to better understand the shifting values of heritage sites from the colonial perspective. The overarching question of this study is:

How has Taiwan developed its industrial heritage in a post-colonial and post-industrial agenda through an ongoing search for her national identity?

In order to answer this question in a deep and nuanced way, the following sub-questions are investigated: **(1) what approaches have been used to protect, preserve, manage and interpret the industrial heritage of Taiwan? (2) What has been the changing policy context for industrial heritage and how has this shaped the relationship of stakeholders? (3) How does industrial heritage intersect with**

the tourism, cultural policy and the creative industries sectors? (4) What wider function does Taiwanese industrial heritage play in terms of geopolitics?

By accomplishing the goal progressively, the research addresses three main areas. The first is concerned with the intentions, aims and strategies of industrial heritage drivers that articulate goals around governance and is investigated through an analysis of heritage documents (policies, reports, websites and publicity materials). The second and largest part of the study focuses on the responses of interviews with the key persons in national and local agencies, the private sector and academia. The study draws upon data generated through observation of study sites, in-depth interviews and engagement with industrial heritage experiences to tackle interpretations. Interviews are the primary sources of data for probing industrial heritage-making and for eliciting the ambitions towards industrial heritage as multifunctional devices. The third area I aim to address concerns the implications which the findings of my research might hold for heritage practice more broadly, in settings beyond those used as case studies.

The study draws upon the related theoretical and conceptual thoughts refined through several disciplinary fields but also calculates the above concerns through the fieldwork at the selected industrial sites in Taiwan. Additionally, the study offers a larger narrative of interpreting industrial heritage to gather a further, deeper and

broader understanding of the convergence between cultural tourism, museification and commercialisation, communication between the stakeholders and shifts in Taiwanese society. The research framework is focused on Taiwan's industrial heritage practices and the belief that the general agenda can be better understood by investigating both the multilayered governance structure and varied promoting strategies. A study may lose its comprehensive vision and conclusion owing to short-sightedness on a single aspect. Therefore, triangulation is applied in this thesis by including the voices of bureaucrats, scholars and professionals. Correspondingly, in order to enhance a general insight and decrease the prejudice of urban-rural differences geopolitically and socio-economically, the study thus looks into individual industrial places situated in not only the urbanised north but also in the secondary cities and in the rural east.

1.3 The Context of Taiwan: An Overview

Taiwan was Japanese for fifty years and experienced the “brilliant return” to the Republic of China (ROC) in 1945 after the Second World War, and then succeeded as the only democracy in the world today that speaks Chinese as an official language. Furthermore, aboriginal tribes dominated the island, which was named Formosa for centuries until the arrival of Western (Dutch and Spanish) colonists and Han-Chinese in the seventeenth century. Japan's victory in the Sino-Japanese War led to its

fifty-year colonial rule of Taiwan from 1895. After the Second World War's withdrawal of Japanese from Taiwan, the industrial hardware facilities and equipment along with relevant techniques left behind by the colonists provided Taiwan with a basis for the later industrial development. Taiwan built on the existing resource area: power stations, manufacturing facilities and other Japanese works. These colonial constructions, including many urban and regional planning projects and surveys, were designed with a long-term vision, thus they are even today beneficial to the development of modern Taiwan. The Japanese-built infrastructure and industrial facilities played an essential role in Taiwan's post-war recovery period. Afterwards, owing to the outbreak of the Korean War (1950–1953), a large number of special needs promoted Taiwan's rapid growth. Taiwan's economic progress also benefited between 1955 and 1979 from US Aid under the *Sino-American Mutual Defense Treaty* and later *Taiwan Relations Act* since 1979. Before the economic reform of the People's Republic of China (PRC) in the 1990s, Taiwan's ROC enjoyed a more robust field of options with regards to global trading partners than most Asian countries. Taiwan is a great example of how a transnational intersection can achieve industrialisation and consequently economic success (Wu, 2005).

After the Second World War, the ROC under Chiang Kai-shek asserted sovereignty over Taiwan, but as a result of the Chinese civil war fought between the Chinese

Communist Party (CCP, which later ruled the PRC) and the ruling ROC led by the Nationalist Party (Chinese Nationalist Party, Kuomintang, KMT), the island became the home of the displaced Nationalist government in 1949. Since then, China has been a divided country. The division has provoked tension and occasionally hostilities across the Taiwan Strait. Debate and speculation have long surrounded the possible political unification of Taiwan with the mainland. There are political factions that wish to reunify with mainland China, others who wish Taiwan to become an independent state recognised by the United Nations General Assembly, and still others who wish to retain the status quo by keeping an ambiguous relationship between China and Taiwan. During the Cold War, the Taiwan issue centred on the question of when and how China and Taiwan would be reunified. In the past decade, it has gradually turned into a question of whether Taiwan will reunite with China or become independent. Taipei and Beijing have been on a collision course. While Beijing remains determined to achieve unification with Taiwan, Taipei has moved towards independence.

Democracy has promoted the creation of Taiwanese identity by stressing cultural heritage and historical tradition since the late 1980s. In fact, while Japan may have first triggered the emergence of Taiwanese nationalism, it was not the only force. China stood at the other end of the nationalist spectrum. In other words, Japan and

China were two poles that defined the boundaries of political imagination for early Taiwanese nationalists. Although the inherited Chinese legacy was rooted deeply among the KMT elites, the solid link between the Japanese colonial era and Taiwanese popular culture has constantly been reviewed in the recent years. In the contemporary context, the underlying rationale behind Taiwanese elites' efforts to stress the Japan–Taiwan connections is not very different from the endeavour by the early KMT nationalists to imagine a peculiar Taiwanese 'Chineseness' to distance themselves from being Japanese subjects.

Taiwan's Chinese heritage was imagined during and after the end of Japanese colonial rule. In Taiwan today, explicit recognition of Taiwanese people in the political context is a continuing controversy both domestically and for Han-Chinese (Hoklo, Hakka and mainlanders), aboriginal tribes, immigrants, foreign spouses and migrant workers from South East Asia. In respect of Japanese colonial rule, the Taiwanese case is quite different from the situation in China and Korea. Although there was an ambience of de-colonialisation and anti-Japanese feeling promoted in post-war Taiwan, Chiang Kai-shek's post-war "policy of magnanimity" towards Japan actually served to generate pro-Japan nostalgia in post-war Taiwan (Huang, 2015). Huang (2009: 165) considered that "Chiang [Kai-Shek] believed—even to the point of supporting the maintenance of Japan's system of emperors—that Japan and his ROC on Taiwan

should be allies based on their shared Asian culture and their common anti-communist position, at least until the change of climate in the 1970s". The fifty-year colonisation had rooted lots of influences introduced by the Japanese into every aspect of Taiwanese life. This close connection did not vanish but was repressed before the end of martial law in 1987.

In recent years, the industrial heritage sites in Taiwan have accumulated a large number of investigation reports and practical experiences for various purposes. In some places, the museum approach has been adopted for displaying industrial collections and conducting site preservation. Alternatively, the sites are set to become tourist attractions by offering facilities for recreation and accommodation. Additionally, there are many urban industrial sites reused as hubs for promoting cultural and creative industries. Owing to a lack of systematic management of heritage reuse in Taiwan, a series of criticisms have also magnified the inadequacy of the heritage system, as manifested in the Cultural Heritage Preservation Act. Recently, a request to advance a comprehensive re-examination of heritage policy had been approved and resulted in the release of the latest edition of the Cultural Heritage Preservation Act in 2016. The description above highlights the difficulty of attempting to interpret the industrial heritage objects at present in Taiwan. Hence, I attempt to argue in this thesis that the articulation of industrial heritage could connect the

colonial narratives and remains that generate the modern Taiwan rather than only nostalgia and imagined memory.

1.4 Overall Research Methodology

This research conducted a qualitative approach based on fieldwork at Taiwanese industrial heritage sites. I applied the observation of fieldwork, in-depth interviews and document analysis for data collection. Details were developed involving the following steps. Firstly, people who were in stewardship positions at each site, as well as relevant agencies and sectors, were engaged through interviews. I conducted face-to-face interviews to understand their accounts, experiences and opinions on specific topics. Next, I assessed the contextual information by sampling twenty industrial heritage sites in Taiwan. The observation involved exhibition design, narrative interpretation, conservation objects, public-private cooperation, community networking and public service, and thus provided a great deal of insight into the actual representation of the site, the performance of staff and the attitude of visitors. Lastly, documents, audio and visual materials were collected, including written evidence—reports, newspapers and academic research reports—as well as audio and visual materials—photographs, videos and websites—in order to analyse the language, words, visual narratives and meanings so as to capture the changes which have occurred and are occurring within the sites.

The methods adopted in-depth interviews with different groups of actors with interests in this theme. This is necessary for the present research goals. Also, the study took the image of shifting changes to be processual and socially accumulated by the relevant actors themselves. Representatives interviewed for this research were from not only the public sector at both national and local levels but also the private sector. A wide range of official records and archives was also collected and analysed. An intensive narration of methodology is discussed in Chapter Four, which gives the details of the specific approaches, methods and techniques that are employed in this study.

1.5 Organisation of the Thesis

The thesis is organised into seven chapters in the following sequence: the thesis's introduction, the relevant literature reviews, the context of study case, the methodological instruction and the discussion, ultimately giving conclusions by summarising the findings and arguments. The chapter structure is illustrated in Figure 1.1.

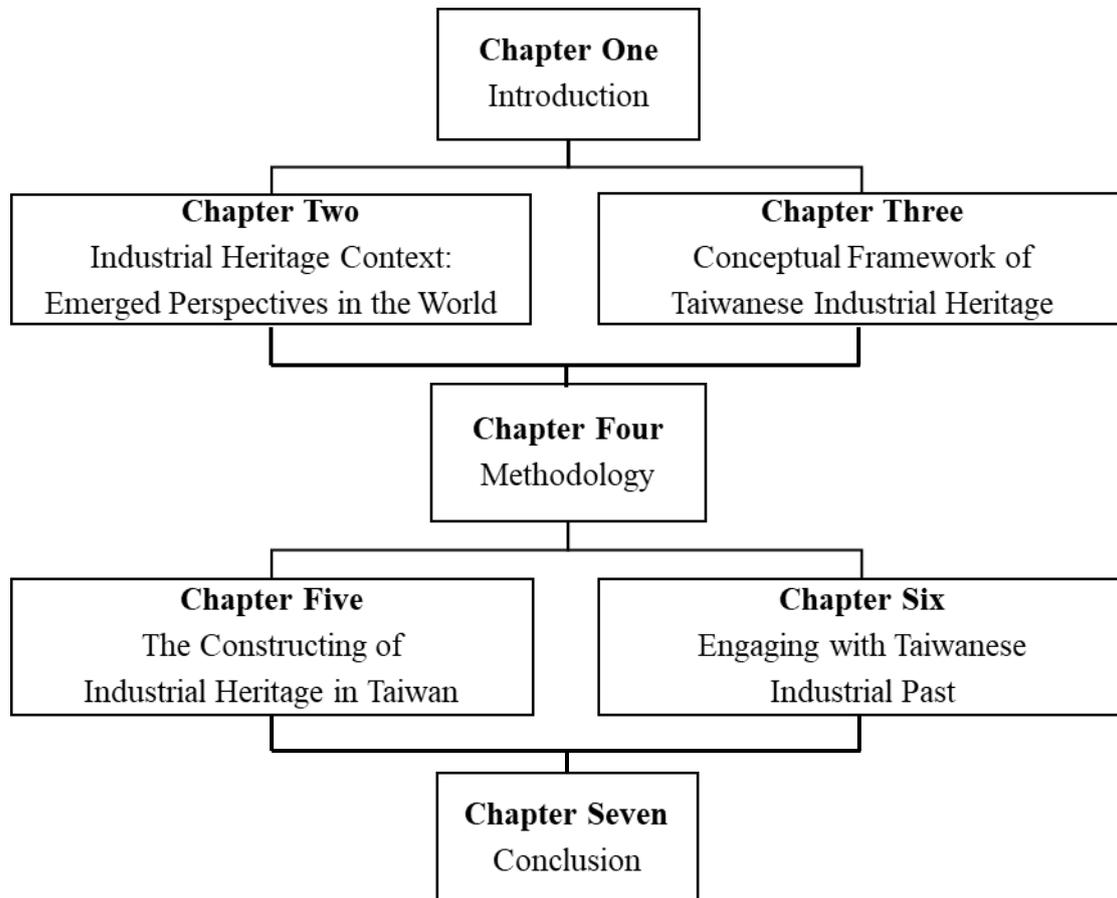


Figure 1.1 The Chapter Structure of this Thesis

This introductory chapter has attempted to provide an overall introduction to the thesis structure, including a brief review of the research context, the research aim and objectives, the major methodology applied, the context of study case and the research process and the thesis organisation. Chapter Two identifies the relevant literature and previous studies in this theme. The major academic theories embodied in this study

are also outlined in this chapter. The literature reviews offer selective, critical and evocative statements in relation to the issues raised in this study. Chapter Three gives the conception of Taiwan and its industrial heritage narrative, which is subsequently reflected and evaluated in the discussion and conclusion chapters. Further, this chapter maps out a conceptual framework and a guideline to inspect further concepts and interpretation of this research. Chapter Four explains the research strategy, design and methodology adopted in this study to achieve the research goals. The research approaches are mainly taken from the in-depth interviews and fieldwork. Chapter Five brings together all of the features of the construction of Taiwan's industrial heritage. It discusses the key drivers of production and new directions in entrepreneurship in industrial heritage in Taiwan. The emerged forms for economic development and tourism ambitions lead by default to the discussions relating to authorised industrial heritage discourse, heritage governance and national narratives, and communication between stakeholders.

In Chapter Six, by engaging with the Taiwanese industrial past, the varied modes of interpretation are revealed along with the different stewardships and shifting user groups. In particular, the evolution of industrial aesthetics also affects the changes of meanings and identities of industrial heritage in a globalised rainbow coalition. New relationships between Taiwan's colonial past and its industrial heritage discourse are

progressively articulated by the concurrence on factual history, demotic culture, political ideology, economic restructuring and social engagement. Finally, the overall conclusions of this thesis and the wider implications are presented in Chapter Seven. This chapter demonstrates a synopsis of the research. Furthermore, it expounds the contributions of this study by examining the heritage governance system but also indicating the role of industrial heritage in Taiwan's heritage agenda in a progressive society of democracy. The potential value of this study is to provide an advancing understanding of Taiwanese industrial heritage in the global context and the shifting geopolitical relation towards nation-building in a post-colonial country. Besides manifesting the limitations and strengths of this research, it also identifies some suggestions and alternative research directions for future studies.

1.6 Conclusion

Multiple research techniques are applied to collect first-hand data to inspect the mobility and complexity of political, economic, cultural and social issues regarding industrial heritage in Taiwan. The research assessment is conducted by analysing the viewpoints of policymakers and administrators at either national or local agencies who supervise or have experienced industrial heritage affairs. Simultaneously, the opinions of both practitioners of site stewardship and the academics who participate in the industrial heritage agenda are taken into consideration. The relevant official policy

documents, promotional material and publications are also evaluated. The study generates and establishes a broad conceptual framework to review and assess the progress of Taiwan's industrial heritage-making in which I aim to advance understanding of the role of industrial heritage domestically and globally through a series of echoed objectives. The findings can be useful to improve understanding of the place of industrial heritage in modern Asian countries and the dynamics and demands of its conservation.

This thesis emerged from the idea that Taiwan's industrial heritage studies of the colonial period needed a jump-start in order to join more successfully the scholarly conversations in other fields of study. To gather scattered studies already under way in the rest of world and discuss as a group different methods can advance the understanding of industrialisation legacy in response to the changing current discourse on the nation, colonialism and modernity. This thesis aims to present the fruits of that discussion. With the rise of the industrial heritage movement, Taiwan, a post-colonial country, has experienced shifts in perceptions of the values of colonial industrialisation. The various driving factors in politics, the economy and culture intersect in Taiwan's industrial heritage-making programme but also in the system of governance. The above provides the necessary background in order to understand the issues of producing industrial heritage discussed in the subsequent chapters. The next

chapter reviews and appraises the previous research literature and theoretical discourses in relation to the scope of the study.

Chapter 2 Industrial Heritage—Emerged Perspectives in the Global Context

2.1 Introduction

Industrialisation has been one of the fundamental forces in the modern history. With the expansion of imperialism and global networks, its continuing process has run nearly the whole planet from the nineteenth century to the present day. Consequently, post-industrialisation and post-colonial issues have entered the global agenda as well. Following the growing de-industrialisation and the new technological innovations, many industrial cities are facing decline and many modern industrial ruins have been created. At the end of the 1950s, the concept of industrial archaeology was developed in Britain, the birthplace of the Industrial Revolution (Palmer et al., 2012), and this idea spread throughout the industrialised West over the next decade. Later, the United Nations Educational, Scientific and Cultural Organization's (UNESCO) *Convention Concerning the Protection of the World Cultural and Natural Heritage*, adopted in 1972, built an initial model of the global heritage system—the example of authorised heritage discourse (Smith, 2006), subsequently, industrial heritage has been able to accelerate its worldwide spread and discussion through authorised organisations and institutions such as ICOMOS (the International Council on Monuments and Sites), DoCoMoMo (the International Committee for Documentation and Conservation of

Buildings, Sites and Neighbourhoods of the Modern Movement) and TICCIH. In terms of industrial heritage and its historical context, heritage tends to reveal the post-industrial societies rather than reflect the historical fact of industrialisation. Industrial heritage is the heritage which represents changing social and cultural attitudes and shifting values towards the industry. Heritage and history are closely interlinked subjects which are rooted in the past; Lowenthal (1998) indicated the differences between them based on the response to modernity, the depth of interpretation and the way of presentation. Industrial heritage as a hybrid complex between engineering technology and humanities derives its value and characteristics along different lines from other historic remains; meanwhile, it also faces the processes of de-industrialisation and the associated challenges of urban renewal and industrial restructuring.

The entire history of the Industrial Revolution involves variety and complexity. The modern industrial narrative results from changes that occurred in the global trade system and economic relations, and the networks that were restructured further from the 1750s onwards. The above caused the world to change more than at any time since the invention of agriculture. The Industrial Revolution advanced the producing process and nearly everything in civilisation (Stearns, 2012). This mega-change, based on machines that used the Earth's stored energy (in water, coal and oil) to

produce everything from cheap clothes to tinned food—and, not least, to build other machines—reshaped mankind’s relationship with nature. The Industrial Revolution is both historical and contemporary. It does not have a tidy beginning or end. For instance, Britain started opening steam-powered factories in the 1780s, which quickly became an integral part of several industries, including cotton spinning, metallurgy and so on, but the economy as a whole changed far more slowly over the decade, as did the economies of the rest of world. Industrialisation and urbanisation gained momentum several decades after the first serious introduction of new equipment and factories. As Stearns states (2012: 6), “even many regions that did industrialise in some manufacturing sectors saw a greater wave of change forty or fifty years after their initial engagement”.

France, Germany, and the United States joined the industrial parade between 1820 and 1840, and each displayed distinctive features in the process. Following the Industrial Revolution’s peak in the eighteenth century, its second wave (the Technological Revolution) in Western Europe generated further engineering and science-based inventions and innovations (Smil, 2005). With the worldwide impact of the Industrial Revolution increasing during this second phase, the industrialisation of the Western world was essentially complete by the 1870s. Industrialisation proceeded from earlier patterns of economic and social change; based in large part on its imitation of earlier

developments elsewhere, its revolutionary implications were seen more quickly. Since the 1870s, all early industrialised countries were also spearheading further transformations of the industrial economy that, within a century, would extend the process of technological, and especially organisational, changes well beyond those of the initial stage. Following the advances of Western Europe, Japan and Russia later redefined and accelerated their industrialisation processes in the end of the nineteenth century, only a half-century after their serious involvement began. As a result, the above shows that a country's industrialisation proceeds from earlier patterns of economic and social change, but is also based in large part on imitation of earlier developments elsewhere to demonstrate its revolutionary implications more quickly.

The major Pacific Rim areas launched their industrialisation shortly after the Second World War; the rise of industrialised Taiwan and South Korea in the 1960s even came less than a generation after the economic and political oppression of Japanese occupation. In addition, many nations in Africa, created during the 1970s and early 1980s, increased their rate of economic growth within decades through the engagement of industrialisation with external investment in the 1990s. Nevertheless, the Industrial Revolution is also in relation to the colony competition between European countries over Africa, America and Asia. When the colonists first took a piece of land, then built a fort and stayed, it was generally to protect their new trade

against other European enemies. Colonialism is never simply about one country invading or occupying the others; countries and leaders have bilateral relationships but also mutual interests. It always involved various preference in policy and the victory of one lobby or economic interest over others. Like the example given by Ashcroft, Griffiths and Tiffin (2007: 48), “the concentration of manufacturing in England and the use of colonies as sources of raw materials meant that colonial societies exercised no control over the *means of production*”. At the same time, a modern class analysis involves more than simply identifying the owners of the means of production and the wage-slaves of classical Marxism. It involves identifying the specific and complex array of class interests and affiliations that are established in the early capitalist system, with the emergence of distinctive forms of ‘native’ capitalists and workers, with social and economic structures with their own order, and social and economic formations. Thus, the advent of new rivalries within the industrial world helped escalate the impact of industrialisation in the world at large.

This escalation, in turn, helped move the Western-dominated first phase of the Industrial Revolution into a more fully international setting. As the Industrial Revolution solidified in Western Europe and the United States during the nineteenth century, it inevitably altered the industrial countries’ relationships with other parts of the world. The power of industrial technology fed new political powers (such as Japan

and Russia) on the international scene; a new explosive round of imperialism and colonialism in the Asia was a direct consequence of the West's industrial expansion and internal competition.

Many earlier civilisations had colonies, and they perceived their relations with their colonies to be one of a central imperium in relation to the periphery of provincial, marginal and uncivilised cultures, but a number of crucial factors entered into the construction of the practices of imperialism. Edward Said (1993: 8) offers the following distinction:

‘imperialism’ means the practice, the theory, and the attitudes of a dominating metropolitan centre ruling a distant territory; ‘colonialism’, which is almost always a consequence of imperialism, is the implanting of settlements on the distant territory.

In the late eighteenth century, a variety of political, cultural and economic reasons led to imperialism becoming a dominant and transparently aggressive policy amongst the European states (Ashcroft, Griffiths and Tiffin, 2007: 139). Hobsbawm in *Industry and Empire* (1999) proposes that the earlier empires (like the British Empire) were crucial in promoting the modern industrial transformation; the Industrial Revolution could not only have occurred in an empire's home country but for the possession by a

colonial empire that provided outlets far in excess of anything the natives could offer. Industrialisation entailed a sudden expansion of productive capacity, and was possible only in countries that occupied key positions within the evolving world economy. This change resulted from shifts in European society, from new ideas about nature to new population levels, and then produced even greater shifts in turn. The international pattern was similar. The revolution produced a rapid intensification in global trade, and through this process increased Europe's advantages as a leading profit-taker and manufacturer. Poured into industrialisation, investments and trade opportunities generated even more fundamental upheavals.

Industrial heritage in the West and in the rest of the world exists in the different contexts. There are rising contemporary and controversial issues that industrial heritage has to deal with in the present day, including social, economic, political and ecological aspects (Rautenberg, 2012; Duijn et al., 2016). Industrialisation as a global progress is one of the most significant periods of 'creative destruction' that human societies (Marr, 2012) and natural landscapes have ever experienced, along with capitalism, imperialism and colonialism in post-industrial society. In 2012, the fiftieth Congress of TICCIH in Taipei was the first to be held in Asia since its establishment in 1978. The Congress generated the *Taipei Declaration for Asian Industrial Heritage*, which "recognising a shared interest in the distinctive elements of the Asian

experience of industrialisation and a shared dedication to a cooperative effort to support preservation and interpretation of that heritage” (TICCIH, 2012). The industrial heritage of the Pacific Rim region includes not only its achievements in industrial development but also mixed exotic ambiences due to the intersection of multiple colonial contexts, such as Taiwan. In order to explore the concepts, values and principles of industrial heritage in a global perspective, we have to understand the Industrial Revolution and how the revolutionary process led into the context of industrial heritage through examining the relevant literature and statistics relating to the development of industrial sites and landscapes.

This chapter explores what the Industrial Revolution was and how it reshaped the world, beyond the particular societies in which it developed its deepest roots in the beginning. The chapter then discusses the development of Industrial Heritage along with its problems and challenges, including reviewing the background, categories and models of industrial heritage and how industrial materials can become part of the modern world. Following this, we shall explore the different ways in which industrial resources are interpreted and (re)presented by heritage managers, and the attitudes of visitors to these resources. We shall discuss the contemporary issue of regional regeneration as it relates to industrial heritage, a subject that is linked to sociology and economics, to clarify the controversy and obscureness regarding the value of

industrial heritage. The final part of the chapter will discuss the new spectrum of heritage in the less industrialised world through exploring its colonial context and its' industrial heritage, especially with regard to the rise of the new industrial nations after World War II, the time of both post-industrialisation and post-colonialism. This chapter also provides the theoretical foundation for the subsequent development of the conceptual framework for this study.

2.2 The Birth of Industrial Heritage

Those in charge of industrial sites were initially slow to recognise their rusted ruins as something belonging to a heritage process. Nevertheless, by the twenty-first century, “industrial remains were acknowledged as possessing heritage values at some level, and included in exhibitions, documentation projects, and museums” (Storm, 2014: 10).

Today, what remains of industrial centres are rusting factories, abandoned buildings, deserted mines, scarred landscapes, and decaying cities and towns. These are all reminders of an economy that was dominated by industrial manufacturing for more than a century. By the early 1960s, the western economies changed as they moved into a post-industrial age. Service industries replaced manufacturing as the main form of employment and industrial jobs began their long and steady decline, business owners going overseas in search of cheaper and nonunionised labour. Industrial ruins functioned as a conduit to the past by creating monuments to the early industrial era.

Industrial landscapes, memorials and museums developed at many former industrial sites. At these regional and national museums, such as the national coal mining museums in the UK, visitors are often told about the economic and social progress resulting from each industry.

As the major developed countries successively moved into their post-industrial phases, industrial heritage gradually developed as a profession and practitioners began to record and preserve the remains of industries before they disappeared from the landscape. Remembering the industrial era became an important part of national, regional, even personal identity, along with collective memory and nostalgia (Palmer and Orange, 2016). The celebration and interpretation of these places become important to regions' heritage. In addition to these social and educational aspects, industrial heritage sites are increasingly becoming economically regenerated and culturally renewed. The process of industrialisation was a rapid development; the West went through Industrial Revolution in the eighteenth century, moving towards a global economy, and then faced the agenda of de-industrialisation and re-industrialisation from the 1960s onward, shaping Bell's (1976) "post-industrial society" in the contemporary world.

As industrial history moved forward, the first International Congress on the

Conservation of Industrial Monuments was held in Ironbridge, England, in 1973, a year before the *Convention concerning the Protection of the World Cultural and Natural Heritage* was adopted by UNESCO. TICCIH was established in Sweden in 1978, the third International Congress. In the same year, the first industrial heritage site was also listed in the UNESCO World Heritage list, the Wieliczka Salt Mine, Poland. Following the discussion of industrial heritage sites in Western Europe and North America (Hoyau, 1988; Edwards and Llurdés, 1996; Miller and Yudice, 2002; Smith, 2009), as part of the de-industrialisation process, industrial heritage has become a key resource and has been the subject of a process of revitalisation, and the idea is that economic, cultural and aesthetic value takes priority over the production of these sites.

In recent decades, industrial sites have gradually become included in the general understanding of heritage. Communities and government agencies have debated how to use abandoned industrial properties. The strategies have ranged from redevelopment, reuse, commemoration, and elimination. These are all policies that will ultimately affect the way we remember the industrial past. Perhaps paradoxically, today's industrial heritage, together with an engagement with military remnants, can be said to occupy a position at the conceptual forefront with deliberations about dangerous and difficult heritage (Logan and Reeves, 2009; Macdonald, 2009).

2.2.1 From Ruin to Legacy

The birth of industrial heritage comes up after the World Heritage discourse by inscribing the industrial site as part of cultural heritage since 1978 along with the background of contemporary agenda in facing the decay of the outdated industrial sites since the 1960s. The rate of decay depends on the component materials of the buildings and the local industrial strategies. Edensor (2005a: 4–5) argued “authorities in cities that are able to attract inward investment are more likely to demolish derelict structures taking up space that might be used for new enterprise”, whereas in cities which fail to attract new investment, there tends to be a greater prevalence of ruins. At the end of the 1970s and through the 1980s, the British government adopted a somewhat protectionist response to the effects of the industrial crisis. With the privatisation of nationalised industries and the scrapping of protectionist legislation, a restructuring of the economy rearranged the landscape of industrial zones across Britain, Edensor (2005a: 6–8) described:

as old, heavy industries sited in brick-built and stone-clad Victorian and Edwardian factories fell into disuse ... the increasing rate at which ruins have been produced across the urban landscape of Britain is testament to the effects of faster modes of capital accumulation and the dis-embedding impacts of global capital flow, dynamic processes through which space is purchased, cleaned and

reassembled, de-territorialized and re-territorialized, producing practices which destroy urban fabric ever faster and more efficiently.

Edensor (2005a: 12) then argued, “the rise of industrialism and the rapid social change which it brought produced an intensified nostalgia for the past, and signs that revealed it became revered”. According to his viewpoint, these industrial ruins can become saturated with a host of imaginary romantic associations that testify to a bucolic past populated by charming characters. Thus, the redundant industrial sites offer opportunities for challenging and deconstructing the imprint of economic development on modern cities by revaluing the contexts and relationship between industries and cities at various perspectives. For progressive urban politics to be effective, as Lefebvre (1996: 159) declares, “the most important thing is to multiply the reading of the city”, that each city has diverse layers and fabrics which tell the stories and narratives connecting to various properties. And industrial remains are the evidential readings of a certain stage of a city’s modernisation. Industrial ruins do not take one shape but are manifold in forms, fashioned by the age in which they were established, their architectural styles and their individual functions, and also partly depending on the strategies mobilised towards them by the managers after their abandonments.

Defunct industrial ruins and objects have been energised and refreshed since the introduction of the term 'heritage'. Integrating the previous discussions, the development of industrial heritage can be seen to follow three stages (Hudson, 1979; Alfrey and Putnam, 1992; Carman and Sørensen, 2009). In the first stage, the 1950s to the 1960s, a small and enthusiastic group of pioneers devoted a great deal of time and energy to stirring up the European public conscience about the rapid disappearance of buildings and machinery which documented the history of industry and technology. The next stage covered from the 1960s to the early 1980s, and was characterised by (an important feature of the industrial heritage movement in several countries) the emergence of a sort of historian intrigued by the challenge, coming with academic journals, responsible institutions, and international agencies or national legislation. In Stage 3, the 1980s to the 1990s, people began to take stock of what had been achieved during the previous stages. The field had entered into inevitable heart-searching and quarrels, which brought forth the issues of 'new museology', dominant ideology, critical archaeology, heritage management, tourism and interpretation etc. The present stage, the 1990s until now, is more concerned with practices and, similarly, issues related closely to public interpretation. The effect on the institutions responsible for heritage practices not only rises with the rise in academic studies in the West countries but also has a significant role in driving global concern and development, such as the

conservation, heritage management, adaptive re-use, economic regeneration (Lardner, 2012; Laconte, 2014; Rouwendal and Boersema, 2016) and so on.

TICCIH, standing on *The Nizhny Tagil Charter for the Industrial Heritage*, announced the following definition of industrial heritage in 2003: “Industrial heritage consists of the remains of industrial culture which are of historical, technological, social, architectural or scientific value. These remains consist of buildings and machinery, workshops, mills and factories, mines and sites for processing and refining, warehouses and stores, places where energy is generated, transmitted and used, transport and all its infrastructure, as well as places used for social activities related to industry such as housing, religious worship or education” (TICCIH, 2003). The committee identified industrial archaeology as an interdisciplinary method of studying all the evidence, material and immaterial—documents, artefacts, stratigraphy and structures, human settlements, and natural and urban landscapes—created for or by industrial processes. It makes use of those methods of investigation that are most suitable to increase understanding of the industrial past and present. For industrial heritage, tangible assets (both built and natural) also have intangible qualities of meaning and association that past and present communities have linked to places, and that enrich our understanding and appreciation of their physical remains. The feelings of loss which such an experience can engender are one poignant cause of nostalgia

and a reminder of the social attachments we form to place, what Yi-Fu Tuan (1977) and scholars Steele (1981), Hummon (1992), Jackson (1994), and Feld and Basso (1996) have referred to as a “sense of place” —the particular experience of individuals in a particular setting which involves both an interpretive perspective on and an emotional reaction to the environment. The everyday attachments of people to places are at the heart of contemporary approaches to heritage, and cultural distinctiveness is a unique asset that industrial heritage sites can offer to different interest groups. Therefore, the industrial heritage and cultural sites of which they are part “play a vital role in creating the sense of *hereness* necessary to convert a location into a destination” (Kirshenblat-Gimblett, 1998).

2.2.2 Heritagisation of Industrial Sites

The current network of heritage sites around the globe, and especially those of World Heritage Status, could be said to be an expression of the practice of heritage conservation applied through the lens of the developed planning system in the west. Ultimately, this draws upon the concepts of building and architectural conservation practice developed from John Ruskin in the mid-nineteenth century onwards (Glendinning, 2013). In recent years, a number of scholars have advanced the notion that there is an ‘authorised heritage discourse’, evident in countries such as Australia, England, Canada and the USA, that is propagated by officially endorsed heritage

agencies, both public and private. The question of who defines and controls heritage has been at the heart of the work of Laurajane Smith. Smith (2006) has considered how particular values are sustained and privileged and used to regulate heritage practice and norms in terms of discourse. Using critical discourse analysis, she posits an authorised heritage discourse (AHD) that she applies to multiple forms of material cultural heritage protection and management, including archaeology and architectural conservation. The AHD is considered a self-referential discourse that “privileges monumentality and grand scale, innate artefact/site significance tied to time depth, scientific/aesthetic expert judgement, social consensus and nation building” (Smith, 2006: 11). The AHD can seek to control fundamental questions about why material objects from the past should be considered valuable and extend this to what should be protected and to how that protection should take place; that is, what constitutes acceptable conservation practice. The AHD is a useful concept. It emphasises the significance of discourse in territorialising the conservation assemblage. Indeed, part of Smith’s AHD is the norms and objects that help define and control the discourse and that are also an important part of the assemblage—she discusses charters produced by the international conservation body, the International Council on Monuments and Sites (ICOMOS) and the UNESCO World Heritage Convention, while Waterton (2010) has subsequently applied a similar analysis to English

Heritage's Conservation Principles discussed above. Furthermore, critical to Smith's concept, are the power relations it embodies, and the way that the AHD is used to close-down other possible heritage, or subaltern heritage, and as such is seen as a regressive process, a point that subsequent writings by Smith and Waterton (2009, 2012), Labadi and Long (2010), and Daly and Winter (2012) reinforce. While it could be argued that Smith is correct to distinguish between the AHD and other heritage possibilities, and to highlight the AHD as a way of controlling the definition of heritage that receives official sanction and its management, a focus on conceptions of value internally generated amongst the heritage elite potentially underplays other forces within the conservation-planning assemblage. In particular, it allows little recognition of external forces that might shape conservation values or the AHD, whether they be broader social movements or explicit tactical responses of the AHD-formers to external pressures.

The extended application of the category of heritage to new objects, such as industrial remains, has been the most important cultural phenomenon of the last decades. It can be seen as one expression of the rise of a 'contemporary regime of historicity' (Koselleck, 1990). The practice of industrial archaeology examines the contextual patterns of industrial remains and their associations with the material world; the development of industrial heritage further highlights the value of industrial culture by

promoting the tactile or emotional aesthetics of the theme. By achieving industrial heritage, we can preserve, conserve, investigate, document, research and present it, and promote education in these matters, including the physical remains of the industrial past, such as landscapes, sites, structures, plants, equipment, products, fixtures and fittings, as well as their documentation, consisting both of verbal and graphic material and of memories of the people who have been involved. The scope of industrial heritage has broadened significantly since the establishment of TICCIH in 1973. Subsequently, TICCIH has taken the lead role in representing industrial heritage worldwide and is a special adviser to ICOMOS on industrial heritage. As has been well rehearsed in the literature, the current concept of industrial heritage emerged in the industrialised Europe, particularly Britain—the birthplace of Industrial Revolution, France and Germany, sourcing from the development of the 1950s–1960s’ industrial archaeology discipline (Buchanan, 2000; Cossons, 2000; Douet, 2012). Through the 1980s to the 1990s, in West-European countries, governments proposed various strategies for the role that industrial site might have in repairing the conflicts of deindustrialisation. The relevant policies argued that heritage—and in particular industrial heritage—could be an effective resource for economic and social development in areas that have been severely affected by

de-industrialisation (Trinder, 2000). And these politics of heritage are impacted by struggles and tensions between local populations and ‘external’ agents as well.

Moreover, the contemporary tourism industry re-created historical and archaeological sites for the serious and nostalgic tourist (Graburn, 1995; Peers, 2007; Jamal and Robinson, 2009), and also provided an opportunity to transform redundant historic buildings or industrial heritage in an approach of either tourism purpose or ‘adaptive reuse’ (Orbaşlı, 2000; Laconte, 2014; Fetisov, 2015). Industrial heritage tourism is a well-established niche within the heritage tourism sector, for example, the European Union’s promotion project—European Route of Industrial Heritage (ERIH), since 2001. As Gouthro and Palmer (2010: 33) have said, “depending upon the social and economic history of the country being visited, tourists can experience a diverse range of attractions depicting aspects of the industrial past”. Nevertheless, it can still be argued that these cultural sites exist as an industry that feeds into what we might term the ‘tourism experience’, along with supporting the cultural and creative industries (Tribe, 2005; Jung and Fu, 2008). Most governments can see the political and economic benefits in attracting homeland tourists, whether through targeted marketing or officially sponsored package heritage or museum cultural tours. They hope this will lead participants to consider future economic investments or serve as informal spokespeople on the nation’s behalf. But they sometimes ignore or give up exploring

the potential for cultural heritage / tourism in the humanities and social engagement aspects regarding authenticity, inheritance and sustainability. Moreover, industrial heritage sites and museums are often seen as the quick-fix solution to renewal, and the entrance to the international tourism market (Smith, 2009; Janes, 2011; Lardner, 2012; Lin, 2012a). Thus, the common approach adopted in heritage and historic places (Jamal and Robinson, 2009) is for redundant industrial sites to be transformed into tourist attractions by reusing either existing or new-built spaces for production and consumption. On the one hand, these compromises allow for cultural consumption and meet the needs of tourists; on the other hand, these changes jar the authenticity of heritage and nearby cultural spaces. Hence, communication, negotiation and compromise become vital parts of institutions' stewardship and response to the competitive tourism market. Formerly heavily industrialised centres have moved from being economies of production to economies of symbolic cultural consumption (Robinson and Smith, 2006). In addition, Hannam and Knox (2010: 45) have argued that "the contemporary staging and performing of cultural heritage is often a contentious issue as it is seen to devalue the special characteristics of particular bodies of tradition and material culture". With regard to industrial heritage, places are usually recognised as iconic constructions existing in contemporary contexts, rather than as traditional monuments with long-standing narratives. Such places include: Wieliczka

Salt Mine in Poland; Ironbridge Gorge in the UK, regarded as the cradle of the Industrial Revolution; Sapporo Brewery in Japan, now a restaurant and marketplace; and factory buildings in the Ruhr in Germany, which have been turned into concert halls. The above sites attract millions of visitors every year. Industrial heritage has become ‘the base of a new cultural economy and contemporary cultural policy has begun to link with industrial and economic issues (Heilbrun and Gray, 2001), meaning that industrial heritage has to deal with commercial, entertainment, tourist-oriented and other management issues. Industrial heritage sites also face various demands from the public. They have to cope with machinery, communities, and the interaction between people and constructions, as well as shouldering the mission of shaping local identity and enhancing local cultural value (Camargo et al., 2007) while linking to wider international environmental and social issues (Janes, 2009).

Since 1997, UNESCO not only recognises buildings and infrastructure but also considers mining landscapes and mining regions as a whole, the complex concepts built by history, economy, community and the relationship between land, materials and people. Industrial heritage sites are now supported by a wide range of communities and form an important part of a nations’ policy on cultural heritage. Despite this, further research should still explore what kind of effects cultural commodification via tourism will have—on the one hand, it can lead to a recognisable

group identity (Cole, 2007); on the other hand, tourism and commodification are taking authenticity away (Kirtsoglou and Theodossopoulos, 2004). Local, regional and national authorities have been keen to support the (adaptive) reuse of old industrial sites, not only to preserve them but to find new uses for them. But as part of this process, attracting visitors to such sites has become increasingly important as a way of stimulating new functions for the site and as a way of generating revenue. The value of an industrial heritage to a region could be defined by regional museums according to the idealistic, touristic and economic aspects. Many former industrial sites and mines are now being restored and opened to the public as visitor attractions (e.g., the Ironbridge Museum, the Big Pit Mining Museum). “Heritage is defined as a view from the present, either backwards to a past or forwards to a future” (Graham et al., 2000: 2). In the case of industrial heritage, it is used to justify the redevelopment of former and residual industrial zones, utilising the cultural hub as a panacea to implement broader tourism and regeneration plans, such as cultural districts and cultural and creative parks. This approach is particularly prevalent in those places that went through a ‘golden age’ followed by a lengthy period of economic decline. However, as Lowenthal (1996) notes, heritage consists of material, natural, and intangible aspects of culture that should be felt by the general public to be permanent and transmittable. Apart from maintenance and heritage conservation, the

interpretation of industrial narratives also demands to be delivered (Leary and Sholes, 2000; Trinder, 2012; Xie, 2015). The discourse of heritagisation “creates a particular set of cultural and social practice that has certain consequences in the context of late modernity” (Smith, 2006: 17) but also shows the intersection of power relations that give rise to it and to make diverse the cultural and social work that ‘heritage’ does.

2.2.3 The Post-industrial Context

As manufacturing cities reinvent themselves and transform the remnants of their industrial fabrics into magnets for entertainments, mega events, conferences, even into places to live, the new campuses of industry have moved to the countryside. But the heavy industry has left large numbers of buildings and this has recently become an issue of urban development. Since the 1960s, and the move to present the industrial past to new generations, a network of museums has developed and now stretches from the Ironbridge Gorge (Coalbrookdale) to Lowell, Massachusetts, even involving the manufacture of authentic items (Darley, 2003: 200) as part of the phenomenon of the ‘Heritage Industry’ that Hewison (1987) noted. In the Ruhr in Germany, the remarkable transformation of the landscape of the coalfields and steelworks around Duisburg came about from a determination not to obliterate the recent history and structure of the region as it had functioned until the mid-1980s. With the closure of the Zollverein Colliery in 1986, the area became a major regeneration project.

Although a scheme on such a scale and carried out with such vision is not replicable across all other ruins of heavy industry, it offers a seductive alternative to the most straightforward option of transforming factories and industrial origins into the most admired museum groups and post-industrial park in Europe— “the gigantic skeletons, threaded by pipes, tracks, waterways and old railway lines, and the tough, subtly replanted landscape, are left to speak for themselves. Local people, many of whom had worked there, have been involved at a practical level, suggesting uses for structures that might otherwise have been carelessly demolished” (Darley, 2003: 202–204).

Museums are often the quick-fix renewal solution, and the entrance to the international tourism market (Smith, 2009; Janes, 2011). Museum management in heritage is a continuing development model (McKercher and Du Cors, 2002), and the trend of commercialisation and tourism must impact on the heritage’s core function, hence communication, negotiation and even compromise become a vital part of institutions’ stewardship and response to the competitive tourism market. The museum is already a highly complex organisation, housing multiple professional allegiances, competing values and interests, and a range of diverse activities, and museums in heritage sites come with a range of problems. Industrial heritage as a new

heritage field could create a brand new type of cultural industry through regeneration, tourism and museumisation.

The growth of industrial museums, open-air/eco-museums and industrial world heritage sites (Figure 2.1) demonstrates not only a re-orientation of economic patterns but also a strong social and emotional attachment to the industrial past with an increasing distance between social life and industrial practice and the material culture associated with industrial production.

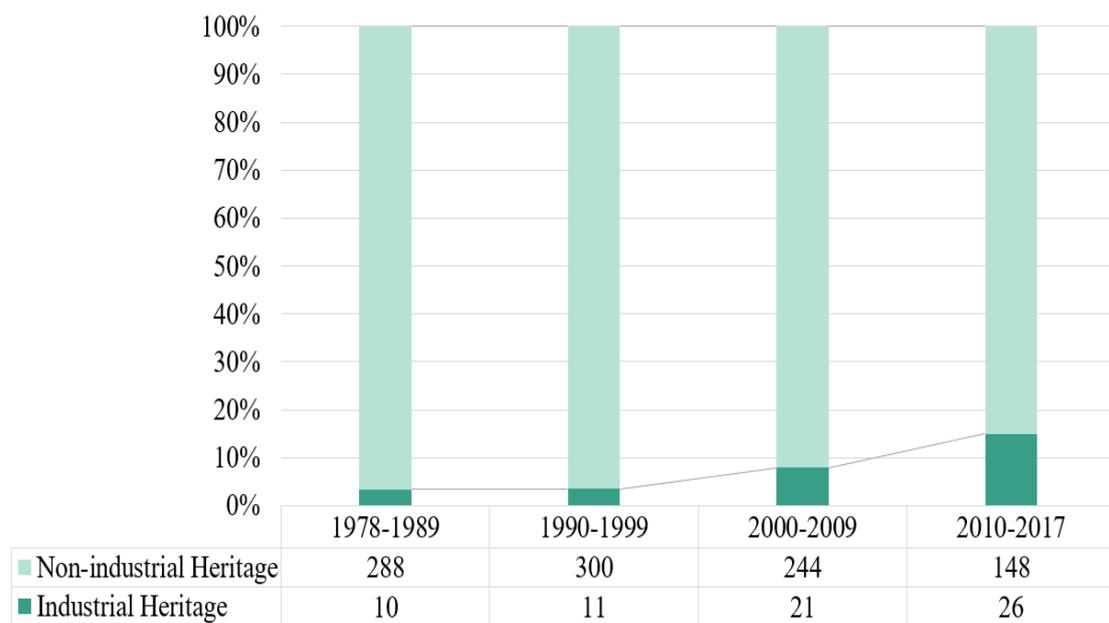


Figure 2.1 Statistics of Industrial World Heritage Sites
 Source: UNESCO World Heritage Centre (whc.unesco.org).

2.2.4 Economy, Tourism and Aesthetics

Industrial heritage is seen as a tourist attraction or seen from an aesthetic perspective

or interpreted in a way that emphasises its aesthetic qualities. It is used to justify the redevelopment of former and residual industrial zones, utilising the notion of a cultural hub as a panacea to implement broader tourism and regeneration plans. Meanwhile, industrial heritage, and other cultural sites which have been forced to change because of political and economic shifts and market forces, have been decisive in bringing about a new climate of audience awareness (Ross, 2004). Specifically, tourists do not just look at historic buildings and visit; they also browse bookshops, drink coffee, watch the locals go about their daily business and generally enjoy the ‘sense of place’ provided at the destination at the same time. These sites are produced for and consumed by visitors. Prentice et al. (1998: 3) clustered visitors to an industrial heritage attraction based on literature under the title recreational’. This could be appropriate for an industrial heritage site which, apart from being classified as ‘heritage’, may have nothing to offer visitors which was linked to their heritage”. Industrial heritage sites are thus quintessentially concerned with tourism (Vargas-Sanchez et al., 2013; Xie, 2015); they serve as authoritative guides, displaying objects that represent the important features of history, nostalgia, and experience that tourists might want to observe. Significantly, it has become a major trend that regional regeneration takes advantage of the new and growing industrial heritage sector of tourism and uses this to assist the economic and social recovery of

many industrial areas (Smith, 2009).

Adams (2013) summarised the argument advanced by a number of scholars, such as Robert Hewison, David Lowenthal, Laurajane Smith and Sara McDowell. In short, heritage constitutes the built environment, landscape, material culture, memory, etc., but is not an objective category; rather it is a relative, almost arbitrary construct, deployed in the pursuit of particular political, ideological and aesthetic agendas. Among several types of responses, in several cities 'industrial ruins' (Edensor, cited in Rautenberg, 2012: 516) became:

alternative places for a new aesthetic, unofficial art and social invention, with or without the consent of the local authorities ... Former factories were transformed into artists' lofts, perhaps because ruins offer an aesthetic experience that bypasses the normal designs of the city, often over-regulated, boring and too smooth.

Unexpectedly, the denominations of industrial activities are often reinvented by artists when they name their workplace or explain their jobs, and workers' memories are often revisited in artistic events. According to Chaudoir (2009: 60),

those artists appear as being closer to the raw reality of the factory, to production,

rather than to the abstraction of creation; the vestiges of the industrial period are recycled in a new artistic and cultural reality.

2.3 A Complex Legacy: Industrial Heritage in Post-colonial Countries

Since industrial heritage became a worldwide concern, both developed and developing countries have been getting involved in the field. However, beyond all doubt, the framework and background of today's industrial heritage concept are based on the West's industrial history; it is unrealistic to imitate or emulate the European and American practices or theories in other regions which have their own industrial cultures and historical contexts. The heritage of industrialisation is endowed a new position or meaning in relation to the past or the future, and this is criticised as a modernisation process within the context of Westernisation. The progress of non-West cultural diversity and creative economy through global civilisation network leads the development of industrial heritage towards the next stage. The various discourses and practices of industrial heritage are accumulating outside of the Western framework.

2.3.1 The Category and Geography of Industrial Heritage

TICCIH's *Nizhny Tagil Charter* is presented to the International Council on Monuments and Sites (ICOMOS) for ratification and for eventual approval by UNESCO. Furthermore, TICCIH classifies the Primary Fields of Interest, the

Thematic Sectors of Industrial Heritage and the Thematic Studies subjects generalised

as Table 2.1.

Table 2.1 Thematic Sectors of Industrial Heritage

Subject	Content	
Primary Fields of Interest	<ul style="list-style-type: none"> ■ Documentation and Recording ■ Education and Research ■ Heritage Conservation ■ Industrial Archaeology 	<ul style="list-style-type: none"> ■ Industrial Architecture ■ Industrial Museums ■ Industrial Tourism
Thematic Sectors of Industrial Heritage	Transportation Industry	
	<ul style="list-style-type: none"> ■ Bridges ■ Canals ■ Communications 	<ul style="list-style-type: none"> ■ Marine Transport ■ Railways
	Power Industry	
	<ul style="list-style-type: none"> ■ Hydroelectricity And Electro-Chemicals 	<ul style="list-style-type: none"> ■ Energy and Power ■ Water
	Heavy Industry	
	<ul style="list-style-type: none"> ■ Chemicals ■ Iron and Steel ■ Mechanical Engineering 	<ul style="list-style-type: none"> ■ Metallurgy ■ Mining and Collieries
	Commodity Industry	
	<ul style="list-style-type: none"> ■ Agricultural and Food Production ■ Glass ■ Leather 	<ul style="list-style-type: none"> ■ Paper ■ Textiles ■ Wood
	Other Industries	
	<ul style="list-style-type: none"> ■ Polar Region 	<ul style="list-style-type: none"> ■ Tourism
Thematic Studies Subjects	<ul style="list-style-type: none"> ■ Agriculture and Food Production ■ Communications ■ Global/Local Group ■ Hydroelectricity and Electrochemical Industry 	<ul style="list-style-type: none"> ■ Metallurgy ■ Mining and Collieries ■ Railways ■ Textiles ■ Tourism

Source: TICCIH (ticcih.org/about/directory)

In most European countries, industrial heritage is seen as an instrument of urban

regeneration because it is supposed to support the specific identity of a place (Pinson, 2009). Not only has heritage been defined as important to the development of tourism, but history also had important ideological functions. On the one hand, history makes it possible to impose a political and urban order. On the other hand, it offers arguments for resisting the destruction of a building or a part of a city. In Britain and France (Rautenberg, 2011), a common will to transform industrial heritage rather than destroy it can be noted. A collective identity is expressed in the artefacts of past industrial glory, making different types of actors work together under the ambiguous protective wing of the state.

Increasingly, restoring and exploiting former industrial sites for touristic purposes is regarded as a useful strategy for regional renewal. Since the developed industrial regions in Europe have entered a spiral of decline, those very regions that were the forerunners of the Industrial Revolution, especially those that specialised in textiles, coal, steel and other heavy industries, which have suffered from structural problems due to cheaper labour in rising economies such as India, China and the Southeast Asian countries, have had to give way to new areas of growth in the European economy. The Ruhr, north-east England and Wales are prominent examples of regions where local governments have pursued restructuring policies with varying degrees of success (Hassink, 1993; Cooke, 1995; Hospers, 2002).

However, these policies are not the only strategies used to rejuvenate local economies. The relatively new industrial heritage tourism is viewed as a helpful tool for regional restructuring (Harris, 1989; Goodall, 1994; Edwards and Llurdés, 1996). ‘Industrial culture’, refers to “the development of touristic activities and industries on man-made sites, buildings and landscapes that originated with industrial processes of earlier periods” (Edwards and Llurdés, 1996: 342). In Europe, policy-makers are also interested in developing industrial tourist activities. For example, the ERIH project has been financed largely out of European funds. The general expectation is that ultimately these new forms of tourism developed around industrial monuments were aimed to play an important role in revitalising industrial regions, thus helping them to build a better economic future (Hospers, 2002).

The roots of industrial heritage tourism can be found in the UK, the ‘birthplace of the Industrial Revolution’ where the decline in manufacturing started earlier than in the rest of Europe. In this country, the relics of the period of industrialisation were initially explored after World War II. Gradually, interest in what was called ‘industrial archaeology’ spilt over to other stagnating industrial areas in Europe. In the 1980s the concept of industrial heritage tourism was occasionally propagated and applied as a strategy of regional restructuring (Soyez, 1986; Harris, 1989). During the 1990s,

however, industrial heritage potential was widely highlighted. This was mainly due to experiences with industrial heritage tourism in the Ruhr which culminated in the opening of a complete regional *Route of Industrial Heritage* in 1999. On this scenic route, tourists can visit 19 important settlements representing the industrial history in coal and steel. These anchor points are connected and can be reached by different forms of public transport. Visitors can explore 25 thematic routes in the region, such as a tour around the theme of local railways. This Ruhr Tour programme was set up by the Emscher Park International Building Exhibition (IBA) (1989–1999) and is currently managed by the local government, the Ruhr District Association of Communities (KVR). Studies (Kilper and Wood, 1995; Knapp, 1998; Parent, 2000) suggest that this localised industrial culture policy may have contributed to the success of local innovation policy towards structural change in the Ruhr. Inspired by the above examples, more and more regions in Europe have turned to industrial heritage tourism as an additional restructuring device.

“Initiatives in this field often emerge from private associations for industrial heritage whose plans are funded by regional, national and European authorities” (Goodall, cited in Hospers, 2002: 399). Likewise, programmes have been launched in this way in Overijssel (the Netherlands), West Flanders (Belgium), Völklingen (Germany), Steyr (Austria), Telford (UK), Catalonia (Spain), Crotone (Italy) and Lorraine

(France). Adopting industrial heritage tourism may improve a region's image and function as a public relations tool to counteract public prejudices against industrial areas in decline (Harris, 1989; Mansfield, 1992; Goodall, 1994). The result of these efforts led to the establishment of ERIH, a route starting in Ironbridge (UK) and ending in the Ruhr (Hospers, 2002). Obviously, all regions that apply some strategy of industrial heritage tourism have experienced a different path of historical development. As such, each of them has a unique set of industrial monuments that can be used for recreational activities. Nevertheless, in the European context, some general categories of industrial tourist attractions may be distinguished (Edwards and Llurdés, 1996; Soyez, 2009; Hospers, 2002; Xie, 2015). The first group comprises industrial relics in the field of production and processing. These attractions are popular among visitors and include numerous sites located underground (mines) or on the Earth's surface (e.g. plants, blast furnaces and shipping yards). Often these workplaces have been restored and transformed into museums demonstrating the history of industrial occupations. Some abandoned industrial sites provide tourists with other amusements, such as films, concerts and catering. In other cases, "industrial monuments are neglected consciously with the aim to show visitors the aesthetics of de-industrialisation" (Edwards and Llurdés, cited in Hospers, 2002: 399). Transport attractions make up the second group of industrial tourist attractions. They refer to industrial legacies in the

field of rail, water and roads, aiming to give visitors a nostalgic or novel transport experience. The third category consists of socio-cultural attractions associated with a region's particular industrial past. Here, examples are former working-class houses and employers' estates.

The international treaty, *the Convention concerning the Protection of the World Cultural and Natural Heritage*, adopted by UNESCO in 1972, members sought to “encourage the identification, protection and preservation of cultural and natural heritage around the world that was considered to be of outstanding value to humanity” (UNESCO, 2016). Some of these sites are included on the UNESCO list because they are examples of engineering feats such as bridges, canals, irrigation systems, aqueducts, railways, mines, ironworks, resource extraction and so on. Since 1978, 67 industrial heritage sites, centres and landscapes have been designated World Heritage Sites by UNESCO (Table 2.2), classified unequally by region as most Industrial World Heritage Sites are found in Europe.

Table 2.2 Industrial Heritage Sites in UNESCO World Heritage List

No.	Industrial Heritage Site	Nation	Inscription Year
1.	Wieliczka Salt Mine	Poland	1978
2.	Historic Town of Ouro Preto	Brazil	1980
3.	Røros Mining Town and the Circumference	Norway	1980, extended 2010
4.	From the Great Saltworks of Salins-les-Bains to the Royal Saltworks of Arc-et-Senans, the Production of Open-pan Salt	France	1982, extended 2009
5.	Pont du Gard (Roman Aqueduct)	France	1985
6.	Old Town of Segovia and its Aqueduct	Spain	1985
7.	Ironbridge Gorge, England	United Kingdom	1986
8.	Hanseatic City of Lübeck,	Germany	1987
9.	City of Potosí (Silver Mining)	Bolivia	1987
10.	Historic Town of Guanajuato and Adjacent Mines	Mexico	1988
11.	Mines of Rammelsberg, Historic Town of Goslar and Upper Harz Water Management System	Germany	1992, extended 2010
12.	Engelsberg Ironworks	Sweden	1993
13.	Historic Centre of Zacatecas (Silver Mining)	Mexico	1993
14.	Historic Town of Banská Štiavnica and the Technical Monuments in its Vicinity	Slovakia	1993
15.	Völklingen Ironworks	Germany	1994
16.	Hanseatic Town of Visby	Sweden	1995
17.	Canal du Midi	France	1996
18.	Mill Network at Kinderdijk-Elshout	Netherlands	1997
19.	Ir.D.F. Woudagemaal (D.F. Wouda Steam Pumping Station)	Netherlands	1998
20.	Semmering Railway	Austria	1998
21.	The Four Lifts on the Canal du Centre and their Environs, La Louvière and Le Roeulx (Hainaut)	Belgium	1998
22.	Blaenavon Industrial Landscape, Wales	United Kingdom	2000
23.	Neolithic Flint Mines at Spiennes (Mons)	Belgium	2000
24.	Derwent Valley Mills, England	United Kingdom	2001
25.	Mining Area of the Great Copper Mountain in Falun	Sweden	2001
26.	New Lanark, Scotland	United Kingdom	2001
27.	Saltaire, England	United Kingdom	2001
28.	Historic Quarter of the Seaport City of Valparaíso	Chile	2003
—	*Dresden Elbe Valley (delisted 2009)	Germany	2004

Table 2.2 Industrial Heritage Sites in UNESCO World Heritage List (Cont.)

No.	Industrial Heritage Site	Nation	Inscription Year
29.	Liverpool – Maritime Mercantile City, England	United Kingdom	2004
30.	Humberstone and Santa Laura Saltpeter Works	Chile	2005
31.	Aflaj Irrigation Systems of Oman	Oman	2006
32.	Agave Landscape and Ancient Industrial Facilities of Tequila	Mexico	2006
33.	Cornwall and West Devon Mining Landscape, England	United Kingdom	2006
34.	Sewell Mining Town	Chile	2006
35.	Vizcaya Bridge	Spain	2006
36.	Iwami Ginzan Silver Mine and its Cultural Landscape	Japan	2007
37.	Rideau Canal	Canada	2007
38.	Rhaetian Railway in the Albula / Bernina Landscapes	Italy, Switzerland	2008
39.	La Chaux-de-Fonds / Le Locle, Watchmaking Town Planning	Switzerland	2009
40.	Pontcysyllte Aqueduct and Canal, Wales	United Kingdom	2009
41.	Seventeenth-century canal ring area of Amsterdam inside the Singelgracht	Netherlands	2010
42.	Coffee Cultural Landscape of Colombia	Colombia	2011
43.	Fagus Factory in Alfeld	Germany	2011
44.	Heritage of Mercury. Almadén and Idrija	Slovenia, Spain	2012
45.	Major Mining Sites of Wallonia	Belgium	2012
46.	Nord-Pas de Calais Mining Basin	France	2012
47.	Pearling, Testimony of an Island Economy	Bahrain	2012
48.	Levuka Historical Port Town	Fiji	2013
49.	Cultural Landscape of Honghe Hani Rice Terraces	China	2013
50.	Red Bay Basque Whaling Station	Canada	2013
51.	Qhapaq Ñan, Andean Road System	Argentina, Bolivia, Chile, Colombia, Ecuador, Peru	2014
52.	The Grand Canal	China	2014
53.	Silk Roads: the Routes Network of Chang'an-Tianshan Corridor	China, Kazakhstan, Kyrgyzstan	2014
54.	Tomioka Silk Mill and Related Sites	Japan	2014
55.	Van Nellefabriek	Netherlands	2014
56.	Speicherstadt and Kontorhaus District with Chilehaus	Germany	2015
57.	Champagne Hillsides, Houses and Cellars	France	2015

Table 2.2 Industrial Heritage Sites in UNESCO World Heritage List (Cont.)

No.	Industrial Heritage Site	Nation	Inscription Year
58.	Sites of Japan's Meiji Industrial Revolution: Iron and Steel, Shipbuilding and Coal Mining	Japan	2015
59.	Aqueduct of Padre Tembleque Hydraulic System	Mexico	2015
60.	Rjukan–Notodden Industrial Heritage Site	Norway	2015
61.	The Forth Bridge	United Kingdom	2015
62.	Fray Bentos Cultural-Industrial Landscape	Uruguay	2015
63.	The Architectural Work of Le Corbusier, an Outstanding Contribution to the Modern Movement (La Manufacture à Saint- Dié)	France	2016
64.	The Persian Qanat	Iran	2016
65.	Valongo Wharf Archaeological Site (Dock)	Brazil	2017
66.	Historic Silver Mine in Tarnowskie Góry	Poland	2017
67.	Lake District	United Kingdom	2017

Source: UNESCO World Heritage List (whc.unesco.org/en/list)

The impact of colonialism on industrial heritage can be deduced from analysis of those countries that have sites listed with TICCIH (Table 2.3). Up to 2016, there were 44 countries listed, and 24 (marked in bold) of them were directly or indirectly ruled by the 'Colonial West' and imperialist powers such as the Empire of Japan. Furthermore, 17 (marked with an asterisk) of these former colonies experienced colonial industrialisation during that time (Table 2.3). Since the mid-eighteenth century, these concepts of a world of nation-states, coupled with the intersection of the Scientific Revolution, the Industrial Revolution and modernity, produced powerful political and economic institutions that have currently either influenced or been imposed upon most countries in the world. This process of influence (and imposition)

began with the voyages of discovery, conquest, colonisation and exploitation of Spain and Portugal, and continued with the rise of the Dutch East India Company and the creation and expansion of colonialism including the British and French empires. The newly independent nation, the United States, in this context, could be regarded, in a very real sense, as the world's first post-colonial industrial nation (Cossons, 2012: 11). Ultimately, the United States was to go on to become the world's leading industrial power by the first half of the twentieth century (Smith and Martello, 2010). Due to the reach of these empires, the imperial legacy expanded throughout the world. Even after demands for self-determination from subject peoples within the colonial empires were met with de-colonisation, post-colonialism and colonial heritage persisted.

Table 2.3 The Industrial Heritage Country List of TICCIH

America	Europe		Asia
1. Canada*	1. Austria	13. Italy	1. China*(Manchukuo)
2. USA*	2. Belgium	14. Latvia*	2. India*
3. Argentina	3. Croatia	15. Netherlands	3. Iran*
4. Brazil	4. The Czech Republic*	16. Norway	4. Japan
5. Chile	5. Denmark	17. Poland*	5. Taiwan*
6. Colombia	6. Estonia*	18. Portugal	6. Turkey
7. Mexico	7. Finland	19. Romania*	Oceania
8. Peru	8. France	20. Russia	1. Australia*
9. Uruguay	9. Germany	21. Slovenia	
Africa	10. Greece	22. Spain	
1. Egypt*	11. Hungary*	23. Sweden	
2. Morocco*	12. Ireland*	24. Switzerland	
3. South Africa*		25. United Kingdom	
Total	44		

BOLD = Formerly Colonised Countries

* = Colonial Industrialisation

Source: TICCIH (ticcih.org/about/countries)

According to the statistics of TICCIH and UNESCO, Industrial Heritage is much more concentrated in Europe and colonisation is less mentioned in the field as well.

However, excluding European states, America and Japan, industrial culture and mills in most other regions were undeniably contributed to by colonialism and imperialism.

Post-colonial societies were left to form nation-states, which often struggled with either boundaries or borders that did not necessarily represent the whole nations, cultures or residents, and often lead the identity crises and domestic friction today.

Though the overt colonial era has passed, the former imperial nations, being comparatively hegemonic, well-developed, and culturally powerful states, still wield a

large degree of influence throughout the post-colonial countries (Loomba, 2005; Ashcroft, Griffiths and Tiffin, 2007). Hence, as to the conservation practices and discourses of industrial heritage running in these developing countries, it is able to explore the worldwide trace of industrialisation but to explore the value of cultural heritage through a post-colonial perspective and shape a clear national identity for new generations. Industrial heritage is about more than the machine, it is also about life, survival, and the recounting of workers' stories about resistance to exploitation, in the context of colonial industrialisation in particular. These regionally, nationally, and internationally recognised spaces preserved by government agencies are places to remember, and memorialise (Shackel and Palus, 2006). These industrial heritage sites consist of the remains of industrial culture which are of historical, technological, social, architectural or scientific value as well as the mixed atmospheres of exotic and local (including aboriginal) lifestyles.

2.3.2 The Post-industrial Context of Industrial Heritage

Significantly, there is a Euro-centric phenomenon of industrial heritage at present. Though the industrial archaeological evidence can be dated back to the medieval period or before then, Western Europe, as the origin of the Industrial Revolution, is no doubt preserving and conserving industrial culture earlier than other areas. The arrival of the steam engine added force to romantic visual imagery and, for those with the

imagination, opened up an incredible future. Thereafter, within the industrialisation age, it contributed a large number of first modern industrial buildings, factories, and lifestyles, with its rapid development in Western countries. By the 1970s, the West saw falling levels of capital investment which raised the spectre of outright de-industrialisation as the new technology replaced dated modes of industrial production. With the post-industrial society coming, the authorities started to consider re-use or re-building projects and endowing cultural signs of these industrial mills through heritagisation of industrial sites.

Nostalgia has been a factor in generating audiences for industrial heritage—ways of coping with social change, for instance, have included the role of Spanish industrial heritage in re-shaping place identity (Del Pozo and González, 2012), German industrial museums' engagement with representing the history of labour (Kift, 2011) and the promotion of Japan's Meiji industrial heritage to the public (Hashimoto and Telfer, 2017). As Shurmer-Smith and Hannam (1994, cited in Hannam and Knox, 2010: 141) state:

we can see the influence of a more pervasive heritage industry at work around the world with an increasing number of tourist attractions centred on the social construction of various traditions of one kind or another.

With the dynamics of heritage in a post-industrial world, industrial heritage becomes a rising resource for tourism and its expectation and activity which, being much more about producing an engaging, stimulating and enjoyable commercial encounter, is certainly different from traditional heritage. Also, in recent decades, when ideas of heritage and identity are being seen as both made and malleable in western society (Anderson, 1983; Hobsbawm and Ranger, 1983; Kaplan, 1996), it is important to explore how the industrial past has been mobilised in the re-formulation of identities and the *group memory* of local people. In some cases, industrial sites have been re-used as museums or culture parks/clusters for regional regeneration or urban revival purposes. Meanwhile, abstracted mechanical imagery has become a powerful strand in the arts, and the excitement of what came to be called the Machine Age was forcefully conveyed, sometimes doubling as an apt metaphor for use in political and social comments. Following this contextual discourse, Darley (2003: 36) suggested:

a generation of photographers, filmmakers and artists, including Paul Strand, Charles Sheeler, Eisenstein and Fernand Leger, borrowed their subject matter from the landscape and technology of the manufacturing process and invested it with a new and intense visual presence.

The extended application of the category of heritage to new objects, such as industrial

vestiges or expressions of collective memory, was the most important cultural phenomenon of the last three decades of the twentieth century. It can be seen as one expression of the rise of a contemporary regime of historicity (Koselleck, 2005; Hartog, 2005, 2016) that was characterised by heritage, which replaced memory as a mode of viewing the past that stood in contrast to history. Cross-generational industrialisation had a substantial impact on ongoing cultural changes; in consequence, industrial culture as presented by the development of contemporary aesthetics, economic regeneration, labour narratives, architecture, technology and science, is not only the group memory of local communities but a re-imagination of place by and for visitors.

However, in developed countries, first-generation industrial heritage sites need to move forward and re-activate to face competition from mass media, tourist attractions, other cultural/creative institutions and rising numbers of heritage places. Additionally, as Stearns states, “the impact of the West’s Industrial Revolution extended well beyond work and leisure, family life, and basic forms of labour protest” (2012: 87). These social alterations forced the culture to change as well. Many artists and writers turned against the ugliness of the industrial setting; romantic painters in the early nineteenth century concentrated on idyllic scenes of nature in part to contrast with the blight of factory cities.

2.3.3 Colonial Industrialisation: Modernity and Postcoloniality

After the Industrial Revolution, by the 1850s a major transition was taking place as newly created public institutions began to take over from private individuals in collecting and displaying the past. Colonial expansion was still in progress during the 1850s and would continue until 1939 and beyond. Various countries, principally Britain, France, Germany, the Netherlands, Belgium, Russia, the USA and Japan, were involved in an unprecedented period of expansion that saw a large proportion of the world come under their administration and control. To give examples of these colonising nations, Britain had colonised Canada, controlled India, formally taken over the Cape Colony at the tip of South Africa and declared Australia to be a colony, followed by joining other European nations in competing to acquire more African territory from the 1880s. Also, France retained some Caribbean islands, and acquired territories in Southeast Asia, the Indian Ocean and Oceania. France was highly competitive with Britain in Africa, occupying North African territory from 1830 and extending down to West and Central Africa by 1900. At the height of its power in Asia, by 1942 the Empire of Japan had also introduced its industrialisation model to its territories—nearly the whole of East Asia, including Taiwan, Korea, Northeast China and Inner Mongolia, and all the regions of Southeast Asia (Osterhammel, 2014: 399-402).

Industrialisation accompanied colonialism and imperialism, a link explicitly drawn out by Jürgen Osterhammel: “The widening economic disparity between countries went hand in hand with the gap in military technology. A country like the Netherlands, for example, lacking an industrial base of its own, could no longer claim the international supremacy it had once enjoyed as a great power” (2014: 395). The developing modernisation of the West was propagated in Asia, Africa and elsewhere in the world through the global trade market and the expansion of colonialism. Within the international context, several regional reactions to the Industrial Revolution took shape. There was a heightened exploitation of non-industrial areas by the hegemonic industrial economies. Simultaneously, interest in expanding imperialism increased because of a desire to monopolise potential markets in Africa and Asia (mainly the post-colonial countries), and to insulate these markets against growing international competition. Europe’s age of empire is also an example of one part of the world developing better technologies and organisation than most of the rest of it. Africa was drawn into the process of supplying food and raw materials to slake the need of industrial Europe. Japan began exploiting raw materials areas in Southeast Asia. Europe, but particularly the United States, increased the use of Latin America as a source of cheap supplies. As well as this, several societies within the British Commonwealth developed extensive industry, including India, Canada, Australia and

New Zealand. Thus, along with the growing international impact of the Industrial Revolution, different regional responses generated an increasing complexity in the world's economy and geopolitics. In Asia, Taiwan is also one example of a country that experienced a changing relationship with its neighbours, particularly China and Japan, in which the various situations always reflected Taiwan's industrial heritage agenda.

The process of colonialism can be seen to have created not only the political and economic boundaries of the modern world but also its cultural and national characteristics. It is, as Edward Said (1978) claims, a form of power which gives authority to the possessor of knowledge. Accordingly, the global export of Western intellectual hierarchies through the processes of colonialism largely explains the success of western values about what objects of heritage could be and who would take responsibility for understanding them (West and Ansell, 2010: 32). Although such ideas are still being debated by historians, it is possible to argue that the process of colonialism essentially created the modern world as we know it as well as modern ideas of nationalism and culture that underlie the entire mission of contemporary cultural heritage management. Dirks (1992) observed that colonialism encouraged and facilitated new claims of this kind, re-creating colonist countries and their colonies through its histories of conquest and rule. Colonialism could be characterised as an

intermediator between tradition and modernity. Post-colonialism, defines the heritage of imperialism tending to intervene in the structure by being a part of it and “to change something that . . . [being] is obliged to inhabit” by tampering with “the authority of Europe’s story-lines . . . reversing, displacing and seizing the apparatus of value coding” (Spivak 1990: 228). Also, AlSayyad (2001) discussed the fact that tradition relates to the cultural continuity of generations and heritage is intermediary to the continuance of meaning, tradition, and values. The purpose of post-colonial discourse is understood as aiming to rival and displace Eurocentric discourses; in other words, the goal of the post-colonial undertaking is “to intervene in and interrupt the Western discourses on modernity” (Bhabha 1994: 241). Hence, in a post-colonial country, the past requires not only a sense of ownership but a sense of permission associated with its consumption, creation and propagation internationally as it relates to national identity in the modern world.

The above discussions might improve the understanding of the place of industrial heritage in post-colonial societies and the dynamics and demands of its conservation.

The nation as a subject, and the concepts of nationalism, anti-colonialism, identity, modernisation and de-colonisation that provided the frame for national narratives, are all constructs that are being contested and rethought. Viewing industrial heritage from a post-colonial perspective provides a new approach to the study of power, collective

identity, culture, and modes of representation, and has opened an entire field of heritage studies. As Smith (2006: 17) stated:

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

In one sense at least, post-colonial nations seek to destroy, cover or re-interpret the artificial tradition imposed by the closure historical narratives create in 'ending' colonialism after World War II and beginning a new era of nation-states. Employing the post-colonial lens in industrial heritage might be useful for understanding continuities and causal relationships between the forces acting during the colonial era and the social, political, and cultural experience of post-colonial nations.

2.3.4 Heritage-making Beyond the Post-colonial and Industrial Past

In order to re-explore and represent the shifting values of the world's industrial legacy, the context of industrial heritage has to be examined not only as a regional concept but as an individual theme and within its global context. Industrial heritage, as a newly built universal agenda, is facing the challenge of including developing countries but also exploring their individual characteristics and perspectives.

Colonialism and post-colonialism should be seen not only as issues relating to post-colonial countries but also as issues that have influenced the nature of industrial heritage and its politics globally. All of us—as individuals, as nations, as ethnic and other entities—adapt the past to our presumed advantage. Such acts, Lowenthal (2005: 87) insists, “undeniably deform history for (industrial) heritage aims; and heritage is further corrupted by being popularised, commoditized, and politicized”.

Unlike the West, most developing nations dropped into the global agenda of industrial heritage to tackle the practice and management issues with less sufficient exploration of their own particular context of industrial culture and characteristics. These rising countries are undergoing unprecedented growth and colonial cities such as Taiwan, Hong Kong and Singapore are in danger of losing their heritage in the rush towards modernisation and urbanisation. The process is also apparent in other South Asian capitals, like Kuala Lumpur and Jakarta, countries on the road to nationhood and a fully developed status, where the experience of colonisation and dealing with its legacy comes into play. In addition, Bossen (2000) reported that governments of independent nations have used touristic representations to foster nationalism. Scholars (Johnson, 1995; Palmer, 1999; Light, 2001; Pretes, 2003) have mentioned that the promotion of heritage sites, including industrial heritage sites, is important in the construction of national identity as the viewing of heritage sites by domestic tourists

offers glances at a nation's past. And there are some cases of colonial industrial sites that have refocused on tourism: Potosí (Bolivia), Kimberley (South Africa), Dawson (Canada), and Ballarat (Australia). While visiting these heritage sites, people of those nations understand who they are and where they have come from (Palmer, 1999: 315).

Some industrial heritage sites built by colonists during the late nineteenth and the early twentieth century are renewed or revitalised by being tourist attractions or entertainment or shopping centres. Tourism is not just an aggregate of merely commercial activities; it is also an ideological framing of history, nature and tradition, a framing that has the power to reshape culture and nature to its own needs (MacCannell, 1992; Desmond, 1999). Colonial industrial heritage, which used to be a place to make products, is currently a space for producing a certain narrative or ideology, and its colonial legacy is manifested in many of the structures and practices of tourism as well (Aitchison, MacLeod and Shaw, 2000). Using Foucault's (1979) concepts of power and power relations, as well as the problem of space and place in relation to sociocultural constructs, post-colonial research as a constituent part of the cultural turn shows an appreciation of the complex nature of spatiality. In (industrial) heritage tourism, the cultural turn has effectively demonstrated that tourism and spaces, places, and landscapes act as sites of social inclusion/exclusion whose status is always in constant transition (Davis, 2001; Urry, 1995). King (2003) emphasises the

need to pay attention to the material properties of space as these convey the makings of both colonialism and post-colonialism. As soon as industrial landscapes are constructed, they become contested, disrupted, and transformed (Aitchison, MacLeod and Shaw, 2000: 19). Continuous, dialectical struggles of power and resistance among and between industrial heritage providers, users and mediators transform these spaces, and in turn affect their creators and users.

The debate surrounding the role of tourism in the renegotiation and dissemination of history has gained much importance recently due to the increased realisation that contested identities account for the world's most important national and international conflicts. Although several scholars (Hewison, 1987 and Walsh, 1990) have undermined the importance of heritage tourism and argued that heritage is a kind of bogus history, others (Ashworth, 1994; Johnson, 1995; O'Connor, 1993; Palmer, 1999; Peleggi, 1996; Pretes, 2003) have argued that heritage tourism may be important in creating national identity. Industrial heritage in post-colonial states is also culturally related and comparative; it can be represented for different purposes in various ways and reflect official socio-political ideologies. Accordingly, as Lowenthal (2005: 165) has claimed:

looking at tourism industry representations is also important because heritage

fabricated by the media often seems more real because it is more familiar than the original.

2.4 A Post-modern Context: Tourism, Commercialisation,

Nationalism

The modern period witnessed the replacement of traditional forms of memory by ‘sites of memory’ (Nora, 1989; Atkinson, 2008), that is, specific places where both formal and popular memories are produced, negotiated and take root. Partly following on from these concerns and processes—when memory attaches itself to places—a number of scholars (Lowenthal, 1998 and Graham, 2002, cited in Atkinson, 2005: 141) have been attempting to understand how heritage, seen not as a single story, but as plural versions of the past socially constructed in the present, and heritage sites, are increasingly mobilised as important cultural, political and economic resources in our contemporary world. Landof (2010) concludes Storm’s argument in *Hope and Rust: Reinterpreting the Industrial Place in the Late 20th Century*:

the significance of industrial heritage, until relatively recently, has presented a unique problem for those who recognise the role that industrial culture has played, and continues to play, in the shaping of national and regional identities ... The currency of the industrial past in post-industrial societies, the

relative ordinariness, complexity and wealth of evidence still in existence, and the lack of a strong theoretically supported research agenda have all challenged a universal recognition of industrial heritage.

No longer needing to justify its brutish appearance and coarse demeanour, industrial heritage has turned from an ugly duckling into a fashionable, if rather ungainly, swan. Former docklands, rail yards and textile mills now underpin strategies for urban renewal while the legacy of mining and industry is playing a vital role, consciously or unconsciously, in defining local and national identities. While accepting that there are eco-political agendas attached to the re-use of industrial heritage sites, criticism and debate have moved to consider the thorny question of whose culture is being represented and why.

The historical relations of power and domination between coloniser and colonised produced, and were produced by, a perception of the colonial subject as other to the West or the colonist power (Said, 1978; Harrison and Hughes, 2010). Within a heritage framework, consideration of industrial heritage in conjunction with the institutions of settler and post-colonial nations, has ensured that this official discourse about what heritage is and can be used for is now effectively global (West, 2010: 2).

Benton (2010: 2) claims:

at issue is not only which cultural traditions and their associated artefacts and places should be conserved, but which version of the past should be commemorated—a matter of particular potency in post-colonial societies in which the legacy of colonial government and struggles for independence continue to have an effect on subsequent generations.

International tourism is frequently accused of being a vehicle for neo-colonisation, using capitalism, globalisation and cultural imperialism to influence developing countries through the perpetuation of inequalities and inequities (Britton, 1982; Morgan and Pritchard, 1998; Mowforth and Hunt, 1998). The tourism industry is criticised for its treatment of heritage as a marketable product, resulting in commodification and excessive commercialisation (Hewison, 1987). The work of scholars (Erisman, 1983; English, 1986; Crick, 1988) supports these conclusions about the links between tourism, power, dominance and authority. Such theories frequently make reference to the arguments of Said (1978) who has written more generally of Orientalism as an intellectual tradition based on assumptions of European-Atlantic superiority, symbolising the power and domination of the West over the Orient. Heritage tourism is not, therefore, concerned only with preserving the remains of the past for visitor enjoyment, but also with contemporary struggles for

power and the concept of nationhood.

Both dissonance and convergence occur when different heritage discourses meet and become entangled. Some studies have extended this agenda by exposing, undermining and complicating simplistic readings of places and their pasts (Atkinson, 2005), connecting these to wider transnational spatial processes, and questioning significant geographical categories of belonging and difference. Heritage sites act as nodes where ‘dissonant heritages’ of different social groups collide, and the possibilities of a more inclusive and plural heritage are explored in multicultural societies (Tunbridge and Ashworth, 1996; Graham, Ashworth and Tunbridge, 2000). Colonial societies thus have a potentially ‘dissonant heritage’ (Tunbridge and Ashworth, 1996), but dealing with this means addressing the question, ‘Whose heritage?’ which “clouds the conservation and marketing of urban heritage in all formerly colonial societies seeking to exploit the tourism markets of their former masters” (Ashworth and Tunbridge, 1990: 55). Part of this dissonance occurs because heritage requires narration to residents as well as tourists. Hence, heritage has also become an economic, social and political tool. For example, heritage conservation in post-colonial Hong Kong has been used as an implement by relatively powerless residents and NGO members to fight against powerful private property owners and the government, and by the relatively poor to fight against the rich (Lu, 2009).

However, the increasingly popular technique of adapting buildings for contemporary usage has generated some confusion about the meanings of conservation and the outcome of implementation. It is important to distinguish between terms and activities such as preservation, restoration, reconstruction, and adaptive reuse or rehabilitation, in order to maintain the integrity of a site and avoid misunderstandings about authenticity that can devalue the visitor experience. At the same time, economic imperatives have to be acknowledged and efforts made to render these compatible with conservation interests; this is a major challenge facing all those involved in heritage tourism. In some cases, industrial heritage is controlled by an official government and represents a national authority, while other sites continue to function as manufacturing plants or are now museums, or have developed new commercial potential. They may remain rooted in the past and retain a quality of exclusivity, but this is dictated by affordability rather than power relations within a colonial society, and public areas are open to all. Together, the industrial buildings are seen as repositories of the country's heritage in the national history. Thus, colonial heritage has been claimed by the government and the resident population and is being employed by them to define and assert national identity, to attract tourists, and for pragmatic reasons of practical necessity.

Based on Palmer's (1999) heritage discussion, the value of industrial heritage in helping all communities and their members to comprehend and appreciate how they arrived at their current situation and perhaps assist them in coping with future trials is a persuasive argument in favour of its conservation. Harrison and Hughes (2010: 239) point out that "the indigenous challenge to colonialism and to the methods of cultural heritage management in colonial countries has been influential in drawing attention to the politics of ownership and control of the past, as well as to the state's use of heritage to establish various legal fictions which allow for the ongoing moral occupation of settler colonies". One might assume that after colonialism the natural reaction would be to establish more inclusive forms of heritage that reflect the complex ethnic and cultural mix of post-colonial states. However, the opposite has often been the case—for example, in countries such as Indonesia (Kusno, 2000), Singapore (Henderson, 2001), India (Bandyopadhyay, 2008) and Zimbabwe (Marschall, 2008), where the need to establish a national identity as a post-colony has led to the suppression of complex, alternative or competing histories and heritage.

2.5 Conclusion

Industrial heritage serves many purposes and is a form of social, economic and political capital, which can be expanded in various ways by assorted parties. It has a role in defining and symbolising a people's identity, which can be felt and understood

at a group and a national level. Lowenthal (1998: xv) proposes that “heritage clarifies pasts so as to infuse them with present purposes”, while McDowell (2008: 43) observes that “heritage is a highly politicised process that is subject to contestation and bound up in the construction, reconstruction and deconstruction of memory and identity”. An important role of advocates of heritage is to reconceptualise certain artefacts, buildings and landscapes as treasures worth saving, often for the benefit of the nation. Deckha (2004) argued that conservation produces rather than reflects heritage and, as Laurajane Smith (2006: 3) asserted, “heritage is heritage because it is subjected to the management and preservation / conservation process, not because it simply *is*”. The process of industrial heritage does not just ‘find’ sites and places to manage and protect. It is itself a constitutive cultural process that identifies those things and places that can be given meaning and value as heritage, reflecting contemporary cultural and social values, debates and aspirations.

During the twentieth century, the notion of industrial heritage as a source of national identity was so successfully institutionalised in numerous legislative acts and organisations that public participation in heritage became dependent on the presence of very complex skills. Political elites, in fact, saw colonial heritage as an obstacle to national development; the emerging nation had to be given a past that was singular, rich and sovereign, and in keeping with the political project of the modern nation-state.

The knowledge and institutions produced as a result of (post-) colonial heritage legislation encoded particular ideologies regarding the aesthetic valuing of natural landscapes and the placement of different indigenous people in the nature-culture continuum. This form of social engineering also shows that ‘legacies’ can be drawn from different pasts and, conversely, can in their turn become ‘pasts’.

The idea of heritage has been widely seen to have its roots in eighteenth-century Europe and is associated with the concepts of modernity and the territorial nation-state. Such national politics require national heritages for numerous reasons, including claiming legitimacy through fostering a shared national identity and culture among the populace through identification with a shared history and landscape (Lowenthal, 1995; Graham, Ashworth and Tunbridge, 2000). Heritage has, therefore, long been a concern of national governments, not least through the introduction of legislation designated to protect, conserve and interpret ancient and historical monuments, ‘natural’ heritage landscapes, portable antiquities and artworks, and more recently, intangible heritage ‘for the nation’. Despite its significant role in the politics of nation-building, a robust scholarly work with the idea of heritage in a colonial context is still necessary. It is appropriate, therefore, that we begin by considering how, in the Western imperial context, ideologies relating to national heritage—both cultural and natural—were not just extended but developed in a colonial context, and how

they have been subsequently redefined and reconstituted in the post-colonial era. Damodaran (2013: 2) noted, “From a nineteenth-century romantic antiquarianism drawn to the ruins of a lost civilisation, we can see the growth in the status of scientific disciplines of archaeology and palaeontology and natural history in the colonies, and an equivalent diffusion of heritage legislation”.

A colonial heritage could distort institutions as a result of a coloniser choosing a colonisation strategy contingent upon whether or not a settlement by members of the colonisers home country is possible (Price, 2003). In recent decades there has been a growing unease in Asia about the applicability of philosophies and practices of cultural conservation imported from the west, concerns notably enshrined in the *Nara Document on Authenticity* (ICOMOS, 1994). The particular qualities of colonial heritage have been explored in places as diverse as London and Australia, South Africa, Singapore and other Asian centres, and Delhi (Jacobs, 1996; Tunbridge, 1984; Yeoh, 1996; Shaw and Jones, 1997; King, 1976). Such locations have to deal with the legacy of the colonial past and how to present it, responses ranging from degrees of acceptance to marginalisation and outright rejection, with the possibility of the destruction of the built environment (Western, 1985; AlSayyad, 2001; Logan, 2002). Buildings (here lacks an industrial heritage case study) that remain no longer embody the authority and superiority of the colonial power and tangible heritage must be

redefined to have a contemporary value and function (Southall, 1971; UNESCO, 1999). Understanding and managing the colonial experience is a critical task for many independent countries and one that confronts former imperial powers. However, especially in the former Japanese colonies in Asia, the legacy of colonialism and the formative years of international conservation policy after the Second World War are rarely discussed in contemporary institutionalised approaches to heritage studies. More specifically, industrial heritage, as an emergent discourse of difference, has sought legitimacy through claims that Asia is materially, culturally and historically different to the West. In broad terms, it is a discourse that asserts that there are different historical and philosophical perspectives towards authenticity, spirituality and historical significance, and that recognition should be given to culturally specific ways of reading or valuing landscape.

Chapter 3 Japanese Industries, Taiwanese Industrial

Heritage

3.1 Introduction

Generally, the term industrial heritage refers to those heritage sites built after the Industrial Revolution in the eighteenth century (Alfrey and Putham, 1992; Palmer et al., 2012). Taiwan's pre-industrial manufacturing activities can be traced back to the seventeenth century. After Japan annexed the island in 1895, Taiwan was colonised by the Japanese. The colonial government soon turned its attention to industry and initiated many types of industry. Taiwan became modernised and industrialised during the Japanese period. At the same time, it changed the society of Taiwan in many aspects. Every industrial heritage site provides evidence of Taiwan's history; thus, the spirit of industrial heritage in Taiwan should be brought to the forefront so that it can play an important role in society.

The Empire of Japan gained control of Taiwan in 1895 after of its victory in the Sino-Japanese War. After several years of suppressing both anti-Japanese resistance and local banditry, the Japanese began to modernise the island. Transportation facilities, such as modern railways, roads, bridges and harbours were constructed, which facilitated the development of various types of modern industry. Progress in

sugar, salt, wine, and forestry (including camphor) industries was significant. After 1935, the Japanese colonial government in Taiwan began encouraging investment in the non-agricultural industry on the island. Most of the industries were monopolised by the Japanese colonists, and Taiwanese society changed gradually from one dominated by the agricultural economy to one dominated by industrial production. Sugar, together with rice, tea, and camphor, were the four main products produced during the Japanese period. Through the development of modern Taiwan, various industries, such as sugar, salt, tobacco, wine, forestry and mining, played a crucial role in transforming the island's economic structure. All of them were supported by transportation, power, and water-supply facilities.

After the end of the war in 1945, the Chinese Nationalist government took control of Taiwan. The whole industrial framework of Japanese Taiwan Governor-General was then controlled by the state-owned business agency: Taiwan Provincial Monopoly Bureau. In the 1950s, Taiwan was dependent on US Aid. The Nationalist government implemented a land reform programme that increased equality among the farming population and strengthened its control towards the countryside. High-speed economic growth accompanied by quick industrialisation began in the late 1950s. Taiwan became known for its cheap manufactured exports produced by its small and medium-sized businesses. Bicycle-making, shoe-making, shipbuilding, and textiles

became crucial industries in Taiwan. However, the success of these industries depended on cheap labour, and the use of the land and resources was not sustainable. Beginning in the 1980s, there were rapid changes: urban expansion, population growth, changes in industrial structure, technological innovations, and changing methods of production. Consequently, the closing and demolition of several types of industry in urban and suburban areas became a common phenomenon.

Taiwan's former commodities industries (such as sugar, wine, tobacco, and forestry) and heavy industries (such as metallurgy, mining and collieries) were forced out of production due to changes in business models, or as a result of globalisation, and now these industries lie idle. This industrial heritage is very different from the generally understood traditional cultural heritage and monuments. In Taiwan, how to reuse old industrial buildings as hubs for developing cultural and creative industries is currently a major concern for government, academics and local organisations. Among various industries that used to play crucial roles in Taiwan, sugar, wine, forestry, and heavy industries established in the Japanese colonial period are of great importance and deserve more discussion when we consider the current development of industrial heritage in Taiwan. This chapter gives a brief historical background of Taiwan and her former colonists, as well as summarising the island's industrial cultural heritage preservation within the context of cultural policy development.

3.2 The Historical Context of Taiwan

The island of Taiwan was mainly inhabited by Taiwanese aborigines until the Western colonists' and the Han-Chinese immigrants' arrival in the seventeenth century. From that time onwards, the country, including its surrounding islands, has been widely involved in global networks; it has been a source of international contention for as long as it has had a recorded history (Table 3.1). In 1662, the Ming Dynasty loyalist Koxinga (Zheng Chenggong) expelled the Dutch and established the first Han-Chinese polity to rule the island, the Kingdom of Tungning. The Qing Dynasty later conquered Taiwan in 1683. When Taiwan was ceded to Japan in 1895, the majority of Taiwan's inhabitants were already Han-Chinese either by ancestry or by assimilation. At the end of World War II in 1945, Japan surrendered Taiwan to the Republic of China's (ROC) military forces on behalf of the Allies. Subsequently, following the Chinese Civil War, the Communist Party of China took full control of mainland China and founded the People's Republic of China (PRC) in 1949. The ROC relocated its government to Taiwan and reserved the limited jurisdiction of Taiwan and its surrounding islands.

Table 3.1 Regimes in Taiwan

Regime	Years	Events
Kingdom of Middag (Central western plains of Taiwan)	?–1732	1732 Conquered by Qing
Dutch (Northeast of Taiwan)	1624–1662	1662 Expelled by Zheng
Spanish (Southwest of Taiwan)	1626–1642	1642 Expelled by Dutch
Kingdom of Tungning (Zheng)	1662–1683	1683 Defeated by Qing
Qing	1683–1895	1895 First Sino-Japanese War, defeated and ceded Taiwan.
(Republic of Formosa)	(1895.5–1895.10)	Collapsed after Japan’s invasion
Empire of Japan	1895–1945	1945 End of the Second Sino-Japanese War, returned Taiwan.
The Republic of China, ROC (Nationalist)	1945–1996	1946–1950 Second Chinese Civil War (Martial Law, 1949–1987)
The Republic of China, ROC (Full electoral democracy)	1996–present	KMT, 1996–2000, 2008–present; DPP, 2000–2008

Source: by the author.

There are various names for the island of Taiwan in Chinese history, recorded since the third century (Chen, 1978; Fan, 1978), derived from explorers or rulers from each particular period. However, in modern history, the name Formosa dates from the 1540s, when Portuguese sailors passing Taiwan in 1544 first jotted in the ship’s log the name ‘Ilha Formosa’, which means ‘Beautiful Island’ (Borao, 2007). In the early seventeenth century, the Dutch East India Company established a commercial base at Fort Zeelandia (now Anping, Tainan) on a coastal islet—called ‘Tayouan’ by the native inhabitants (Siraya) (Oosterhoff, 1985); when the Qing formally designated the Taiwan Prefecture (now Tainan) as a part of Fujian Province in 1684, the name was extended to the whole island. Modern Taiwan is a multicultural country and is still on

her way to shaping her unique national / cultural identity (See Figure 3.1). Since at least the eleventh century, the Penghu islands have been listed as part of Taiwan's territories; they are listed as such in the 1225 book, *Description of the Foreign Lands* (Song Dynasty, AD 907–1276). Penghu, the closest archipelago to the western coast of Taiwan, was the first place Han-Chinese from southern mainland China began to establish fishing communities; hereafter, representatives were intermittently stationed there by the Southern Song, Yuan and Ming governments. As for Taiwan Island, Chen Di (1540–1617) gave his eyewitness account of Taiwan in the earliest extant literature, *Records of the Eastern Savages*, in 1603 (Teng, 2004). Before the series of colonial battles among the Dutch (1624–1662), the Spanish (1626–1642), a pro-Ming Dynasty state, the Kingdom of Tungning (1662–1683) and the Qing Dynasty (1683–1895), Taiwanese aborigines had lived on the island for centuries. Due to major Han-Chinese immigration, beginning in the seventeenth century, the population with mixed Han-aboriginal heritage had the border to Han shift around them in the short span between 1650 and 1685 (Brown, 2004). Despite the loss of territories caused by increased population and military pressure stemming from Han-Chinese immigration, both the Plains and Mountain aboriginal tribes still strive to perpetuate their own customs and rituals today. Moreover, since the mid-1990s, there are increasing numbers of new immigrants from Southeast Asia (mostly from Thailand, Vietnam,

Indonesia and Philippines) arriving through marriage in Taiwan. The amount of new immigrants to Taiwan has stood at the same proportion of the population with Taiwanese aborigines (MOI, 2017; CIP, 2017, see Figure 3.2).

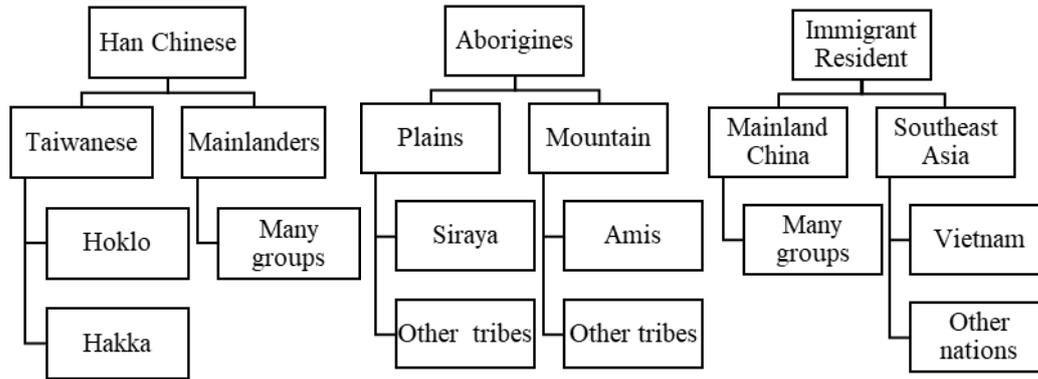


Figure 3.1 Relation of Ethnic Groups in Taiwan

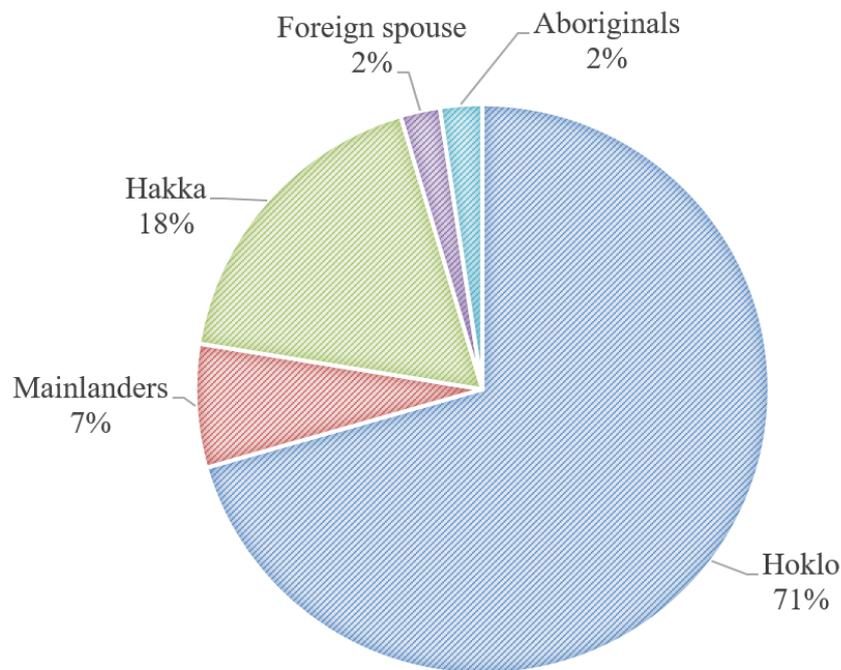


Figure 3.2 Proportion of Ethnic Groups in Taiwan

(Total Population in 2017 is 23,556,169)

3.2.1 Two Colonists and Two Kingdoms in the 1600s' Formosa

In 1624, threatened by the army of the Ming Dynasty, the Dutch East India Company withdrew from the Penghu Islands after about two years of occupancy. In 1624, the Dutch seized Tayouan (now Tainan). Not long after this, the Spanish dispatched part of their armada from Taiwan's east coast to the north, occupying Quelang (now Keelung) in 1626. By 1642 the increasingly strong Dutch presence led a military force to defeat the Spanish garrison at Quelang, nominally making the Dutch into the single ruling power in Taiwan until 1662. To compare the two European colonial powers, the Dutch overcame problems such as the shifting political allegiances of the indigenous people and the sovereignty disputes of Japanese immigrants, presenting an example of a colonial rule that began in hardship and later became relatively successful, while the Spanish faced problems in the Philippines regarding alternating political regimes, as well as conflict between church and state. Coupled with their unsuccessful Taiwanese colonial administration, Spanish rule became, in contrast to the Dutch, a model of initial success followed by failure (Andrade, 2005).

Initially, the native inhabitants did not use writing, the Dutch missionaries created a Romanisation writing schemes—*Sinkang Manuscripts* for the Formosan in the 1640s (Academia Sinica, 2006). Experiments were also made with teaching native children the Dutch language (Everts, 2000). This is the first historical record of a written

language in Taiwan (Li, 2008a). The Taiwanese aboriginal habit of smoking tobacco was also first noted in the colonial literature of this period (Blussé, Opstall and Ts'ao, 2002). Today, their legacy in Taiwan is visible in Tainan City where the remains of the Dutch castle and fort stand. And the fort which the Dutch rebuilt at Tamsui still stands as a preserved heritage. The Dutch and Spanish remains help us to understand the development of Taiwan in the seventeenth century. The economic policy driven and the port system facilitated by the Dutch in Formosa was subsequently seen as the basis of the launch of Taiwan's mercantile history and international trade economy (Chiu, 2008).

Meanwhile, there was once a purely aboriginal-led regime in Taiwan. The Kingdom of Middag, established by the Taiwanese Plains aborigines in the seventeenth century, was a supra-tribal alliance located in the central western plains of Taiwan in the seventeenth century. Quataong, known in the Dutch colonial documentation as 'Keizer van Middag' (Emperor of the Daylight), was the leader of multiple villages, and his authority extended over 27 tribes (Weng, 2002). In 1645, the Dutch subdued Quataong and acknowledged his role as a local leader. From 1661, under great pressure from the Zheng clan, the power of Quataong's leadership gradually weakened. Having survived during the period of both European colonists and the Kingdom of Tungning, the aboriginal tribes that had previously comprised Middag

were eventually subjugated by the Qing in the eighteenth century.

In 1662, after nine months of siege from the army of Zheng (Koxinga), the Dutch surrendered, ending their thirty-eight-year rule of Taiwan. The Kingdom of Tungning was a government that ruled part of south-western Taiwan between 1661 and 1683. It was founded as a pro-Ming Dynasty state by Zheng after the Ming government in China was overthrown by the Qing Dynasty. Replacing the Dutch system of government previously used in Taiwan, Koxinga instituted the administration as the first Han-Chinese governance in Taiwan (Clements, 2004; Lin and Keating, 2008). When the Qing's army landed in Taiwan in 1683, Taiwan was incorporated into the Qing, ending two decades of Zheng family rule. The period of Zheng's rule stands as the first period of organised Han-Chinese immigration; immigrants included many previous Ming government officials, and this marked the formal beginning of Confucian and Chinese language education in Taiwan. Han-Chinese The Confucius Temple at Tainan today was built in 1666 by introducing the worship of Confucius and the Confucian education system. Zheng's government also extended the cultivation of sugarcane and the production of salt for trade with other Europeans, such as the British. However, trade with the Europeans was for the most part limited (Wills, 2006).

3.2.2 Taiwan During the Qing Dynasty

In 1685, two years after conquering Taiwan, Qing officially annexed the island into its territory under the control of Fujian province (there was an argument to waive this new domain by considering Taiwan a remote and barren land). Along with the gradual predominance of Han-Chinese immigrants, the Qing government reshuffled Taiwan's administrative divisions constantly, but did not yet take the island into serious account.

After the Japanese invasion of Taiwan in 1874, the Qing recognised the importance of Taiwan and changed its passive strategy of governance to an aggressive administration, and ultimately made Taiwan a separate province in 1885. The Europeans were also interested in Taiwan and its trade potential as an East Asian base.

In 1840 Keelung was invaded by the British during the First Opium War, and after the Second Opium War (1856–1860), The Qing was forced to open up four trade ports in Taiwan, Danshui, Anping, Keelung and Kaohsiung, for international trading. Due to the abundance of camphor, sugar, tea and coal in Taiwan, foreign merchants established foreign trading companies and reintroduced a global trading system (Lin, 2000; Huang, 2003). Great changes were made to Taiwan's industrial makeup. As the major exchange of tea, camphor and coal mines were in the north, Taipei became the rising economic hub. When the Qing imperial commissioner office temporarily resided in Taipei at 1885, Taiwanese political-economic centre has moved towards the

north.

From 1875, facing increasing foreign aggression, the Qing altered its policy to promote modern infrastructure for guarding Taiwan's borders against foreign encroachment. After the French invaded Penghu, Danshui and Keelung during the Sino-French War in 1884, the Qing government formally established Taiwan Province in 1885. From this point, Taiwan made a certain degree of progress in commerce, transportation and mining (sulphur, coal, gold, salt and oil) in the final decade of Qing rule. The Taiwan Province office promoted a series of Western-style architectural developments, such as Taipei Locomotive Repair Factory (1885), the laying of submarine cables between Taiwan and Fujian (1886), a modern postal service (1888), a Western school (1890) the Headquarters of Taiwan's Telegraphy (1892), the Taipei-Hsinchu railway (1893), as well as iron bridges, modern Western-style forts, and westernised mining techniques (Yeh, 2006). However, soon after these reforms, the First Sino-Japanese War broke out, and Taiwan was ceded to Japan by the Treaty of Shimonoseki in 1895 (Paine, 2003). In an attempt to prevent Japanese rule, the Taiwanese elite declared themselves a republic, expecting that the Western nations would not allow a sovereign state to be invaded by Japan, and thereby allying themselves with the Qing. The independent democratic 'Republic of Formosa' was established on 23rd May 1895 and mustered the former Qing troops

and Taiwanese militias to fight against the Japanese (Chang, 2003). Nonetheless, the Republic of Formosa survived for only five months with no strong support from the Qing or the international community. On 23 October 1895, the Japanese army entered Tainan City and ended this organised resistance at the Battle of Yiwei (Xie, 2001; Chen, 2006), inaugurating five decades of Japanese rule in Taiwan.

The Qing court defeated the Zheng regime in 1683, then annexed Taiwan into its realm in 1684 and ruled it for 212 years, until ceding it to the Japanese in 1895. This was the first time Taiwan had been united with the mainland, and also the time of greatest development in Taiwan. Politically, the fixed Chinese regime allowed the development of a patriotic ideology. Economically, Taiwan developed rapidly, forming a reciprocal economic system with the mainland. Socially, there was a large influx of Han-Chinese immigrants, who took over the most fertile parts of the plains, superseding the aboriginal people as the dominant ethnic group and reinforcing the establishment of Han society there. Culturally, Confucian thought and cultural and educational systems were established. Comprehensively, during the Qing Dynasty, Taiwan made a certain amount of progress in farming, trade, mining and transport. Before the next stage of Taiwan's history—the Japanese colonial period—in order to understand the industrial heritage context in Taiwan, the following section will focus on the development of the heritage system in Taiwan to realise the framework of

‘authorised heritage discourse’ in Taiwan, and continue to review colonised Taiwan and its industrialisation from a colonial industrial heritage perspective.

3.3 The Construction of the Heritage System in Taiwan

The heritage system in a nation directly reflects its development of cultural policy structures which significantly affect cultural affairs and citizens’ opinions towards the arts (Mulcany, 1998). McGuigan (2001) considers there to be three main streams of cultural policy discourse, which are: state discourse, civil discourse, and market discourse. At the beginning of the twentieth century, the Western democracies adopted positive measures to advocate cultural affairs among their people or by national intervention for the purpose of advancing national integration and the practice of political rights (Gripsrud, 2000). Later, there was an increasing number of national authorities for culture and communication. After the Second World War, through to the 1970s, a framework of the national cultural policy was gradually constructed by the national centralisation as a state discourse. At the same time, global heritage preservation issues were also frequently discussed. In the 1980s, due to the rise of Neoliberalism, the government would not use public subsidies to support cultural affairs, and the economic concern was then promoted by the relevant sectors as part of cultural policy discourse (Gilmour, 2007; Throsby, 2010).

The concept of heritage preservation in Taiwan was first promoted by the Japanese during the colonial period. After 1945, the Nationalist government used the *Antiquities Preservation Act*, which legislated in 1931 to regulate heritage issues. Until the 1970s, Taiwan had a better and more stable situation than before in its society, its economy and its politics, and began to build cultural infrastructure, especially the Council for Cultural Affairs (CCA) and the *Cultural Heritage Preservation Act* in the 1980s, which demonstrated an awareness of the importance of culture to the identity of Taiwan. Later, in the 1990s, the CCA introduced ‘Community Development’ from Japan, which led to a localised model of cultural popularisation, highlighting local culture and history. After 2000, because of the trend towards ‘New Public Management’ and ‘Creative Industries’ around the world, heritage was linked with tourism and included in the cultural and creative industries field. Meanwhile, the connection and exchange with international heritage organisations also provoked the domestic debate to rethink and improve the current heritage system in Taiwan.

3.3.1 Concept of Culture Heritage in the Early Stages

The earliest literature of cultural heritage in Taiwan as known by far appears in the early local chronicles of the Qing Dynasty, Jiang Yu-Ying’s *Taiwan Prefecture Gazetteer* (1685), with 13 historical sites and the subsequent general records of

counties in Taiwan listed. The Qing authorities did not implement any preservation tasks; they had no awareness of the meaning of heritage (Lin, 2007).

With the coming of Japanese rule in Taiwan, the Taiwan Governor-General founded a series of committees for the investigation of Taiwan, which offered various research reports into and journals on Taiwanese culture and natural resources. In 1908 the Taiwan Governor-General Office issued a formal ordinance to establish a 'Museum Affiliated with the Taiwan Governor-General's Colonial Civil Administration Office' in Taipei. The purpose of the museum was not only based on the resource investigation of the colonial exploitation for the Empire of Japan but also to be a showcase for introducing the empire's colony to Japanese tourists, a classic colonial museum (Huang, 2007; Chang, 2007). These collections and studies, including the Taiwan Industrial Competitive Exhibition (1916), the Chubu Competitive Exhibition (1926), the Kaohsiung Harbor Exhibition (Takao Kou Exhibition, 1931), and the 40th Anniversary of the Ruling Expo in Taiwan (1935), also provided great materials for subsequent official exhibitions for the purpose of celebrating the emerging Japanese Empire's achievements and successful colonisation; thirteen museums were set up by the colonists during the period of Japanese rule (Noritaka, 1987; Lu, 2005). The Government-General enacted the rules for 'the Implementation of the Preservation Law of Taiwan's Historic Site, Scenic and National Monument'. This marked the first

time the heritage of Taiwan was officially recognised. The ‘Researching Commission of Taiwan’s Historic Site, Scenic and National Monument’ was established later for the investigation and examination of the potential sites. Based on the surveys of scholars and experts in 1933, 1935 and 1941, a total of 29 historic monuments and natural monuments were named until 1945. The results of over 50 years’ accumulated surveys are a rich trove. They are a gateway to the academic study of modern Taiwan, and they are the foundation for any academic study of Taiwan in the post-war years.

In the early years of the Republic of China (ROC), due to political unrest and a sequence of civil wars, the Nationalist Government had no strong and specific cultural policy. However, the recognition of the importance of antiquities preservation was becoming widespread in China, and thus the *Antiquities Preservation Act* was brought in in 1930 (Taiwan was a Japanese colony until 1945). The act later became the legal basis for cultural heritage preservation in Taiwan between 1945 and 1982. Nevertheless, the Antiquities Preservation Committee was suspended and its business was transferred to the Ministry of Education (MOE) and the Ministry of the Interior (MOI) due to the Second Sino-Japanese War (1937–1945). After 1949, Taiwan Historica (an institution established to compile the common history of Taiwan Province) began the post-war investigation of historic attractions / buildings and accumulated a lot of basic studies and data with an emphasis on the inheritance of

cultural heritage between Taiwan and China. The Nationalist Government finally settled in Taiwan and improved civil living standards in the islands with the help of US Aid (1951–1965). In the following decades, the cultural policy of the Nationalist Government attempted to maintain Chinese culture in response to the Communist Government's Cultural Revolution (1966–1976). President Chiang Kai-shek initiated the Chinese Culture Renaissance Movement at the end of 1966; the aim of this was to promote Confucian orthodoxy, and stood in opposition to the Communist authorities that were destroying the nation's heritage by upholding the Nationalist Government's leadership and defending Chinese culture. In the days before localism came to be emphasised, the renaissance movement was used to enhance the legitimacy of the ROC's political authority. In the meantime, the Bureau of Culture (MOE) was established in 1968. It was the first central authority of Cultural Affairs, including affairs of arts, film, broadcast and TV development. But there had been no competent authority for heritage affairs since 1937. The above situation widened the gap between heritage studies and the cultural administrative department, and caused lots of destruction and loss of heritage. However, the institution of the Bureau of Culture reveals the attempt to specify and systematise cultural authority within the official-led approach to form a cultural policy. The Bureau was under the Ministry of Education; it appears that cultural affairs were initially included in the education system.

Furthermore, although the Bureau was abolished in 1975 due to its functions overlapping with those of the Council for Chinese Cultural Renaissance, this experience also provides a reference point for the cultural model and organisational framework of the future CCA (Huang, 2010).

3.3.2 Establishment of Cultural Authorities: the 1970s–1990s

After a long-term negligence of local customs and traditions, the 1970s, relatively, is an era full of disputes on cultural issues in Taiwan. When the Republic of China's (ROC) right to represent China at the United Nations (UN) was transferred to the People's Republic of China (PRC) in 1971, Taiwan lost its voice and position in the international heritage preservation sphere. In 1972, the government started a 'Proposed Monument Survey' which ultimately included 344 proposed monuments on the list between 1972 and 1979. Meanwhile, after breaking off diplomatic relations with Japan in 1972, the *Direction for Eliminating the Colonial Memorial Monuments of Japanese Imperialism Superiority in Taiwan* was announced in 1974 by MOI to demolish Japanese architecture (such as shrines) and prohibit the use of Japanese-era names. The act caused many Japanese monuments to be destroyed. Then, in 1980, the government boosted a series of cultural infrastructure programmes to build culture centres and museums in each city and county, with the number of museums going from 30 in the 1970s up to 90 in the 1990s (Tien and Lin, 2010). Simultaneously, in

this period, the Taiwanese people attached importance to cultural awareness and tended to treasure the historical buildings and heritage, despite a string of controversy over heritage preservation, such as over the preservation of Changhua Confucian Temple (1975), Lukang Old Street (1977) and Taipei Linantai Mansion (1977). The *Ordinances of Developing Tourism* (1969) were also enacted for promoting domestic heritage tourism. *Guidelines of Taiwan Provincial Government Subsidising County (City) Monuments Restoration* (1976) was announced by the Taiwan Provincial Government; it was the first official policy to advocate subsidising monument restoration. But in practice, the Government was passive, with no clear policy support and inadequate rules; it was a government with cultural acts but without cultural policies (Han, 2001). In 1981, the CCA was authorised to provide subsidies and rewards for arts workers and organisations, and the *Cultural Heritage Preservation Act* was brought in to replace the *Antiquities Preservation Act* in the next year. Hereafter, cultural policy in Taiwan was provided with a permanent administration and the legislation to deal with issues of cultural heritage.

The CCA led the Comprehensive Community Building Plan (1994), which had the aim of promoting cultural industries through local cultural institutions and cultural events in the 1990s, along with running ‘Public Art Projects’, enacting the *Culture and Arts Reward Act* (1992), and creating the National Culture and Arts Foundation

and the Cultural Office, Taiwan Provincial Government that moved in a positive direction, towards de-centralisation and a bottom-up approach. The National Culture and Arts Foundation, established in 1996, was put in charge of sponsorship, rewards, training, promotion and counselling for arts workers, organisations and events; this began the contemporary cultural heritage and preservation studies in Taiwan. And in 1998, CCA announced the first *White Paper on Cultural Affairs*, marking the start of a defined cultural policy for developing Taiwanese culture and literature.

3.3.3 Changing Administrations: Post-2000

When Taiwan's first alternation of political parties in power in 2000, the Democratic Progressive Party (DPP) government was urged to implement 'Challenge 2008 National Development Plan', which contained a series of measures lead by CCA, including the Reuse of the Discarded Spaces (2000), the New Hometown Community Building Programme (2002), Local Museums Programme (2002) and the Cultural and Creative Industries Development Plan (2002). In 1998, there were 232 museums and 75 listed heritage sites in Taiwan (Huang, 1998; Li, 2008b). By 2009, 645 museums and 659 heritage sites were recognised (MOC, 2017) due to the promotion of cultural affairs. Also, the local culture centres built by the government in the 1980s began to cover regional cultural heritage affairs and became a part of the Bureau of Culture of local government to bridge local policy articulation and implementation with CCA in

central government. An unexpected factor was the earthquake on 21 September 1999 (called 921 Earthquake) which damaged, and in some cases destroyed, many historical buildings and heritage sites. Due to this, in 2001, CCA conducted the General Survey of Historic Buildings (2001–2003); this was a national historic building survey, which surveyed 300 buildings. Likewise, as part of Taiwan's industrial modernisation process (Industrial and Cultural Heritage Regeneration Plan), the 'Industrial Heritage Survey' was undertaken by the Industrial Cultural Heritage Survey Team from 2002 to assist the ministries and institutions conducting inventories and preservation (Cultural Heritage Inventory Plan), and planning for the re-use of Taiwan's valuable cultural heritage.

During this period, official systematic reports were published: *Cultural Statistics* presents the yearly development of cultural affairs through cultural statistics data showing the development of Taiwan's cultural affairs since 2001; the *Almanac of Taiwan's Cultural Properties Conservation* records Taiwan's important persons, properties, and issues of cultural heritage, including tangible and intangible cultural heritage since 2001; the *Annual Report for the Development of Taiwan Cultural and Creative Industries* reports on the status of the development of Taiwan's cultural and creative industries, and has described the current cultural and creative industries policy since 2003; and CCA announced a new edition of the *White Paper on Cultural*

Affairs in 2004 to review cultural policy between 2000 and 2004. In order to link with global heritage preservation groups, ‘Potential World Heritage Sites in Taiwan’ selected twelve sites in 2003 at CCA’s Selection Meeting, and then established the ‘Committee for Promoting the World Heritage’ in 2009. After six meetings since 2012, the total number of Potential World Heritage Sites in Taiwan stands at 18. Correspondingly, the *Cultural Heritage Preservation Act* was amended 7 times: in 1997 (twice in this year), 2000, 2001, 2005, 2011 and 2016 to be in accordance with domestic needs and international standards. Following this, the Preparatory Office, Headquarters Administration of Cultural Heritage (CCA) was founded in 2007 (it was restructured as the Bureau of Cultural Heritage, BOCH, MOC in 2012) responsible for all heritage issues excepting natural landscape management (that authority belongs to the Council of Agriculture, MOI).

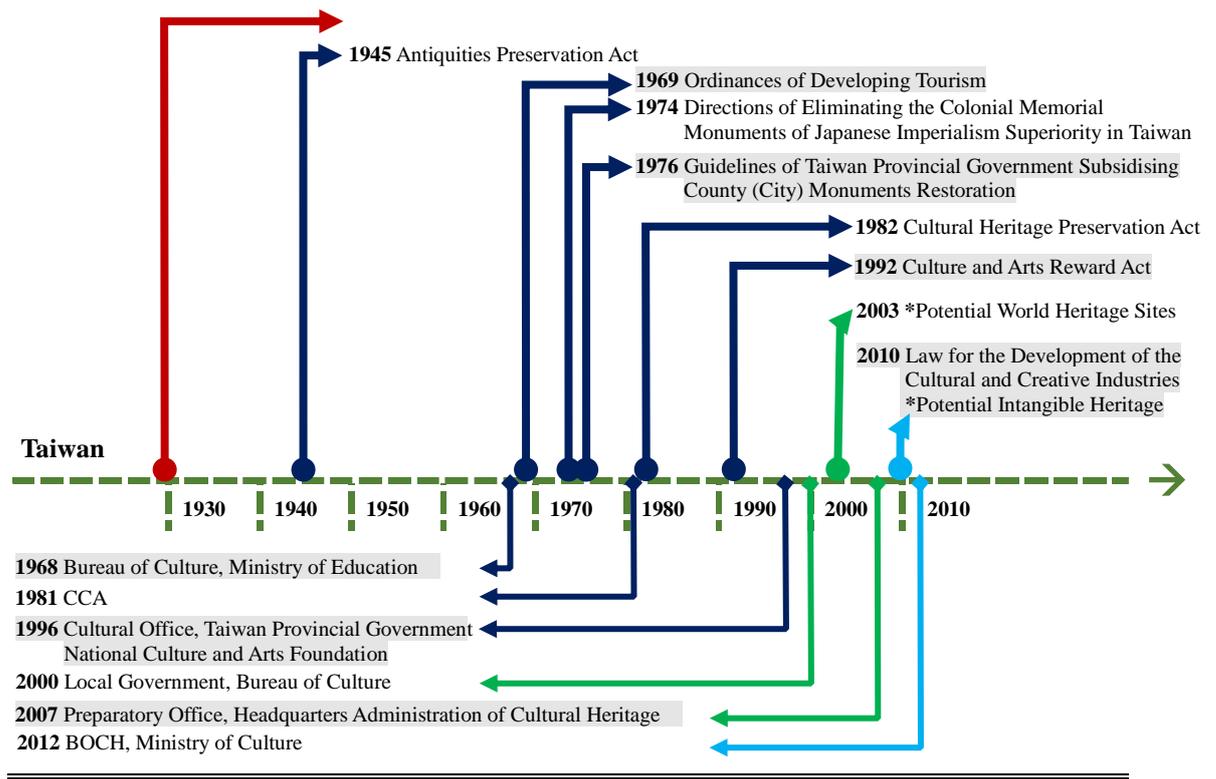
When the KMT government returned in 2008, President Ma Ying-Jeou issued his *White Paper of Cultural Policy* and a statement of cultural governance with the aim of establishing a Ministry of Culture (MOC). In 2010, the *Law for the Development of the Cultural and Creative Industries* had been enacted. This brought in the policy of developing cultural and creative industries from 2002. In addition, CCA listed ten Taiwanese Potential Intangible Cultural Heritage Sites in 2002. In 2011, the *Draft of Culture Basic Law* was proposed by CCA. And CCA was upgraded to the MOC next

year, extending its cultural affairs to include broadcast, TV, film and publishing services; currently, the *Culture Basic Law Draft* is still being brought in. Overall, in the early stages of the ROC, Taiwan's cultural infrastructure policies under martial law (1949–1987) strongly emphasised national spirit to fight against the ideology of the Communists. However, in the 1990s, CCA advanced policies based on community development, public art and local autonomy over culture, moving in a positive direction to embody the reflective climate of the times. In the 2000s, the de-centralisation and bottom-up approach advocated in these policies resonated with the ideas of democratisation and civil society in Taiwan.

Taiwanese society is diverse. It is home to indigenous peoples of the Austronesian language family, ethnic-Chinese peoples that brought traditional Han-society during the Qing Dynasty and ethnic-Chinese peoples that arrived after World War II. It has experienced colonisation under the Japanese Empire, the rule under the nationalism of the Nationalist government and the impact of modern Western culture. The country is presently facing challenges involving the development of democratic government, the presence of localism alongside globalism, an influx of post-modern information and the growth of the consumer society. As a result, Taiwan has experienced a diversity of cultural expressions and forms of cultural development over the course of its history.

As a consequence of this diversity, Taiwan's cultural policy addresses a great

plenitude of issues. These include: indigenous cultural identity; Japanese language and cultural identity stemming from the period of Japanese colonisation; colonial consciousness and cultural expressions (i.e. museums and exhibitions); disparities between nationalistic cultural policy and ethnic group cultural capital during the era of Nationalist rule; the elitist art policies of modernism; the rise of local Taiwanese cultural organisations; the community empowerment movement's cultural thinking regarding decentralisation; the dialectic of public art policy and civil society; local development and the role of large arts and culture events; the meaning of art as a type of economic investment and commercial market; the cultural and political topics addressed by different types of museums; the contradictions between the industrialisation of art and culture and the nature of art and culture; the news media's video industry and the production of ideology; cultural civil rights; Taiwan's cultural identity and the production of its international identity and image; and Taiwan's post-colonial and post-modern cultural expressions and cultural policy thinking.



* In 2014, there were 18 Potential World Heritage Sites, and 12 Potential Intangible Cultural Heritage in Taiwan.

Figure 3.3 Timeline of Heritage Development in Taiwan and Globally

3.3.4 The Framework of Cultural Heritage Preservation in Taiwan

The authorities on cultural heritage in Taiwan, based on the different classifications of heritage, have included MOI, MOE, CCA, and the Council of Agriculture. By 2005,

after the fifth amendment of the *Cultural Heritage Preservation Act*, the competent authority of ‘Monuments, Historical Buildings, Settlements, Historical Sites, Cultural Landscapes, Traditional Arts, Folk Customs and Related Cultural Artefacts, and Antiquities’ is the MOC by authorising the Bureau of Cultural Heritage (BOCH) as the dedicated agency for cultural heritage affairs; and the competent authority of ‘Natural Landscapes’ is the Council of Agriculture (including the Taiwan Forestry Research Institute and the Forestry Bureau). Furthermore, there are several authorities and national institutes involved in assisting with the work of heritage preservation, such as MOI—the Construction and Planning Agency, the Department of Civil Affairs; the Ministry of Transportation and Communication’s Tourism Bureau; the Ministry of Science and Technology; the Council of Aboriginal Affairs; the Hakka Affairs Council; the National Development Council’s National Archives Administration; and Academia Historica’s Taiwan Historica.

Through a series of amendments to the Cultural Heritage Preservation Act, the Taiwanese Cultural Heritage system tends to the following improvements: (1) establishing a unified regulatory authority for cultural affairs: BOCH is in charge of all cultural heritage categories with the exception of natural landscape, undertaken by the Council of Agriculture; (2) designation and registration of cultural heritage: designation is a mandatory order while registration is an incentivised approach; (3)

strengthening the preventive protection of cultural heritage: to build a basic database of cultural heritage and seek a protecting measure of heritage before its designation; (4) emphasising a specialisation of preservation tasks: to set up a dedicated preservation agency, to require a professional agency engaged in cultural heritage preservation, and to establish a specialised committee for consideration; (5) indicating the importance of traditional skills and crafts inheritance and its owners; (6) to highlight the management and reuse of heritage, to respect the private interests, and to add incentive measures. In 2017 (BOCH, 2017), cultural heritage in Taiwan includes: monuments (891), historical buildings (1347), settlements (13), archaeological sites (46), cultural landscapes (61), traditional arts (133), folk customs and related cultural artefacts (133), antiquities (1667), and natural landscapes (27). According to the classification and definition of the *Cultural Heritage Preservation Act*, current cultural heritage in Taiwan, the cultural heritage referred to in the Fourth Article of the Act, mean that the following designated or registered assets have historic, cultural, artistic or scientific value:

- a. Monuments, Historical Buildings and Settlements: the buildings and / or ancillary facilities built for the needs of human life with historic and / or cultural value.
- b. Historical Sites: the places which contain the remains or vestiges of past

human life with historic and / or cultural value and the spaces upon which such remains and vestiges are erected.

- c. Cultural Landscapes: the location or environment which is related to any myths, legends, a record of events, historical events, social life or ceremonies.
- d. Traditional Arts: traditional crafts and skills descended from different ethnic groups and locals, which include traditional arts and crafts and / or performing arts.
- e. Folk Customs and Related Cultural Artefacts: customs, beliefs, festivals or any other related cultural artefacts which are related to the traditions of civilian life and have special cultural meaning.
- f. Antiquities: any parts or utensils of life or civility, and books or documents having cultural significance or demonstrating the value of different eras and being from different ethnic groups.
- g. Natural Landscapes: natural areas, land formations, plants, or minerals, which are of value in preserving natural environments.

The category of cultural heritage and the relevance of each subject in the Act can be summarised as shown in Figure 3.4 This illustrates the intersection among individuals with a subordinate relationship or an independent interaction. For example, Cultural

Landscapes may cover Monuments, Historical Buildings, Settlements and Historical Sites, but Monuments, Historical Buildings, and Historical Sites are self-contained and the former two could interact with Cultural Landscapes or Settlements respectively. Natural Landscapes are included as part of Cultural Landscapes, while Antiquities may be the artworks or objects containing the values or evidence of Traditional Arts and Folk Customs and Related Cultural Artefacts. However, Cultural Landscapes, as a sort of cultural heritage category in the Act, covering the rest of the cultural heritage categories within its limited and ambiguous definition, leads to an object-oriented concept in heritage preservation in Taiwan and causes confusion in the heritage category in terms of designation by central / local authorities, because a heritage candidate may be applicable for all classifications.

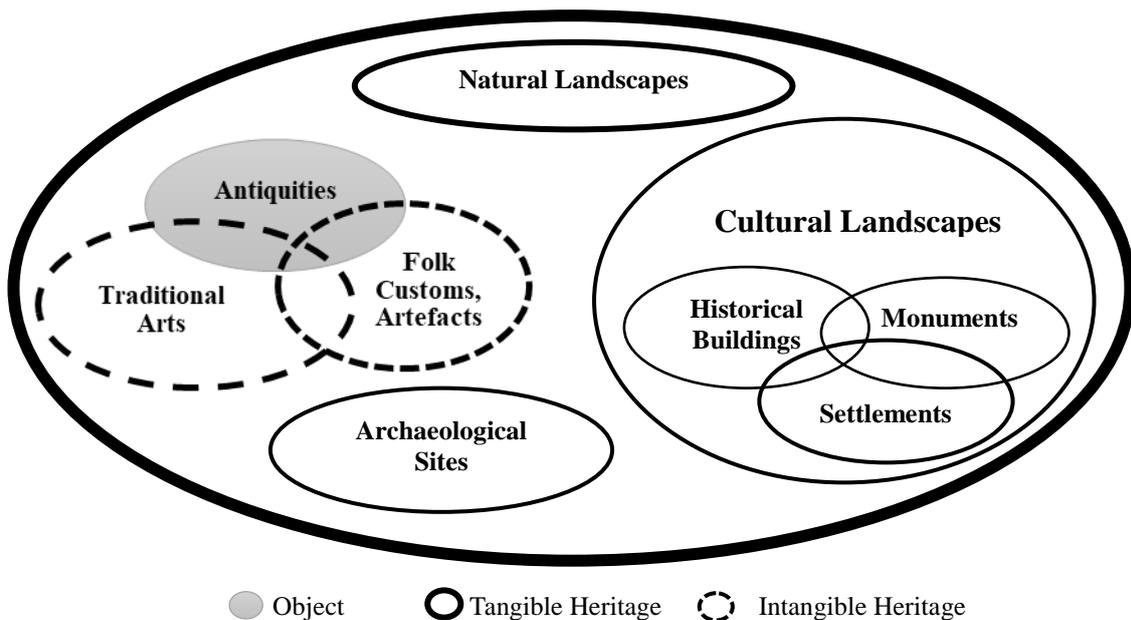


Figure 3.4 Diagram of Cultural Heritage Categories in Taiwan

Besides, when Taiwan's economy changed from one dependent on heavy manufacturing industry to one based on technology and service, most owners of the mentioned industries, especially those of private and semi-private companies, generally considered the profit value rather than the heritage value of their factories and machinery.

Also, by reviewing the development of the *Cultural Heritage Preservation Act* since 1982, after the 7 times' amendments by 2016, we can see that there are some issues and problems still to be coped with in the on-going process, which will be summarised below. Firstly, in general, economic and social advances take priority over cultural heritage preservation, and there has been a continuing controversy regarding development and preservation in recent decades. Simultaneously, the rapidly increasing number of designated cultural heritage sites, especially in the 1980s and the 2000s, on the one hand, causes local authorities to be unable to provide comprehensive maintenance or complete reuse programmes immediately, and leads to sites becoming deserted or damaged; on the other hand, because some designated cultural heritage is private property, the owners may refuse preservation. Second, the dissonance of position and sequence among cultural groups can be observed clearly from the context of Taiwan's cultural heritage development. When the *Act* was enacted in 1982, initially, until 1998, the identification of cultural heritage mainly

focused on Han-Chinese centralisation, and then the heritage relating to the West and Japan began to be added; aboriginal heritage was not considered until 2005. Due to ideological bias and the negligence of Taiwanese multiculturalism in the past, cultural heritage has been demolished and lost. Finally, differences in national identity discourse between different political positions occasionally reset the legislation progress and ongoing approaches to heritage preservation.

3.4 Japanese Colonial Industrialisation in Taiwan

In 1895, Qing and Japan signed the Treaty of Shimonoseki ceding Taiwan to Japan, which subsequently exercised governance over the territory. The island's organised resistance collapsed by the end of 1895, a year or so after Japan formally took possession. When Japan was defeated in the Second World War in 1945, on 25 October, the Surrender Ceremony at the Taipei Public Hall (now Taipei Zhongshan Hall), marked the end of fifty years of Japanese occupation and rule of Taiwan. The period of Japanese rule was a pivotal one for Taiwanese society, a series of social mobilisation and social movements shaped this island with the characteristics of modernity. Under the Japanese cultural administration, Taiwan's social structure, social systems, population distribution, cultural and intellectual life, and even its traditional ways, all changed significantly. It was a time when its 'folk society' made the transition into a 'civil society' (Lu, 1998; Lamley, 1999; Wu, 2000). Over the

ruling years, there were 19 Taiwan Governors-General. According to the background of each Taiwan Governor-General (trained as military officers or civil servants) and the term of office, the fifty years of Japanese rule in Taiwan can be divided into three periods of adjustments to government policies in response to economic and social trends.



Figure 3.5 Map of Japanese Colonial Taiwan 1895–1945

Source: Myers and Peattie, 1984.

3.4.1 Japanese Colonialism in Taiwan

In the early colonial years (1895–1919), ‘special governance’ over Taiwan as a newly obtained territory that was home to non-Japanese ethnic groups was given to Japan. In order to alleviate the resistance of the Taiwanese and thereby lower the cost of governance, Taiwan was technically made a special legal zone, with systems that differed from those of Japan proper and were adapted to the special circumstances of Taiwan, instituted in the name of old habits survey. After Japan gained control of Taiwan, colonial officials began investing heavily in railroads, harbours, roads, warehousing, banking, etc., and these investments continued at a high level throughout the colonial period. At the same time, expanded economic infrastructure increased the profitability of private investments in agriculture, commerce, and industry. The Taiwan Governor-General’s Office also established the *Agricultural Taiwan* industrial directive to develop the two main crops of rice and sugar for supporting industrialisation in Japan’s homeland. For the sake of the above, in order to run the goods transport routes efficiently between Taiwan and Japan, the office of Taiwan’s Government-General was urged to construct the North-south Railroad, build roads over the mountains, and rebuild Keelung Harbour.

When the last resistance of the Han-Chinese in Taiwan occurred in 1915, the second period, *Dōka: Integration* (1919–1936) began, started by the appointment of the civil

officer for the Governor-General in 1919. During this period, the Western world altered the perception of colonialism after the First World War, and give rise to growing waves of nationalism amongst colonial natives, as well as ideas of self-determination. With Japan's colonial governance of Taiwan stabilising, it therefore further implemented local governance systems and laws similar to those on the Japanese mainland, and education was made more like that in Japan proper, both in terms of systems and content. All signs pointed towards increased imperial assimilation for the colony of Taiwan (Tsai, 1994). In 1919, the Governor-General Office pursued a policy of *Dōka* (literally 'assimilation') which Taiwan was viewed as an extension of Japan's home islands, and the Taiwanese were educated to understand their role and responsibilities as Japanese citizens. In the process, local governance was instituted along with individual elected advisory committees; the public school system was established; the use of the Japanese language was rewarded. Later, with the entire Japanese Empire on a wartime footing, the citizens of the entire Japanese nation—including the colonial areas of Taiwan and Korea—were inducted into this totally militarised system. They were required to intensify both their enthusiasm and their economic activity in the following years.

The third stage is *Kōminka: Subjects of the Emperor* (1936–1945). While 1936 saw a return to the selection of military officers for office, it began with the eruption of the

Second Sino-Japanese War and ended along with the Second World War in 1945. Japan sought to utilise resources and material from Taiwan for use in the war effort. In terms of the importance of the Taiwanese's cooperation, the Taiwanese had to be fully assimilated as part of Japanese society. As a result, the social movements were banned and the colonial government devoted its full efforts to the Kōminka movement, aimed at fully Japanising Taiwanese. Between 1936 and 1940, the Kōminka movement sought to shape Japanese spirit and Japanese identity amongst the populace, while from 1941 to 1945 focused on encouraging the Taiwanese to join the army to fight for the empire. As part of the execution, the colonial government strongly encouraged the Taiwanese to speak the Japanese language, wear the Japanese costume, live in the Japanese housing, and convert to the Shintoism. In order to vigorously promote the national Shinto cult, 68 places of Shinto worship were approved, of which 38 were constructed between 1937 and 1943 (Chou, 1996; Tsai, 2006). The law of advocating the adoption of Japanese names was also passed in 1940.

3.4.2 Colonial Economy: From Agrarian to Industrial

Japan occupied Taiwan in 1895, a time when Taiwan's industrial base was fragile. And at the initial stage, the Government-General devoted most of its energy to military suppression. In 1898, the Government-General launched a strategy to create a systematic economic and financial programme. Between 1898 and 1906, the Japanese

carried through policies that brought about financial stability and initiated economic growth, thus laying the foundations for Japanese rule in Taiwan (Ka, 1995). In 1905, the Empire of Japan began to shift its energies to preparing for the Second World War; the Taiwan Government-General continued their governance and rule through major state-owned companies and relevant agencies. It enlarged the transportation system through a public network of roads, bridges, railway lines, telegraph installations, and tunnels and mountain trails, constructed harbour equipment to accommodate an ever-growing volume of shipping, expended a tremendous effort on sanitation and disease control, and relieved much of the uncertainty regarding the effects of weather on crops by building an irrigation system, which also reduced the level of destruction from floods.

Beginning in 1898, a land reform system was put in motion, with a land survey carried out in order to obtain a precise grasp of the area and the conditions of arable land and fields in Taiwan, resulting in major increases in revenues from land taxes that allowed the Taiwan Governor-General's Office to be financially independent by 1905; next, a survey and listing of woodlands was carried out, and a system for the privatisation of forestry was established, not only guiding Japanese capitalists to develop into forestry, but also completing the capitalisation of forestry. In 1899, the Bank of Taiwan was established, and undertook the organisation and reform of the

Taiwanese system of currency; and beginning in 1901, regulations adopting the use of Japanese weights were introduced. The integration of these currency and weight systems spurred the flow of goods and capital between Taiwan and Japan, which accelerated the capitalisation of the operations of Taiwanese enterprises, helping to bring in Japanese capitalists. The Taiwan Governor-General's Office also began the construction of telegraph, telephone, railroad, road, harbour, and other communications and transportation infrastructure, with all projects largely completed in just over a decade. Railway transportation became the lifeblood of Taiwan's economic development, while the newly renovated harbours of Keelung and Takao (Kaohsiung) became fully-equipped modern ports, greatly increasing the quantities of goods passing through them.

During the Japanese rule, the human and natural resources of Taiwan were used to aid the development of the Empire of Japan, for the most part, Taiwan's economy was a standard colonial economy. In 1919, the Governor-General's Office officially comprehensively controlled and exploited Taiwan's forestry resources. The Alishan Mountain, Taiping Mountain and Baxian Mountain forests were the most important of the official lumber areas. In order to implement the sugar and rice promotion policy, it was necessary to guarantee the stability of irrigation systems and actively engage in the allocation of water. The Taiwan Governor-General's Office treated Taiwan as a

producer of cash crops and grain, and actively carried out an agricultural revolution in Taiwan, instituting regulations on agriculture, establishing agricultural research institutions, funding new agricultural organisations, and constructing irrigation works. It devoted efforts to agricultural reform, promoting agricultural development centred upon the production of rice and sugarcane and establishing a colonial capitalist economy based primarily on agriculture and food supplements (Table 3.2). The Government-General intensively sponsored special corporations to enlarge new industries that it wanted to foster. The sugar industry was an outstanding example of government indulgence of private corporations and the effects of this. After a merger in 1940, more than 95 percent of the sugar in Taiwan was milled by five companies. Though more extreme, the history of the sugar industry was essentially that of all large-scale Japanese enterprise in Taiwan. Sugar also acquired a place of high priority in wartime as a source for industrial alcohol; however, for this reason, somewhat were bombed into extinction during the war.

Table 3.2 Gross Value of Production Recorded for Industry in Taiwan, 1921–1942

(by line of product)

Years	Total	Textiles	Metal Products	Machinery & Equip.	Misc.*	Chemical Products	Food Products
A. Millions of Yen:							
1921–24	165	3	3	4	20	13	122
1925–29	217	3	4	5	32	20	153
1930–34	228	3	6	5	29	18	167
1935–39	387	6	17	12	45	38	269
1940–42	664	11	46	30	91	80	406
B. Percentages of Total:							
1921–24	100.0	1.7	1.9	2.1	11.9	7.9	74.6
1925–29	100.0	1.5	2.0	2.2	14.7	9.3	70.3
1930–34	100.0	1.1	2.5	2.3	12.9	7.8	73.3
1935–39	100.0	1.5	4.5	3.1	11.6	9.9	69.4
1940–42	100.0	1.7	7.0	4.5	13.7	12.1	61.0

*Including Printing, Wood Products, Ceramics, and Other.

Source: Barclay, 1954: 38.

The 1930s constitutes a watershed for colonial industry policy; the Government-General itself began to promote industrial expansion by further participation in economic life. The pattern of development in manufacturing from 1913 to 1927 was also influenced by Japan's desire to reserve the colonial markets for its manufacturing industries at home, and the stimulative effect of World War I. The colonial government began to join forces with big business in Japan to launch new mining and large-scale manufacturing undertaking in Taiwan, activities that influenced the pace and pattern of industrial growth. Foundering in the world crisis of 1929, Japan needed profitable investment opportunities to contend with these

difficulties; therefore, in Taiwan, industrial facilities were created to produce the raw materials, petro-chemicals, ores, and metals, which were needed by Japanese heavy industry. From then, Japan attempted to make Taiwan a forward operating base for military operations (Azuma, 2000). In 1931, the Taiwan Governor-General's Office authorities advanced a policy of industrialisation, developing fundamental industries related to the arms industry by making Taiwan a base for the production of military materials and the supply of the 'Southern Expansion Policy' (a national strategy of the Empire of Japan during the World War II by taking that Southeast Asia and the Pacific Islands as Japan's sphere of economic interests and territorial expansions), reducing the burden borne by heavy industry in Japan. The type of industrialisation that the Japanese attempted to bring to Taiwan was unlike the industrial growth in the early years that was based on agriculture. The industrialisation in the 1930s was based upon the mineral resources and energy development. The latest hydro-electric power was used to provide energy for the metallurgical and chemical industries.

During the early or middle 1930s, the Japanese Empire began to turn towards preparations for the World War II. Taiwan as the Empire's model colony was called upon to increase their contribution in lines of production both in foods and the logistics of the military for the 'Southern Expansion'. The colonial government joined with private Japanese businesses to form semi-official enterprises / agencies in mining

and processing of minerals. It controlled certain key sources of income and authority, as before, though legal monopolies (Myers and Peattie, 1984). Net receipts from these enterprises, including salt, alcohol, camphor, tobacco and opium, made up one of the largest classes of revenue. Public railroads, irrigation and generation of electricity were also government monopolies. The drive to initiate heavy industries to Taiwan in the 1930s was led by two semi-official companies: Taiwan Development Company and Taiwan Electric Power Company (known along with the Bank of Taiwan, as the three major National Policy Companies of the Japanese colonial government). Moreover, the Taiwan Development Company was formed in 1936 as a super-corporation to promote interrelated ventures of this nature while speedily promoting a host of subsidiaries strategic for the war programme. For instance, the larger electric power companies, owned or dominated by the Government-General, helped to build the nucleus of Taiwan's metallurgy industry at Ruifang.

With the increasing tension both in mainland China and the Pacific, the Government-General Office made frantic attempts to expand specific fields in which Japan itself was lacking, particularly aluminium and coal. Also, the centralised corporate structure had been expected to be adequate preparation for most of the demands of war. In 1938, Taiwan began to implement the 'Five-year Plan for the Expansion of Production Capacity' (Nakamura and Akira, 1970), emphasising

increasing the production of coal, gold, silver and copper ore, oil, industrial salts, phosphorus hydroxide, and electrical power, which were needed for military-oriented industrialisation. In 1939, the Government-General asserted industrialisation and the front operating base for *Southern Expansion* as the key roles of Taiwan. In the same year, industry and agriculture occupied almost equal proportions of the total production of Taiwan (Ho, 1984). At this time, the development of economic production and the expansion of agricultural productivity were essential to Japan's military regime. In order to guarantee that the military had sufficient supplies, farmers in village areas were made to participate in social education programmes. Cultivating cotton, jute and barley was a patriotic duty, and the campaigns instilled in rural people a sense of responsibility to produce to serve the country.

Before 1940, manufactured commodities were still subordinate to Taiwan's farm products (Table 3.3) and did not amount to much beyond processed sugar. Afterwards, the Japanese began to marshal the island's resources in. Certain types of heavy investment had received their close attention for some years. Railway construction, for example, was pushed forward with enthusiasm from the start, to be followed by the establishment of a system of improved roads, rails and public irrigation over the island. And the development of electric power was closely related to the growth of Taiwan's newer industries. The generation of electricity was one of the specialised

heavy investments that formed the nucleus of industrial progress after 1930. With Japan's military ventures and imperial expansion, growing protectionism in the West against Japanese products, rising militarism and increased emphasis on war preparations in Japan, factories in Taiwan came to depend on the cheap electricity that was developed at state instigation from water power. Japan's colonial policy was modified to support this new industrialisation drive. In strategic terms, Taiwan was like nature itself—as the empire's front operating base for extending Japan's influence to South China and Southeast Asia. Taiwan already served as the main naval base for Japanese operations in the South Seas. In the decisive period of the war, from 1943, production increase was emphasised. In Taiwan, where production began in 1935, production of aluminium ingots, used in the production of aircraft, continued to increase.

Table 3.3 Gross Recorded Value of Principal Types of Production, 1915–1942

(yearly average for each period)

Years	Total	Agriculture	Mining	Fishing & Forestry	Industry
A. Millions of Yen:					
1915–19	262.7	144.5	7.2	9.1	101.9
1920–24	411.5	207.0	12.0	23.0	169.5
1925–29	559.0	293.6	16.8	31.8	216.8
1930–34	525.5	255.8	15.5	26.5	227.7
1935–39	901.0	432.9	39.6	41.5	387.0
1940–42	1388.4	576.4	62.8	91.8	657.4
B. Percentages of Total:					
1915–19	100.0	55.0	2.8	3.4	38.8
1920–24	100.0	50.3	2.9	5.6	41.2
1925–29	100.0	52.5	3.0	5.7	38.8
1930–34	100.0	48.7	3.0	5.0	43.3
1935–39	100.0	48.0	4.4	4.6	43.0
1940–42	100.0	41.5	4.5	6.6	47.4

Source: Barclay, 1954: 38.

3.4.3 Taiwan on the Road towards Modernisation

As a colony between 1895 and 1945, Taiwan experienced rapid and sustained growth relative to the previous age. Except for a brief initial period of vacillation after the annexation of Taiwan, Japan's first colony, the government during its fifty years as a colonial power was committed to achieving the integration of its empire. The goal of Japanese colonial policy was to create a tightly welded, centrally controlled empire within the legal framework of the Meiji Constitution. At no time were self-governing colonies, similar to the British Dominions, the goal of the Japanese government (Yanaihara, 2002). The Japanese authority took Taiwan as an economic resource for

its people; it, therefore, devoted great efforts to establish a base for a colonial capitalist economy soon after taking control of Taiwan. Although the main focus of each period differed, the primary goal was to increase Taiwan's productivity to satisfy the demands of Japan. In this duration, new conceptions, ideas, and values were introduced to Taiwan; also, the infrastructure works, such as railways, public education, and telecommunications, were established. As the economy grew, society stabilised, the politics and society were also gradually liberalised. Taiwan thus served as a 'model colony' for Japan's propaganda on the colonial efforts throughout Asia, as displayed in the 1935's Taiwan Exposition. But the colonial industrial sectors had developed not according to their comparative advantages but rather to meet specific Japanese needs.

It could be said that economic desires and political purposes characterised modern capitalistic colonial rule, and the ruling system was pushed forward by the impetus rising from this cause-effect cycle. The early economic policy of the Taiwan Governor-General's Office could be said to have done the fundamental work of pacifying Taiwan including reforming the land system, establishing the Bank of Taiwan, instituting a monetary system, regulating exchange between Japan and Taiwan according to existing treaties supporting the establishment of shipping lanes between Japan and Taiwan through subsidies, and completing the unification of the

internal Taiwanese market by constructing the North-South Railway, as well as building Keelung and Takou (Kaohsiung) harbours to build economic links between Japan and Taiwan. The Taiwanese economy became detached from the South China economic area, centred on Xiamen, and gradually inclined towards the Japanese sphere of economic influence, gradually becoming a Japanese colony in essence, in which the Governor-General's Office played a key role. To tackle the public debt, a series of constructions were undertaken, large-scale land and wilderness surveys were used to straighten out land tax, the sugar industry was promoted and the sugar consumption tax was introduced, the tax system was rectified, and monopolistic enterprises were begun. These measures were not only extremely effective but also had deep and distant influence. In 1914, after the profits of the sugar consumption tax were returned to the Japanese National Treasury, Taiwan achieved true financial independence. Taiwan's Governor-General's Office introduced a standard time system and a regular work week and formulated new rules regarding work time and time off. In 1921, it promoted a 'Time Commemoration Day' movement. As the standard time system began to take hold, it transformed the fixed rules in Taiwanese life regarding work, rest, and production. It produced the concept and habit of time 'standardisation', and punctuality gradually became the norm. And when the custom of regular weekly work and rest periods was accepted, people now had leisure time.

And leisure time now became a necessary part of people's daily life. Meanwhile, the Taipei Radio Station was established in 1928, following with the Radio Station in Tainan (1932), the Taichung (1935), Chiayi (1943), Hualien (1944) and a transmitter in Minxiong (1940) to act as a whole broadcasting enterprise of the island.

Like the European colonial powers, Japan managed its colonies for its own interests. When Japan became more urbanised and industrialised, the colonies were viewed as its providers of agricultural goods; as Japan's manufacturing sectors expanded, its colonies also became the source of fuels and industrial raw materials. Finally, in the 1930s, the preparation for the Second World War was the vital factor in determining the pattern of developing colonies. Despite the fact that Taiwan underwent industrial expansion during the colonial period, it has been argued by Yanaihara (2002) and Tu (2017) that Japan did not provide the necessary elements for sustained industrial growth in the colony. In large part, this was due to the discriminatory elements in Japanese economic policy. Because Japan kept economic power out of the hands of the Taiwanese, a modern entrepreneurial class grew only marginally in Taiwan. This resulted in some dislocations in the economic structure of Taiwan when the Japanese industrial chain withdrew. As the role Taiwan played in the Japanese economy was only one of agricultural processing and providing foodstuffs, Taiwan basically had no real possibility of developing towards an independent industrialised economy.

Although Japanese colonial rule did promote Taiwan's modernisation in some ways, at the same time, there were inbuilt limitations.

The Taiwanese entered the twentieth century as an agrarian people, one that had just come under the rule of a colonial regime dedicated to instituting change. The Japanese who controlled the island were determined to make its economy more efficient, but also to concentrate rather than distribute the gains. Though their success in devising an orderly programme of development was unique, and though the response of Taiwanese was likewise, the objectives of the programme and the type of reactions to it had a close resemblance to those in other areas. The Japanese took their lessons in overseas administration from the record of European powers in the nineteenth century. As a colonial dependency they governed Taiwan in a manner that was nothing short of exemplary by these standards; they excited the admiration of old colonial hands who had a chance to witness their methods. The Japanese experience in Taiwan thus embodied the aspirations of most colonial rulers since the Industrial Revolution. With the benefit of the past experience of others and the advantage of their own firm determination, the Japanese made strides that were sure and exceedingly quick. Their achievement represented the techniques and policies of others carried to a new level of refinement.

3.4.4 Shifting Value of the Colonial Legacy

Due to the defeat of the Nationalist (KMT) Government in the Chinese Civil War, at least 90,000 mainlanders (ten percent of the island's population) were forced to immigrate to Taiwan in the late 1940s and the early 1950s (Li, 1968; Lin, 2003). From the late 1940s, for a period of time, at least until 1992 (Luoh, 2003; Xu, 2015), most government officials, congresspersons and intellectuals were from the mainland with an impressive experience of the Second Sino-Japanese War. Indeed, in the Japanese colonial period, there was a series of armed uprisings which led by either the Taiwanese local residents whose ancestors had immigrated to the islands before 1945 or the Taiwanese aboriginals (for example, the Tapani Incident in 1915 and the Musha Incident in 1930). However, relatively, the island was a more peaceful and flourishing society than the mainland in the first half of the twentieth century. When an anti-government uprising erupted in Taiwan (the 228 Incident in 1947), it escalated confrontation and conflict between local residents and the mainlanders on the islands over many generations. The boundary between the two groups had vanished gradually due to the inter-marriage for years and the removal of native place from the household registration in 1992, but the opposing ideologies revealed the different attitudes towards the fifty years of Japanese rule—resentment or nostalgia.

During the period of Taiwanese martial law (1949–1987), the *Taiwan Provincial Government Gazette, Winter, 41* (1951) was required by the News Agency of Taiwan's Provincial Government, along with other publications, to use 'Japanese Occupation' rather than 'Japanese Governance'. Following the suspension of diplomatic relations with Japan in 1972 (Japan turned to recognise the PRC instead of the ROC), the government issued the *Direction for Eliminating the Colonial Memorial Monuments of Japanese Imperialism Superiority in Taiwan* to deny any Japanese contribution and erase any trace of colonisation. However, when Lee Teng-hui became the ROC President, the first one born in Taiwan, in 1988, his twelve years (1988–2000) in power became a key period in the rise of 'Taiwanese Localisation', which combined Taiwanese local customs and the refined culture left by the Japanese (Han, 2001). President Lee also emphasised the importance of Taiwanese identity by supporting a new edition of the history textbook, *Understanding Taiwan*, for junior high school students in 1997; this textbook is a milestone which highlights the underprivileged position of Taiwanese history in school education since 1946 and tries to reverse the phenomenon. On the one hand, this publication aroused lots of public argument and forced Taiwanese people to take their cultural identity issues seriously; on the other hand, the controversial discourse of the textbook is questioned by some scholars because its contents play down the

connection between Taiwan (ROC) and mainland China (PRC) and highlight the contribution of Japanese governance to Taiwan over Japanese repression, discrimination and exploitation (Wang, 1997; Chen, 1999). In 2000, Chen Shui-bian succeeded to the ROC Presidency. This was not only the DPP's first time in power but also the first transition of power to a new ruling party in Taiwan. The DPP government continued to promote the use of Japanese rule in textbooks and official publications. After the KMT completed the second transition, becoming the ruling party in Taiwan in 2008, in 2013, the Executive Yuan (the highest administrative organ of the Taiwanese government) proclaimed that 'Japanese Occupation' should be the only term of use in the official documents instead of 'Japanese rule', but both of the above are acceptable within general and academic use (Executive Yuan, 2013). Furthermore, in 2014, the MOE adjusted the high school history lesson outline to add the term 'colonial' into the titles and to reduce the description of Japanese constructions in Taiwan etc. This brought about a serious controversy and a student movement that lasted for months.

Specifically, until 2016, 44 percent of listed cultural heritage in Taiwan related to Japanese colonisation directly, most of which (66 percent) were designated by the DPP Government between 2000 and 2008, and nearly 50 percent of the Japanese heritage is industrial heritage. In addition, some other forms of Japanese heritage

(shrines, monuments, institutes and residences etc.) are also allocated nearby or surround the industrial sites. Because Japanisation, modernisation, and industrialisation all happened in the fifty-year colonisation of Taiwan, it is nowadays still widespread for people to use Japanese terms to refer to modern machinery and industrial objects and in daily conversation on the islands. What is more, recent Japanese popular culture has also influenced the attitude of the new Taiwanese generation towards the colonial legacy.

3.5 The Heritagisation of Japanese Industries in Taiwan

The Nationalist Government took over most of the Japanese colonial monopolies in 1945 and reshuffled them as the Taiwan Provincial Monopoly Bureau. In the beginning, the bureau's businesses included tobacco, alcohol, camphor, matches, weights and measures, but this was reduced to administering tobacco and alcohol in 1947 and the bureau was renamed the Taiwan Provincial Tobacco and Wine Monopoly Bureau. After the defeat on the mainland China, the Nationalist Government settled on the islands; the authority planned to use Taiwan's agricultural revenue to develop industries. And the 'Import Substitution' policy was established for domestic factories during the 1950s. The products produced there aimed to replace imported products and reduce the need for foreign exchange. Through the official protectionist acts, the government developed labour-intensive industries with basic

technology and low capitalisation. These industries produced goods for the domestic market and replaced imports, and thus protected the infant industries at the initial developing stage. These industries produced goods that were related to people's daily life, such as food, clothes, housing and vehicles. Meantime, in the climate of the Cold War (particularly the Korean War and the Vietnam War) caused by Communist expansionism, Taiwan gained a huge amount of financial and material support from the USA via the US-Aid programme. US Aid funding played a vital role in the development of Taiwanese economic and social constructions in the first two decades of the post-war period, the funding is also the main resource for a series of economic programmes, large-scale infrastructure projects and the state-owned enterprises' investments. In the 1960s, the USA changed the instrument of US Aid to Taiwan from a grant to a loan; this showed that Taiwan was fully capable of reimbursing loans in USD. The United States exported its US Aid to Taiwan for 15 years or so; it was crucial in building up economic and civil infrastructure in Taiwan at that time, prudently guiding the development of private capital, and nurturing the development of Taiwan's economy (Lee, 2003; Hsueh, 2008).

3.5.1 Post-War Industry Reshuffle and New Industrialisation

After the Import substitution industrialisation in the 1950s, from 1958 Taiwanese industries that focused on internal sale faced an overproduction crisis due to the

limited scale of the domestic market; thus, the government shifted the goal to export-oriented policies by promoting the ability of Taiwan's economy to act as a trading power, and export incentive policies were implemented between 1959 and 1960. The Export Processing Zone was set up with the objectives of expanding external trade, attracting industrial investment, introducing the latest technology, and increasing employment opportunities. This included the establishment of the Kaohsiung Export Processing Zone in 1965, the Nantze Export Processing Zone in 1968, and the Taichung Export Processing Zone in 1969. Due to the policy of encouraging export trade, and as a result of urbanisation, transport and commercial hubs, such as Taipei and Kaohsiung, attracted a great amount of investment and labour. Later, in the early 1970s, because of the global economic recession caused by the first Oil Crisis in 1973 and the withdrawal of the Republic of China from the United Nations in 1971, there was a decrease in the willingness of foreign powers to invest in the islands. In this period, the government promoted various policies to implement the second import substitution programme. In addition, the Executive Yuan announced the 'Ten Major Construction Projects' after the outbreak of the First Oil Crisis in 1973. The first national mega-infrastructure projects promoted by the government from the late 1960s to 1979 included six transportation construction projects (the National Highway, the Electrification of the Western Railway Line, the North-Link Line

Railway, Chiang Kai-shek International Airport, the Port of Taichung, Su-ao Port), and three heavy construction projects (the China Shipbuilding Corporation (CSBC) shipyard in Kaohsiung, the China Steel Corporation's Kaohsiung factory, the oil refinery and industrial district, and the nuclear power plant) to upgrade Taiwan's industrial structure and to lay out the foundations for developing heavy industry along with the large industrial parks established by the government since the 1960s. These constructions created direct and indirect employment effects for Taiwan and reduced the economic impact caused by the oil crisis. Based on this foundation, Taiwan's economy embarked on its way to becoming one of the world's 'Newly Industrialising Economies' (Chowdhury, 1993). Furthermore, in 1977, the government continued to plan the 'Twelve Construction Projects', and this was the first time that cultural constructions (to build cultural centres in cities and counties) were listed in the national programme.

In the 1980s, Taiwan underwent an industrial transformation from traditional labour-intensive industries to technology-intensive industries and the service industry (Lin and Chuang, 2007). Hsinchu Science and Industrial Park was established by the government in 1980, followed by the Southern Science and Industrial Park in 1995, and the Central Science and Industrial Park in 2002, as well as some private science and industrial parks throughout the island. With the competition with global economic

markets becoming more intense from the 1990s, the state-owned enterprises in Taiwan were forced to become privatised, and this was accelerated by the DPP Government in 2000 particularly. Hence, the Taiwan Provincial Tobacco and Wine Monopoly Bureau became the Taiwan Tobacco and Liquor Corporation in 2002. And in 2003, the DPP Government also announced ‘Ten New Major Construction Projects’ (water conservation, transportation, higher education, Taiwan Expo, museum and theatre, and information technology projects) as a part of ‘Challenge 2008 – National Development Plan’; and some of these projects were included in the ‘Twelve Construction Projects’ in 2008 by the KMT Government.

3.5.2 The Rise of Japanese Industrial Heritage Preservation in Taiwan

When the *Cultural Heritage Preservation Act* was brought in in 1982, there was not yet a significant discussion about industrial heritage (see Figure 3.5). The major appeal of Taiwanese industrial heritage preservation can be traced back to 1995, a railway research society organised by National Chiao-Tung University students striving to preserve the Fan-shaped Train Shed in Changhua and the Old Mountain Lines between Miaoli and Taichung in west-central Taiwan (Wang, 2007). Concurrently in Taichung, locals also required the preservation of the old Taichung railway station building (the building had been designated as a national historic monument in the same year, also as the first industrial heritage site). These actions

forecasted the industrial heritage issues to come and caused both the government and the public to consider positive action towards the existing industrial ruins and the already-abandoned industrial sites created during the process of privatisation of state-owned enterprises (most were former colonial monopoly enterprises) in the 1990s caused by the industrial transformation in order to respond to economic globalisation. Also, with expanding urbanisation in the metropolitan regions changed, and former industrial areas were gradually replaced by commercial districts and residences; these tendencies urged the authorities to tackle industrial heritage issues as a part of planning urban development.

In 1998, the CCA began to promote the Reuse of Deserted Space Plan by creating Railways Art Village Networks (to reuse the railway stations' old warehouses as art studios). Later, in 2003, the Programme of Planning Creative-Cultural District, which was inspired by the concepts of the 'cultural district' (Frost-Kumpf, 1998) and the 'creative cluster' (Hitters and Richards, 2002), was conducted to establish National Creative-Cultural Districts (now Cultural and Creative Industries Parks) through transforming former industrial sites into creative industries hubs. In 2000, the 'Thorough Survey of Historic Sites' took place because of the 921 Earthquake in 1999; this also involved some industrial buildings and sites. And in 2002, CCA formed the

‘Industrial Cultural Heritage Investigation Team’ to assist each public sector and institute in inventorying; and the ‘Cultural and Creative Industries Development Plan’ went further to encourage the rebuilding of these industrial sites as cultural consumption venues, with the expectation that they would have the potential to bring revenue into the creative economy. In the next year, CCA declared 12 potential world heritage sites in Taiwan, including the Jinguashi Gold Mining Settlement, the Ali Mountain Forestry Railway and the Taiwan Railway Old Mountain Line. In 2006, CCA continued to formulate its ‘Cultural Properties Registration Plan’ (formerly the Industrial Cultural Heritage Investigation Plan), its ‘Reviving Plan for Industrial Cultural Heritage’ (including five sugar mills, two salt fields and one brewery) and its ‘Regional Cultural Property Environment Conservation and Revitalisation Plan’; these plans supported not only industrial heritage preservation but also military, banking and educational historical buildings (for example, military power plants, the gunpowder factory, the Bank of Taiwan, the National Taiwan University, the National Taiwan Normal University, and so on).

The number of heritage sites increased greatly between 2000 and 2008, the DPP Government period; spectacularly, the sites are mainly of Japanese heritage. By 2016, Taiwan had 2,015 heritage sites (excluding national treasures and collections) on the official cultural heritage list; about 900 of these are Japanese heritage sites (including

439 industrial heritage sites), and over fifty percent (including 286 industrial heritage sites) were designated as such by the DPP Government. The geography of Japanese-built industrial heritage in Taiwan (Figure 3.6) shows it is widespread on the islands; each region has its specific industrial sites based on the development of colonised industry (for example, the forestry sites in Hualien and Chiayi), and the category of the industrial heritage (Table 3.4). However, most of the Taiwanese industrial heritage preservation and designations are dependent on the authorities' opinions and plans rather than the awareness of local communities. And neither the KMT nor the DPP Government since the 1990s has been concerned about the contextual background of industrial culture from colonisation to the present modernisation. Due to the lack of connection between heritage and residents, and the weakness of interpretation of industrial culture, some heritage sites and spaces have been re-ruined or re-deserted (Lin, 2012b).

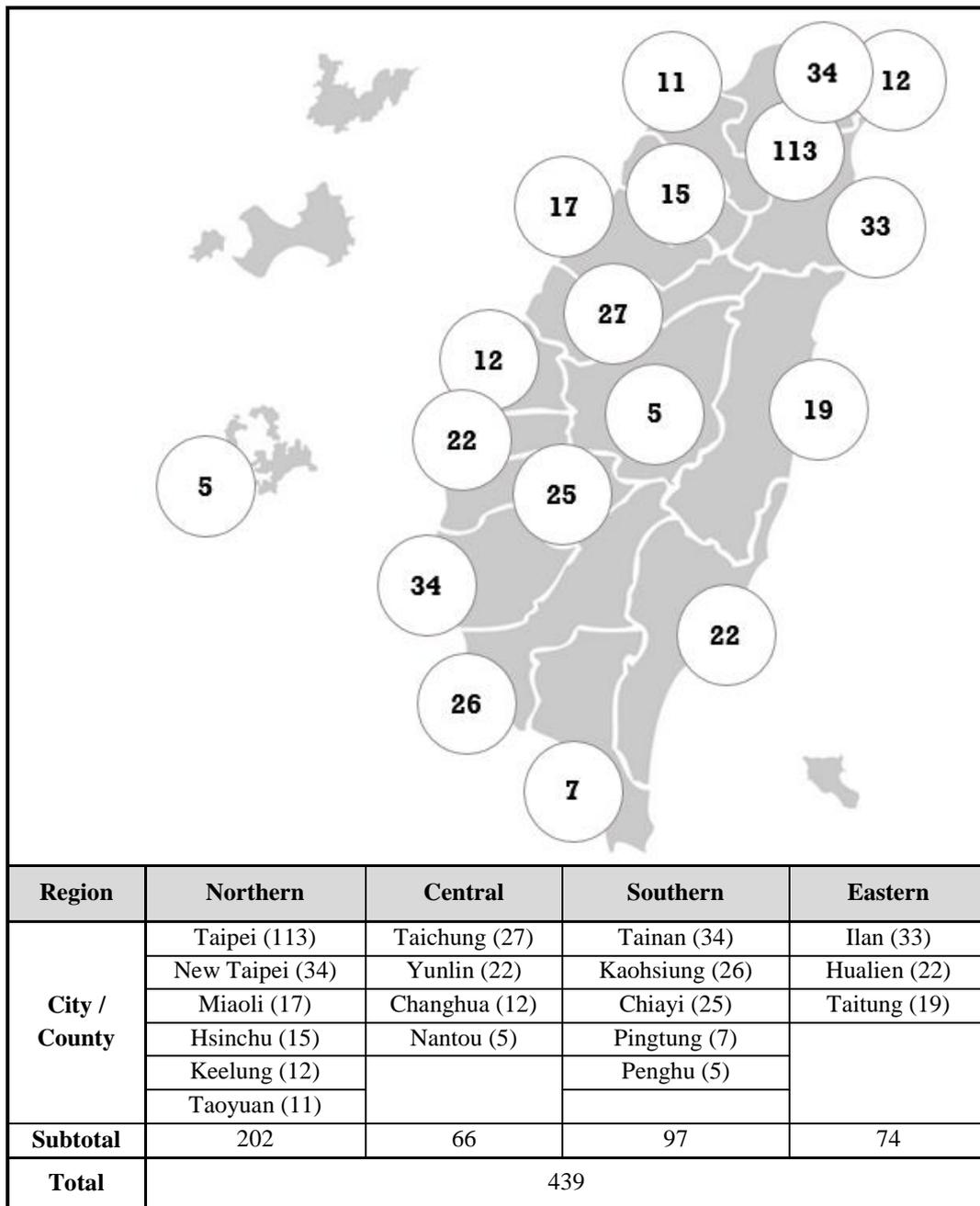


Figure 3.6 Geography of Japanese-built Industrial Heritage in Taiwan
 Source: National Cultural Heritage Database Management System, MOC
 (nchdb.boch.gov.tw).

Table 3.4 Japanese-built Industrial Heritage in Taiwan

Industrial Subject	Thematic Sector	Amount
1. Transportation Industry (148)	Bridges	34
	Canals	2
	Communications	13
	Marine Transport	8
	Railways	91
2. Power Industry (49)	Hydroelectricity and Electro-chemical	5
	Energy and Power	2
	Water	42
3. Heavy Industry (23)	Chemicals	2
	Metallurgy, Mining and Collieries	17
	Brick and Tile (3), Stone (1)	4
4. Commodities Industry (129)	Agricultural and food production: Sugar (33), Salt (3), Rice and Agriculture (20), Tobacco (7), Tea (11), Wine (9), Other ^a (13)	98
	Glass (and Lime)	1
	Paper	1
	Wood (and Camphor ^b)	29
5. Other Industry (90)	Tourism (and Leisure)	6
	Business and Banking (71), Medical (13)	84
Total		439

a. Including a shell button factory, a tin factory, a lacquer factory and 10 monopoly bureau offices.

b. Including 3 Camphor factories.

Source: National Cultural Heritage Database Management System, MOC

(nchdb.boch.gov.tw/).

3.5.3 The Development of Taiwanese Industrial Heritage

With the advancements in economy and society, industrial structures have changed drastically since the 1980s. When the state-owned enterprises (for example, Taiwan Tobacco and Liquor Corporation) were privatised by introducing private investment and business management, many factories were closed or made redundant due to low productivity. Consequently, the conservation and preservation of industrial heritage

became an urgent task from the late 1990s. A nation-wide survey of industrial heritage was begun, and a number of industrial heritage sites (mostly built in the time of Japanese rule) of different types were listed as monuments or historical buildings by local sectors and the central government. The industrial heritage related to the mining, sugar, fishery, forestry, tea, ship-building, oil, and wine industries. Some transport constructions, especially railways and bridges, have also been recognised. A few hydraulic facilities, such as waterworks, water reservoirs, and irrigation waterways have been listed as well. In addition, traditional sea salt fields and stone tidal weirs are also being treated as industrial heritage sites.

The government seems to recognise that industrial heritage is not only the rusty remains and historic buildings; industrial heritage sites contain the historical, cultural, artistic, and scientific values, which are worth preserving; further, there are various strategies proposed for industrial heritage under the lead of the government. The first strategy is to transform industrial heritage of various functions into educational settings, especially museums. The Jinguashih gold mine was reused as an industrial museum, the Gold Museum, which opened in 2001, Taiwan's first so-called 'eco-museum', meaning a community-driven museum or heritage project that aids sustainable development (Davis, 2007: 199). It attempts to create settings that help people to understand the history of Taiwan's mining industry and economic

development by transforming industrial facilities into museum exhibition; it also aims to develop a close relationship with local communities to cover history, culture, nature, industry and community as an eco-museum park.

The next strategy is to reuse industrial heritage sites (mainly the state-owned estates), especially wine factories and breweries (such as the former breweries in Taipei, Taichung, Chiayi, Tainan, and Hualien), as creative and cultural parks, by introducing the western concept of ‘creative cluster’, based on 1990s’ urban planning and artists / creative people-led urban regeneration (Pratt and Hutton, 2013). The Huashan 1914, where the former Japanese Taipei Brewery is located, became the first one of these parks, including green spaces, exhibition spaces, offices, commercial spaces, restaurants and multipurpose spaces for design workshops and other activities.

The third strategy is to counsel private enterprises, the traditional manufacturing industries in particular, by promoting their industrial places as ‘tourism factories’ in which to create a new type of cultural tourism. In 2003, the Industrial Development Bureau (IDB) and the Ministry of Economic Affairs (MOEA), initiated the Tourism Factory Project by actively promoting a combination of industrial culture and tourism in order to bring the benefits of tourism into the manufacturing industries. The Tourism Factory Project is economically motivated but has helped to preserve 136 old

factories and mills so far (IDB, 2017). Later, both the cultural and tourism sectors wanted to develop cultural tourism in industrial sites. CCA's 'Reviving Plan for Industrial Cultural Heritage' has offered counselling and funding since 2006 to promote the reuse of industrial sites, including five sugar mills, two salt fields and one brewery; and the Tourism and Travel Department of the New Taipei City Government set up a new eco-museum park on the site of a coal mine in Houtong in 2010, which is planned to not only create a new tourist spot but also to regenerate the local economy.

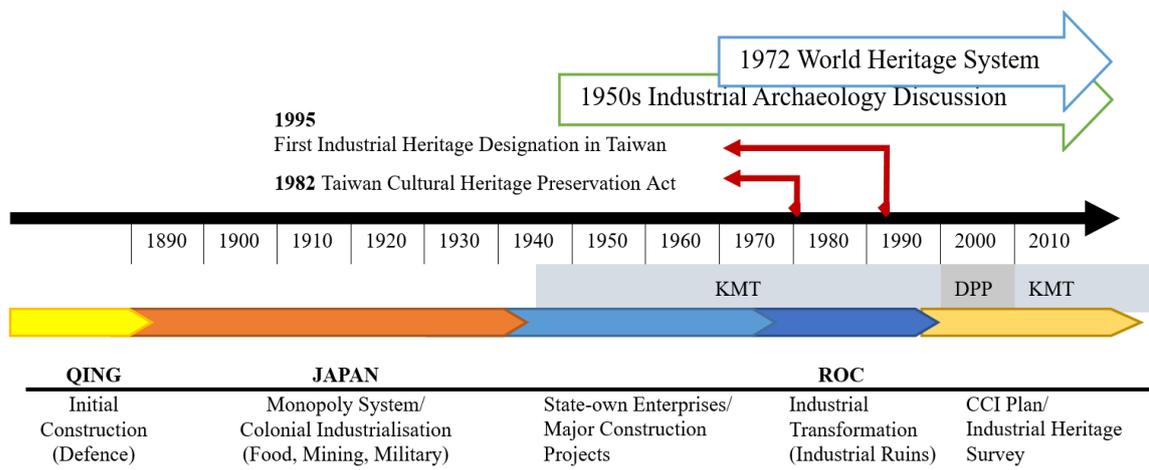


Figure 3.7 The Development of Industrial Heritage in Taiwan

3.6 Conclusion

In the nearly four hundred years of modern Taiwanese history, after the rule of the European colonists, the Ming and Qing Dynasties, and Japanese colonisation, Taiwan has experienced a political shift from authoritarianism to democracy, which has steadily shaped the islands' cultural identity. The rapid changes of industrialisation,

urban expansion, population growth, industrial restructuring, technological innovation and privatisation all came within a single century. This has led to the vacancy and demolition of industrial heritage in urban and suburban areas as well as to controversy over the interpretation of colonial heritage. Generally speaking, industrial development in Asia is different from its counterparts in the West; “many key elements of industrial heritage in Asia were imported by colonisers or countries in the Western world, and factories and facilities are pioneering avant-gardes, incorporating aesthetic and scientific values that reflect the history of architecture, construction techniques and equipment, which should be preserved in ways that reflect their integrity” (TICCIH, 2012). Recognising the significance of industry to the history of Taiwan, the government of Taiwan has started to pay attention to industrial heritage and an effort to preserve important sites has been implemented since the late 1990s. However, most of these industrial heritage sites are conserved and preserved in a conventional manner, similar to other heritage building types. The context of colonial industrialisation and the core values of industrial heritage seem to have been neglected, either consciously or unconsciously. The policy of industrial heritage conservation has been executed without considering the uniqueness of each site.

On the one hand, the definition of industrial heritage in Asia should be broadened to include technologies, machinery and producing facilities, built structures and built

environments of the pre- and post-industrial revolution periods, because the development of native manufacturing methods and facilities is part of local history; on the other hand, in Taiwan, workers' housing, sources of materials and transportation facilities are all contributory parts of this integrity and should also be considered for preservation within a cultural landscape concept, while the interpretation and performance of industrial materials from a post-colonial perspective should not be disregarded. The discourse of industrial heritage preservation intersects with the contexts of technology, history, society and modernity. For developing countries in the post-colonial world, industrial heritage is a historical footnote of colonial modernity. Neither resentment nor nostalgia towards colonial heritage is able to reflect comprehensively on industrial heritage; a new intimacy between the former colonists and former colonies is taking shape along with the shifting of domestic and cosmopolitan values.

Chapter 4 Methodology

4.1 Introduction

This chapter justifies why I have chosen to conduct the research in the manner that I have. Each of the methods in respect of the selection of case studies, data collection and data analysis was deemed appropriate for this research. This chapter also explains the reasons I have conducted a research design but also used data-gathering techniques and analytical methods. Since the main objective of this research is to understand the relationship between the conservation and the significance of Taiwan's industrial heritage, it is important to investigate the ways in which industrial heritage in Taiwan is not only influenced by the increasing convergence between tourism, museumification and commercialisation, but also re-imagined and re-interpreted with reference to former Japanese colonialism. The aim is to better understand the valorisation of industrial heritage in the country and how it feeds into larger narratives regarding the colonial past and issues of Taiwan's identity. To do so, it is necessary to adopt a range of different methodologies to capture the distinctive character of these related fields of enquiry, and to combine these into a single but flexible working method that enables a meaningful interpretation of the phenomena under consideration. The methodology of the study is based on the insight discussed in the

previous chapters that the term 'industrial heritage' in Taiwan can be used to describe notions both of an inherent heritage character and the process by which individual subjects are revealed in the industrial sites. The study, therefore, attempts to understand how the Japanese colonial past is revalued in Taiwan's industrial heritage by the increasing convergence between tourism, museumification, and commercialisation, seeking to describe the acknowledged principles when listing Japanese-built industrial sites as heritage sites in Taiwan, and the types of management that the authorities adopt to valorise them. Further, it explores an understanding of the heritage site as a medium for the performance of various forms among cultural, economic, political and ideological perspectives. Lastly, it looks at how influential discourse has been (re)shaped by heritage narratives and Taiwan's identity.

In order to investigate the above, the researcher has undertaken fieldwork to sample Taiwan's industrial heritage sites through a combined approach of field observation, interviews and document analysis. The research was conducted between October 2014 and March 2015. Predominantly in Taiwan, a programme of interviews with heritage policymakers at a national level and with heritage site managers was designed and agreed. The researcher recorded face to face interviews and transcribed these. I conducted detailed visits to eight industrial heritage sites across five regions in

Taiwan to examine and discuss the narratives they work with and how they negotiate their Japanese links—historical and present. The visits allowed me to collect policy documents and materials relating to the development and interpretation of the site for subsequent analysis. The aim of this chapter is to discuss the research issues raised by these mixed methods, in particular, their implication for the collection and interpretation of data. It also aims to describe the procedures involved in the research process. Finally, it is also, in part, a reflection of the personal journey that I have made during the process of completing this dissertation.

4.2 Research Philosophy and Paradigm

Blaikie (2009: 96) states that “social research is usually conducted against a background of some tradition of theoretical and methodological ideas”. These traditions are referred to as research paradigms. They are the source of both theoretical ideas and assumptions. A paradigm is a framework or philosophy of science that makes assumptions about the nature of reality and truth, the kinds of questions to explore, and how to go about doing so (Gray, 2014). In this section, the philosophical assumptions and research paradigms underpinning this study are described, since these have informed the methodological approach that has guided this research. The research philosophy refers to the way the researcher thinks about the development of knowledge. Within the social sciences, two main philosophical

currents—positivism and phenomenology—have historically dominated methodological approaches to social research, each of which implies very different sets of underlying assumptions concerning the nature, scope and purpose of social enquiry (Silverman, 2013).

The term ‘positivism’ came from Auguste Comte, a nineteenth-century philosopher, as he advocated “an approach to social science ... that would emulate the natural science and would be positive in its attempts to achieve reliable, concrete knowledge on which we could act to change the social world for the better” (O’Reilly, 2005: 29).

The central tenet of positivism is that the external social world exists as a singular, self-consistent entity which can be described and measured using objective methods.

In contrast, phenomenological philosophy, which appeared during the early decades of the twentieth century as a reaction to the dominance of positivism, focuses on the meaning that subjects give to social phenomena. It is also linked to the ideas of interpretivism, which can be traced back to Greek and Roman philosophies (also called interpretivism). However, as a form of social science research, it grew out of the work of eighteenth-century German philosopher Immanuel Kant and was expanded on by Wilhelm Dilthey, Max Webber, Edmund Husserl, and others (Glesne, 2011). The role of the social scientist thus becomes that of accessing others’ interpretations of some social phenomenon and of interpreting their own and others’

actions and intentions. Phenomenology (or interpretivism) shares the goal of understanding human ideas, actions, and interactions in specific contexts or in terms of the wider culture. Phenomenological research is a form of inquiry coming from philosophy and psychology in which the researcher describes the lived experiences of individuals as they relate to a phenomenon as described by the participant, including a design for philosophical understanding and conducting interviews (Moustakas, 1994; Giorgi, 2009). This form of research, therefore, considers social phenomena to be radically constituted by the modes in which subjects view and experience them (Silverman, 2013). This emphasis on the subjective and experiential elements of social phenomena has entailed a scepticism about the claim to value-free enquiry inherent within positivist assumptions.

Generally, positivism has come to be associated with quantitative methods of data collection, while phenomenology has come to be linked with qualitative research methods. The main aim of this research is to understand how far Taiwanese industrial legacy depends upon concepts and practice deriving from the heritage and cultural industry fields, and how far it is a feature of Imperial Japanese colonisation and Taiwanese industrialisation. Given the above, the methodology adopted needs to be sensitive to the cases studied and the nature of the aims and objectives of the research; thus, the phenomenological paradigm and an appropriate methodology have been

chosen.

Phenomenologists regard social reality as a product of its inhabitants; it is the world that is interpreted by the meanings participants produce and reproduce as a necessary part of their everyday activities together. Attention focuses on the nature of the meaningful social action, its role in understanding patterns in the social life, and how its meaning can be assessed (Blaikie, 2009: 99). Eyles (1986: 17) has commented that qualitative research can be used to “enrich our understanding of the human condition and of people in places”. Mason (2000: 16) also argues that these methods are “sensitive to contextual relationships”; they prove to be “indispensable in studying the nature and interplay of heritage values”. Gorman and Clayton (2005: 3) define qualitative methodology as “a process of enquiry that draws data from the context in which events occur, in an attempt to describe these occurrences ... using induction to derive possible explanations based on observed phenomena”. Consequently, for the sake of this research, qualitative research methods are appropriate as they are particularly useful for exploring the revaluation of industrial heritage sites and professional communities with colonial narratives and Taiwan’s identities, key elements in this study.

The adopted approach also combines qualitative methods and techniques and triangulates these by drawing on material from multiple data sources. Richardson

(2000: 934) suggests crystallisation as a more useful metaphor than triangulation: “I propose that the central image for *validity* for the post-modern context is not the triangle—a rigid, fixed, two-dimensional object”. Rather, the central imaginary is the crystal, which combines symmetry and substance with an infinite variety of shapes, substances, transmutations, multi-dimensionality, and angles of approach. The researcher seeks to elucidate the ‘truth’ of a setting or situation since they believe in no underlying reality, but rather are trying to understand the multiple perspectives available. Inconsistencies can help to reveal the complexity of a situation.

A further available philosophical foundation for qualitative research is called ‘interpretivism’ or ‘naturalism’. Matza (1969: 5) defines this as “the philosophical view remains true to the nature of the phenomenon under study”. The observable fact that people’s feelings and behaviours change as they move through different parts of their lives and interact with different people means that these things have no single, true meaning. It means that we need methods of measuring phenomena as they occur in the social world. This is the principal assumption of the naturalist paradigm. The assumption of the above-mentioned approaches is that not only is reality socially constructed, but also that variables are complex, interwoven, and difficult to measure (Denzin and Lincoln, 2005). And the research purposely focuses on contextualisation, understanding and interpretation. With the research goal of interpreting the social

world from the perspectives of those who are actors in that social world, it follows that the research methods include interacting with people in their social contexts and talking with them about their perceptions. From the phenomenological perspective, a study design tends to focus on qualitative methods by in-depth, long-term interactions with the participants in one or several sites.

4.3 Research Approaches, Concepts, and Strategies

The process of qualitative research is largely inductive and the inquirer generates meaning from the data collected in the field. Regarding the research questions of this thesis, as there are no clear theoretical leads from the literature, theory generation is required. Therefore, both an abductive and an inductive research strategy are adopted in order to explore this understanding in depth. However, they examine the patterns of relationships between the site management and the significance of Taiwan's industrial heritage from a colonial perspective. The researcher tends to use open questions so that the participants can share their views, and seeks to understand the contexts and settings of the participants through collecting information personally.

“Social researchers need descriptions of social phenomena in order to answer ‘what’ research questions” (Blaikie, 2009: 83). The aim of the inductive research strategy is to establish limited generalisations about the distribution of, and patterns of

association amongst, observed or measured characteristics of individuals and social phenomena. The abductive research strategy can answer both ‘what’ and ‘why’ types of questions. However, it answers ‘why’ questions by offering an understanding rather than an explanation, by providing reasons rather than causes. In the abductive research strategy, the concepts and their definitions may be derived initially from those used by social actors in the context of the topic under investigation. The abductive strategy involves developing descriptions and constructing a theory that is grounded in everyday activities, and / or in the language and meanings of social actors. Abduction refers to the process generating social scientific accounts from social actors’ accounts; for deriving technical concepts and theories from lay concepts and interpretations of social life. As a method abduction has two stages: “describing these activities and meanings; and deriving categories and concepts that can form the basis of an understanding or an explanation of the problem at hand” (Blaikie, 2007: 88-89). The abductive strategy is a process by which the researcher assembles lay accounts of the phenomenon in question, with all their gaps and deficiencies, and, in an iterative manner, begins to construct her or his own account.

The ontological tradition in the use of social science concepts is concerned with establishing a set of concepts that identify the basic features of the social world, and that is essential for understanding societies, major social institutions and, perhaps,

small-scale social situations. The ontological assumption is concerned with the nature of social reality. Such an assumption makes claims about what kinds of social phenomena do or can exist, the conditions of their existence, and the ways in which they are related (Blaikie, 2009: 92). To investigate the nature of the phenomena, or entities, or social reality, requires researchers to ask themselves what the research is about in a fundamental way, and probably involves a great deal more intellectual effort than simply identifying a research topic. It involves asking what a researcher sees as the very nature and essence of things in the social world, or, in other words, what is a researcher's ontological position or perspective (Mason, 2005: 14).

The researchers' epistemology is their theory of knowledge, and should, therefore, concern the principles and rules by which they decide whether and how social phenomena can be known, and how knowledge can be demonstrated (Mason, 2005: 16). Epistemological questions should, therefore, direct the researcher to a consideration of the philosophical issues involved in working out exactly what a researcher would count as evidence or knowledge of social things. Epistemological assumptions are concerned with what kinds of knowledge are possible—how we can know these things—and with criteria for deciding when knowledge is both adequate and legitimate. Construction, as a type of epistemological assumption, has been chosen for this study, and Blaikie (2007, 2009) has described constructionism as

follows: everyday knowledge is the outcome of people having to make sense of their encounters with the physical world and other people, and social scientific knowledge is the outcome of social scientists reinterpreting this everyday knowledge into technical language. Because it is impossible for fallible human beings to observe an external world unencumbered by concepts, theories, background knowledge and past experience, it is impossible to make true discoveries about the world; all social enquiry reflects the standpoint of the researcher and all observation is theory-laden. Hence, there are no permanent, unvarying criteria for establishing whether knowledge can be regarded as true.

In order to assess how Japanese-built industrial heritage sites are valued in Taiwan, it is necessary to adopt a broadly historical approach to the emergence of the modern Taiwan heritage discourse, tracing current industrial heritage formations from their historical development. As was argued in Chapter Three, by working with historical data from the period of Japanese rule to the current Taiwan, Taiwan's heritage discourse can be theorised in terms of top-down or bottom-up approaches, or more preferably through some methodological combination of the two. However, a historical perspective is essential for both approaches, in the sense that it allows an analysis of how industrial heritage discourses are constructed both by elites and by nation-states. As such, this dissertation adopts a historical approach to the emergence

of Taiwan's industrial heritage. In this chapter, this takes the form of a chronological historical analysis of the development of Taiwan's coherent industrial heritage narratives from various professionals and geographic locations.

4.4 Research Questions

According to the discussion in the previous section, the research approaches for this study may result in hypotheses and theories that see the researcher as an instrument, searching for patterns, seeking pluralism and complexity, using descriptive writing, but making minor use of numerical indices (Glesne, 2011: 9). Qualitative research is an approach to exploring and understanding the meaning individuals or groups ascribe to social or human problems. The process of research involves the emergence questions and procedures, data typically collected in the participant's setting, data analysis inductively building from particulars to general themes, and the researcher making interpretations of the meaning of the data. The approach sees people, and their interpretations, perceptions, meanings and understandings, as the primary data sources to support a study which uses interview methods where the aim is to explore people's individual and collective understandings, reasoning processes, social norms and so on. It also seeks people's perceptions, or what Blaikie (2009) calls the 'insider view', rather than imposing an 'outsider view'. Other data sources are possible according to this approach—for example, text, object or observation. The qualitative approach

allows for a range of methods, which may include the closed-question survey, but is more likely to draw upon a variety of participant-observer techniques, such as informal conversations of a friendly nature, semi-structured in-depth recorded interviews, analysis of tourist-guide brochures, leaflets and advertising, and fieldwork diaries. These qualitative research approaches support the way of looking at a research that honours an inductive style, a focus on individual meaning, and the importance of reading the complexity of a situation. The researcher's role types include personal, involved, empathetic, and understanding.

In terms of the role of concepts, a concept is an idea that is expressed in words or as a symbol. Some concepts are used to provide initial direction for the study (Blaikie, 2009: 111). The aim of this study is to explore the meaning given to Japanese-built industrial heritage sites by the people interviewed and the fields visited, and to discover other concepts they use or discovered by the researcher that are roughly equivalent, or are different. The research objective of this study is to investigate 'how the Japanese colonial past is revalued in Taiwan's industrial heritage by the increasing convergence between tourism, museumification, and commercialisation'. Thus, the main concepts of this study are tourism, museumification, commercialisation, industrial heritage, Japanese colonialism, and Taiwan's identity. Meanwhile, the above concepts offer ways of looking at the world which are essential to defining the

research questions, both descriptive and explanatory, in this study. The study is descriptive in two ways: by exploring the evolution of valuing heritage and the development of Japanese-built industrial sites in Taiwan; and by establishing patterns in the relationships between these and commonly used socio-economic variables. The following research question provides the focus and direction of the research:

How has Taiwan developed its industrial heritage in a post-colonial and post-industrial agenda through an ongoing search for her national identity?

Having outlined the fundamental research approaches that have been used in this thesis, I would like to state the research objectives more specifically. As stated earlier, the overarching aim of this research is to explore the relationship between conservation and the significance of Taiwan's industrial heritage from a colonial perspective, and in addition how the Japanese colonial past is revalued in Taiwan's industrial heritage by the increasing convergence between tourism, museumification, and commercialisation. In order to achieve this, the following specific objectives relating to the research questions have been formulated:

- a. What approaches have been used to protect, preserve, manage and interpret the industrial heritage of Taiwan?
- b. What has been the changing policy context for industrial heritage and how has

this shaped stakeholder engagement?

- c. How does industrial heritage intersect with the sectors of tourism, cultural policy and the creative industries?
- d. What wider function does Taiwanese industrial heritage have in terms of geopolitics?

4.5 The Case Study: Fieldwork Approach

Interpretative (phenomenological) researchers assume that the social world is indivisible. It is complex and we should study it in its completeness. In this sense, interpretative research marries easily with case studies, which also prioritise looking at the whole (Thomas, 2011: 126). Therefore, in order to understand the details of what is happening, the study utilises the case study research tradition. Case studies are a design of inquiry found in many fields, in which the researcher develops an in-depth analysis of a case or of one or more individuals. Thomas (2011: 23) gives the definition of case studies as follows:

... case studies are analyses of persons, events, decisions, periods, projects, policies, institutions or other systems which are studied holistically by one or more methods. The case that is the subject of the inquiry will be an instance of a class of phenomena that provides an analytical frame—an object—within which

the study is conducted and which the case illuminates and explicates.

Creswell (2013) has also defined that a case study is a simple bounded entity, studied in detail, using a variety of methods, over an extended period. Thus, the case study is not a methodological choice but a choice of what is to be studied (Stake, 2005: 443).

In a qualitative inquiry, case study research refers to the intensive study of a 'case'; cases can vary, from one person to a village or from an event to a set of procedures such as the implementation of a programme. Designing a case study is like designing anything else—starting with a purpose and then planning how to achieve it. The research design is a recursive process (Thomas, 2011: 27), as shown in Figure 4.1. It involves each element influencing the others. The conception of this research meets the research purpose, on the basis of the initial literature review; the researcher refines the original conception and thinks about the process necessary to do the work (the design frame, the methods, and the analysis chosen), then progresses towards actually doing the task (the process used in case studies).

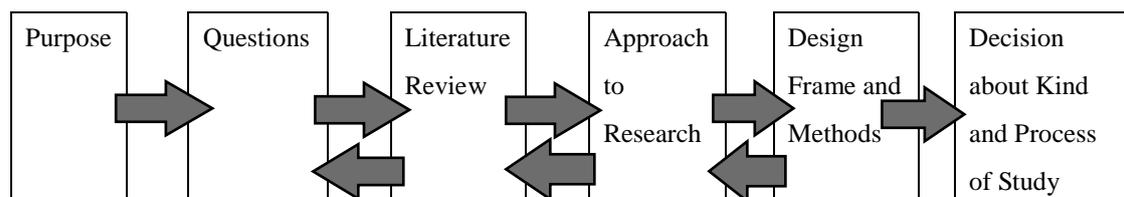


Figure 4.1 The Research Design

By doing a case study, researchers focus on the complexity of the case, on its uniqueness, and its linkages to the social context of which it is a part. The case study offers the opportunity to bring evidence together from many and varied sources to support arguments in ways that would not be possible using other forms of inquiry that are fenced in by different considerations. As Keith Punch (2005: 144) puts it, “the basic idea is that one case (or perhaps a small number of cases) will be studied in detail, using whatever methods seem appropriate. While there may be a variety of specific purposes and research questions, the general objective is to develop as full an understanding of that case as possible”. Cases can be bounded by time and activity, and the researcher collects detailed information by using a variety of data collection procedures over a sustained period of time (Eisenhardt, 1989; Stake, 1995; Yin, 2012).

The case study includes two parts, the subject and the analytical frame (the object). The former is a practical, historical unity, the latter is the theoretical, scientific basis of the case, each part needing the other. A case study is about the particular rather than the general. It is a kind of research that concentrates on one thing, looking in its completeness from many angles and offering a boundary to the research. In this study, Japanese-built industrial sites in Taiwan is the subject and an analysis of how they are thought to be a crucial heritage and the recent use of sites. For the research questions, industrial sites of different categories were enrolled in an industrial heritagisation /

touristification programme; the selection of case study depended on the following criteria: industrial sites built in Taiwan during the Japanese rule which meet the definition of a historic monument or a historic building (two categories), which are supervised by a variety of official sectors with different functional roles (three categories—BOCH, the Cultural-and-creative Development Division and the Forestry Bureau), which are located in both urban and rural areas on the main island of Taiwan (three categories: city, country town, and rural), and which have a range of operational models (three categories: museum, cultural and creative industries park, and tourist attraction).

In a qualitative approach, interpretivist researchers tend to select each of their cases purposefully (Patton, 2002). Patton (2002: 46) also notes that “the logic and power of purposeful sampling ... leads to selecting information-rich cases for study in depth. Information-rich cases are those from which one can learn a great deal about issues of central importance to the purpose of the research”. The assumption in a case study is that, with a great deal of intricate study, looking at the subject from many and varied angles, the researchers can get closer to the ‘why’ and the ‘how’. Also, the researchers drill down further and create a three-dimensional view, or what Michel Foucault (1981) called ‘a polyhedron of intelligibility’; in looking in several directions, a more rounded, richer, more balanced picture of the subject is developed. The research

questions of this study lead to the fieldwork study by seeing the process within the choice of focuses and at the how and why of the process revealed. The approach of the selection of the cases is predicated upon the availability of practical experience, intimate knowledge, and a particular interest in my home country (the local knowledge case). They are also the major exemplary cases that reveal the industrial heritage development in Taiwan (the key case). This is not merely descriptive, but I am seeking to understand the perspectives and positions of those who experienced the period. In this sense, this study is interpretative. I conduct the fieldwork study by investigating twenty-one selective Japanese-built industrial heritage sites in Taiwan. Regarding the connection between the chosen sites and the third research question, three different professional groups are interviewed (see Appendix 1). They are: (1) the industrial heritage site managers who are currently in charge of the site, (2) the policy-makers relating to industrial heritage who conduct the legal procedures to fulfil the policy goals, and (3) the relevant experts who engage in this field or the particular sites as consultants, historians, architects, designers and others.

Regarding an abductive research strategy, abduction involves making a judgment concerning the best explanation for the facts the researchers are collecting. Abduction provides heuristics, which are ways to analyse complexity that may not provide watertight guarantees of success in providing explanations or predictions.

Explanations tend to be tentative or context-specific, but it is in the multifaceted nature of a case study that the researcher gets the opportunity to relate one bit to another and offer explanations based on the interrelationships between these bits.

The case study includes in-depth interviewing, fieldwork, and continual and ongoing observation of a situation or phenomenon, in order to capture the whole picture and reveal what the researcher finds in the field and how participants describe and structure their world. Moreover, case studies of necessity involve the subjective interpretation of the researcher. As Anderson et al. (2003: 9) have remarked: “contrary to the lingering legacy of positivist thinking with which ‘case studies’ grew up, we do not conceive of them as simple descriptions of the world as it is ... the case study is not a local application of an abstract model or a ‘micro’ statement of a ‘macro’ series of events”. Rather, case studies are passionate evocations of the world and engagements in it. Careful thought must also be given to the choice of location for the case study fieldwork, ensuring that it is appropriate to the focus of the research. For the purposes of this study, twenty-one industrial heritage sites (see Appendix 2) are selected according to (a) their being the major tourist attractions in the respective geographic area; (b) their being of commercial significance to the authorities; (c) their each having their own cultural symbolic meaning; and (d) their involving numerous professional communities. However, some of the visited sites are either listed very

recently without significant transformation or have had very little use, meaning that there is considerably less potential for access for investigation due to there not yet being clear planning. These sites, therefore, provided fewer opportunities for observing the processes that this research would like to focus on. However, where relevant, the materials gathered from them are still described as the subgroup for further references.

When using the case study approach, it is essential that the primary data and analysis generated from the fieldwork is used in conjunction with contextual information from an appropriate range of secondary data sources. Thus, the data which was gathered from the fieldwork interviews was supplemented with, and compared to, information received from a range of other sources relating to the same phenomenon and also deriving from different phases of the fieldwork. These sources included: existing academic research relating to industrial heritage, colonial narratives, tourism and national identity in general, and to Taiwan in particular; secondary data, such as governmental and non-governmental documents and newspapers relating to Taiwanese industrial heritage and, mainly, to the management of the eight sites, accessible via the internet and other library sources; annual reports, official and policy documents; and my own observations in situ.

The use of multiple or combined research methods and strategies to form part of a continual process of research triangulation carries a number of benefits. Most importantly, they provide more complex information by “adding depth to the description of social meanings involved in a setting” (Hammersley and Atkinson, 2007: 198). Moreover, a mixture of data collection methods, as Axinn and Pearce (2006) argue, can help to counterbalance the biases or flaws that may arise from the employment of a single data collection technique and analysis, meaning that triangulation can provide a useful validity check, which increases the reliability of the result.

4.6 Data Collection and Fieldwork

Case studies generally entail extensive fieldwork at a single study site, possibly conducting observations and interviews which are backed by quantitative measures such as surveys or secondary analysis. This approach is particularly appropriate for exploratory questions and situations where a great many variables might have different kinds of effects. Fieldwork study can value the “detailed and intimate knowledge of economically and politically marginalised places, people, histories, and social locations” (Scheyvens, 2014: 11). Fieldwork reveals that self-conscious shifting of social and geographical locations can be an extraordinarily valuable methodology for understanding social and cultural life, both through the discovery of phenomena

that would otherwise remain invisible and through the acquisition of new perspectives on things we thought we already understood (Gupta and Ferguson, 1997: 36–37). The fieldwork is understood to take place at a socio-political and / or geographical site where a researcher spends time collecting data to gain a deeper understanding of development issues. To try to get a deep, complex understanding, three data-gathering techniques dominate in qualitative inquiry: observation, interviewing, and document collection. Within each technique, a wide variety of practices can be carried out, some more common than others (Glesne, 2011: 48).

As highlighted above, this research aims to gather qualitative data from a variety of approaches through categories, geography and management and governance practice to industrial heritage. Fieldwork, which involves travelling to the research setting where the issues are discussed, provides us with a deeper and more tangible understanding of the social context in which the industrial heritage exists. The research can explore and elaborate on the data with rich narrative descriptions of the industrial sites' landscape and the ambience of the Japanese colonial past and modern-day performance. The fieldwork entails researching how different industrial heritages are identified with the sites in terms of the categories of tourist attraction, cultural institution and economic generator; the geography element entails considering how the colonial past and industrial heritage discourse intersect with the

spatiality of the sites; and the management element entails considering how governance practices reflect the interests of authorities and professional communities. Each of these research objectives intersect and converge with each other, and therefore require the collection of varied forms of data, from the opinions of policy-makers, site managers and professionals, to direct observation of spatial characteristics and the ways in which they fix bodies in space, to readings of the semiotics of industrial heritage in terms of practical, historical, and ideological signifiers.

There are eight sites selected for intensive case-study research through fieldwork. The data are drawn from the representation of Japanese-built industrial spaces in Taiwan. Although a major focus is on industrial sites in Taiwan, I am also interested in the attitude of Taiwanese people towards Japanese symbols including Japanese residences, architectures, infrastructure, shrines and monuments. Without writing, the sharp, incisive details about people, places and cultures are lost to us (Sunstein and Chiseri-Strater, 2002: 56). To assist in the data collection phase, I utilise the field notes, which provide the detailed account of ways I plan to spend my time when I am in the fields to study. By moving onto the transcription and analysis phase, I intend to record details related to my observations in the field notebook and keep the field diary to chronicle my own thinking, feelings, experience and perceptions throughout the

research process. Further useful techniques include keeping the data from life histories and oral histories, which are the audio-recorded histories of people, places and events, to provide unique insights into unrecorded situations and alternative views on written histories. Along with photographs, film and video, as well as letters, archives and diaries, these sorts of texts make useful primary and secondary sources. A researcher cannot divorce his / her scholarly endeavours from the bodily reality of being in the field (Coffey, 1999). When being in the field, the researcher's engagement with the field is both intellectual and physical.

The fieldwork for this research took place in Taiwan. Data collection in the field may be considered with a continuum from the least intrusive observations—where the researcher stays out of the way and takes notes—to involve combinations of interviews, observations, and the analysis of social artefacts. The observation technique was used throughout the fieldwork, and the interviews were conducted in the later stages. This section goes on to describe the processes of entering the field. When entering a field site, gaining entry often requires: (a) conducting enough nonparticipant observation of the site to develop a rough mapping of the informal social structure at work there; (b) identifying gatekeepers who can ease our entry or bar our way; (c) choosing key informants who can guide us through the site with insider knowledge (Lune et al., 2010: 244). For this research, I had conducted trial

fieldwork between December 2013 and January 2014, to conduct an initial investigation by drawing upon nonparticipant observation at five sampled sites, including Tangrong Brick Kiln, Pier-2 Art Centre (ironwork and shipping industry), Houtong Coal Mine Ecological Park, National Museum of Taiwan History (the colonial past, heritage discourse and Taiwan's identity), the National Taiwan Museum's Nanmen Factory Park (camphor industry). During the course of this investigation, I met people in heritage-related fields (they were: Mr Chien-lang Lee, an expert in architectural heritage in Taiwan; Ms Hsiao-Wei Lin, the Taiwan Chair of TICCIH Congress 2012 Taipei, the Assistant Professor of the Department of Architecture; and Ms Shu-Ying Wu, a senior researcher in the Cultural Resources Division, MOC), and reviewed some material resources, such as documentaries, reports, journals and publications, which helped to guide this ongoing study.

4.6.1 Participant Observation

Qualitative studies, as the research activities were situated in natural settings, aim to reach the goal of understanding and interpreting the experience of the sampled informants from their perspectives. This was similarly discussed by Denzin and Lincoln (2005: 3), who stated that: "qualitative research is a situated activity that locates the observer in the world. It consists of a set of interpretive, material practices that make the world visible". This is the case because qualitative studies tend to

emphasise more in-depth analysis of specific situations and populations. This type of research is also known for prides itself on its ability to decipher hidden meanings and latent structures in addition to obvious observations. Observation in a fieldwork setting can feel a more intensely personal and intimate endeavour than conducting interviews, and researchers may invest a great deal of themselves in it (Mason, 2005: 87). Wolcott (1981) suggests four more strategies to guide observations: (a) observations using a broad sweep; (b) observations of nothing in particular; (c) observations that search for paradoxes; and (d) observations that search for problems facing the group. All these strategies help to make the familiar strange, make the strange familiar and ground the researcher in the research context.

Observation in qualitative research is fundamental to understanding other cultures. In the constructionist model, observation is to ask both ‘what’ and ‘how’ questions to understand how interaction is organised; texts and documents are the materials for an understanding of language and other sign systems, and interviews are for narrative construction (Silverman, 2005: 124). In the naturalist model, observation aims to understand subcultures, texts and documents are the background materials, and interviews are for understanding experience. The observation refers to methods of generating data which entail the researchers immersing themselves in a research ‘setting’ so that they can experience and observe at first hand a range of dimensions in

and of that setting. An observer consciously observes the research setting, its participants, and the events, acts, proxemics, and gestures that occur within it. As Sunstein and Chiseri-Strater note, “the body is not just a physical object; it is a social object” (2002: 295). They also suggest that the researchers periodically ask themselves and write about the following: (a) What surprises you? This helps track assumptions; (b) What intrigues you? This helps track personal interests and positions; and (c) What disturbs you? This helps track tensions and possible stereotypes and prejudices (2002: 95–96).

The researcher adopts unstructured observation for this study. Unstructured observation is undertaken when researchers immerse themselves in a social situation, usually as some kind of participant, in order to understand what is going on there. Also called participant observation, because it is associated with researchers becoming participants in the situations that they are researching, it requires the researcher to immerse themselves in the place / society they are studying (Scheyvens, 2014: 63). Participant or unstructured observation is where the researcher is in the situation, recording and watching from within it, watching informally but methodically in and among a group, recording the important facts of what is happening. By entering the field, it is possible to empathise with people’s way of looking at and interpreting the world. The main outcome of participant observation is

a better understanding of the research setting, its participants, and their behaviour in the cases / sites. Field observation and document collection aim to create an in-depth case study of each of the sites; the researcher has not only interviewed the site manager individually but also spent time visiting the sites. I gathered any media I could to help me to analyse more deeply. I also jotted down key comments and crucial quotes in two ways. Firstly, descriptive notes, which entail recording details, strive for accuracy but avoid being judgmental; these descriptive notes are intended to portray the context in which focused observations and conversations take place. Secondly, analytical notes, those recordings of things that occur to the researcher—sometimes called observer comments, but they should be more than comments. Analytical notes are part of the process of delving beneath the surface descriptions of what is seen and heard. Afterwards, I reviewed my notes and filled in the gap after the observation.

The process of gathering and analysing data from observation coincides with the in-depth interview themes to explore through the later interviews. The twenty-one observed industrial sites are listed and summarised in Appendix 2; a minimum of two hours was spent observing each site (see Appendix 3). The list also shows the other thirteen subcases in Taiwan.

4.6.2 In-depth Interview

Fieldwork observations are used to refine the phenomena and to fill out the details of the contexts. In-depth interviews are used to present the phenomena to the informants for confirmation or further refinement. Qualitative interviewing tends to be seen as involving conversation, or the reconstruction of knowledge more than the excavation of it (Mason, 2002). Interviews might record subjects' recollections of certain events, in their own words, with an emphasis on how they feel about those events now. Veal (1997) outlines three situations in which in-depth interviews are particularly useful: firstly, when a small number of people are involved in the phenomenon being researched; secondly, when it is necessary to explore the points of view of different stakeholders; and finally, in the early stages of a research project before developing a larger study. Consequently, I use in-depth interviews with various individuals from all levels who represented the different groups in order to shed light on the roles of the different professional communities.

It is acknowledged that, while interviewing, the researcher often makes observations and may be participating in the social life of the community (Glesne, 2011: 64). The in-depth interviews are conducted after the first field observation is completed at each site. They focus on: (a) the context in which everyday life now occurs, and has occurred in the past; (b) the roles undertaken in these contexts; (c) involvement in the

industrial sites' activities, past and present; and (d) perceptions of threats to industrial heritage which may affect the next and future generations. In terms of grouping the professional communities, the three groups are: firstly, policy-makers—those who occupy high positions, have more decision-making capacity and are more likely to exercise policy; secondly, the site managers who are less likely to influence heritage issues, but who still have important stakes in valorising industrial sites; and lastly, the people who have engaged with a particular industrial site or who own the unique experiences of heritage practices, whether as architects, consultants, scholars or local historians. Accordingly, the in-depth interviews are conducted with the above 29 people representing the professional communities (see Appendix 1) for a minimum of one hour each time (see Appendix 3); all the interviewees were chosen based on their authorities and expertise.

An interview is a conversation with the purpose of discovering facts. The interviews are semi-structured, initially following a script of particular questions relating to a set of topics or issues that must be covered, but allowing the interview subjects to lead the conversation in whatever direction makes the most sense to them. Through the use of interviews, I explored each individual's understanding and experience of industrial heritage practices. As highlighted in previous sections, this research, by design and by philosophy, requires the involvement of my 'interviewees' as co-learners in this study,

and the development of a relationship based on trust and rapport. I engaged in multiple interviews, through the course of which I and my co-learners collaboratively designed and redesigned the interview structure as we proceeded. Given that our relationship evolved across these interviews, the quality of the information we exchanged was also able to evolve.

The questions in the semi-structured interviews were based on issues and points of view that emerged from the previous studies, together with other factors relating to the aim of the research. The semi-structured interviews were conducted in a range of settings, as deemed appropriate. Some of the more informal interviews proved to be a rich source of material since, as Eyles notes (1988: 8), they permitted individuals “to describe and talk about their own lives in their own words”. They also encouraged the expression of personal opinions, concerns and agendas. By using the semi-structured interviews, I provided the structure with a list of issues rather than specific questions to be covered, and I had the freedom to follow up points as necessary. The structure was provided by the interview schedule, which was a list of issues that the researcher intended to cover. The researcher was not obliged to go through these points in order, or in any way to keep to a formal set format for the interview. Rather, these points gave the researchers a reminder of what they wanted to cover. The interview schedule reminded the researcher not only of the issues but also of potential questions. The

following themes were used:

- a. Meaning of industrial heritage, the colonial past, Taiwan's identity, etc.;
- b. Knowledge and awareness of industrial heritage issues;
- c. Understanding of the causes and effects of these issues;
- d. Views on the importance of valorising industrial heritage and which individual measures should be adopted;
- e. Practices of the respondent;
- f. Motivation for these practices;
- g. Influence of significant cases and experience with industrial heritage and approaches to reuse, such as tourism, museification and commercialisation.

The interview questions design was semi-structured (see Table 4.1), and three types of interview schedule were used, for policy-makers, site managers and professionals respectively (see Appendix 1).

Table 4.1 Interview Structure

Section One: Introduction and Interviewee's Background
<ul style="list-style-type: none"> ● Position and Role within the Organisation ● Main Responsibilities ● Professional Career
Section Two: Policy and Management
<ul style="list-style-type: none"> ● Development History and Background ● Tourism, Museumification and Commercialisation Approaches ● Characteristics (Unique Selling Proposition) ● Challenges and Limitations
Section Three: Knowledge Awareness
<ul style="list-style-type: none"> ● Industrial Heritage Conservation ● The Challenge of Interpretation Industrial Heritage ● Opinion of Japanese Colonialism ● Collaboration with Japanese Heritage Sectors
Section Four: Attitudes
<ul style="list-style-type: none"> ● Political and Social Influence ● Industrial Heritage Value and Identity ● The Audience / Community's View of Colonial Past ● The Strategy of Industrial Heritage for the Next Generation

Source: by the author.

For the third research question, data were collected by an in-depth interviewing method advocated by Pawson (1995), Maxwell (1996), and Pawson and Tilley (1997).

Realist interviewing is used to involve research participants in the process of testing the model of their cognitive mechanisms and how these operate in particular social contexts. There are industrial sites selected and interviewees invited in this study.

Data were collected from October 2014 through to March 2015 (see Appendix 3).

Each interview, with the site manager, the policy-maker and the professional, took between one and two hours. Subject to the agreement of the respondent, twenty-three

interviews were recorded by the audio recorder. When an interviewee objected to being recorded, notes were taken and written up immediately afterwards. Thus, there are 29 notes in total, taken by each researcher simultaneously. Each respondent had to complete an informed consent form before the interview.

After all the interviews were completed, the transcripts were reviewed by each respondent and were made available for further clarification / consultation before being analysed. This may have led to some changes in the interview transcripts, but it allowed an in-depth understanding of all the respondents' thoughts. Transcripts are used to understand how participants organise their speech and body movements during qualitative research. Making an immediate transcription of interviews and translating them from Chinese into English proved to be a very useful exercise since I could translate them by remembering the original context in which they had taken place. They also gave me a deeper insight into the competitive relationships and tensions between different groups and enabled me to assess the complexity of the relationships that arise from the various practical approaches of industrial heritage and the shifting values and meanings of the places involved. The further available materials include an account from a respondent, the result of a format that allowed him or her to communicate experience and feelings freely, and a research diary involving the researcher's record of ideas, reflections, thoughts, emotions, actions,

reactions, conversations and so on.

4.6.3 Data type and Source, and Data Analysis

Qualitative data collection strategies focus on the particular qualities of events and circumstances that cannot be reduced to numbers. Merriam (2007), Marshall and Rossman (1989) contend that “data collection and data analysis must be a simultaneous process in qualitative research” (cited in Creswell, 2013: 209). Schatzman and Strauss (1973) claim that qualitative data analysis primarily entails classifying things, persons and events, and the properties which characterise them. During data analysis, the data are organised categorically and chronologically, reviewed repeatedly, and coded (in order to use each interviewee’s information, permission must be obtained by way of an informed consent form signed by the individual in question). By reducing complex phenomena to conciseness and focuses, preferably under controlled circumstances in which the time and place of the study will have little to no impact, we are able to get a close reading of attitudes, opinions, and recent behaviour. The initial data collection of this project is shown as two lists of types and sources: Table 4.2 and Table 4.3.

Table 4.2 The Data-collection of Fieldwork and Secondary Materials

Material Theme	Fieldwork		Literature									Total
	Field Notes	Photo	Book	Conf.	Journal	Report	Meg.	Thesis	Video	Slide	Audio	
Brewery	3	643	—	3	1		1	1	1	—	—	653
Forestry	3	778	7		8	14	2	1	3	—	1	817
Irrigation	1	24	5	3	—	3	2	—	—	—	—	38
Mining	3	1077	7	2	4	18	2	3	2	2	3	1123
Railway	1	267		2	3	3	2	1	2	—	—	281
Sugar	3	460	4	4	2	3	2	2	—	2	—	482
Tobacco	1	346	1	—	1	—	—	2	—	1	—	352
Others	5	510	66	41	57	26	18	7	1	3	—	737
Total	20	4105	90	55	76	67	29	17	9	8	4	4483

Source: by the author.

Table 4.3 The Data-collection of In-depth Interviews

Material Interviewees	Interview					
	Audio	Transcript	Reference material			Informed Consent Form
			Flyer	Brochure	Paper / Briefing	
Site manager	12	12	34	4	3	12
Policy-maker	6 (1)	6	—	3	5	6
Professional	7 (5)	7	—	—	—	7
Scholar	4	4	—	—	—	4
Total	29	29	34	7	8	29

() Interviewee prefers no recording.

Source: by the author.

As per the previous description in this chapter, a list of major ideas that surface is chronicled, field notes, research diaries and visual materials are regularly reviewed, and taped interviews are transcribed verbatim. After reading the texts of interviews, textual and content analysis are used to analyse the data, which are annotated and

grouped into different categories according to their importance and relevance. McNeill (1990: 112) defines content analysis as a “method of analysing the contents of documents or other non-statistical material in such a way that it is possible to make statistical comparisons between them”. The main steps are: (a) identifying the aims; (b) selecting the samples; (c) recording the samples; (d) putting samples in categories; (e) analysing them; and (f) writing up the results. Likewise, as suggested by Ely et al. (1991: 150), there are two different kinds of statements researchers should be attentive to in analysing texts. The first is the statement of meaning that can be seen to run throughout all or most of the data being analysed. The second is the statement of meaning that, although in the minority, may be said to have a heavy emotional or factual impact; through identifying such themes, convergence / similarities and divergences / differences can emerge from the data. This method is employed in analysing the primary data.

4.7 Consideration of Ethical issues

Denzin and Lincoln note (2000: 662) that the ethical code in research has traditionally centred on three areas. The first of these is ‘informed consent’, which refers to the need for researchers to seek and obtain consent from the research participants after they have been carefully and truthfully briefed about the purpose and scope of the study. Secondly, there is the need for researchers to ensure that they protect the

identity of any subjects involved in research due to the individual's 'right to privacy'.

The third and final concern relates to 'protection from harm' for all participants, be it of a physical, emotional or other kinds. Other ethical concerns that researchers should be aware of include the need to present accurate research findings and to ensure that the full range of material discovered is included, even when that material does not necessarily support the central hypothesis or assumption of the research. This might also be linked to the issue of 'positionality' and the need to declare any known biases.

Taking account of individual languages and narrative descriptions of place and region in various contexts requires considering and clarifying central ethical issues and problems which may arise alongside the collection and analysis of research data. In what follows, I elucidate how accuracy, confidentiality and integrity are maintained in this research project.

Before embarking on this research, and in line with the relevant requirements of the University's Code of Practice for Research, I applied for ethical approval in order to proceed with my fieldwork. My project was reviewed by the University's Humanities & Social Sciences Ethical Review Committee and granted conditional ethical approval. Additionally, a letter was written and given to each of the interviewees which enquired about their readiness to participate in the project. And the Participant Information Sheet and the Informed Consent Form were recognised as key

requirements for processing any information obtained. All targeted interviewees for this project were clearly informed about my position as a researcher, the overall research context and topic, the role of voluntary participants, and their freedom to withdraw at any point. Also, they were ensured that no social, political or economic harm could potentially come to them as a result (Diener and Crandall, 1978). Regarding data protection, the materials gathered as part of this study have been treated as confidential and have been securely stored in accordance with the University of Birmingham's Data Protection Policy. All data coming from the interview are only used for research and further academic research. No information about the identity of the interviewees or informants will be revealed, in order to safeguard the right to anonymity of every interviewee and informant.

Notions of contextuality are critical to the present research project and inform the employment of montage and bricolage styles of social inquiry (Denzin and Lincoln, 2000). These include approaches and techniques which are informed by ethnomethodologies which acknowledge the fragmentary, informal and incidental nature of social reality and, according to Lynch and Peyrot (2005), treat meaning contextually, attempting to unpack relational configurations that enable sense or meanings to be produced in situ. The interviews were recorded accurately, other than in the cases of the six respondents who preferred not to be recorded. All transcriptions

of the audio recordings or notes were made as accurately as possible. A number of conversations and unstructured interviews were undertaken informally with the respondents before and after the formal interviews on social aspects such as meeting their colleagues or visitors, further discussions and concerns about related issues, the project progress, my future career, and so on. Although some of these conversations were conducted without audio recording, I transcribed and collected them in my fieldwork diary during the dialogues in order to preserve correctly the content and wording of the provided statements and information.

Every potential informant was verbally assured that confidentiality and anonymity were guaranteed and that there was no risk involved in the project whatsoever that would jeopardise the individual in a physical, psychological or social manner. In order to maintain anonymity and confidentiality, names have been abbreviated throughout the text. Engaging with this perspective, much information was gathered in the course of ‘re-valuing industrial heritage’—for example, through entering the sites, walking, listening and observing, participating in the interviews, talking and socialising with informants etc., notwithstanding the accidental quality of the information (such as individual preferences or political ideologies) gathered in situ. When the researchers critically reflect upon their own views or those of others or consider the justification

for their actions in comparison to others, they enter the realm of philosophical ethics (May, 2011: 61). Thus, I have to clearly understand the necessity of explaining my position towards the encountered individuals and to clarify my intention to process provided information and content into a written academic text. Simultaneously, in this study, a number of internet sources are cited which originate from private, governmental and corporate web pages and resemble individual statements which are regarded as relevant to the overall research context. Such statements / narratives are considered public domain and thus subject to the legal terms and conditions as well as the copyright policies of the web space owners or website providers, who were acknowledged throughout the course of research.

4.8 Conclusion

In this study, the qualitative approach is adopted according to the constructivist knowledge claims as the philosophical assumption. In-depth interviews and fieldworks are employed for collecting research data. The researcher collects participant meanings, focuses on a single concept (phenomenon), brings personal values into the study, studies the context or setting of participants, validates the accuracy of things, makes interpretations of the data, creates an agenda for change or reform, and collaborates with the participants to practise the research. This chapter has outlined the qualitative and phenomenological methodologies that were employed

during the fieldwork study phase of this project, and the philosophical assumptions underlying these. This chapter also adopts various social science research approaches in its research; this leads to the definitions of the research aims and the objectives of the dissertation. Additionally, it has described the actual process of data collection, including fieldwork, unstructured observations, and in-depth interviews. In the final section, it has considered the analysis methods and procedures, as well as the limitations of the project and its findings.

Chapter 5 The Constructing of Industrial Heritage in

Taiwan

5.1 Introduction

As introduced in previous chapters (Two and Three), with the rise of the industrial heritage movement Taiwan, a post-colonial country, has experienced shifts in perceptions of the values of colonial industrialisation. The various driving factors in politics, the economy and culture intersect in Taiwan's industrial heritage-making programme but also in its system of governance. The above provides the necessary background in order to understand the issues of industrial heritage-making discussed in subsequent chapters.

Before the idea of industrial heritage conservation became rooted in Taiwan, the reuse of former industrial buildings had been conducted in both urban and rural areas, though as a way of supporting the contemporary arts. With a series of policy drives and the participation of relevant groups, industrial heritage is associated with several departments. As government historical buildings surveys are mainly undertaken by architects, industrial heritage was introduced with an emphasis on its architectural features and constructional history. Urban industrial sites have been given the mission by the cultural sectors to encourage the development of cultural and creative

industries. In rural regions, industrial sites are mostly transformed into tourist attractions by linking the natural landscape and scenery to the property. In this chapter, based on my fieldwork, I examine the changing attitude and perceptions in recent decades towards Taiwan's former industrial sites built during the Japanese period. I also explore the way that policy drivers undertake to establish Taiwanese industrial heritage within the intersection between tourism, museumification and commercialisation. Accordingly, I discuss the power relations and governance system of industrial heritage in Taiwan.

5.2 Key Drivers of Producing Industrial Heritage

Cultural heritage attractions are expected to offer income-producing opportunities to urban or rural places in decline. Such mass tourism has often inflamed regional and national passions, causing people to decry the irreversible destruction of heritage sites. Industrial heritage sites, in particular, face a controversy over the shifting values of culture, society and economy. Taiwan is in a similar situation to most examples around the world. A modern society continuing to face the multiple shifts which are always evident in relation to the decline of the economy, redevelopment and regeneration. The discussion next examines three dimensions in which Taiwan launched its industrial heritage movement. The agenda of economic restructuring in the post-industrial Taiwan has brought huge transformations to every aspect of society

including heritage. To an extent, heritage is a by-product of the climate of (re)constructing Taiwan. Industrial heritage, in particular, as an emergent perception, was mainly promoted by either national or local agencies but is also embedded in varied approaches to achieve individual goals. And so this policy-driven transformation of redundant industrial places is actually advancing the development of industrial heritage preservation in Taiwan. It was revealed by conducting new directions in entrepreneurship and showing ambition in tourism. In terms of the contest between national narrative and colonial past, industrial heritage is on its way to offering itself as a present-day vehicle to visit the past and develop Taiwan's future.

5.2.1 Industrial Heritage by Default

With the increasing progress of Taiwan in every field since the 1970s, the growth of urbanisation and the demand for economic redevelopment force the major cities to accelerate the latest urban planning and progress the regeneration programme. The redundant industrial sites or less-productive plants in the city centre were first scheduled to be demolished in order to contribute to commercial or housing programmes. Meanwhile, the appreciation of and engagement with arts and cultural affairs in Taiwan, which increased from 35,784,000 visitors in 2005 to 247,187,000 in 2015 (CCA, 2008: 70; MOC, 2015a), created a need for performance places. Artists are eager to explore, occupy and create their own studios at minimum cost in the

urban area. The abandoned factories were emptied of machinery, leaving the solid industrial buildings made of concrete or bricks to become their ideal performing venues. To begin with, Taiwan government's cultural department also encouraged artists to reuse redundant places, such as with the Deserted Space Reuse Pilot Project and the Art Network of Railway Warehouse Project in the 2000s.

However, there was ultimately conflict when economic regeneration dominated the urban planning programme. In order to respond to both sides, the Cultural and Creative Industry Programme was created by the government as the culture sector-led regeneration strategy. The establishment of cultural and creative industries parks in major cities by reusing former industrial sites is part of the Cultural and Creative Industries Development Programme. Today, the major popular industrial heritage sites are not only identified as cultural and creative industries parks but are also situated in the heart of the city including Hua-Shan Brewery and Song-Shan Tobacco Factory in Taipei, Hualien Brewery, Taichung Brewery, Tainan Monopoly Bureau Office, Chiayi Brewery and the Pier-2 Art Centre in Kaohsiung. On the other hand, owing to the growth of the domestic tourism market and tourists from the major cities, redundant plants in rural regions have also been transformed into tourist attractions. In the countryside, the natural landscapes and ecological resources are opportunities for industrial sites to attract tourists from the cities. Additionally, owing to less pressure

to develop, most Japanese housing complexes in rural regions have been preserved. These rural industrial sites are led mainly by the tourism sector instead of the cultural department, such as the Forestry Bureau's forestry culture parks and Hou-Tong Coal Mine Ecological Park. The interviewee CHIANG, a former leader of industrial heritage preservation, who experienced and witnessed the whole story in these decades, indicated,

there are complicated economic, social and political realities which drove the reuse of industrial sites in the beginning ... with the advance of civilisation and urbanisation, both the commercial profit and the political priority always lead the direction instead of the voice of valuing industrial culture or aesthetics.

In this period between the late 1990s and the early 2000s, the creative industries were driven by the arts sector and came to be at the core of the global knowledge economy (Devlin, 2010) in most developed countries and the advanced developing economies, including Taiwan. In order to enlarge the scale of the cultural and creative economy, heritage and museums were classified as part of the cultural and creative industries category in Taiwan. Since the development of urbanisation is closely related to the knowledge, creative or cultural economy, the example of reusing artists-led urban industrial sites was soon adopted by the cultural department as the model for the

cultural and creative industries parks. The parks programme, particularly in the city, became a major policy in Taiwan in recent decades (Han and Liu, 2008a; 2008b; Wu, 2013).

In terms of economic redevelopment, Taiwan's government scheduled a privatisation programme for national companies but also prepared to join the World Trade Organization (WTO). In order to face the global trade competition, Taiwan was on the verge of privatising its state-owned enterprises, which experienced huge decline through lower productivity and effectiveness. The Inventorying of State-Owned Enterprise Cultural Industrial Heritage, launched in 2002, aimed to prepare for this industrial transformation. However, in the initial stage, the understanding of the criteria for valuing industrial heritage was not yet clear for most employees in the state-owned enterprises and relevant supervisors. Thus, according to Table 5.1, many interviewees had a similar experience of saving industrial materials, records and archives before they vanished.

Table 5.1 Experience of Saving Industrial Heritage from State-owned Enterprises

“a former senior heritage officer even asked to delist and demolish the industrial objects. After a series of negotiations for keeping them, the demolition was still implemented.” (FU, architecture scholar)

“lots of materials were sold before we arrived ... we can only save a little part of records. ... The state-owned enterprise is very practical with less concern on cultural heritage.” (KUO, industrial heritage site contractor)

“I’ve seen the trucks of archives sending out to throw away ... I can only save a bag among them at that time” (B.Y. LIN, industrial historian)

“They [the state-owned enterprises] believed that it could make more money by tearing the industrial remains down than doing preservation. ... We saved the plant from them.” (K.L. SHIH, head of the heritage sector)

“They [the state-owned enterprises] tended to focus on the valuable property for making a profit instead of considering the heritage preservation [but] we did save some via the inventory training programme.” (Y.M. TSAI, senior officer of heritage sector)

“There is no serious regulation on preservation at that time ... sometimes we can do nothing but witness the loss of industrial stuff.” (K.C. YANG, heritage scholar)

Source: by the author.

Although the above situation, the government insists on conducting an inventory project on industrial heritage. HUANG, an expert of industrial heritage considered:

The cross-department inventory led by the government communicates the conception of industrial heritage, particularly for the state-owned enterprises ... it also encourages the further discussion on industrial heritage among the general public.

During the emergent phase of Taiwanese industrial heritage, the government played an important role in helping to preserve industrial sites from being demolished, though it was also the same government that was engaging demolition. “Without the support from the government in policy and in financial [matters], it would be difficult to have the achievement today” (K.C. YANG). It can be argued that the circumstances of facing urbanisation and economic redevelopment drive the issue of industrial heritage. On the one hand, the new generation in the urban area is revaluing the redundant places as distinct discovery, inspiration and attraction. On the other hand, decision-makers in urban planning sectors are aiming to regenerate brownfield sites via various value-adding approaches. As mentioned in Chapter Three, the active participation of the government in promoting industrial heritage joins the abovementioned and other relevant programmes together in making Taiwanese industrial heritage.

5.2.2 New Directions in Entrepreneurship; Ambitions in Tourism

Since it was one of the earliest highly developed societies in Asia, the Taiwanese

government launched a series of programmes in cultural development by aiming to reveal and promote modern civilisation (especially in the Western world's context). These cultural programmes, mainly infrastructure, were led by certain government and social elites rather than the grassroots. However, the general cultural consumption market was not yet sufficiently mature and large. The top-down policy of culture and the oversupply of relevant constructions become the root cause for the later deserted (redundant) space issue. In terms of the Deserted Space Reuse Project, it derives from a problematic consequence. The reuse policy was also criticised by academics (Chu, 2014; Yao, 2016) for its lack of efficiency and sustainability. With a shortage of government funds, some of the reconstructions and their new outbuildings had low use / visit rates and were even discarded again within a decade. HUANG explained:

some reuse projects are for either short-term or temporary event instead of considering a sustainable strategy, thus, the spaces were deserted again after the end of the government fund. ... There is a criticism called these spaces "mosquito house" [meaning that the places were less used and had no visitors but mosquitos] and argued the relevant funds actually from the taxpayers who would never be benefited.

Additionally, some industrial places, such as Huashan Breweries, were originally

taken by cultural and artist groups as offices, studios and event venues owing to their cheap rent in the mid-1990s. These redundant industrial sites once located at the outskirts of urban centres were now located in the heart of cities and themselves faced the challenges of encroaching development, increasing land prices and shifts in local population patterns. With the urbanisation progress approaching, most private owners or official authorities always intended to withdraw the spaces for better profit. This kind of act created the early campaign for preserving industrial places as a way of civic engagement for heritage affairs.

These controversies forced the government to take the connection between culture and economy seriously. Thus, the policy of developing cultural and creative industries was announced by the DDP government in 2002. The policy superseded the previously deserted space reuse project by launching the new cultural and creative industries parks national pilot programme. In addition, policymakers aimed to attract investment from the private sector by encouraging the new entrepreneurship in the culture and creative industries to establish their businesses in these former industrial spaces. The reuse of industrial sites became a rising business for cultural and creative consumption. Many industrial buildings began to be listed and scheduled for conservation. Meanwhile, public industrial museums, forestry cultural parks and several new tourist spots in former industrial sites in rural areas were established by

local governments, the Forestry Bureau and the Tourism Bureau, respectively. For these sectors, industrial heritage is a unique selling point for marketing the newly established attractions to both draw visitors and stimulate consumption. Additionally, the heritage department of the CCA (later the Ministry of Culture) later launched the Cultural Industrial Heritage Revitalisation Project. The Revitalisation Project is specially designed for state-owned companies, which faced serious competition from the global market when Taiwan became a member of the WTO. The original category included the industries of wine (beer), sugar, salt, electricity, petroleum and every relevant business owned by the government. However, an urban planning scholar, M.C. YANG, who was involved in the project, indicated the difficulty of developing a new business model for state-owned enterprises in the past decade:

the project aims to explore the potential of cultural and creative value from the industrial heritage ... it has basic criteria and regular examination supervised by the experts from various fields, but some state-owned enterprises either has its own plan or don't meet / accept these criteria.

Ultimately, the state-owned enterprises are still capitalists; profit is the board's priority instead of heritage affairs. Even though the project has faced some passive responses, it still introduces diverse possibilities for site managers. For example, a

state-owned enterprise may not be good at heritage management (the Ministry of Economic Affairs, the authority overseeing state-owned enterprises, will start to recruit new staff with heritage expertise at the end of 2017) but it is used to being a landlord. Thus, under the encouragement of the previously mentioned policies, individual industrial site offices started to offer their redundant buildings, warehouses and former workers' housing to private retailers (Figure 5.1). With the scheduled policy on promoting cultural and creative industries, the Ministry of Culture is determined to establish a successful business model for the cultural and creative parks. Owing to the climate of park-making on former industrial sites, the Ministry's creative industries department has also faced competition from other industrial site attractions led by local government, the Forestry Bureau, the Tourism Bureau and private enterprises. Moreover, because museums and heritage sites fall within the cultural and creative industries programme, industrial heritage affairs could overlap between the creative industries department and the heritage sector.



Figure 5.1 The Commercialisation of Workers' Housing, Qiaotou Sugar Refinery (photo by the author).

The initial purpose of the policy was that its introduction was, in fact, to counter the government's limited cultural resources and the increasing number of redundant industrial places by aiming to introduce private entrepreneurship. Nonetheless, in order to attract investors, the ministry and major city governments have spent more resources on updating site facilities to meet business demands. Specifically, heritage listing and preservation have become an administrative routine as a procedure before moving forward the cultural and creative industries. A similar situation is also seen in rural areas, where the Forestry and Tourism Department-led industrial site attraction-making programmes conduct restoration works to provide a better tourist satisfaction with less concern for the sustainability of industrial heritage. The Law for the Development of the Cultural and Creative Industries reached the peak of

promoting creative industries by reusing redundant industrial places. By visiting the above sites, the value of the preservation of industrial heritage is seldom mentioned but is replaced by the performance of visitor numbers, commercialisation and architectural design (Figures 5.2 and 5.3). K.C. YANG, a heritage academic who has experience in consulting on industrial heritage reuse, pointed out that “this kind of conservation is rarely relevant to heritage. It is all about the architects’ imagination. And the increasing of these constructions is replacing the authentic heritage value”. KUO, who conducted several tourism constructions in industrial heritage sites, relates:

the reuse is seen as an essential part by the authorities. ... However, having a brand-new building or creative appearance without a meaningful content and connection is unable to keep the site being attractive for long.



Figure 5.2 The Crowd in Huashan Creative Park’s Weekend Market, the Former Brewery (photo by the author).



Figure 5.3 New Shopping Mall and Old Old Tobacco Warehouse at Songshan Creative Park (photo by the author).

According to a senior heritage officer's words (Y.M. TSAI), "many former industrial places are now known by the public or listed. ... However, some site owners put lots of investment in the reuse programme, thus, the original intention of preserving industrial heritage is gradually out of their sight and replaced by commercialisation". Considering the difference of geography and social capital, there is an imbalance of heritage concern between the urban and rural industrial sites. On the one hand, industrial heritage reuse adopted in urban sites and popular tourist attractions by official authorities always attracts many visitors based mainly on its convenience and entertainment services instead of heritage itself; on the other hand, the reuse of rural industrial sites run by the local community often face the difficulty of sustaining it without relevant support in spite of all efforts towards heritage preservation. A site manager, CHIANG, who participated in the industrial heritage movement, argued that "the culture [heritage] sectors should concentrate on managing heritage affairs comprehensively rather than marketing events and packaging politics individually". In fact, as part of the first generation of industrial heritage advocates, many artists and local groups have been isolated from current industrial heritage works. For example, the early art groups which engaged in saving Huashan Brewery are rarely connected to the current Huashan 1914 Creative Park. With the growing awareness of industrial heritage preservation, a group of new-generation artists, historians and museum

professionals introduced the concept of quasi-museums into the rural site by highlighting the connection between industrial heritage and social value in the perspective of aesthetics (NCAF, 2011; Shih, 2012), such as Bywood Art Space in the former Qiaotou Sugar Refinery and the Art Museum of Mountain Village at Jinguashi, the former mining settlement. The diversity of industrial heritage participants from the private sector leads a grass-roots approach too. They manage redundant industrial places, which are distinguished from the stereotype of creative theme parks. A site manager, S. HSIEH, stated that “our practice is an example for the public sectors, a different approach from destruction”.

In Taiwan, the climate of constructing culture has been progressively replaced by developing culture associated with Taiwanese materials and narratives. As mentioned in this section, there are not only the Ministry of Culture’s programmes including developing cultural and creative industries and heritage reuses but also the Tourism Bureau’s architect-led heritage conservation projects and the Forestry Bureau’s efforts on branding new tourist attractions; both local government and grass-roots practices are also conducted in Taiwanese industrial heritage sites. Although the authorities and administrations have attempted to coordinate with the private sector and appreciate their entrepreneurship, the top-down approach is eager for a quick-fix solution and a financial performance by focusing on consumerism. On the other hand, with limited

resources, the industrial sites run by the grassroots have delivered industrial heritage to the public from the perspective of aesthetic and nativism. Ultimately, the multiple approaches led by various sectors and groups, professionals and amateurs make the governance system of industrial heritage complicated and fragmented, as will be explored in the next section.

5.2.3 Industrial Heritage as a National Narrative

The official statement on nationalism and cultural identity in Taiwan was dominated by the Nationalist government over at least four decades. In 1994, the Council of Cultural Affairs (now the Ministry of Culture) launched the Community Development Programme, which introduced a positive attitude for residents to explore and understand their daily narratives and the surrounding environment. This progress in shaping the identities of individual communities collaborated with the later Deserted Space Reuse Pilot Project as the mainstream agenda of cultural policy in Taiwan before the idea of cultural and creative industries. Since then, there have been a number of amateurs, volunteers and residents devoting themselves to heritage affairs. As one first-generation participant, CHIANG, an industrial heritage site manager, considered,

By reviewing the contextual background of (industrial) heritage preservation

movement, the Community Development Programme is the starting point of the first wave ... it woke the Taiwanese people to take local narratives and cultural identity seriously.

S. HSIEH, another industrial heritage site manager, also believed that the Community Development Programme spurs the younger generation to engage in preserving heritage sites and shaping their identity, especially for their hometowns. But the later occurrence of the 921 Earthquake becomes a turning point for Taiwanese heritage history.

The 921 Earthquake in 1999 was the critical moment for Taiwanese heritage preservation development. The disastrous damage, which was widespread over the island, endangered many listed heritage sites, monuments and architectures which were built in the early twentieth century, including various industrial buildings. Because the past heritage survey and designation are based on the significance of Chinese culture and tradition, the early twentieth century's constructions, which were mainly built in Japanese colonial time, were not seriously considered and preserved. After the earthquake, plentiful resources and support from the government and the private sector enlarged the scale and category of heritage preservation but also introduced architecture professionals and relevant academics to involvement in

heritage practices. HUANG recalled the occasion at that time: “This is a peak of Taiwanese heritage preservation. The financial support of the Earthquake lasted for a decade ... the works were expanded by including many industrial constructions which they were less concerned about before”. Owing to the progress of heritagisation, many heritage administrators were trained in this duration: “they are now the backbone of Taiwanese industrial heritage preservation”.

The group of heritage administrators later also took over the Inventory Project of Industrial Heritage mentioned before in this chapter. The model for an industrial heritage system was gradually established. As noted in Chapter Three, along with the nativistic policy led by the DPP government in the following years (between 2000 and 2008), the government attempted to enhance the link between Taiwan and Japan through encouraging the listing of industrial heritage built in the Japanese colonial time in order to distinguish the uniqueness of the Taiwanese legacy from mainland China and strengthen the Taiwanese identity. “It is a strong transition for Taiwanese society”, said K.C. YANG. He explained:

It is a fifty-year long Japanese colonial period in Taiwan ... the root is indeed deep. The connection [with Japan] never vanishes, but depressed ... with the progress of the nativistic movement, the colonial past, the modern and the

industrial narrative relating to Japan are impossible to be ignored and erased as before.

The modern industrial context, culture and legacy between Taiwan and Japan are closely associated with each other. Although this relationship was found on the colonial exploitation, T.H. HSIAO, a senior officer of the cultural department, stressed that “the past can be forgiven but cannot be forgotten”. As the current industrial heritage remains in Taiwan were mainly built during the Japanese colonial period, he further argued that the establishment of the Japanese Monopoly Bureau of the Taiwan Governor’s Office is almost the beginning of modern Taiwanese industrial history. To some extent, the heritagisation of industrial sites creates a pathway for the Taiwanese to access the island’s history, which was rarely mentioned by the Nationalist government. In contrast, the Nationalist government spent considerable effort to erase and cover the colonial past (Figure 5.4). The industrial heritage preservation can be a pathway to fill the gaps between post-war Taiwan and pre-war Taiwan.



Figure 5.4 The Defaced Japanese Shrine Remains in Ciaotou Sugar Refinery (photo by the author).

As for the general population, they often declare their neutral position towards the colonial past. According to field observation, most visitors enter the industrial site to enjoy the atmosphere and entertainment regardless of the controversy over whether or not the site is colonial heritage. Similarly, for the heritage conservation communities, they often stand their ground with a neutral attitude. Nevertheless, industrial heritage in Taiwan is not yet defined clearly. Most official reports and literature quoted the concepts directly from international heritage organisations, such as ICOMOS and TICCIH. With enthusiastic international exchange—the Taipei Declaration for Asian Industrial Heritage in 2012, for example—the heritage authority has attempted to clarify a distinct position for Taiwanese industrial heritage by launching a series of

research projects. There is not yet a satisfactory outcome, as noted by Y.M. TSAI, but “we aim to establish a comprehensive industrial heritage network as part of our long-term plan”. The motivation from either the practices of preserving heritage or advancing an understanding of the past drives the shifting attitude towards industrial sites accompanying the discussion of nationalism and identity.

5.3 Governing Industrial Heritage: Emerged Forms

The above discussion has revealed the drivers of industrial heritage in Taiwan. With the demand for stewardship in industrial heritage, it is also important to assess the establishment of an industrial heritage governance system which is intersected by various sectors, since it has greatly influenced the subsequent development of tourism, museumification, and, most importantly here, economic regeneration upon industrial heritage practices. The discussion in this section mainly explores the influence of the multiple drivers and bureaucracy managing industrial heritage, with particular reference to the research sites.

For a period of time after the Second World War, political power dominated heritage policy and education in Taiwan. The Nationalist government at that time saw themselves as the only successor of the Chinese legacy in every aspect. CHIANG pointed out that this policy meant that many Taiwanese had less knowledge about

their homeland than about the mainland for at least five generations since the 1950s. And Japanese materials have also been a sensitive issue since the 1970s owing to the change of diplomatic relations. The above over-produced mission for inheriting Chinese culture and the deliberate elimination of Japanese artefacts caused challenge and controversy in preserving colonial heritage. The architectural academic FU gave the following instances:

Taoyuan Shrine is the first listed heritage built in the Japanese Period in Taiwan. In order to ease the dissent, the reason of being listed was based on its Tang dynasty's style without any Japanese context mentioned. ... Before the building of Tainan District Court being listed, it was criticised by a former president of the Judicial Yuan as a national disgrace due to a Japanese badge on the wall.

A similar example of industrial heritage has been noted previously in this chapter, a former senior officer of heritage sector "tore down the listed storage tanks based on his insistence of the objects being unable to represent Chinese culture" (quoted by the interviewee FU). However, in terms of the influence of Japan, there were many modern concepts, knowledge and engineering technologies introduced into Taiwan by the Japanese in the first half of the twentieth century. In particular, many manufacturing system and infrastructures in Taiwan inherited the Japanese industrial

legacy. In the years of post-war recovery, these constructions were the initial force to support Taiwan's progress towards the next stage of modernisation. Regardless of the international political dispute in the 1970s, the exchanges of culture and trade between the two societies are still sustained and frequent. While the government gradually eased political control in the 1980s, Taiwanese people have more opportunities to explore the connection between Taiwan and Japan. With the advance of a heritage conservation campaign, the grassroots have evoked a sense of admiration and respect for the Japanese contribution to Taiwan.

The above controversies do not retard the progress of industrial heritage awareness; on the contrary, the arguments keep encouraging the enthusiasts of industrial heritage to fight for the situation to be rectified. The climate is changed by Taiwan's nativistic movement but also the rise of PRC international promotion of its Chinese culture.

K.C. YANG commented:

due to the rise of China, there is a crisis of self-identify being discussed across the islanders by recognising themselves between Chinese and Taiwanese. The Taiwanese narrative starts to be explored and reviewed by the public. ... Additionally, the first change of ruling party led by DPP is a turning point in cultural policy by addressing Taiwanese nationalism and identity as well as

highlighting Taiwanese heritage.

The DPP government intended to strengthen Taiwan's identity and her multicultural characteristic (Han, 2006) through a series of heritage designation, including Hakka, aborigine and, particularly, historical buildings dating from the Japanese colonial period. Likewise, after the 921 Earthquake, the damaged buildings included massive constructions built using Japanese methods. To do so, it was necessary to seek the assistance of experienced Japanese experts since Japan is a developed country that has also suffered earthquakes. Thus, the Taiwanese government not only consulted Japanese specialists but also introduced the Japanese governance systems (such as a heritage register and legislation) and expertise to the relevant heritage affairs and practice in Taiwan. This positive and intensive collaboration of heritage affairs inspired the cultural sectors but also provoked society to reconnect with the surrounding narrative and heritage relating to the Japanese colonial context.

Since then, the colonial past has no longer been a severe controversy but a commonplace issue which is open for discussion. Also, owing to increasing numbers of academics engaged in heritage preservation, they conduct the relevant business seriously and professionally. Y.M. TSAI expressed:

In my experience, most (heritage) programme participants are holding the

neutral standpoint towards heritage ... in the early year, we did get some complaints from certain groups who were in favour of anti-imperialism and de-Japanisation ... this kind of argument is hardly heard of today.

The nativism climate of encouraging Taiwanese identity later reflected on the controversy between Japanese occupation and Japanese governance. The KMT won the next two presidential elections and became the ruling party in Taiwan between 2008 and 2016. The leaders of this recent KMT government attempted to provoke the mission of inheriting Chinese legacy to Taiwanese society again. The extra efforts and resources were spent on re-editing the official course outline of a history textbook and issuing regulations on using the term “Japanese occupation” as the proper noun in every government’s official document for the relevant descriptions. And many official organisations have to follow the policy by amending relevant contexts (Figure 5.5).



Figure 5.5 The Revised Text in a Display Panel at the National Science and Technology Museum Exhibition (photo by the author).

It referring to the “Japanese occupation” (日據) in the Chinese text and “Japanese governance” (日治) in the English text.

It was rather a sensitive issue in the initial stage of heritage preservation development.

An urban planning scholar, M.C. YANG, recalled: “the initial inventory of industrial heritage team tended to identify neither Japanese occupation nor Japanese governance but concentrate on the recording of industrial materials and constructions ... the colonial narratives relating to Taiwanese Industrialisation was always ignored”. However, the perception of Taiwanese consciousness has taken root in society in recent years. The majority of the Taiwanese public is more concerned about the historical facts and their own narratives than the particular political ideology or red tape. Although the divided nationalism between Chinese and Taiwanese sometimes causes conflicts, according to a public industrial museum director’s suggestion (T.H. TSAI):

In my point of view on the argument between Japanese Occupation and Japanese Governance, Taiwan is the subject for both of them, instead of China. ... The conflict can be a positive phenomenon for building Taiwanese identity. ... But personally, considering the continuum of historical context between aboriginal people and Han-Chinese, it might be more reasonable to use [the term] Governance.

Simultaneously, K.L. SHIH explained that the above policy does not affect the current (and future) heritage conservation agenda’s progress: “[e]very valuable and

meaningful monument, site and object have the even opportunity to be listed whether dated from Japanese colonial time or not”. The officer believed that the heritage sectors would always maintain the principle of respecting historical fact. In addition, “the existing disagreement between Japanese Occupation and Japanese Governance would not affect any heritage evaluation process”. Therefore, at present, the colonial past and its relevant industrial narrative is not the main issue for both official departments and private sectors in heritage practices. At least, there is much less controversy than decades ago. This can be verified by visiting some of the researched industrial sites today. For example, the renaming of industrial places, such as Huashan 1914 Creative Park (by its establishment in 1914, in the Japanese colonial period), Lin Tian Shan Forestry Cultural Park—MORISAKA (after the original name of the site in the Japanese colonial period), Hatta Yoichi Memorial Park (after the Japanese engineer’s name) and Hamasen Museum of Taiwan Railway (after the original name of the railway line in the Japanese colonial period), as well as advertisements (Figure 5.6) and events (Figure 5.7) connected to the colonial past.



Figure 5.6 The Front Page of National Taiwan Museum– Nanyang Park’s Leaflet.

The design is associated with the flag of Japan (photo by the author).

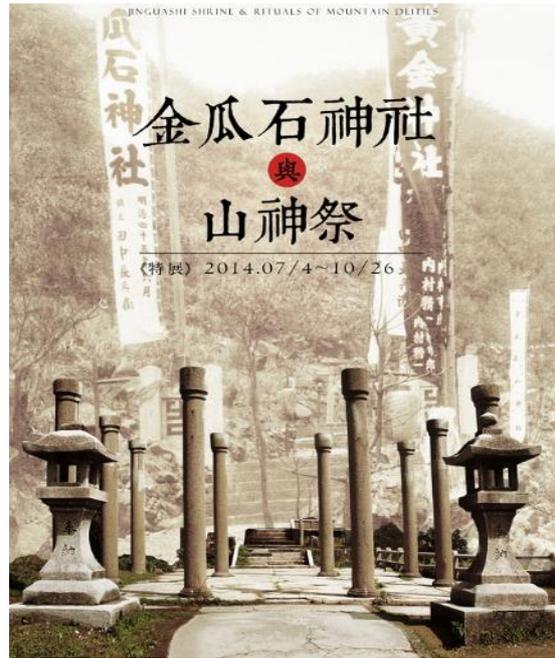


Figure 5.7 The Japanese Ceremony Event in the Gold Museum (photo by the author).

The positive image of Japanese objects has been strengthened since the nativistic movement. Many colonial narratives are revealed by the amateurs, academics and relevant professionals who have participated in heritage preservation over the last decade. Despite initial coercion and subsequent persecutions, by the end of the Japanese colonial period, Taiwan had become a modern society with its own legal and political system. Compared to the chaos in the early years of the Nationalist government’s relocation in Taiwan, Japanese rule is considered rather a law-abiding and methodical society by some of the older generation. Some of their nostalgia towards the Japanese period was passed to their descendants, at least for a generation.

For example, both Professor FU and C.C. TSAI, the architect who conducted a series of forestry heritage constructions, mentioned that their parents had always talked about the good times and the high-standard society during the Japanese period but also criticised the Nationalist government. C.C. TSAI said that “my father sees himself as a Japanese but now lives in the wrong place and the wrong time”. He considered that “we always have the emotional connection towards Japan. ... The Japanese workers’ houses symbolise the ideal realm which we are longing for”.

Further, it has been a general understanding rooted broadly in Taiwanese society that Japanese-made goods are an assurance of both quality and aesthetics. In the material aspect, an industrial heritage site manager, CHOU, believed that the constructions built in Japanese colonial times are still standing today because of their Japanese method of construction. Another perspective refers to the Japanese humanity and spirit. A site manager of a national scenic area office, W.J. WANG, had high praise for the Japanese engineer’s personality and contribution to Taiwan. He had never heard of the relevant narratives until participating in the heritage conservation programme. The gaps in Taiwanese narratives between the individual generations are healing over. Moreover, according to the fieldwork observation, it is hard to have a comprehensive understanding of the heritage value of five major cultural and creative industries parks with less supporting references and clear interpretation in the sites. In contrast,

although the Japanese colonial past is rarely indicated in the sites, there are many visible elements with the Japanese exotic atmosphere, such as Japanese gardens, ornaments and brands (Figures 5.8, 5.9 and 5.10). This shows not only the appreciating attitude to Japan but also the attempt to be close to up-to-date tendencies and general understandings for promoting heritage businesses. Connecting industrial heritage-making with popular culture hence turns into the main approach adopted by site administrators for marketing redundant factories to the public.



Figure 5.8 A Quasi-Japanese Brands in Songshan Cultural and Creative Park (photo by the author).



Figure 5.9 Japanese Ornament in the Gold Museum (photo by the author).



Figure 5.10 Japanese Garden in Chiayi Forestry Cultural Park (photo by the author).

In general, site visitors often express their neutral position towards industrial heritage without involving the colonial past and industrial narrative. According to my observation of the research sites, visitors tend to enjoy popular culture and entertainment rather than appreciate or understand the industrial heritage by further interpretation. The approaches adopted at the sites by individual authorities could be part of the causes. T.H. TSAI considered that, in contrast to the Taiwanese older generation's colonial nostalgia, the younger generation's attitude towards the colonial past is more neutral and realistic than emotional because they have cultivated their own understanding of the colonial past. From these points of view, the tension between Japanese occupation and Japanese governance is mainly a political issue. K.L. SHIH also commented, "today, every policy and approach have to face the public's inspection and criticism, particularly from the younger generation". The following sections have a further discussion of the full picture of Taiwanese industrial

heritage-making business.

5.3.1 Operation Types: Museum, Creative Park and Tourist Attraction

The development of industrial heritage practice in Taiwan is mainly a top-down policy associated with the coordination between multiple public sectors and private investors for the state-owned industrial properties, materials and places. There are various stakeholders in each industrial heritage site including the private investors, retailers and government administrators. However, the ownership and the strategy of the sites always depends on the individual authorities' opinions. Based on my fieldwork at the research sites, the current stewardship of industrial heritage in Taiwan can be categorised into three major divisions: museums, cultural and creative parks and tourist attractions. Museums and heritage are often seen as a quick-fix solution of renewal and an entrance into the international tourism market (Smith, 2009; Janes, 2011). Myerscough and Frost-Kumpf (cited in Tien, 2008) also demonstrate “the economic value of the culture industry in the way that art institutions can create job opportunities and provide the incidental value which stimulates both tourism and local development”. Academics have noted (Jamal and Robinson, 2009) the trend of “marketing heritage as tourist attraction through rebuilt surrounding natural and cultural spaces for creating new production and consumption”. The above three approaches are also inter-influenced by the increasing convergence between

museumification, cultural tourism and commercialisation at each research site.

5.3.1.1 Museum

The Ministry of Culture has recently announced that a new national railway museum is planned to be established at an industrial heritage site, a former railway workshop (MOC, 2016a). In fact, there is not yet a national industrial museum in Taiwan. But two science museums supervised by the Ministry of Education have a connection with industrial heritage. The permanent exhibition—the Industrial History of Taiwan—and its database in the National Science and Technology Museum make up the major industrial collection hub. However, the exhibition and the relevant data have not been updated since 2011. The National Museum of Marine Science and Technology (NMMST) is situated in the Pei-Pu Steam Power Station, a former power plant. However, the industrial site is listed as heritage after being scheduled as the museum. By visiting the museum, there is rarely information about industrial heritage in context. The panel illustrated in Figure 5.11 is the only interpretation of the Steam Power Station in the museum. Modern architecture (Figure 5.12) also completely covers the industrial remains (Figure 5.13). A senior researcher at the museum, T.W. SHIH, who experiences the whole process of the museum establishment, expressed that “the architect and the museum supervisors had no interest to neither the industrial past nor the relevant preservation campaign”. The industrial heritage, in this case, is

isolated from the museum but left the function of being part of construction structure.

Regarding the Ministry of Culture's museums, Nanmen Park as a branch of the National Taiwan Museum is part of the former camphor factory. The park includes an outdoor industrial archaeology site (Figure 5.14), a permanent exhibition of camphor industry and several exhibition spaces indoors. Observation during fieldwork demonstrated that the industrial archaeology site draws less attention than the remained and restored industrial buildings owing to the distance from the main entrance and the design of visitor interpretation. According to P.L. CHEN, a senior researcher for the museum, "the Park was actually an extension programme for National Taiwan Museum's collection storage". The industrial heritage presentation is not the core part of the initial plan. Ultimately, the mission of the park is aimed to strengthen the National Taiwan Museum development instead of promoting industrial heritage.



Figure 5.11 The Display Board of the reuse of Pei-Pu Steam Power Station in National Museum of Marine Science and Technology (photo by the author).



Figure 5.12 The Modern Architecture of National Museum of Marine Science and Technology (photo by the author).



Figure 5.13 Pei-Pu Steam Power Station in 2004. (photo by Dr Shih, Tung-Wei).



Figure 5.14 Nanmen Factory Remains (photo by the author).

Besides actions at the national level, local government and state-owned enterprises have also made some contributions to industrial heritage from the museum perspective. The Gold Museum of New Taipei City Government is positioned as an eco-museum and is situated in a large-scale mining landscape. Compared with the other industrial sites, although the museum is supervised by the local cultural department, it had investment from the cultural and tourism sectors in both the

national and local levels in the early stage. Director T.H. TSAI said:

In the first five-year, the abundant funding from both culture and tourism department of government has set the Gold Museum on the right track. ... And now we have the capacity to be partly independent of the government in financial terms.

The Gold Museum has successfully introduced local entrepreneurs to start up their businesses in the industrial site as part of museum services, such as retailing, catering and studios. The director believed that only financial independence can save the museum from being politicians' tool of cultural policy and help it to get autonomy on heritage affairs. Under this principle, the museum is active in interpreting the site's industrial narrative and colonial past through events and exhibitions (Figure 5.15). Houtong Coal Mine Ecological Park, which adopted the open-air museum concept, is another example in New Taipei City. But the major industrial heritage conservation and current museum exhibitions are conducted by the local tourism department instead of cultural organisations. Initially, the local government aimed to have a comprehensive coal mining museum. However, owing to the popularity of the Cat Village opposite the site, the authority has turned their attention to promoting cat tourism, such as the building of the Cat Bridge (Figure 5.16). The senior officer of the

tourism department, Y.H. CHIU, indicated that “our job is promoting and marketing tourist attraction instead of the museum management ... considering it is an industrial heritage site, the cultural department is better to step in”. Therefore, maintaining status is the current principle of the tourism sector.



Figure 5.15 The Special Exhibition of Taiwan’s Japanese Shrine in the Gold Museum (photo by the author).



Figure 5.16 The Cat Bridge in Houtong (photo by the author).

In terms of state-owned enterprises, two industrial museums have been established by the Chinese Petroleum Corporation (CPC) and the Taiwan Sugar Corporation. Although Taiwan Oil Field Exhibition Hall in Miaoli is owned by the CPC, there has been no further investment in the museum exhibition and content over two decades. Currently, the board has no intention to make any other changes. Therefore, the museum business relies on resources from the Chu-huang-keng Oil Field Cultural Park Programme of Miaoli Government's Cultural and Tourism Bureau and the local industrial heritage preservation association. A senior member of the local association, C.H. HSIEH, who is also a former worker, noted that "we know the resources are limited, but we are willing to contribute and save the site". Considering the financial difficulty of the local government and the lack of a future plan in practice, the museum and the oil field site are in a critical situation. Taiwan Sugar Museum is managed by the company's Leisure Business Division. According to my field experience, there were only a couple of visitors in the museum, which is isolated from the rest of the buildings at the site. CHIANG argued that the museum team was professional: "the museum management is not as the same as sugar production". In order to build the museum, the contractors removed the old rail tracks and ruined the sugar cane field. As a result, the museum is disconnected with the surrounding industrial landscape instead of being beneficial to the site.

5.3.1.2 Cultural and Creative Park

Following the expansion of urbanisation in Taiwan, most industrial districts, once located on the outskirts of urban centres, are now after decades of urbanisation located in the heart of cities and themselves face the challenges of encroaching development, high land prices and shifts in local population patterns. Considering the urban development progress, the authorities tend to conduct not only preservation but also exploitation of industrial heritage sites. On the one hand, the easy access of management and reconstruction based on the reuse conception in the early 2000s initially drew the public's attention to exploring former industrial places; on the other hand, the mission of advancing cultural and creative or tourism industry is forced to embed in the factory space, however, the disappearance of the industrial narrative has decreased the value of industrial heritage to some extent.

For the cultural and creative industries park approach, the idea of the park is introduced and fully supported by the CCA (later the Ministry of Culture) as part of the national cultural policy. The current five national cultural and creative parks are located in the five former industrial heritage sites of the individual city centres. In the creative industries department's opinion, they tend to deal with industrial sites simply as spaces available for developing cultural and creative industries in every field. That is what the department asks in its contract with the private investors who actually run

the park business. “Industrial heritage can be part of the visitor communication or marketing work, but it has to be decided by the site teams instead of us ... the heritage thing is not in the contract”, said CHU, a senior officer of the creative industries department. By reviewing the conservation history of these five sites, the restoration of the industrial buildings is the main achievement. In order to save space for further use, core manufacturing places are emptied and the machinery vanishes or is left outside the plants.

After over a decade’s effort, the national five cultural and creative industries parks were all opened to the public in 2016. According to the MOC news-bulletin (2016b), Taipei Huashan Creative Park is branded as the primary cultural and creative industries hub and incubation centre in Taiwan. It is the earliest example of introducing private investors and managing expertise. The creative parks in Chiayi City and Hualien City have adopted this business model in recent years by advocating traditional artistic innovation and cultural and art tourism, respectively. Tainan Park is contracted to a private university for promoting popular music industries. Taichung Park aims to present the architecture, design and performing arts industries; in addition, it is the only site managed by the public sector—the Bureau of Cultural Heritage—and is the Bureau’s headquarters. The above sites are either former Breweries or breweries, except for Tainan Park, which is a redundant railway

warehouse. In general, the reuse of industrial heritage site as cultural and creative industries parks aims to set up venues for new businesses instead of valuing industrial heritage. As a private investor, J.W. WANG, commented:

we are not doing industrial heritage preservation but revitalisation of the redundant place ... we aim to transform the site by curating (new) stories fit in the spaces rather than stay as a storyteller of the industrial past.

There are some heritage contexts in the sites, such as display boards and museum exhibitions (Figure 5.17 and 5.18). However, owing to the current policy's priority on creating economic profit, the creative industries department urges site managers to focus on cultural and creative industries development rather than the industrial narrative. Thus, the management of industrial heritage in these parks is not seen as the core business for the authority and private investors.



Figure 5.17 The Display Board of History of Huashan Creative Park (photo by the author).



Figure 5.18 The Liquor Culture Museum in Taichung Creative Park (photo by the author).

The practice of the creative park is also adopted by the major city governments in their industrial heritage sites. In the case of the Songshan Cultural and Creative Park, this former tobacco factory is now operated by the Taipei Culture Foundation, which is a cultural agency supported by the Department of Cultural Affairs, Taipei City Government. The Songshan site team has a clear principle of dividing the site into heritage area and non-heritage area. CHOU indicated that “there is rarely commercial activities in the heritage area ... due to heritage is public goods, we aim to save the space for more citizens instead of individual business”. As a non-profit organisation, the Taipei Culture Foundation has an explicit position towards industrial heritage reuse. Current reuses in the heritage area include the site office, a design theme library, design museums, exhibition rooms, lecture rooms and office spaces for nascent creative entrepreneurs and non-profit associations in the creative industries field.

Considering the major purpose of the park in promoting creative industries, the priority of the site team is no doubt to accumulate and unearth potential entrepreneurs in creative industries. With regard to the further industrial heritage works, “[w]e are expecting the professionals to engage the heritage affairs which are beyond our capacity”, said the site manager. Therefore, the contribution towards industrial heritage has been considered but limited so far in this old tobacco plant.

The Kaohsiung City Government has set another example by reusing the former pier warehouse and shed complex as a creative district—The Pier-2 Art Centre—which is managed by the Cultural Affairs Bureau. The Kaohsiung Museum of Labour was situated in one of the site’s warehouses. The museum created a strong hub by linking this site with the industrial past. However, the Kaohsiung Museum of Labour belongs to the Labour Affairs Bureau portfolio instead of the Cultural Affairs Bureau. At present, the museum has been moved to a new location, a new modern office building, which disconnects it from the working narratives. The original space is now a bookshop and a restaurant. Similarly, the remaining warehouses are reused as either catering or retailing businesses, including a cinema, a theatre, shops and private galleries. Although the Cultural Affairs Bureau keeps three warehouses for special exhibition rooms and has recently opened a new museum, the Hamasen Museum of Taiwan Railway in the warehouses on this site as part of Kaohsiung Museum of

History, there is no specific evidence of industrial heritage management in this site other than as a theme park for popular culture and creative industries.

The final example is the Ten Drum Cultural and Creative Park. This is a grassroots-led reuse of industrial heritage. The TenDrum is a local drum performing group based in Tainan City. They rent a redundant plant (Rende Sugar Refinery) from the state-owned sugar enterprise as their rehearsal venue and training centre. The group leader, S. HSIEH, expressed:

We never know these brilliant stories around the site until we arrived here ... and we truly appreciate the sugar production as the most representative example of Taiwanese industrial heritage. ... We have the responsibility to prevent the site from being demolished.

The members' strong belief in the site and their fully enthusiastic efforts have earned a reputation in both industrial heritage conservation and creative park practice, though they are only amateurs in the heritage field. A series of sugar-making displays by the working machinery in the park is hardly seen in present-day Taiwan. After getting support from both central and local culture departments as well as coordination with private investors, they are now launching a new branch site in another redundant sugar refinery.

5.3.1.3 Tourist Attractions

There are several industrial heritage sites adopted by the forestry and tourism departments for the purpose of tourism. The Forestry Bureau of the Council of Agriculture was in charge of the whole forestry business as a state-owned enterprise. But the Bureau is now a civil service agency for protecting the forest ecosystem and conserving natural resources including the administration of the national forest recreation areas and relevant forest tourism services. The current four forestry culture parks are the former major logging stations in Taiwan. These parks were built to be a tourist attraction based on their natural scenery resources rather than valuing the importance of the timber industry. As a result, the regional offices were running these parks in a similar way to the general forest recreation areas within basic environmental maintenance. In addition, each park is managed by the individual regional offices and assigned to either the recreation division or the operation division. This inconsistency of governance is caused by the autonomy for the head of the regional office. Furthermore, the site manager, CHI, indicated that “a new and up-to-date programme is necessary for the current park development ... we have to catch the latest tourist market need instead of keeping the status quo”. For example, the Lin-tien-shan logging station as the earliest forestry culture park has had no discussion about further development in the Bureau since 2003. Considering the

above situation and the demand for comprehensive planning, the head office of the bureau plans to integrate the four parks' business by running a consulting programme led by the head office. L.W. CHIU, the senior administrator of the Bureau, said:

By being aware of this problem, we decided to examine these sites' stewardship comprehensively and aim to develop a sustainable vision and coherent plan for the future.

In terms of industrial heritage presentation, as a non-cultural sector, the bureau's head office acknowledges that there should be a further action on the current industrial materials. L.W. CHIU stated that "we do bear in mind forestry heritage affairs ... and save the industrial materials is also part of our works". The Bureau now attempts to rebrand these parks by highlighting the forestry narratives through events, new exhibition rooms and introducing the private entrepreneurs. C.C. TSAI considered that:

the Bureau was no interest and no experience in cultural activities before, after years' progress, there are more and more events held in the park by the Bureau due to the coordination with the communities and private sectors.

The Chiayi Forestry Cultural Park is the latest opened but also the first example to

contract the site to private enterprise. The park is now a retail complex composed of individual shops and exhibition halls situated in former workers' houses. The Bureau tends to adopt their forest recreation areas tourism model into the forestry cultural park management by introducing private-sector investment and cooperation programmes, such as hotels and restaurants. In the Chiayi Park case, "we have gotten the local government's support ... the plan is to reuse the site as a commercial and entertainment centre for attracting high-end tourist groups", commented HUNG, the site administrator. According to the bureau's experience, they seem to believe that private corporations can provide a better quality of tourism service and facilities as well as brand marketing. Furthermore, a timber industry museum is also an option for the Bureau's future plan.

The Tourism Bureau of the Ministry of the Interior is the national-level department for tourism affairs in Taiwan. From the perspective of the bureau's individual national scenic area administrations, the redundant industrial site has the potential to be a relay station and travel information centre for tourists in the scenic area. Che-cheng Timber Industry Exhibition Hall is one of the examples. "The administrators did not intend to proceed the project in a way of industrial heritage preservation ... we convinced them", said the contractor, KUO. However, the scenic area administration is ultimately a tourism authority, not a heritage authority. Thus, the administration keeps

a building as the tourist centre and commissions the rest of the site to a private company to maintain the museum and run the businesses, including catering, retailing and events. Another example is the Wushantou Reservoir and Jianan Irrigation Waterways including Hatta Yoichi Memorial Park. The regional scenic area administration led the conservation work but the current authority of the site is a local water resources agency owing to its ownership of the site. The current authority takes this site as a general tourist attraction without further plans to connect the industrial landscape to the relevant heritage narratives. This increasing recognition towards industrial heritage as a valuable tourism resource and marketing strategy also draws the local tourism department's attention. In Shui-nan-tung, there is a massive copper-smelting refinery which attracts many visitors each year, thus the Tourism and Travel Department of New Taipei City Government established a new tourist centre there as well. As summarised in this section, the present approaches in Taiwan's industrial heritage are always based on practical purposes. The examples are not only the state-owned enterprises' properties but also government-led programmes and private investment. The next discussion is how these stakeholders negotiate with each other.

5.3.2 Relations between Stakeholders

As introduced in Chapter Three, an appreciation of both colonial and industrial

heritage in Taiwan has been cultivated over recent decades. The understanding of industrial heritage and the open attitude towards the colonial past are not yet comprehensively accepted by certain people, including some government officers, administrators, politicians and even site owners. The discussion in this section focuses mainly on the power relations of industrial heritage governance but also the actual concerns of the relevant communities, with particular reference to the industrial heritage scene at the research sites.

Industrial heritage in Taiwan is in a developing agenda regarding the late establishment of the official heritage authority. Although the Cultural Heritage Preservation Act was enacted in 1982, on the one hand until 2005 the Ministry of the Interior still took charge of major heritage surveys including industrial buildings instead of the CCA (later the Ministry of Culture); on the other hand, major industrial collection works are conducted by the Ministry of Education's National Science and Technology Museum. Before the Bureau of Cultural Heritage was formally set up in 2012, it was the Headquarter Administration of Cultural Heritage as well as the former central region office of the CCA. Therefore, work regarding industrial heritage preservation in Taiwan is divided between individual national agencies. K.L. SHIH considered it problematic to be guided by multiple policy drivers in the administrative system of heritage affairs. It creates a boundary between sectors and causes difficulty

for further coordination. The administrator said that “many concepts are recently introduced ... it takes the time to make the government officers understand comprehensively about the principle of cultural heritage preservation”. Nowadays, Taiwanese industrial heritage sites are legally recognised and protected by the Bureau of Cultural Heritage, but they are in fact supervised by different authorities at either national or local level. Meanwhile, the relevant communities and the private sector have also given their voice and action to industrial heritage affairs. This raises the issue of the relationship between national and local authorities, between academic and community interests, and between those who seek certainty based on defined and quantifiable value measures and others driven by more emotional imperatives. The following sections discuss the Bureau of Cultural Heritage’s situation towards state agencies and related communities respectively in industrial heritage affairs.

5.3.2.1 Relations between the National Agencies

It was mentioned in Chapter Three that Taiwan’s government launched the industrial heritage survey led by the CCA in 2002 as part of the privatisation of state-owned enterprises. The national agencies of the survey committee included the Ministry of Economic Affairs, the Ministry of Education, the Ministry of Transportation and Communications, the Ministry of Finance, the Ministry of National Defence, the National Archives Administration, the Council of Agriculture, the Public Construction

Commission and the Directorate-General of Personnel Administration. Regarding the stewardship of the industrial heritage sites, the Ministry of Education (science museums' collections and artefacts), the Ministry of Economic Affairs (state-owned enterprises), the Council of Agriculture (Forestry Bureau's forestry cultural parks) and the Ministry of Transportation and Communications (Tourism Bureau attractions) are the major site authorities outside the cultural governance system. Further, there are three divisions of the Ministry of Culture relating to industrial heritage management including the Bureau of Cultural Heritage, the Department of Cultural Resources Museum Sector and the Department of Cultural and Creative Development. The Bureau of Cultural Heritage mainly plays a consulting role for the national museum in relation to industrial heritage affairs. The museum in its turn conducts its own industrial heritage preservation, such as National Taiwan Museum's Neman Park and Railway Department Park. However, with the scheduled national railway museum programme of the former railway workshop (Figure 5.19), led by the Bureau, coordination between the Bureau and the museum sector could be an example in developing future industrial museums.



Figure 5.19 The Taipei Railway Workshop (photo by the author).

In regard to the relation between the bureau and the Department of Cultural and Creative Development, Taichung Cultural and Creative Industries is the only creative park managed by the national agency, the Bureau of Cultural Heritage, and its head office. As it is a public administration, there is less commercialisation in this park. In the department's opinion, there was an argument for withdrawing the park for further business planning to recruit private investment and relocating the bureau elsewhere. "It was an option in order to release the Ministry's financial burden ... it could be too much for them [the Bureau] by handling cultural heritage affairs but also taking care the creative park business", said CHU. But the discussion concluded with nothing definite decided. According to the latest announcement, cultural heritage preservation

is also included as part of Taichung Park, along with architecture, design and the performing industries (MOC, 2016b). As for the remaining creative parks, an officer of the creative department said that “it is not necessary to present the connection with the park’s industrial narrative in the business proposal ... we are mainly looking for an attractive and a great potential for cultural and creative development ... not the heritage thing”. On the other hand, K.L. SHIH commented that “cultural and creative industries development is one of the approaches for the reuse of industrial heritage, the key element is to make sure the venue in an adaptive reuse based on the heritage value”. As the above conflict between the two national agencies demonstrates, the bureau currently regularly submits a report about the Taichung Park’s events and activities; the department tends to operate the remaining parks under the principle of promoting cultural and creative industries.

The Council of Agriculture is, in fact, part of a heritage governance system for natural heritage, having joined the Bureau of Cultural Heritage for cultural heritage. As the council’s Forestry Bureau launched the Forestry Cultural Park Programme before the Bureau of Cultural Heritage was established, even earlier than the Cultural and Creative Parks Project, the Bureau of Cultural Heritage tends to leave the forestry cultural parks under the Forestry Bureau’s supervision instead of actively intervening. However, LEE, a heritage sector officer, indicated that the two bureaus have some

coordination through certain occasional meetings, such as the issue of Alishan Forest Railway conservation. The railway is listed as one of thirteen Taiwan national heritage sites which recognised the universal value (based on UNESCO's World Heritage Selection Criteria) by the Taiwanese government, and a special committee has been established for its promotion. Another example is the Tea Research and Extension Station—Yuchi Branch. “In this case, we communicate with a coordination platform ... through our participation, they begin the industrial heritage listing work”, commented K.L. SHIH. From the perspective of the Forestry Bureau, there is more coordination with the local cultural department than with the Bureau of Cultural Heritage. L.W. CHIU from the forestry sector indicated that:

normally, the listing works are submitted by the local government according to the Act ... however, the responsibility of conservation is on our own ... if we fail to protect, we would be fined by the local cultural department.

Because the Cultural Heritage Preservation Act empowers local government to have the right to list heritage, the forestry regional offices have more experience of contact with the local cultural sectors. The relevant constructions at the heritage sites also need the approval of the local heritage committee. With the progress of the latest consulting programme for the forestry cultural parks, L.W. CHIU expressed that “as

we are not heritage sector, we are looking for professional advice and financial support ... at present, pragmatically, due to the park is just part of our works, we would keep the current park business by our steps”. As both agencies are parts of the heritage governance framework, they tend to respect their respective system.

In the aspect of communication with other national agencies, the Bureau of Cultural Heritage’s efforts are restricted by the bureaucratic administration system. The Ministry of Education’s museum department is dealing with industrial materials as museum collections and resources for promoting science education instead of industrial heritage affairs. Although the Ministry’s National Science and Technology Museum has launched an industrial heritage survey for private enterprises, the survey is funded by the Ministry of Economic Affairs instead of the cultural sectors. In general, educational museums tend to have more collaboration with academic institutions than with the bureau.

However, the Ministry of Transportation and Communications’ Tourism Bureau has conducted several conservation projects upon the industrial heritage sites, such as timber and water conservancy. From the Bureau of Cultural Heritage’s standpoint, LEE said that “the cooperation between our two agencies is focused on the educational promotion by providing the relevant materials for their tour guide training

courses ... they do not have a heritage plan so far”. In addition, W.J. WANG from the tourism sector expressed that “the communication between heritage and tourism sectors is led by the high-level state officials ... we, as the bureaucrats have less direct access to heritage sector, but we have some co-projects on cultural tourism”. Thus, currently, there is not yet a regular connection between these two sectors for industrial heritage affairs. In the case of Che-cheng Timber Industry Exhibition Hall, the contractor, KUO, recalled:

Initially, we programmed here as a museum for the timber industry. ... However, the Tourism Bureau is unable to have a museum legitimately, because it is neither a culture nor an education sector. Thus, an exhibition hall plan replaced the museum one ... the building is built in a professional museum standard, but the contents are the general information for tourists.

The Tourism Bureau administration has to make sure that the investment in the industrial site would be their own achievement and under their supervision. Once a museum is built, it can be transferred to the cultural sector’s portfolio. According to the architect’s opinions, after years of experience, the Tourism Bureau has also made great progress in preserving heritage. There is a shaping heritage model in the tourism development’s perspective. However, W.J. WANG commented that “ultimately, the

heritage issue should be handled by the heritage sector ... we are expecting more heritage sectors' engagement and we [tourism sectors] can focus on the tourism promotion". On the one hand, the tourism system is not a heritage department and relevant faculty, and it could cause problems for sites' sustainability; on the other hand, owing to the limitation of bureaucratic administration, they would have to transfer or authorise the site to another non-heritage agency, this also worried them, such as at Wushantou Reservoir's Hatta Yoichi Memorial Park.

5.3.2.2 Relations between State-Owned Enterprise and Local Agencies

BOCH has spent lots of efforts on inventorying the relevant industrial heritage for state-owned enterprises supervised by the MOEA. During the interviews, both K.L. SHIH and Y.M. TSAI emphasised the importance and representativeness of state-owned enterprises in Taiwanese industrial heritage. This can also be illustrated from major industrial heritage publications and reports, which are all about state-owned enterprises' sites. The administrators of BOCH believed that it is their responsibility to be the protectors of the legacy of state-owned enterprises. In their understanding, the Deserted Public Space Reuse Programme in the 1990s has been superseded by BOCH's Cultural Industrial Heritage Revitalisation Project and the creative sector's Cultural and Creative Industries Park Project, respectively. The Cultural Industrial Heritage Revitalisation Project has accomplished some examples

of industrial heritage reuse, such as the Budai Salt Fields and the Taitung Sugar Refinery. Meanwhile, in the case of the state-owned Taiwan Sugar Company, the board transferred the industrial heritage affairs to the land development department and creative section by aiming to enlarge its commercial potential. Additionally, as BOCH can only offer advice, the state-owned enterprises themselves are the final decision makers for industrial heritage affairs. Also, the bureau is, in fact, not an authority on the enterprise. Thus, some state-owned companies have no interest in heritage affairs—either they do not believe that there is any benefit to their own business or they worry about legal restrictions against the business plan by being listed as heritage (FU, Y.M. TSAI and M.C. YANG). This shows that inter-understanding and in-depth communication are in demand between the heritage people and business people. Both BOCH and MOEA should consider positive coordination with each other in order to be more practical and sustainable to meet their respective heritage values and business interests.

In relation to local government, owing to the fact that local governments are empowered to designate their own heritage by the Cultural Heritage Preservation Act, the Bureau tends to act as supervisor for the local agency instead of its authority body, especially since not each local government owns a dedicated section for heritage affairs. In the case of state-owned enterprises, since most regional offices are passive

in industrial heritage listing, some local agencies tend to schedule and list their factory sites directly without comprehensive communication and consensus. K.L. SHIH argued that “the lack of experience and expertise on some local agencies’ heritage designation cause the misunderstanding between industrial heritage, cultural landscape and historical buildings”. There are some sites being listed repeatedly in various heritage categories, such as the Qiaotou Sugar Refinery. This could cause confusion to not only the relevant sectors but also the public. However, not even the bureau is able to correct or amend the designation protected by the Act. FU indicated that:

it is a cliché but an existing phenomenon in many Taiwanese sectors, people always work behind closed doors without the advancing understanding of industrial heritage but self-interpretation.

On the other hand, not every designation as a heritage site is confirmed and convinced by the relevant stakeholders. In the case of the Taipei Railway Workshop, because the industrial site situated in the heart of Taipei City possesses great commercial potential, there has been serious controversy among the Taipei City Government, the Taiwan Railways Administration, private enterprise, the preservation group and residents for three years. The bureau was forced by the climate of opinion to step in and designate

the whole site as a national heritage site and as the future national railway museum's location in early 2016. Despite the concern for autonomy for heritage affairs in the governance system, the bureau still has enough authority to correct the local industrial heritage affair, particularly when it is desired by the people. At present, local governments generally include heritage affairs in their cultural agendas and initiate their own industrial heritage surveys or studies. The bureau does not only encourage local cultural agencies to set up heritage sections but also actively facilitates a cross-department coordination committee for industrial heritage led by local governments. However, the creative industries development seems to be more attractive for local agencies. The Ministry of Culture's Department of Cultural and Creative Development has made no attempt to supervise local cultural and creative industries (CHU), in which the local agencies have more force and flexibility to build cultural and creative parks.

Therefore, such early examples as Taipei's Songshan Cultural and Creative Park and the Kaohsiung Pier-2 Art Centre and later cases including the Yilan Chunghsing Cultural and Creative Park (a former paper mill), the Taipei Beer Culture Park (a former brewery) and the Keelung C23 Cultural and Creative District (formerly dock warehouses) are all examples of the reuse of industrial heritage sites in a cultural and creative approach led by local agencies including heritage conservation teams.

Meanwhile, the bureau lays particular stress on state-owned enterprises with less investment from private companies. “Such as the private textile mills, the importance of Taiwanese textile industry is no less than sugar industry ... however, there is hard to find a mill now due to the massive demolition”, said FU. Private-sector businesses which intend to make some contribution in the former industrial sites often adopt the culture and creative park approach and prefer to seek local agencies’ support first rather than the bureau (K.L. SHIH), such as Ten Drum Cultural and Creative Park and Sintung Sugar Factory Culture Park. Alternatively, the MOEA’s Factory Tourism Programme also provides a range of financial, counselling and marketing support for many private manufacturing industries by creating the benefit of tourism (ITRI, 2016).

5.3.2.3 Coordination with the Relevant Communities

By reviewing the development of Taiwanese industrial heritage, besides the policy-driven factor, the continuous engagement of artists, architectural professionals and civic groups are the main forces to maintain the advance of industrial heritage. According to CHIANG and R.H. CHIU, who was one of the pioneers in developing Taiwan’s industrial heritage, the artist groups launched the initial argument on revaluing industrial buildings in urban brownfield sites. With the advocacy of the CCA’s Deserted Public Space Reuse Project, many artists and culture workers had

started to rent those redundant places from the public sector as studios, galleries and cultural venues with the encouragement of the CCA's art department. They were attracted by the aesthetics of industrial ruins but also by the exotic ambience of the colonial narrative (Yao, 2004; Chen, 2005). The large scale of spatial plasticity can accommodate the huge artworks and there is no restriction on reflecting the latest social issues in their performance here. And, last but not least, the cost of these spaces is much cheaper than the official venues, and they offer better availability and accessibility to the general public. The iconic cultural venue located at the former Huashan Brewery, established for the purpose of promoting arts and culture events and cultivating young artists, was a prototype cultural and creative industries park for years afterwards. CHIANG commented that, "at that time, the relevant save industrial heritage campaigns are meaningful by re-interpreting our cities and giving the grassroots' voices". Before the inventory of cultural heritage and the establishment of BOCH, R.H. CHIU considered that "the cultural associations and the individual artists led the initial conservation and promotion of industrial heritage". Due to the nature of pursuing art-creation, in general, the connection between the artworks and industrial heritage sites is not the artists' first priority. In this period of time, the consciousness of industrial heritage was ignited but was still only glimmering.

After the 921 Earthquake, the massive and comprehensive heritage-saving works

were scheduled for accomplishment. This nationwide heritage programme was governed by the CCA's Central Region Office (later BOCH). On the one hand, the office became the headquarters of relevant heritage affairs including former industrial places; on the other hand, owing to the huge demand of construction work, the office worked closely with architectural professionals instead of artists. Owing to the large scale of the earthquake's damage to historical buildings over the island, some architects and architectural academics took heritage production practices as kind of social responsibility and meaningful vocation (as mentioned by interviewees HUANG and KUO). Furthermore, in the early years, there was neither a comprehensive education nor a governance system for heritage in Taiwan. Most of the opinion leaders were from either architecture or history fields. Owing to the primary resources being invested in historical buildings restoration, architects gained the better advantage to access heritage conservation practices and implemented more initial industrial archaeology works than historians. Additionally, the closure of some state-owned enterprises has also threatened the preservation of the historical machinery and plants. Some architects and academics who have individual interests in industrial heritage urged the government to tackle this issue seriously. The office thus undertook a series of surveys of industrial heritage led by architecture professionals.

Since then, many industrial heritage conservation programmes have been led by

architects and architectural scholars. However, the professionals of industrial materials, such as former workers, engineers and technicians, have less access to the industrial heritage field. Similarly, regarding the local level, K.L. SHIH said that “within the limited budget, the most local sectors also tended to focus on the physical buildings, memorials and remains’ restoration works” and acknowledged that “the development of industrial heritage in Taiwan is rather architecture-oriented”. FU also pointed out that “it is no doubt a criticism that there are more architecture experts in the national committee for heritage than the rest”. As regards this phenomenon, a heritage expert, as well as R.H. CHIU, argued that:

The professional-led protectionism of Taiwanese heritage field has its drawback and needed to be corrected. ...The governments relied on the architectural people for the conservation work based on their professional [skills] ... however, the policy-makers and administrators one-sidedly emphasised on the approaches rather than the discourses. ... They did not think deliberately through the following question, what is the restoration work for? And to whom?

Occasionally, with less time to accumulate heritage expertise and with tight schedules, most industrial heritage project contractors and architectural teams cannot help but

take the material restoration as the priority by excluding the preservation of machinery and a larger picture for the site's future planning. Seeing these problematic situations, civil groups and cultural historians concerned with industrial sites began to give their contributions and voices to the relevant conservation works. When the owner of an industrial site which has potential heritage value has no interest in heritage, civil groups can unite the relevant communities including local residents, industrial heritage enthusiasts and architectural professionals to submit a heritage listing request to national or local heritage agencies, as happened with the MITSUI Warehouse in Taipei City, the Keelung C23 Dock and the Taipei Railway Workshop, for example. These grassroots-led campaigns mainly target communicating with local heritage agencies, however, once the negotiation failed or evolved into severe conflicts the national authority—the Bureau of Cultural Heritage, even the Ministry of Culture would be asked to step in for coordination. For some Taiwanese ethnic groups, the industrial sites are part of their historical settlements and narratives. The relevant authorities for these matters including the Hakka Affairs Council and the Council of Indigenous Peoples would also give decisions and supervision over industrial heritage sites, such as with the aboriginal narrative in the Lin-tien-shan Cultural Forestry Park (Figure 5.20) and the Hakka settlement around the Chu-hung-keng Oil Fields Park (Figure 5.21). The bureau also has to consider these stakeholders' opinions with

regard to industrial heritage site matters.



Figure 5.20 The Aboriginal Exhibition in Lin-tien-shan Forestry Cultural Park (photo by the author).



Figure 5.21 The Hakka Exhibition in Chu-hung-keng Oil Fields Park (photo by the author).

In short, owing to the difference of bureaucratic administrations between the sites’

authorities, the uses of industrial heritage sites in Taiwan merge various approaches in practice, including forestry cultural parks, museums, exhibition halls and tourist attractions. Each of the authorities is imbued with the importance of industrial heritage by policy and relevant groups, but the understanding of industrial heritage management is a kind of self-learned process for individual sectors. In the early stage, when a national heritage governance was being developed, the government was extremely dependent on certain professional groups, architects in particular. As a result, lots of resources were spent on the buildings' conservation, restoration and investigation over many years. And the subsequent pressure of creating output value on economic and local regeneration forced the majority of site managers and authorities to conduct a business model of commercialisation to sustain the sites' operation. Over time, they took industrial sites as estate or property instead of valuing them as heritage and legacy. Consequently, the controversy between economic benefit and heritage value in reusing industrial sites not only emerged in internal management but was also transmitted to external groups and the public.

5.3.3 Towards an Authorised Industrial Heritage Discourse?

The above discussion noted the multiple governance systems in industrial heritage in Taiwan; private participants and entrepreneurs often faced conflicts between the different stakeholders and suffered lots of red tape by negotiating with administrators.

Meanwhile, the individual authority or owner of the industrial sites had their own management systems, principles and priorities. On the one hand, the communications are fragmented and irregular. The non-culture sectors usually showed less interest than the heritage department. Therefore, there is rarely conversation between the Forestry Bureau and the Tourism Bureau on heritage affairs. Moreover, not only are the museum and creative industries not included in the current institution of conservation but also other relevant sectors. On the other hand, based on the Act of Cultural Heritage, both the Bureau of Cultural Heritage and the Council of Agriculture, which supervises the Forestry Bureau, are designated as supervisors of heritage affairs. However, there is no dedicated agency for heritage in the Forestry Bureau. The dialogue between them is rather difficult without counterparts. According to interviews, the administrators from the above sectors consider the mechanism to be meetings for a few senior officers who have a limited understanding of the actual scene. Also, being the workers at the front line of site management, they hardly (or rarely) know the further details of the relevant information. For example, some industrial heritage site managers and administrators had never heard of the TICCIH Taipei Declaration for Asian Industrial Heritage until the interviews for this study.

In addition, BOCH is rather a young department of the MOC despite the existing heritage works since the 1990s. Owing to the early lower level of hierarchy in cultural

affairs, the perception of heritage preservation was not well-conveyed across the administration system until the 921 Earthquake. The 921 Earthquake is the crucial turning point for cultural heritage preservation in Taiwan since it accelerated the development of Taiwanese heritage awareness and practices. HUANG, with a rich experience in heritage conservation, pointed out that:

the enormous non-governmental and private donations for the restoration created many employments for heritage conservation but also trained a crop of administrators for heritage affairs.

The financial resources from both the government and crowd donations forced the CCA (later the MOC) to enlarge the heritage faculty for supervising the relevant conservation works. The earthquake's relevant works lasted for a decade, during which period the heritage sector aimed to manage a wide range of works with a limited staff and time. Owing to the massive works on comprehensive conservation works and the shift of heritage bureaucracy, there was a less serious discussion of industrial heritage in the early stage. When the creative industries and tourism and forestry sectors stepped up the reuse of industrial heritage, they tended to manage industrial sites according to their own understating of heritage preservation without further consultation with the heritage sector. And the heritage sector was difficult to

contend with because of its lack of authority and limited administrative support.

In order to have a positive contribution, the heritage sector launch the Cultural Industrial Heritage Revitalisation Project, which aims to coordinate with state-owned enterprises to develop an approach that meets the principle of heritage preservation.

On the one hand, the heritage sector places itself as a consultant to the state-owned industrial site managers; on the other hand, the heritage sector also introduces the relevant resources from creative industries and the economic and tourism sectors. The project also assists state-owned enterprises to set up their own heritage office for managing industrial heritage sites and materials. However, M.C. YANG, who supervised the projects, expressed that:

it is all about the people, the key element is the board and the individual site managers are willing to proceed the proposals under our supervision ... and it is always a challenge of having a consensus between our heritage preservation principle and their own business plan.

Thus, the project has created an industrial site governance inside the state-owned enterprise system, which is also positioned at the intersection between creative industries, heritage and tourism. Furthermore, political purpose also interferes with the development of certain industrial sites. One example is the Wushantou Reservoir

and the Jianan Irrigation Waterways site. Because of instructions from the president's office in 2009, the heritage programme of this industrial site became the first priority for the Tourism Bureau's regional office and local cultural department, in order to accomplish the work within two years so as to be part of the celebration events for the Republic of China's Centennial. In the tourism sector, W.J. WANG believed the policy to be the essential drive to promote the whole programme of the irrigation landscape conservation: "the decision made by the statesmen seems to preserve the site accidentally". Nevertheless, the governance issue also worries him: "our team have learned and engaged in preserving this industrial site as heritage. However, the current authority is running the site as a general tourist spot".

According to the initial division plan, the local irrigation agency, not the conservation team, takes over the site management and subsequent tourism business. Besides governance, it also creates a gap between heritage-making and consumption. A similar case is the Alishan Forest Railway. The railway line had been run by the Forestry Bureau since 1945. Owing to the previous controversy between the Forestry Bureau and a private company, but also to safety concerns, in 2014 the government transferred both the railway's business and its ownership to the Taiwan Railways Administration of the Ministry of Transportation and Communications. Thus, in the fieldwork, although the Alishan Forestry Railway's North Gate Station is about a

minute's walk from the Chiayi Forestry Cultural Park, the connection between the railway line and the park is hardly noticed. The context of forestry narrative and the relevant heritage interpretation works are divided into two different sectors.

In addition, the current Cultural Heritage Preservation Act empowers local government to designate heritage in legislation based on the spirit of local autonomy.

However, through a lack of comprehensive understanding and eagerness for cultural contribution, some local governments are keen to increase industrial heritage sites before proposing further preservation plans. FU expressed that “the education of valuing and preserving industrial heritage is urgent, both for the governments and the public”. K.L. SHIH also considered that “it is the Bureau of Cultural Heritage's on-going job by assisting the local government to establish their heritage department”.

In terms of the specialised agency for heritage affairs, at present only seven out of twenty local governments provided for the heritage sector. Within such different hierarchies of heritage governance and institution, the approaches adopted by individual sectors in the research sites are discussed next.

5.4 Conclusion

It can be understood that industrial heritage awareness had been spread gradually among society with the threat of demolition from modern infrastructure progress but

without a systematic and structural preservation agenda. The development of industrial heritage reuse, as per CHIANG's comment, "is not only a cultural issue but also the progress of modern society". The agenda reflects the drive of shaping cultural identity, advancing civilisation, offshoring and regenerating the economy. It demonstrates the process of a shifting attitude towards heritage materials and industrial narratives in modern Taiwanese society. On the one hand, the government departments advance relevant programmes to valorise the old factories; on the other hand, the cultural groups launched heritagisation campaigns to preserve the industrial sites. From the cultural sectors' point of view, in order to protect the plants, designating industrial sites as heritage is the most reasonable and powerful way in law. Meanwhile, in terms of nation-building, this reveals the recognition of the importance of industrial Taiwanese history, in the duration of Japanese rule particularly.

In the background of the early political system and governance structure in Taiwan, the Nationalist government was still a traditional centralised state power. Thus, the initial heritage policy and heritagisation movement were dominated by the central government and its political position. With the practice of democracy conducted on this island, the dominance of party politics has gradually been replaced by the grassroots' voice. With the growth of heritage awareness and sites, a comprehensive heritage governance system was an urgent demand. For a period of time, the culture

sectors were unable to immediately handle the increasing heritage affairs with limited recourses and organisation scales. While the Bureau of Cultural Heritage was set up in 2012, its budget for 2017 has risen to 90 per cent more than the previous year (COCH, 2016). However, it is hard to have a long-term vision and clear classification of the Taiwanese heritage programme without political calculations. Also, the current heritage governance structure is overlapping and crosses many departments in both central and local authorities. Simultaneously, the state-owned enterprises' corporatisation policy and its national cultural assets inventory also influenced many ongoing industrial heritage programmes. The conflicts may link to the power relationship between different sectors and groups. On the other hand, industrial heritage by private companies is seldom mentioned or addressed, either by the government or by the private sector itself.

The policy of developing cultural and creative industries not only encourages the creative commodification of heritage but also appreciates the significant performance of culture. Thus, instead of a traditional heritage approach, commercialisation, tourism and museumification become the mainstream of reusing industrial heritage. These diverse theme parks are questioned in their consumption of industrial sites rather than conservation of them. In the recent years, industrial heritage sites in Taiwan have accumulated a lot of investigation reports and various practical

experiences. Owing to the lack of dialogue between the two sides, the argument of economic regeneration and narrative interpretation on industrial heritage reuse is continuing today. For Taiwanese people, Japanese-built industrial heritage not only meets the older generation's nostalgia towards the colonial past but also gives the younger generation Japanese exoticism as well as the ambience of the industrial age to those who never experienced it. In terms of the colonial controversy, the subject might, on occasion, be manipulated by certain politicians. But, in general, over the years of the shaping of nationalism and cultural identity in Taiwan, the colonial past is a debatable theme in current society. This shifting value towards industrial heritage gives site managers new elements to promote their sites. Despite sound progress in the major sites, the remaining former industrial places are still struggling. The interpretation of the colonial past is not only about good memories but reflects also on the dissonant trauma narrative. Aside from the Japanese connection, by thinking of industrial heritage in an international context the rising power of the grassroots leads to the next stage of Taiwan's industrial legacy.

Chapter 6 Engaging with Taiwan's Industrial Past

6.1 Introduction

Following from the discussion of the production of Taiwan's industrial heritage in the previous chapter, the various practices in management and multiple layers of governance structures towards Taiwan's industrial heritage drive Taiwanese to (re)value industrial sites variously but also raise aspirations for further narrative interpretation and meaningful representation beyond the rusted machinery and physical architecture. Firstly, the reasons why people visit and the ways people consume industrial heritage sites illuminate the debate between traditional preservation and creative conservation in the reuse of industrial heritage. Secondly, shifting attitudes and specific appreciations of the industrial past of different groups and generations are shown and remain on these sites. In particular, the profound contribution of artistic efforts enhances the taste for industrial heritage but also the dialogue between robust materials and Taiwanese culture—from folk to trendy. Ultimately, by seeing the development of Taiwanese industrial heritage as a continuum in the whole picture of the Taiwanese heritage agenda, it fits into the ongoing process of shaping cultural identity and nation-building in Taiwan. The above issues successively emerge *en route* in valorising industrial heritage in Taiwan.

Consequently, this chapter identifies the presentation of each research site with which the different audiences' engagement including tourists, corporations, residents and governors. According to the discussion in Chapter Five based on the studied industrial sites, the interpretation modes of Taiwanese industrial heritage can be classified into two approaches—conformity and creativity. By considering the ways which have been adopted by valuing industrial heritage in either the foreground or the background, the management structures and strategies are subsequently discussed. The changes of user groups have also continuously affected the orientation and the extent of use at sites as well as in response to the geographic situation—urban and rural areas. The adoption of the artistic practice in industrial heritage is generally still an unusual approach in the West's industrial heritage field. But it is a typical and well-trodden path in Taiwan's industrial sites owing to the approach of art intervention led by either the cultural sectors or art groups since the beginning of reuse. Furthermore, the aesthetic taste linked industrial heritage to both consumptions in modern society and nostalgia towards the colonial past. Finally, the shifting meanings of industrial heritage and the relevant colonial context kept raising the problematic issue of nationalism and cultural identity in Taiwan. On the one hand, industrial heritage is similar to other cultural issues as a kind of motivation for the international agenda that aims to reconnect Taiwan to the world (as Taiwan has not been a member of the

United Nations General Assembly since 1971). On the other hand, the rise of industrial heritage made a contribution to generating new relationships between modern Taiwan and its colonial past by intersecting with every field.

6.2 Modes of Interpretation: Conformity or Creativity?

This section looks at the ways that industrial heritage is interpreted in Taiwan by firstly looking at the typical heritage perspective of interpreting industrial heritage in the foreground. Then I go the other way, considering the background context where industrial heritage has been interpreted but also used, mobilised, reconstructed and restored. Heritage as a cultural process is offering experiences but also performances (Smith, 2006). It reveals a sort of conformity by the interpretation in the foreground; by moving to the background, this seems to fit into a creative approach in developing Taiwanese industrial heritage.

It draws upon the interpretation of Taiwanese industrial heritage in two main dimensions. One is conformity to the principle of preservation, industrial archaeology and the traditional museum approach by interpreting the sites' industrial histories, manufacturing processes, workers' lives, relevant social histories and so on to visitors. The second is adaptive reuse, which is associated with innovative conservation, architectural design and the creative industries by adopting industrial materials as

attractive elements into thematic settings for various purposes. Though there have been overlapping uses between these two categories, a discussion of the different management structures and strategies based upon the studied industrial sites can be the rationale for a complex demonstration in heritage interpretation. In terms of the moves of heritage narratives between foreground and background presentation of industrial sites, to what extent does this theme confirm whether the tradition is more geared towards of industrial heritage interpretation and production or towards adopting creative application?

6.2.1 Industrial Heritage in the Foreground

In line with most developed countries in the world, industrial heritage was not included in Taiwan's initial heritage categories. From 1982, the first decade of the Cultural Heritage Preservation Act in Taiwan adopted a conservative way of preservation by identifying traditional heritage sites and monuments rather than industrial places. Most of the early industrial heritage pioneers were basically inspired by their individual interests or enthusiasms. Mainstream conformity with heritage interpretation was established by a group of architectural academics through changing discourses and accumulating practices. While the perception of reuse and industrial heritage were introduced by architectural professionals (Lee, 1994; Fu, 2010), the sugar refineries were the first conservation objects owing to the decline of this

state-owned industry. The rise of Taiwanese nativism had also encouraged certain preservation movements of industrial place by connecting local narrative and identity with the sites. The approach of museumification in industrial heritage was also benefited by the Community Empowerment Policy and the Local Cultural Museum Programme, both top-down policies mainly contributing to addressing the connection between residents, sites and local narratives by conducting museum practices.

Since then, investigation, scheduling and listing works were launched and reached a peak after the massive restoration constructions following the 921 Earthquake (the most serious earthquake in Taiwan history so far, dated 21 September 1999); this also “roused the debate of the authenticity in interpreting heritage” (interviewee FU). Meanwhile, as introduced in Chapter Three, owing to the continued restructuring of the industry, an appeal to preserve the relevant cultural industrial heritage of the former state-owned monopolies and administrations was announced, in which “industrial heritage was thus able to be included in the general heritage category and discussion” (interviewees HUANG and K.C. YANG). The above efforts continue to the present day and provide essential resources for the further interpretation of industrial heritage. However, the understanding of industrial heritage is not yet achieved an agreed definition at home. Y.M. TSAI stated:

we normally quoted the international heritage organisations' definitions of Industrial Heritage ... however, are the West discourses and citations adaptive to Taiwanese examples, as many of them are still in use.

At present, although industrial heritage is generally accepted by the public and academics, the Cultural Heritage Bureau's official documents tend to adopt the term 'industrial cultural heritage' in Taiwan. According to the bureau, there are two approaches to monitoring industrial sites, formerly or currently state-owned enterprises in particular. First, the bureau encourages the listed industrial heritage to be active in reuse. It also emphasises that the interpretation of industrial heritage is essential. Second, the sites which have potential heritage value but are not yet listed are included in the bureau's industrial heritage revitalisation project for further consideration.

In terms of interpreting Taiwan's industrial heritage, the majority of these listed sites were built during the Japanese colonial period. As a result, based on the factual industrial history of Taiwan, the colonial past is the inevitable context evoked by the interpretation. These rising industrial heritage sites had altered Taiwanese perception to industrial artefacts but also brought a new understanding of the industrial narrative (and its colonial past) in shaping nativism, identity and sense of place. Although the

colonial past is naturally embedded into an industrial narrative and the history of Taiwanese industrialisation, there was a less comprehensive consideration of industrial sites in the Taiwanese industrial heritage conservation agenda. In the general investigation programme of industrial sites, the colonial context of industrial narrative did not draw the executors' attention. Y.M. TSAI noted:

in the initial stage of the survey, we have no picture of chronological order for categorising industrial heritage. We aim to contextualise the industrial materials and built constructions only.

In fact, there were some controversies around the nomination and listing of industrial heritage sites at that time including debates around decolonialisation, representation of Chinese culture and perception of industrial aesthetics. On the other hand, owing to the lack of a discipline of industrial archaeology in Taiwan, there had been no opportunity for people who actually understood the machinery, such as the former workers, to get involved in this field, and this caused difficulty in the interpretation of industrial heritage in Taiwan. As K.C. YANG argued, "these surveys and preservations were mainly contributed by the architecture academics. ... The experts of mechanical, electrical engineering, even the former workers rarely participated ... it showed that today's interpretation context is more about the buildings but less about

the machinery”.

According to my observation at the research sites, most presentations are less about an industrial heritage narrative but are more descriptions about the architecture’s function (Figure 6.1). Similarly, most statements of listed industrial heritage are based on external features from either the perspective of architecture or general information. By adopting a museum approach towards Taiwan’s industrial heritage, the main challenge is to display the relevant industrial narrative in a connected series over the large scale of the industrial landscape. Instead of introducing the manufacturing process in each place of the site, the museums tended to situate the main exhibition in certain buildings and reuse the rest for retailing, catering, tourist services and special events. The static displays are the regular elements in most museum sites in order to demonstrate a whole picture of the site or the manufacturing process to the audiences. Regarding the colonial context, the period room, which is displayed in many industrial sites (Figure 6.2), is presented as an exotic scene by decorating it with Japanese-style furniture and accessories. On the other hand, Japanese shrines located in the industrial sites that were once ruined are now revalued as cultural attractions. Moreover, the factual narratives relating to industrial sites are encouraged to be revealed and demonstrated including their dark history, such as the Gold Museum’s Prisoners of War Camp (Figure 6.3) as well as providing experiential and edutainment

activities—the tunnel tour (Figure 6.4).



Figure 6.1 Interpretive Panel Concerning the Architecture, Songshan Creative Park (photo by the author).



Figure 6.2 The Japanese Interior Display in Hatta Yoichi Memorial Park, Wushantou Reservoir (photo by Siraya NSA).



Figure 6.3 The New Permanent Exhibition for the POW camp in the Gold Museum (photo by the author).



Figure 6.4 The Gold Museum's Mining Tunnel Tour (photo by the author).

In the meantime, besides the culture sector (including the heritage and museum sectors), the tourism and forestry sectors and state-owned enterprises have all launched their own industrial heritage investigation, preservation and exhibition work. Specifically, instead of the above agencies, these works were mostly implemented by

academics, civic institutions and private consultancies; this is an outcome of the practice of government organisation restructuring in Taiwan since the late 1990s caused by personnel streamlining and the encouragement of private-sector engagement. Thus, the dominant interpretation of industrial heritage is actually dependent on these commissioned academics or private businesses. When the works were handed over to the sites' authorities, some authorities did not make the attempt to enhance prior efforts, as KUO pointed out:

they are very practical with less connection to culture and history ... no attempt to promote these collections which are far from Japan.

In contrast, some struggled to deal with the industrial heritage owing to less experience and expertise: "we have no relevant background about heritage ... it is a huge challenge for us", expressed W.J. WANG of the Tourism Bureau. L.W. CHIU of the Forestry Bureau also remarked:

we do worry about our lack of professionalism in heritage, museum ... we have to consider deliberately before the next step.

Initially, for some tourist attractions in rural areas, industrial heritage preservation was aimed at a fixed scale and limited interpretation in order to be easily managed by the

tourism agencies. The construction works sought to create topicality by establishing an attractive or spectacle building at the site including tourist services. “The authenticity of showing the heritage value and the interpretation of industrial narrative is not the priority”, commented K.C. YANG. On the other hand, with the accumulated experience of heritage affairs, the forestry sector is aware of the importance of narrative interpretation. Its regional offices keep investing in the restoration of Japanese-built industrial buildings and collection of colonial narratives so as to appeal to cultural tourists. For example, both HUNG (Chiayi Office) and CHI (Hualien Office) manifested their ambitions to preserve and interpret timber industrial heritage in the future as well as offering their support to the sites’ heritage designations: “To some extent, I think some tourism sectors even do better than certain heritage sectors”, said KUO.

In facing competition in global trade, the boards of state-owned corporations tended to either close factory to save costs or diversify the business to sustain profits. For example, the Taiwan Sugar Company launched new businesses in construction, supermarkets, animal husbandry, petrol stations and so on. In terms of out-of-date machinery and facilities, in some cases the staff sold them abroad in sets or tore them down for scrap metal recycling, thus there is neither existing machinery nor an industrial narrative to be interpreted other than the shape of the buildings. In contrast,

some places have quite a few machines and tools left in storage, although the staff have tended to keep them frozen in time; they were last used years ago and have been left rusting. Furthermore, in some mining sites, owing to the large scale and controversy of ownership between the public and private corporates as well as environmental issues, the whole region is currently in a frozen situation without further planning. From the museum point of view, “it has the positive effect in avoiding over-development”, as T.H. TSAI observed. In this way, the Gold Museum decided to concentrate on its museum complexes and industrial narratives. The remaining areas are left as an attractive industrial landscape promoted by the tourism sector with limited interpretation. Additionally, under the Bureau of Cultural Heritage’s supervision, many employees of state-owned enterprises have been trained as heritage protectors. K.C. Yang argued that “the state-owned companies are also merchants ... the heritage things are normally non-profit. Without heritage enthusiasm and the Bureau’s support, the action could be cut off sooner or later”. However, there are some employees who have now successfully adjusted their roles from machinists or administrators to heritage managers, such as the Taitung Sugar Refinery’s team.

The reconnection between industrial sites and local communities is also a critical issue that needs consideration. When the original worker settlement declined or vanished, the new arrivals might have had no relevant professional connection, or no

connection at all, to the industrial sites. However, they had the idea of interpreting the industrial past and valuing the heritage narrative. The heritage entrepreneur S. HSIEH remarked that “[s]elling lands and building new properties might be profitable, but the heritage is irreplaceable to this place and locals for generations”. C.W. LIN, director of the Art Museum of Mountain Village, also expressed that “we aim to develop the future by visiting the past ... we are keen to record the site’s narrative and do our best for interpretation”. The means of interpreting industrial heritage has now been re-examined and reinspected by the public. In general, based on the fieldwork observation and informed conversation with visitors, the young generation and enthusiasts are keen to have an advancing understanding of industrial heritage; some interviewees gave the same opinion as CHIANG, CHIU, FU, S. HSIEH and LIN.

The relevant narratives, including colonialism, modernity, nationalism, techniques and labour at individual industrial heritage sites, have been rediscovered and conveyed through a series of industrial heritage site preservation discussions and campaigns in today’s Taiwanese civil society. Examples include the campaigns of MITSUI Warehouse in Taipei and the Taiwan Cement Corporation (formerly Asano Cement Co.) plant in Kaohsiung. In terms of the broader global context, a further consideration of the appearance of the Taiwanese industrial heritage network and international relations is also brought to attention. Therefore, civic engagement is a

rising force in Taiwanese industrial heritage preservation, aiming to fill the gap between present-day impression and historical narrative interpretation.

By examining the interviews, many of the interviewees who participated in industrial heritage affairs indicated that before they became involved most of the factories and machinery had vanished and left more office buildings in place of the plants. They continued to argue that this is a serious disadvantage for interpreting industrial heritage. Without the fundamental industrial materials and reference, there was less discussion of Taiwan's industrial heritage value on a broader scale by reflecting its regional and national impacts, but more focus on the historical context of individual buildings. The absence of interpretation towards industrial heritage sites also caused a failure to present the whole picture of nationwide industrialisation. As discussed in Chapter Five, the relevant heritage works of industrial places are mainly contributed by academics and professionals who are focused on architectural relevance. FU commented:

the dominance of architecture field with less involvement of the specific expertise individually is problematic.

The excessive focus on architectural preservation has unavoidably led to most efforts being inclined towards physical buildings in both the preservation works and relevant

studies. Additionally, although because of the lack of industrial heritage experience in the heritage agency many consultants and academics from various disciplines were invited to engage in industrial heritage affairs, the restoration works and academic studies were always undertaken separately by individual groups. Without a conformity of interpretation on industrial heritage in advance, it is found that the outcomes of studies presented at individual industrial sites rarely focus on the value of industrial heritage in delivering their interpretation to the audiences (MOC, 2012) so this is marginalised in the site's interpretation. As K.L. SHIH expressed:

there is the criticism saying the Bureau of Cultural Heritage has paid too much attention to architecture ... we take it on board, and now we always look after the core value of heritage and its interpretation.

Occasionally, even the offering of interpretation was considered as excessive. For example, according to W.J. Wang, the policy-driven project of Hatta Yoichi Memorial Park at the Wushantou water conservancy site was questioned by the national investigatory agency owing to the high praise for the colonial-era Japanese engineer, Hatta Yoichi. In response to this phenomenon, R.H. CHIU considered that the professionals deserved recognition for their achievement in industrial heritage; however, inexperienced industrial heritage governance had distracted from the

subsequent development. To sum up, the lack of a clear index of current industrial heritage governance in Taiwan has obstructed the performance of interpretation.

It could be understood that industrial heritage awareness had spread gradually among society with the threat of demolition and the progress of preservation. However, it is still in need of a systematic and structural form of governance. Heritage is intersected with various sectors, but there is not yet an effective and cross-sector communication mechanism in Taiwan. On the positive side, the interpretation of industrial heritage in Taiwan has drawn the various fields' engagement but it has also been included in the general heritage agenda. On the other hand, the diverse judgements and higher expectations towards the context of industrial interpretation as well as the latest innovations of the adopted practices are driving Taiwan's industrial heritage forward. These relevant creative approaches are discussed in the next section.

6.2.2 Industrial Heritage as a Background

The perception of reuse was adopted in Taiwan's redundant industrial places before (and over) the practice of industrial heritage such as the Ministry of Culture's five cultural and creative parks. The functional and utility concerns were the first priority and less attention was paid to industrial contents. In particular, with the rise of "creative economy" the commercial potential of the cultural and creative park and tourism drove the site managers or owners to introduce innovation and creativity into

industrial heritage conservation and presentation. The national creative industries agency-led cultural and creative park programme commissioned five different private bodies in the individual urban industrial sites. As Y.Y. CHU mentioned before, the creative sector of the MOC only looked after the performance in the aspect of cultural and creative development. Once the site manager can deliver the benefit via interpreting industrial heritage, they have no reason to be against it. However, the activities in these parks are mega-events, retailing and special exhibitions, which usually link to popular culture. Although there are some relevant displays about the sites' narrative, the interpretation tends to be simple and dull; in contrast, the individual creative retailer is elegant and stylish (Figure 6.5).



Figure 6.5 The Presentation of Industrial Narrative.

Top: The Exhibition of the Wine Production, Taichung Creative Park. (photo by the author).



Bottom: The Creative Design Gift Shop (photo by TDC), Taichung Creative Park.

At the local level, local governments are also keen to develop cultural and creative parks in redundant industrial places by referencing the national agency's mode. In Kaohsiung City, the Pier-2 Art Centre reused the former railway warehouses as a cultural consumption complex including shops, a cinema, catering, galleries, exhibition venues etc. As for the Songshan Cultural and Creative Park in Taipei City, the site team created a series of products by combining the relevant images and

narratives of the former tobacco factory, such as stationery, posters, accessories and commodities. (Figure 6.6). L.M. CHOU stated that “industrial heritage is an important origin of here ... the commodification is a way to inherit the industrial narrative and heritage spirit”. However, the promotion of cultural and creative industries is still their primary mission and expertise. So far, the industrial narrative has been displayed as a kind of attractive ambience for the visitor experience but also a branding strategy instead of for the purpose of interpretation.



Figure 6.6
Commodification of Industrial Elements in the Gallery Shop of Songshan Cultural and Creative Park (photo by the author).

In terms of the heritage field, according to the interviewee HUAN, traditional heritage preservation specialists are less interested in industrial heritage. Thus, it was difficult to establish a training system for young participants in the field of industrial heritage. While the BOCH accumulated some achievements about industrial heritage studies and surveys, cultural and creative ideas had filled the air of heritage field. From the

BOCH's perspective, K.L. SHIH believed that "heritage is the core element of culture and creativity ... industrial heritage is unnecessary to end up with running cultural and creative industries ... there is no positive causal relationship between those two". Thus, the BOCH-led counselling project of revitalising the state-owned enterprises aimed to explore the adaptive approach to distinguish industrial heritage sites from creative parks.

Considered in relation to the urban development process, authorities tend to conduct not only preservation but also exploitation of industrial heritage sites. As the leader of the revitalisation project, M.C. YANG, noted,

the counselling project for industrial heritage places is providing consultancy instead of instructing the site managers ... we applied the urban planning perception and worked on both conservation and development ... every method should be considered.

In her opinion, the sustainability of industrial heritage site really matters. Thus, the counselling project introduced various approaches, including accommodation, craft workshops, live music, an art village, ecological conservation and so on. The former Hualien Sugar Refinery is the latest transformation, in this case becoming a resort hotel. Such a complex use became the popular practice of many industrial heritage

conservations for creating a larger hinterland for commercial activities and attracting either private investment or relevant public agencies' engagement, such as the museum sector and local government. Local communities were also included in the individual sites' development programmes in order to promote economic regeneration but also as part of the local cultural museum system, for example, the Tsung-Yeh Arts and Cultural Centre, a former sugar refinery.

Regarding the national museum example, the default approach taken by the National Taiwan Museum in respect of interpretation of industrial heritage is demonstrated in its three branches, which are a former bank, a camphor factory and railway administration buildings. While the National Taiwan Museum is actually the natural history museum, the choice of whether to the foreground or background an industrial narrative is always criticised. For the sparse display in the National Museum of Marine Science and Technology (NMMST), according to T.W. SHIH's description, the whole interpretation towards the former thermal power plant remains dominated by the architect responsible for its design; meanwhile, the supervisor had no interest in this narrative either. Additionally, the government-led Local Community Empowerment Programme and the Local Cultural Museums Policy also contributed to state-owned industrial heritage conservation by reusing the redundant construction as a local museum. In general, these local museums are rather small-scale in size and

in the stewardship of local government. The major mission of these museums is to generate local identities and present local history. Therefore, the industrial buildings were usually emptied for public uses, in which the industrial narrative is less mentioned, as for example in the Jiji Camphor branch office. On the other hand, from C.W. LIN's perspective, whether the industrial narrative or the colonial past is the factual history presented, both are naturally embodied in the site and do not need deliberate emphasis. He believes that visitors can naturally appreciate and value mining heritage through the Art Museum of Mountain Village and landscape without further interpretation.

In AlSayyad's (2001) discussion, when cultural heritage is expected to offer income-producing opportunities to declining urban or rural places, such mass tourism has often inflamed regional and national passions. Several sectors in Taiwan were thus taking industrial sites as a potential tourist attraction, promising a unique cultural experience. To increase the number of visitors is definitely the major objective for the tourism sector. Further, in order to enlarge the usability of the estate, the site authorities and managers favoured the idea of addressing commercial opportunities such as theme parks and sensational construction. A good example of this is the Taiwan Salt Museum. The museum is now converted into a private resort and hotels complex. As a leisure business, the presentation of the museum focuses on

entertainment and gimmicks to attract visitors (Figure 6.7). The nearby national scenic area regional office had also built spectacular buildings on the former salt fields as the new tourist attractions (Figure 6.8). The above actions disconnected the site and the relevant industrial narrative but also devalued the preservation of these industrial heritage sites. Nevertheless, domestic tourists are attracted to visit with less hesitation through the salt museum, viewing this place as a space for an art installation, not so much as a museum.



Figure 6.7 Thematic Salt Sculpture outside the Taiwan Salt Museum (photo by TSM).



Figure 6.8 The Crystal Churches on the Former Salt Fields (photo by SC-NSA).



The Ministry of Economic Affairs launched the factory tourism programme as a means to assist declining industries, state-owned breweries in particular, such as the Yilan Brewery. However, as they were supervised by the economic agency without heritage expertise, the lack of cultural concern and manufacturing presentation in the face of increased commercialisation is a critical issue of the approach, as K.C. YANG notes. Meanwhile, the Forestry Bureau also considered joining the programme for the former sawmill restoration in Chiayi, including a museum as one of the options (HUNG), but the implementation of the idea now depends on commissioned private tourism enterprise. On account of the Forestry Bureau's eighteen forest recreation areas (national forest parks), the bureau is comfortable with adopting the tourism business model, which heavily relies on private corporations' participation. Thus, under the operation of private enterprise, the Chiayi Cultural Forestry Park is currently a retailing cluster and entertainment centre situated in a former forestry workers' housing complex. Industrial heritage interpretation is sparse and there are a few irregular exhibitions connecting to the narrative of timber industries. In Hualien, although the commissioned contractor created a replica of the timber flow cage base and the railway route in the Lin-tien-shan Forestry Culture Park, the object seems to be isolated from the park. In respect of the tourism and forestry agencies, the conservation of industrial sites included the restoration of old buildings but also

establishing new ones. They attempted to create topicality by establishing new landmarks at the site as well as tourism centres. The landscaping of the whole site is usually dependent on certain contractors or architects' imagination without considering the heritage context. From the architectural perspective, as C.C. TSAI stated, "the practice of reuse is the most important ... you have to put something new and attractive inside or outside the historical buildings to keep the site appealing to the audiences".

The industrial heritage, formerly a place to make products, is currently a space for presenting a certain narrative or ideology, and its colonial legacy is manifested in many of the structures and practices of contemporary purposes (Aitchison, MacLeod and Shaw, 2000). Sometimes it creates a situation of considerable cultural misrepresentation, a kind of tabloid history, bogus history (Hewison, 1987; Walsh, 1992) or invented tradition (Hobsbawm and Ranger, 1983). In the above examples, both industrial narrative and materials are seen as properties or resources rather than heritage. The authorities and contractors exploited the industrial remains in order to offer access for the consumption of modern society. KUO argued that "it is ironic to call them industrial heritage ... without the remains but a shell ... they are in fact the heritage industries (business)". By witnessing the industrial place becoming the site for "heritage industry", Y.M. TSAI commented that "as reuse becomes the major

purpose, the original value of preservation is thus forgotten by degrees”. Industrial heritage reuse as part of the progress of modern civilisation, in response to urbanisation, also reflects the phenomenon of ‘gentrification’ (Atkinson and Bridge, 2005). In CHIANG’s opinion, the reuse of industrial heritage, particularly as cultural and creative park, is always closely linked to popular culture and fashion trends, which increase the attractiveness and economic development of the surrounding districts.

On the one hand, the easy access of reusing industrial sites in the initial years (the late 1990s) highlighted the various potentials of the former industrial places; on the other hand, the exploitation of the creative and tourism industries which excluded the sites’ relevant narrative context had, to some extent, “hampered the development of Taiwan’s industrial heritage” (interviewee FU). However, there is an embedded impression that the loss of so much typical machinery and factories before preservation is an irreversible disadvantage for industrial heritage in Taiwan. In response to the previous reuse argument, J.W. WANG remarked:

so far we still struggle to create a new business future based on industrial heritage due to the uncertainty of its value ... we take the manufacturing legacy on board, and aim to build a creative hub for next generations ... it is not only a

business but also a social movement.

Y.M. TSAI also expressed that “it is always a matter of opinion between authenticity and reality, attractive romance and factual history, commodification and interpretation ... the above changes should be further explored”. By considering the bigger picture, industrial heritage reuse could be included as part of the progress of heritage context. The shifting of valuing industrial heritage and the rise of cultural and creative industries encouraged the relevant agencies to adopt commercialisation, museumification and tourism in the industrial sites. Simultaneously, for the commissioned contractors or architects, the innovation of usage and design are the priority rather than the industrial past and narrative. Sometimes, the knowledge of industrial heritage was less considered seriously during the decision-making process of site reuse. The authorities of the industrial sites are often questioned about their understandings and practices by cultural groups and local communities. This shows that the ways of either conserving or preserving industrial heritage are still under debate, but the intense discussions could also establish a platform for further communication between the practical utility and meaningful interpretation of industrial heritage.

6.2.3 Different Management Structures and Strategy

The above discussion of the two approaches to Taiwan’s industrial heritage shows the

way of presenting the industrial narrative in either foreground or background. This section considers the different management structures in governance and strategies in practice in response to the status quo. The rise of the cultural and creative industries caused an important change in the heritage agenda. It encouraged those reusing industrial sites to adopt various approaches such as commercialisation, tourism and museumification instead of struggling with the argument between authenticity and practicality. Owing to the change in political climate and the urge for economic regeneration, many examples were conducted and supported by the creative and tourism sectors. Connecting industrial heritage with cultural and creative industries became the mainstream in Taiwan. However, the creative sector tended to concentrate on developing creative business rather than industrial heritage affairs. Y.Y. CHU believed that there is always the possibility to promote heritage in the creative parks, but she also explained that, as heritage is protected by the Cultural Heritage Preservation Act, they would not interfere with the status quo of heritage unless it is included in the annual business proposal of the creative park. Considering the impact towards industrial heritage, HUAN noted:

one the one hand, the rising investment of creative sector means the decrease in the heritage part ... on the other hand, due to the separated governance structure, there is less connection between the creative industries workers and industrial

heritage workers.

Although cultural heritage and museums are classified as one of the Taiwanese cultural and creative industries fields, it is quite difficult for both of them to have a significant contribution to financial performance. From the heritage sector's perspective, it attempted to give and guide the industrial sites towards a resilient strategy which is distinguished from the creative park. As most of the current industrial heritage is state-owned property, K.L. SHIH considered that "it is essential to conduct the adaptive reuse by valuing industrial heritage instead of consuming". However, he also indicated that an awareness of the appreciation of industrial heritage might be consolidated in general society but is not yet rooted in the national and local administrative structure. Unlike the creative sector's relation to private investors, the BOCH usually played a role of adviser to the industrial sites run by state-owned enterprises or other national agencies.

In terms of state-owned enterprises, "[t]hey [the companies' employees] have a stereotype on heritage ... They believe that being listed as heritage means extra restriction and limitation", commented FU. The owners also worried that the designation of heritage might forbid further replacement and upgrade of the machinery or facilities, especially those running industrial places which cannot afford the risk of being ordered to suspend production for heritage purposes. Without further

authority over the state-owned enterprises' industrial sites, the BOCH is in fact in a passive situation. Additionally, the lack of sustainable communication and coordination throughout the governance system in heritage affairs is difficult to generate a long-term vision for Taiwan's industrial heritage. The above shows not only the insufficiency of understanding but also the reactive situation in industrial heritage affairs.

From J.W. WANG's viewpoint, as the first private investor in a cultural and creative park in a former brewery, he argued that the relevant national agencies, whether in the creative or heritage sectors, did not collaborate comprehensively at the start. "They identified the industrial site as creative park and heritage, but they did not involve the management and stewardship. ... We have to figure out on our own". In fact, the site's managing team from the private sector had to balance revenue and expenditure but also face the critiques of over-commercialisation with less support from the creative and heritage sectors. The relationship and coordination between the public and private sectors are problematic.

With the potential of tourism development, the former industrial sites situated in rural attraction areas are expected by the Tourism Bureau's regional offices to be used to enlarge the tourism economy. And the relevant buildings are usually led by

architecture and landscape design professionals with less connection to the heritage sector. Likewise, the architecture is also part of the Taiwanese cultural and creative industries. An example is Houtong in New Taipei City. The place is initially promoted by the local tourism agency based on its coal mine heritage and landscape (Figure 6.9). However, owing to the increasing popularity of the local wild cats, the tourism sector recently invested in the making of a “Cat Bridge” (Figure 6.10) to provide easy access for visiting the cats’ habitat.



Figure 6.9 The Ruined Coal Dressing Plant at Houtong
(photo by the author).



Figure 6.10 The Cat Bridge and Houtong Mining Landscape
(photo by the author).

The authority aims to focus on its tourism business by including industrial heritage as part of its promotion strategy and unique selling point. The conservation works on the industrial site led by the local tourism bureau relied mainly on individual professionals' participation instead of the local heritage department. Each contractor worked in isolation, with little communication with the authorities. These kinds of constructions are often rebuilt or restored without a comprehensive vision and long-term operation plan. There are some bodies involved in the industrial heritage sites that lack relevant expertise. For instance, Y.H. CHIU, of the tourism department at New Taipei City Government, is very much concerned with tourism as a particular strategy, but the department felt the challenge: "it is a challenge for us to interpret

heritage ... as we are here for promoting tourism”. As a result, some rebuilt or restored spaces and buildings were left unused or redundant owing to the lack of either a connection with the industrial past or an understanding of its reuse. Indeed, it is not realistic to ask every tourism professional to have the expertise in interpreting industrial heritage. However, it highlights the importance of communication and coordination among sectors in dealing with heritage conservation work. Because of this administrative reason, the site manager was less interested in going further with heritage affairs, and still less with further interpretation. The situation not only postponed the subsequent development of the industrial sites but also decontextualised the narrative between industrial heritage sites, such as the ‘Cat Bridge’ at Houtong coal mine site.

Meanwhile, regarding the promotion of forestry cultural parks in the Forestry Bureau, the stewardship of individual regional offices is not on the same page. Some of them are managed by the Operation Division of the Forestry Bureau, which looks after afforestation works; some are managed by the bureau’s Edutainment Division, which runs the forest amusement parks business. With this incoherent managing structure, there is a debate within park planning. HUNG, an official of Chiayi Office of Forestry Bureau, commented:

There are still at least two different opinions today. One is appreciating the restoration of outside with the pure space inside for the flexibility, the other is suggesting to relocate the machinery inside for better understanding the background of the place.

The Forestry Bureau empowered its regional office to tackle park business, and each regional office managed its park with different governance, resulting in less coherence in presenting the whole picture of Taiwan's forestry culture. To highlight the forestry heritage value, a senior officer of the bureau, L. W. CHIU, remarked that the head office of the bureau was working on a new and thorough programme for the parks. At present, the major approach to the parks is to promote tourism and recreation. Furthermore, the geographic location and the difference between urban and rural location are some essential factors on the management strategies of industrial sites. According to the local historian and heritage worker CHIANG, urban industrial heritage sites are always dominated by trends, fashion, artistic and popular culture activities, which draw the attention of citizens, especially the younger generation—the national five cultural and creative parks, for example. By contrast, industrial heritage sites in rural regions turned to address natural scenery and landscape, including new, man-made and unusual spectacles, such as the crystal churches on the former salt fields.

Additionally, there are some clues which show a shifting attitude towards revaluing the industrial narrative. Both J.W. WANG and L.M. CHOU (both creative park managers of a former industrial site) are aware of the importance of heritage narrative interpretation for sustainable development. Basic displays and entrepreneurial innovations connecting to the industrial past and heritage narrative are a good start. Simultaneously, industrial sites in rural places introduced coordinate travel by coordinating with locals. Visitors can enjoy the exotic and nostalgic ambience within well-preserved Japanese housing complexes but also experience rusted machinery rarely seen in their daily lives. With the growth of grass-roots engagement, the shifting attitude towards industrial heritage is continuously intersected with multiple forces. In the next section, the change of users in Taiwan's industrial sites gives a path of exploring heritage interpretation in relation to the past and the narratives.

6.3 Changing User Groups

As mentioned in Chapter Five, the transference of supervision of industrial sites in governance moved what Smith (2006) called "authorised heritage discourse" into the art, tourism, creative, and museum sectors while conducting industrial heritage. The transformation of interpretation and entrepreneurship also characterised the individual industrial sites' effect on audience experiences and behaviours, as well as in relation to the relevant artistic applications. Regarding the initial reuse, before the cultural and

creative industries emerged, the residency of artists and pro-artistic programmes in redundant industrial places were conducted by the relevant authorities, the culture sectors in particular, owing to the low cost, less complicated needs and the visible benefit of embellishing the ruins with artwork. Afterwards, the flourishing climate of developing cultural and creative industries forced artist occupiers to leave because of the high rents and commercial demands. However, as a new mode of operating industrial sites, whether as creative parks, museums or tourist attractions, there was no guidebook or example on how to manage these places. Thus, the frequent changes happened in not only site ownership and stewardship but also appearance and functions.

The first wave of change was the shifting of industrial sites' ownership. Both currently state-owned enterprises' and public agencies' industrial properties were inherited from the former Japanese (and Taiwanese) owners after the Second World War. Some of the previous narratives were destroyed or lost in the post-war period. The government's privatisation policy was the next phase, emerging in the late 1990s. There was an initial sense of preserving industrial heritage emerging, but it was not recognised by the private corporations that acquired the former state's assets, like the example of Jingzaijiao Tile-Paved Salt Fields in Tainan City, where Y.M. TSAI commented that "the reason of preservation after privatisation is nearly forgotten". In

addition, neither state-owned enterprises nor relevant sectors in government had experience in industrial heritage conservation. The architecture and heritage scholar HUANG described:

it is kind of trivial mix by gathering experts, academics from various fields ... and the industrial sites usually ended up being given over to the private corporates which were not involved in the beginning ... thus the gaps emerged ... and the heritage register system was less contribution on conservation practice but exploited as kind of pre-operation for commercial profit.

These sites' reuses were not only conducted by individual private firms but also supervised by different departments of national or local agencies. Y.H. CHIU, the subsection chief of the Landscape Management Section, Tourism and Travel Department, New Taipei City Government, noted that "the Houtong coal mine ecological park experienced various management team and diverse planning between culture, construction and tourism sectors. ... It is quite hybrid". FU also pointed out that "the frequent change of heritage team to the industrial site revealed the lack of professionalism continuity". The inconsistency of knowledge, practices and statements created either business opportunities or crises of de-contextualisation for

industrial heritage sites. This phenomenon creates various gaps among these user groups.

Sometimes the change made by the top policymakers was with less comprehensive communication in advance but also a lack of consideration for sustainability thereafter.

In terms of the forestry industry, the forestry railway lines were part of the timber industrial heritage system, such as the Chiayi Alishan forest railways. However, recently, the Forestry Bureau was asked by the central government to transmit the control of the forestry railway line to the Taiwan Railways Administration to unify the railway business. This change forced the bureau to reposition its attention from mountain railways to the timber mill and industrial materials. On the one hand, the Chiayi Regional Office intended to introduce commercialisation and tourism in the park, such as accommodation, catering and retailing; on the other hand, it also created a tension of shared interests in the heritage tourism. There has clearly been a lack of coordination between the Forestry Bureau and the Taiwan Railways Administration on this issue so far. The Hatta Yoichi Memorial Park in Wushantou Reservoir site is also a policy-driven example, led directly by the president's office. Likewise, the national tourism agency's regional office took charge of heritage conservation (with the commissioned private contractor) instead of the heritage sector (because it was scheduled to celebrate the Republic of China Centennial by 2011 without seriously

considering the heritage agenda). After the accomplishment, the local irrigation association took over the site's management as it has ownership.

Regarding the stewardship, in the case of the state's sugar corporation, owing to the request from the heritage sector, the sugar refinery's technicians and machinists became directors or staff of the sugar museum and heritage, funded mainly by the national culture agency. Some of them were keen to participate in heritage affairs; others considered that it was not their business. The latter were questioned about their acceptance of state funding to preserve industrial heritage even though they didn't care about heritage affairs (K.C. YANG and CHIANG). Occasionally, some refineries rented out redundant factories to the private sector, which had to restore, maintain and develop the sites as heritage on their own. However, the state's sugar corporation had the right to withdraw the places from the private operators without any consideration of heritage once the contract ended. CHIANG argued that this situation was "an injustice not only for society and national resource but also for generations". The government heavily relies on private investment and experts (both professional and academic) to execute either commercialisation and tourism or museumification and heritagisation. In fact, owing to government budget cuts and personnel streamlining, it is official policy to engage private investment, whether for business or for heritage. Therefore, the different authorities' leaders and various site managers had their own

understandings of industrial heritage management by swinging each site between tourism, museumification and commercial approaches. Eventually, it brought not only an alienation between residents and industrial heritage but also conflicts between administrators and heritage enthusiasts.

Owing to the decline and ruination, former industrial places in Taiwan are unconnected or unfamiliar to the locals and younger generations. Hence there are some enthusiastic outsiders who endeavoured to launch industrial heritage campaigns from the earliest case, the Jhuzihmen Hydro Plant in 1992, to the latest one, the Kaohsiung Cement factory in 2016. With the growth of grass-roots interest, particularly from groups associated with art and culture, community-led and civic-engaged industrial heritage sites emerged, such as the mining site's Art Mountain Village in the north and the sugar refinery's Bywood Art Space in the south. The local communities are also aggressive in expanding the heritage agenda to relevant fields in order to acquire extra resources. For example, the Chu-hung-keng oil field is situated in a countryside region with a high Hakka population, thus, the community gained the support of the Council of Hakka Affairs and the Council of Agriculture as well as the Water Resources Agency by including regional irrigation improvement. Local museums also energetically engaged with local communities and established close relationships with residents through heritage issues. T.H. TSAI,

director of the Gold Museum, commented:

It is a challenge but also an opportunity. ... In order to be independent in financial terms, the museum heritage is the platform for the locals, every cooperated activity has the interests of both the residents and museum.

The local museums and industrial heritage sites became incubation centres for the small-scale enterprises with distinctive characteristics. This bottom-up approach to establishing a sustainable relationship between industrial heritage and community had replaced the top-down process by promoting the authorised heritage discourse through legal designation. The climate of civic engagement also inspired the creative park's site managers. L.M. CHOU remarked that "commercialisation is a double-edged sword ... the crowd might make the heritage endanger but also limit the elaborating of creativity ... nevertheless, the civic engagement can generate the originality and our brand". S. HSIEH also had the vision of coordinating the local communities and private culture groups to establish a heritage cluster. In S. HSIEH's point of view, the continuing adaptive reuse and innovation is the way to develop in the future, but the above vision is rarely brought out in policy or official reports. An interdisciplinary evaluation for current examples is necessary, and the further policy of industrial heritage needs to be reflected and examined by the experienced practice of industrial

heritage.

The change of user groups usually leaves traces around industrial sites. These are the footprints that show how industrial narrative and the colonial past have been interpreted by individual authorities and site managers. On the one hand, although the “Japanese colonial time” became the common term used in general display texts, the mixed use of “Japanese governance” and “Japanese occupation” can still be seen in certain places, as well as examples of the restoration of destroyed Japanese shrine remains given in Chapter Five. On the other hand, the frequent change of authority means the site usually experienced the stewardship of each organisation both for a short time and in a fragmented manner. It caused the main efforts in industrial sites in the past decades to be concentrated on external appearances rather than accumulated heritage meanings. Meanwhile, because of the geography, accessibility or other reasons, some industrial heritage sites are either very poorly used or are failures in development terms by being criticised as “mosquito houses” (mentioned in Chapter Five); some even remain in ruined states.

The interpretation of industrial heritage in Taiwan presents diverse features through different authorised discourses and approaches. “The shifting uses of Taiwan’s industrial heritage motivated the ambition of being distinct ... we aim to build and

elaborate not only the heritage value but also the brand legacy”, said L.M. CHOU. No doubt the ideal presentation is to create a new use for modern society while at the same time preserving authentic remains for sustainable heritage and the intangible narrative. Although Taiwan’s industrial heritage practice usually presents the built environment as an empty container for various purposes, the heritage remains are still places where real people living / lived and where real conflicts may arise in the future. The integration between new and old is not an unusual perception for most; however, comprehensive dialogue and coordination between stakeholders is eagerly demanded.

6.4 The Industrial Aesthetics

Since the appreciation of art has become one of the necessities in developing industrial heritage in Taiwan, the artistic creations and the industrial remains surrounding sites embody the sequence of ideas regarding industrial aesthetics. The changes of artistic appreciation reveal not only the shifting attitudes between generations but also the merging hybridity between ethnic narrative and popular culture in Taiwan. In Chapter Three, I introduced the context of the new-generation artists who rented or occupied redundant industrial places in the late 1990s. On the one hand, the unique and large-scale industrial spaces were adaptive venues for presenting contemporary art without the traditional theatre and gallery regulations or thematic limitations but also benefited from low costs and great locations, especially

in urban sites such as the warehouse in Huashan Brewery. As Edensor (2005a) argued, industrial ruins “became alternative places for a new aesthetic, unofficial art and social invention” (Rautenberg, 2012). Former factories were transformed into artists’ lofts. On the other hand, the connection between art and industrial places not only attracted citizens’ interests and shifted their attitudes towards the rusted places but also drew other artists to follow and provoke this approach. This was a brand new perception of Taiwanese people, and these (industrial) ruins offer an aesthetic experience that bypasses the normal designs of the city, often over-regulated, boring and too smooth (Edensor, 2005b).

Later, the Council of Cultural Affairs (now the MOC) launched the Network of Railway Art Village programme by aiming to extend the industrial aesthetic to the redundant railway station’s warehouses, the mode of artist residency (which usually gathered a group of domestic or foreign artists and assigned the disused space to them as both studio and accommodation, months later giving group shows for the public to view) is mostly adopted in particular. With increasing amounts of redundant space released by national and local authorities for an artist residency, it also encouraged the development of industrial reuse, sometimes generating tensions as a consequence. K.P. LIN, the former administrator of the tourism department at New Taipei City Government, mentioned the Sharping Theatre in the former mining settlement as an

example. When the local government acquired the ownership of the ruined theatre and proceeded with the restoration work, local cultural groups all set their eyes on it. In order to cease the controversy, the local government finally decided to assign the place as part of the Gold Museum.

Generally, artists were normally visitors to the places and then left after the end of their residency. There were few audiences allowed to have communication with the artists and realise the connection between their artworks and the industrial places. The programme did not actually accumulate or cultivate a much in-depth appreciation of the industrial aesthetic, but it did draw society's attention to the industrial aesthetic via the artist-led in-depth tours as well as offering certain support to artists and their livelihoods. With the potential of being a tourist attraction and exploring the cultural cluster, the examples which experienced the artistic approach earned a reputation for creativity and usually became the prototype for the later policy of cultural and creative parks. For example, according to informal conversations with visitors in the field, the current Huashan 1914 Creative Park in Taipei was often referred to as the Huashan Art and Cultural District, which was the title used in the art residency period; in Kaohsiung, the Pier-2 Art Centre, which is now run by the local government, borrowed the same name from the previous artist-led phase.

Some phenomena emerged at the same time—public art, steampunk and graffiti.

When the redundant industrial sites were scheduled for new uses, as they were part of public constructions the new user groups (whether cultural or non-cultural sectors) had to set up public artworks in these cultural venues according to the Council of Cultural Affairs' (now the MOC) Culture and Arts Reward Act, which requires that every place opened to the public must have public artworks worth no less than 1 per cent of the site's value. Consequently, at present, there are many public artworks which stand in various kind of industrial sites in Taiwan. These public artworks aim to glamorise the place by representing the character of the individual site (Figure 6.11), present a relevant narrative (Figure 6.12) or reflect popular trends (Figure 6.13).



Figure 6.11 The Public Art at Industrial Sites (1): The Former Breweries.

Top: The Public Artwork with Colourful Displays in Huashan Creative Park.



Bottom: The Public Art in Hualien Creative Park (photos by the author).



Figure 6.12 The Public Art at Industrial Sites (2): Gold Museum (photo by the author).



Figure 6.13 The Public Art at Industrial Sites (3).

Left: Houtong Coal Mine Site (photo by the author).

Right: Pier-2 Art Centre, the Former Warehouses (photo by BCAKCG).

In certain sites, public art is also seen as an attraction for fun (Figure 6.14). In forestry cultural parks, for a decade each regional office has held an annual woodcarving competition. However, these annual art collections have gradually occupied the park and filled up the historical buildings (Figure 6.15). And this homogeneity among the parks is problematic in terms of distinguishing the character of each site. In fact, the large wood carvings have limited the use of the forestry site but also left less space for other activities. The place became a gallery of wood crafts instead of a site for the presentation of a forestry narrative.



Figure 6.14 The Public Art at Industrial Sites (4). Public Art as Tourist Attraction and Playground. An Installation Arts Garden, Ciaotou Sugar Refinery.



Figure 6.15 The Public Art at Industrial Sites (5). A Former Power Plant, Now a Wood Carving Exhibition hall, Chiayi Forestry Cultural Park (photo by the author).

The popularity of public art is also associated with advocacy of an aesthetic education,

by being venues for outdoor teaching activities, and of a policy of community empowerment by local artists and groups' participation, which also encouraged the establishment of local exhibition halls and galleries. In the opinion of C.W. LIN, who opened a gallery in the former mining settlement within the mountains,

both the current artists and the past miners came here for the opportunities ... the mining landscape is now the source of artists' inspiration ... people can reconnect the industrial past through these works of art.

He believed the art can give the declining mining community another option, a better future. By reviewing the increasing number of cultural events since 2009, the growing cultural tourism has brought signs of regeneration to this mountain village. Likewise, CHI, from the Hualien Office of Forestry Bureau, also scheduled the art space as the next step for reusing the sites' historical buildings. An urban industrial site manager, L.M. CHOU, remarked that:

the industrial heritage not only provides the stage and space for the artists and creative workers but also gives them the great special ambience for the intangible spirits of aesthetics and creativity.

Another urban site practitioner, J.W. Wang, also explained that they are considering

whether to have a Huashan Gallery in the creative park once they had enough collections. Nevertheless, this perception was not well delivered and understood by the administrators of certain sites. They supposed that it could be installation art by putting abandoned machinery in the outdoors. The disparity of understanding industrial heritage and displaying aesthetics among persons in charge could sometimes mislead the crowd's appreciation of industrial heritage.

In regard to graffiti, these redundant industrial sites used to be the perfect place for the graffiti artists owing to the management vacuum and the abundance of canvas—the remains and the rusted metallic materials. As one of the iconic elements of subculture, graffiti appeared more in the urban context (Figure 6.16) than in rural areas. However, the appreciation of graffiti is still controversial. For example, at the Huashan Creative Park, there are some graffiti outside the park's fences but earlier graffiti is covered or blanked out (Figure 6.17).



Figure 6.16 The Graffiti at Industrial Sites (1).

Top: Pier-2 Art Centre (photos by the author).



Bottom: Huashan Creative Park (photos by the author).



Figure 6.17 The Graffiti at Industrial Sites (2): Huashan Creative Park (photo by the author).

In addition, the rusted, ruined industrial landscape and the Japanese, art deco style of architecture have attracted many couples to have their wedding photos in industrial

sites by showing their distinct taste in aesthetics (Figure 6.18). Some site teams also provide relevant services for this rising market, such as wedding catering and ceremony arrangement (Figure 6.19). To some extent, not only the industrial and colonial narrative but also the aesthetics in relation to industrial heritage are in the background of the customised, special and invented tradition in consumption. Many site managers are aware of the artistic appeal of industrial sites and their potential towards audiences. In order to respond to the shifting demands and interests of the public, the new generation of art residency associated with art entrepreneurship is emerging. In contrast to the majority of approaches led by the national cultural agency before, the aggressive art groups are the main force of this wave.

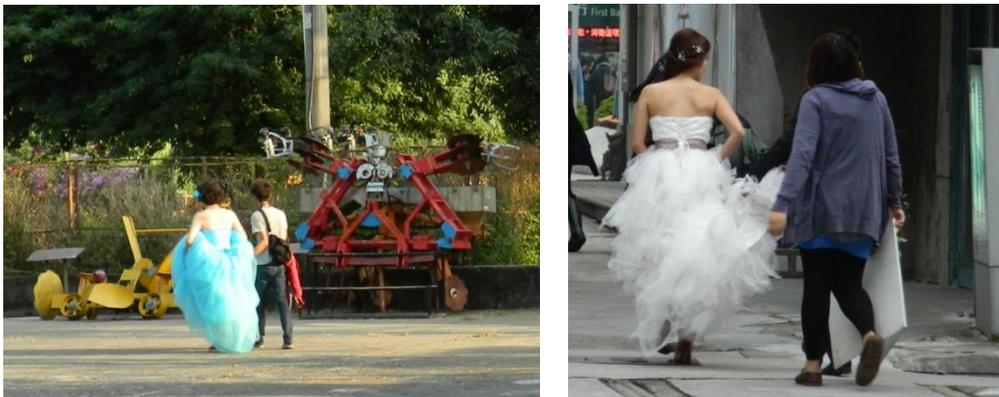


Figure 6.18 The Wedding Photo-taking at Industrial Sites.

Left: Ciaotou Sugar Refinery (photos by the author).

Right: Huashan Creative Park (photos by the author).



Figure 6.19 The Wedding Venues at Industrial Sites.

Left: Rende Sugar Refinery, TenDrum (photos by the author).

Right: The Wedding Ceremony Flyer of Bywood Art Space, Ciaotou Sugar Refinery (photos by the author).

The Art Museum of Mountain Village made itself a platform for various forms of art for networking, exhibition and creation connected to the mining site. The Gold Museum mining landscape also attracted the attention of the Taiwanese international performance group U-Theatre and created a play *'Town of Gold'* —based on the mining industrial narrative (Figure 6.20). Moreover, Rende Sugar Refinery, now known as Ten Drum Cultural and Creative Park, also conducted a new mode of conserving industrial heritage by art intervention. The local drama performing art group and its members are enthusiastically involved in the site conservation. They are keen to preserve, explore and convey the story of the sugar refinery. The director of the Ten Drum Cultural Creativity Park, S. HSIEH, said:

we are attracted by the brilliant stories and beauty of this site ... the sugar

industry is a representative of Taiwan ... we have the responsibility to look after it.

Another sugar refinery in Ciaotou, the Bywood Art Space, is also a local artist-led stronghold. These two sugar industrial sites both integrated their ideals and experience towards industrial heritage by making films (Figure 6.21). Film as a medium can communicate with wider audiences but is also an artistic strategy to draw people's attention to industrial heritage by, as S. HSIEH said, "reminding them of the collective memory and waking their concern upon the past". The practice of industrial aesthetics in Taiwan is shifting and mobilising, between city and countryside, north and south. It is the container which fills the artistic imagination and innovation towards industrial narrative but is also the carrier which delivers the 'beauty' (based on the industrial aesthetic) and meaning of heritage value.



Figure 6.20 Poster of the Opera 'Town of Gold', Gold Museum (photo by U-Theatre).



Figure 6.21 The Film-making at Industrial Sites

Left: The TenDrum's Film Poster 'Go Luck! Boy', Rende Sugar Refinery (photo by Ten Drum).

Right: The Bywood Art Space's Golden Sugarcane Film Festival, Ciaotou Sugar Refinery (photo by Bywood Art Space).

6.5 Shifting Meanings, Shifting Identities

The above sections of this chapter have demonstrated the ways of interpretation, the changes of stewardship and the art interventions in Taiwan's industrial heritage sites.

Although I look at these particular cases, interpretations in the foreground and background, and the varied management approaches set out above open up to indicate a serious issue with regard to Taiwanese national identity. It also brings a bigger issue of Taiwanese colonial past and the industrial narrative. In fact, the evolution of industrial heritage practice in Taiwan has not only shaped the format of heritage production and consumption in this island but also stimulated the reflection towards Taiwanese nationalism in domestic and global terms. Internationally, the performance of industrial heritage and its derivatives by tourism, the creative industries and

museums has drawn specific attention to Taiwan. In contrast, domestically, the escalating discourse of industrial heritage and the factual industrial history seems to fit in the gap between contemporary Taiwan and its colonial past. The grassroots are now the new force to step in to explore meanings and shape identities by developing the new relationships between industrial heritage and society in the past, present and future.

6.5.1 Globalised Rainbow as National-Building Approach

Taiwan is indeed a country that contains people and cultures of many different legacies including the former colonial powers of Spain, the Netherlands and Japan, the main force of Han-Chinese since the seventeenth century, and includes Hoklo and Hakka and various regional groups from mainland China, the aboriginals of which there are at least sixteen tribes, and recent South East Asian immigrants. From the perspective of industrial heritage, it is difficult to identify the connection towards each group, whether the interpretation is in the foreground or the background. However, the discussions in the previous sections show that the majority of functional consumption is in physical terms for multiple purposes. Prejudiced politics in the post-war period and the bias of emptying industrial sites and replacing them with new elements in the subsequent capitalism consideration fragmented Taiwan's modernisation narrative and industrial past, particularly the progress of the Japanese

colonial period.

The consequence of the above remains to the present, such as the controversy of using the term ‘Japanese occupation’ in school books and government documents and the creative and tourism economic emphasis of national and local agencies’ authorised heritage discourse. As the valuing of industrial heritage is generally out of the regular discussion, although the industrial heritage movement can be traced back to two decades ago in the early 1990s, the relevant preservation campaigns emerged subsequently in recent years. And the general public has normally expressed its implicit or neutral attitude towards industrial heritage according to interviewees’ opinions and fieldwork observations in this study. By visiting these places, they revealed their enjoyment of the ambience shaped by former workers’ settlements (Japanese housing complexes) and the robust remains in industrial sites.

Furthermore, the new rise of the grass-roots forces united not only industrial heritage enthusiasts and academics but also diverse interest groups and interdisciplinary participants (interviewee HUANG, an architecture and heritage scholar). Besides the mission of preservation, the industrial heritage issue became the amplifier of their voices as well as the catalyst for establishing a local identity. “The strong belief in Taiwan’s belonging and identity is the reason why the Taiwanese grassroots which

fight against the governments and the corporates for preserving heritage is still standing”, commented CHIANG. While civic engagement stepped in, industrial heritage reflected the latest social issues the citizens are experiencing and fitted into the democratic agenda which society longs for. CHIANG stated:

saving industrial heritage urges us to re-explore our cities and our daily life matters. ... It is meaningful but also the example of community empowerment.

Industrial heritage might not numerically be the majority of Taiwan’s heritage. But it could be the most active aspect in recent years owing to its lower threshold of access to the residents, especially urban citizens, than traditional heritage as an entry point for exploring the narrative of modern Taiwan, not only factual industrial history but also the further circumstantial past of this country. “[W]hen people realised such a lot of stories were erased and distorted either deliberately or unwittingly ... the grassroots’ determination is epic and impressive”, noted CHIANG. On the other hand, as CHEN (a researcher of the National Taiwan Museum) reflected on the public sector, capitalism still dominates the general heritage governance; also, the bureaucracy of leading cultural cadres and their frequently shifting political principles always confused the crowd. In the scope of Taiwan’s heritage, this conflict arose from a series of debates on the relationship between heritage and the public realm. Moreover, it

encouraged and enhanced the progress of nationwide heritage awareness in both society and legislation (KUO), such as the increasing cultural campaigns addressing the value of modern heritage and the latest amendment of the Cultural Heritage Preservation Act which stipulates that a built construction over fifty years old qualifies for designation.

Meanwhile, the meanings of heritage are changing from a sort of very factual industrial history but also as part of the historical narrative of Taiwan. As the Taipei Declaration for Asian Industrial Heritage (TICCIH, 2012) stated, “industrial heritage [is] witnessing the process of the modernisation contributes to the identity of regions and countries, and forms an integral part of the history”. As a post-colonial society and young country, industrial development covers nearly a majority of modern Taiwan history. As P.L. CHEN said,

It symbolised the production of modern knowledge, witnessed the change of urbanisation and ruling powers ... from the authoritarianism to democracy and heading to consider Taiwan’s global context.

Both CHIANG and FU also addressed the view that industrial heritage is no doubt part of the development of nation-building. By reviewing Taiwan’s industrial heritage practice in the past decade, J.W. WANG suggested that the governance and strategy of

heritage should enlarge the pattern of valuing heritage internationally. In common with many cultural policies in Taiwan, industrial heritage is also taken as the pathway for reconnecting Taiwan to the world. This ambition can be told from the BOCH's latest programme, which attempts to explore Taiwan's international context and establish an Asian network of industrial heritage in the years to follow (Y.M. TSAI).

On the one hand, some remaining machinery, technology and construction designs were imported from the Western world, such as the United Kingdom, Germany, Belgium and the United States, during the era of Japanese rule. On the other hand, some machinery was transmitted to South East Asian, South American and Arabian countries. Moreover, some national policy-driven reuse approaches, such as the Shueijinjiou Mining Site and the Wushantou Reservoir Site, were intended to transform industrial places into hubs for international tourism. It is also a path to step into the international industrial heritage agenda. In 2012, the fifteenth TICCIH Congress in Taipei was promoted as the first time that it had been held in Asia. The Taipei Declaration for Asian Industrial Heritage also highlighted the issue of "(Neo-) Colonial Industrial Heritage" in relation to marking the character of Taiwan. The event encouraged industrial heritage professionals at both national and local levels to explore the connection to the global.

The above also shows much more to the globalised rainbow coalition type of

approach than wanting international tourists and attention. However, the promotion strategy might have to be customised depending on the individual markets, for example, compared to marketing Taiwan's industrial heritage towards Japanese visitors as a kind of colonial legacy, the image of cultural and creative industries parks is much more attractive to Chinese tourists.

6.5.2 New Relationship between Colonial Past and Industrial Narrative

The twentieth century is a vital period in generating the current modern Taiwan. In the view of most respondents, Japanese colonial industrialisation established the foundations of modern Taiwan and the relevant industries (particularly monopoly businesses including mining, wine, tobacco, sugar, salt and forestry) developed in this period are part of the main force for post-war economic regeneration. It is strong evidence that most of Taiwan's industrial heritage is built in the Japanese colonial time. However, the hostility and tension between the Nationalist government in Taiwan and Japan during the Second World War and the 1970s' diplomatic issue caused conflict between Japan's and Taiwan's narratives.

By the process of a maturing society and contemporary cultural exchange, Taiwan's people have attempted to deal with the sensitive issue of Japanese colonial heritage by aiming to strengthen the delicate relationship between Taiwan and Japan. With less

historical burden and ideological concern, Japanese-built industrial heritage became a more accessible and familiar approach. Correspondingly, the limited narrative interpretation in history and manufacturing also kept the audiences from further understanding beyond the exotic (Japanese) ambience and robust materials. FU argued “most of Taiwan’s industrial heritage is not well-demonstrated ... without the appropriate explanation, the visitors have no intention to take it as seriously as heritage but theme park”. Furthermore, it became problematic that managers / administrators and residents / visitors see themselves as outsiders in relation to industrial heritage sites. By looking back at the background of industrial heritage in Taiwan, the colonial context is just part of the whole picture: “whether post-colonial or de-colonial discourse, the subject is to value heritage. ... People always blur the focus”, said CHIANG. In fact, the lack of confidence and understanding towards the industrial narrative and the colonial past can be major causes.

Hence, the artistic application and the museum, tourism and cultural and creative industries fit into the gap and contribute to achieving multiple purposes including glamorising the environment, community empowerment, local identity and economic regeneration. When the positive value is obviously highlighted, the disagreement for the colonial past is decreased accordingly and replaced by the new function. Y.M. TSAI recounted that “people normally do not have a special reaction on industrial

heritage while they do feel its distinctness from the other monuments, theme parks or tourist spots, and they tend to visit for pleasure”. Additionally, although there are limited clues by linking to the colonial narrative, these conserved sites can still to some extent express a nostalgia for Taiwan’s past. By reviewing the above mentioned, looking at the bright sides of the colonial past in industrial sites seems not a difficult part for now. As one of the political representatives from the grassroots, the mayor of Taipei City, Wen-je KO, noted that “the longer a backwards country was colonised before, the more progress she has now”; this was quoted as an example by T.H. TSAI to express the positive attitude towards Japanese colonial rule.

With the progress of democracy and the third change of governing party in Taiwan, the factual history and its interpretation in relation to this island are critically reviewed, especially the difficult periods during wartime and the early Nationalist government ruling. In the opinions of some of the Taiwanese older generation, the early KMT, the Nationalist’s first decade of governance after the war, was even worse than the previous two decades of Japanese colonial rule, according to some interviewees’ recollections. Compared to the domestic controversy in Taiwan, it is instead open and neutral in respect of Japan. Both HUANG and K.C. YANG had friendly impressions while they were doing industrial heritage exchanges with Japan: “when we launched the initial industrial heritage programme, due to the same strain of

industrial context, we visited Japan for learning their expertise. We were warmly welcomed by them, it's like another homeland for me", said HUANG.

Similarly, many interviewees also expressed their visions for the future through the Japanese experience. For instance, R.H. CHIU expressed that Japan is always the role model for Taiwan's heritage practices; C.W. LIN related that the comprehension of industrial heritage in Taiwan was via Japanese documentary; S. HSIEH learned the importance of bridging the connection between community and heritage from Japanese examples; and T.H. HSIAO, the chief secretary of the Ministry of Culture, also the former director of the National Taiwan Museum, remarked that the Japanese colonial time enlightened modern construction in Taiwan. With the shifting climate on reading the colonial past and the introduction of new conservation approaches, these factors not only drive an open attitude towards discussing industrial heritage but also provide various methods for reusing industrial sites.

However, the critical challenge is dealing with the dark side. Most colonial interpretations today keep on demonstrating the old good days with nostalgia and romance. The dark narrative is beyond the usual colonial context. The fact of colonial exposition is rarely mentioned. Like K.C. YANG's observation, "the interpretation of the colonial period sometimes is also the imagination of that time. A sweet dream is

always more popular than a nightmare”. Therefore, industrial slavery (including aboriginal labour), discrimination, prisoner of war camps, holocaust and individual persecution are fading out of mainstream interpretation. In the meantime, in some places, owners, managers, former workers and locals are still hanging onto their own identities towards industrial heritage. Moreover, the controversy between Japan and South Korea regarding the Japanese World Heritage site inscription—Meiji Industrial Revolution: Iron and Steel, Shipbuilding and Coal Mining—in 2015 also urged Taiwanese society to re-examine the connection to their former colonial power, whether there are problematic remains or a rooted legacy. Specifically, the colonial relationship between Japan and Taiwan is distinguished from either the Japan–Korea or Japan-China background, but it is still an issue in the wider heritage scope.

The new answers for the Japan–Taiwan relationship in heritage can be traced back to the colonial period. From a macroscopic point of view, the current discourse of post-colonialism is based on the Western background. We were colonised in one aspect but we might also be colonists in others. The vital thing is the way we explore the past and look to the future via the context of industrial heritage instead of setting our eyes merely on the colonial issue. Now the meaning of colonial industrial heritage is shifting and moving forward. The growth of civic engagement sees industrial heritage as part of the regional context, in which it is in a way a vehicle for letting

citizens explore their identity and economic potential. The industrial heritage participants take these affairs as a social obligation but also social responsibility for the present society and the future generation.

6.6 Conclusion

Industrial heritage in Taiwan is valorised in physical and spiritual terms by multiple practices for various purposes. The shifting meanings of Taiwan's industrial heritage make it the agilest and active member of Taiwan's heritage. The continual changes and rising issues do not weaken the motivation of Taiwan's industrial heritage. On the contrary, further evolutions and inventions have been adopted and improved, such as the return of artistic approaches in industrial sites recently after the late 1990s' art intervention acts. On the one hand, traditionally industrial heritage represented the chronological context of modern Taiwan based on factual industrial history and traces of the colonial narrative. On the other hand, the use of industrial remains conducted the diverse presentations and imagination by adding new values, functions and appreciations of the ambience and the relevant objects.

Additionally, after years of effort from the public sector and policy-driven approaches, the increase of private investment and entrepreneurship seems to offer a new pathway for heritage affairs. The contribution of the series of industrial heritage campaigns associated with grass-roots forces over the recent decade is really crucial. The climate

also urged reform of the general heritage governance in legislation, in practice and even towards the world. To sum up, the interpretation of industrial heritage in Taiwan is not only the container for holding the industrial narrative and the colonial past but also the carrier for conveying contemporary culture and the economic future of modern Taiwan. In responding to the above, it urges further consideration: if heritage must be paid for, it is worth considering what people are buying in visiting Taiwan's industrial heritage. What is the sustainable approach for these sites? And what do the contents of colonialism, commercialisation and nationalism mean to Taiwanese society in relation to industrial heritage? As Smith (2006: 84) argued, "what makes certain activities 'heritage' are those activities that actively engage with thinking about and acting out not only 'where we have come from' in terms of the past, but also 'where we are going' in terms of the present and future". The production of industrial heritage is indeed a cultural process that mediates a sense of social, political and economic change in Taiwan.

Chapter 7 Conclusion

7.1 Introduction

David Lowenthal (2005, 2015) articulated that “the past is a foreign country”, declaring how attractive the past is as well as emphasising its unfamiliarity. He also indicated that “the role of heritage is more or less to swerve from the true past—selecting, altering and inventing the actual past” (Lowenthal, 1998: 112). In his discourse, heritage seems like a modernised device and commands ubiquitous reach. In response to his statement, I would suggest that the malleability and modernity of industrial heritage in Taiwan represents a vehicle that bears multiple narratives through the past, the present and the future. Concurrently, for a post-colonial and young democratic country, moving from the reign of colonialism and authoritarianism to full freedom implies multilayered challenges in modifying (correcting) interpretation and nation-building.

In this thesis, I have attempted to respond to this deficit in understanding through an investigation of the way in which the valorisation of Taiwan’s industrial heritage proceeds set within the larger narrative regarding the colonial past and the issue of identity. I offer a set of concepts which together constitute a way of understanding and articulating a framework for interrogating the uses of industrial heritage in Taiwan by

reframing, informing and facilitating society's conversation about the different opinions. I argue that the development of industrial heritage-making and revaluing in Taiwan, by identifying the discourse of conservation and recontextualising the interpretation of narrative, is increasingly being influenced by the increasing convergence between cultural tourism, museumification and commercialisation, reimagined and reinterpreted with reference to former Japanese colonialism. I have identified both interpretive strategies and specific approaches, cues and props of industrial heritage-making in Taiwan, which achieve these various purposes. I have sought to investigate beyond the sometimes abstract concept of industrial heritage as a site for special value to illuminate the role of the grassroots, the experience of aesthetic, the joy of consumption and the hub of creativity. Furthermore, I have explored the idea that industrial heritage can function by default as a forum for discussion within the political context of contemporary issues of civic engagement that, in many societies, have become increasingly pressing and contested. It is, perhaps, unsurprising that I conclude the thesis by arguing that industrial heritage has a contribution (largely nascent rather than actual) to aid the development of a less prejudiced society.

Additionally, the explicit geo-politicisation of industrial heritage as a locus for conversations about difference has surfaced in a number of especially challenging

tensions and dilemmas for practitioners, which are explored in this concluding chapter.

The dissonance of industrial heritage lies in the nature and genesis of industrial heritage-making, with it being re-consumed and reinterpreted over the generations in Taiwan. Understanding the past is similar to pursuing a consensus among the differences in cultural exchange. By considering the global agenda of industrial heritage, the challenge is not only to conciliate or reinforce this conflict but to recognise and respect differences of interpretation and identity. The increasingly global vision is helpful to reflect on identifying and interpreting industrial heritage itself, particularly in post-colonial countries, and if the controversy can be relieved by respecting differences then there is substantive equality on the relevant issues. The nature of the interpretive processes that emerge out of the international encounter and the character of the meanings that are generated by individual practitioners are critical in repositioning my understanding of industrial heritage. The above finding is taken as one resource, among many, on which people might draw in shaping their individual and collective social understandings.

7.2 Industrial Heritage-Making in Taiwan

The rise of the industrial heritage movement in Taiwan has revealed the shifting perceptions regarding the meaning of colonial industrialisation. The various driving factors in politics, the economy and culture intersect in Taiwan's industrial

heritage-making programme but also in the system of governance. The perception of preserving industrial buildings in Taiwan was generated by architecture professionals, and the contemporary artists who launched the initial practices until the policy-driven motivations on commodifying and producing industrial heritage took root. With the increasing convergence between cultural tourism, museumification and commercialisation, the policy always positioned the reuse of the redundant industrial site in the first instance, hence consideration of the contribution of individual sites in respect of industrial archaeology was rarely promoted. Although lots of investigations and studies accumulated over the past decades, these are marginalised at the industrial heritage scene. Alternatively, the creative and enterprising investment are advocated and fed into the authorised industrial heritage discourses and valorisation processes of industrial heritage-making in Taiwan. Furthermore, the growth of grass-roots engagement on industrial heritage affairs is encouraging the climate of exploring factual history and narrative but also revaluing the colonial past and remains in Taiwan.

7.2.1 (Re) Framing Industrial Heritage Governance and Conversation

The character of industrial heritage governance in Taiwan is multiple, authorised and pragmatic. Indeed, the Ministry of Culture (formerly the Council for Cultural Affairs) led and instituted the majority of the current heritage system through its dedicated

agency—the Bureau of Cultural Heritage. However, the Ministry of Culture’s creative industries department and museum department, the Ministry of the Interior (Tourism Bureau), the Ministry of Economic Affairs (the state-owned enterprises and factory tourism programme), the Ministry of Education (which contains the national science museums) and the Council of Agriculture (Forestry Bureau) are more or less included in the management of industrial heritage affairs. The power relations between the ownership, stewardship and supervision of the various industrial heritage sites are multilayered and delicate. Each authority has its own understanding and discourse towards industrial heritage. The authority of expertise can also be mapped out through the idea of inheritance and patrimony based on the individual use of industrial heritage. The production of Taiwan’s industrial heritage certainly conforms to Smith’s (2006) notion of “authorised heritage discourse (AHD)”.

The emerged forms of industrial heritage-making in Taiwan can be summarised as raising creative industries hubs, museums and galleries, and tourist attractions. The interpretation of industrial heritage values was occasionally excluded or downgraded in the above modes owing to pragmatism for economic purposes. Reviewing the process of the generation of the current uses of industrial heritage revealed the idea of the materiality and boundedness of heritage. Taiwan’s industrial heritage, similarly to many such heritages in the world, had traditionally been conceived within the AHD as

a discrete site, object and construction derived from an organic context and a rooted narrative. Industrial heritage became the manageable container for promoting the experience and value of either the elites' ideal or mass popular culture. Meanwhile, in terms of the heritage sectors, on the one hand, they stood up for their principle of preserving industrial heritage; on the other hand, they cannot help but participate in promoting the adaptive reuse of industrial heritage sites in response to fashionable trends. Ironically, as many redundant industrial sites are part of national properties which are supervised by individual national or local agencies, the policy-driven motivation contributed the majority of making industrial heritage and many exploited industrial remains are actually conducted by the same government.

With the multiple policy drivers and the participation of relevant groups, Taiwan's industrial heritage is widely associated with economic purpose, as is the case with most examples in the rest of world (Laconte, 2014; Fetisov, 2015; Duijn, et al., 2016). Instead of spreading the attention, the debate of adaptive reuse and the changing user groups in relation to industrial heritage encouraged the diversity and agility of operations, policies and discourses. Owing to the top-down strategy and the sense of competition, Taiwan's industrial heritage had certainly accumulated experienced practices in every field. At present, the idea of industrial heritage conservation has taken root in Taiwan. Because cultural heritage and museums are classified as part of

the cultural and creative industries categories in Taiwan, the reuse of former industrial buildings has been conducted in both urban and rural areas as a way of supporting contemporary consumerism in relation to arts, creative industries, tourism and commodification. The relationship between industrial materials and modern society are reimagined, reinvented and reconnected. Although the industrial spaces are reused one after another, the multiple policies, discourses and approaches are conveyed respectively. Without an interactive and contextualised network, the challenge of Taiwan's industrial heritage is to feed into the larger narrative of national discourse and create a sustainable relationship for the generations.

Nevertheless, it is problematic that the industrial heritage sites are not only lacking in sustained conservation but also present few efforts in interpreting a meaningful narrative. The typical conception of heritage is innately valuable in either desirability (mostly) or rejection (rarely) to the ancient past. Industrial heritage has been situated in rather an unusual category since the post-medieval period. Positively, it represents the enlightenment of modern civilisation but also scientific and technological progress since the Industrial Revolution. It caused pollution and left contamination throughout the whole manufacturing process as well as generating collective memories and narratives regarding society at that time (Cossons, 2012; Palmer and Orange, 2016). Most importantly, the above two dimensions which had contributed to the

development of the modern society can be perceived somewhat in our daily experiences. However, as Trinder (2012: 29) has pointed out, many industrial heritage sites have paid too much attention to the presentation of the positive aspects of industrialisation and additional entertainments in order to please the audiences. Similarly, there is a phenomenon of replacing industrial heritage interpretation by the commercialisation of popular culture in Taiwan. Industrial heritage conservation in Taiwan is criticised for having focused for a long time on architectural restoration and less on narrative interpretation. Furthermore, the background of colonial and authoritarian rules in Taiwan ought to be considered part of the distinct features of Taiwan's industrial heritage.

In the aspect of industrial archaeology, as well as in the aspect of industrial preservation along with the industrial presentation, the reality is that the industries closed and industrial heritage opened in a very short period. The marginalisation of the discipline of industrial archaeology in certain discourse and practice may be an alarm. As governments' historical building surveys are mainly undertaken by architects, industrial heritage in Taiwan is situated with an emphasis on its architectural features and constructional history. There is a less comprehensive consideration from the perspective of archaeology throughout the whole agenda of Taiwan's industrialisation. The exploitation of industrial sites on the surface limits and

neglects the potential of exploring the further meanings beyond the objects. It is essential to map out the origin, structure, evolution and distribution of certain industrial heritage as the fundamentals for the future inspiration (Trinder, 2012).

On the other hand, the findings of this research are not to suggest a pathway to the sustainability of industrial sites but address the ongoing valorisation towards heritage approaches in Taiwan. Today, Japanese industrialisation has transferred into Taiwanese industrial heritage. Hence, in order to deepen and extend the interpretation of Taiwan's industrial heritage for sustainable development, the reframing of the governance structure and the construction of a conversation system need to draw upon a larger consideration of Taiwanese heritage. In general, regarding the production of Taiwan's industrial heritage, the real force to the varied changes has been responsive by the cultural and creative industries sectors. What that has allowed is a way of regenerating, revalorising and reusing industrial heritage for a particular economic purpose, which shows together in the creative sectors and cultural sectors. Therefore, without this process and drive, in 2002 an industrial site would not have been looked at for its function. It might be recognised importance historically as national registered heritage and might be many people care or preserve it. But it doesn't take the debate and the site forwards. Now, this approach appears to work; there are more than ninety-two cultural parks or creative clusters in Taiwan (MOC, 2015b, 2016c).

Notably, at least thirty-five of these are related to industrial heritage and are still in growth. These former industrial sites are normally not empty but have lots of visitors, Kaohsiung Pier-2 Art Centre for example. In contrast, some industrial sites with less creative economic investment are rather quiet, such as the Miaoli Chu-hung-keng Oil Field site and the Taipei Wanhua Sugar Mill. Visitors are smart and with the capability of recognising the elements, events and places which are attractive.

The abundant governmental finance keeps the production of industrial heritage going in Taiwan, but it causes site managers to become overdependent on government funding. However, it is less a mechanism for loosening their dependence as an approach to achieve the sustainability of industrial heritage. Actually, this emerged form based on Taiwan's industrial heritage discussed so far is also starting to happen upon the other part of Taiwanese heritage including indigenous heritage. Heritage management is now in relation to the business of festivals, performance, catering, retailing, fashion and even representing heritage outside the museum realm. To some extent, the framework of national museums and relevant cultural institutions has embedded the mechanism, and thus there are varied models being involved, extended and seen instead of sticking to a typical way of running museums.

Furthermore, the cumulative implications have also allowed Taiwan to talk about its

participation in the world. The research findings reveal the fact that the legacy of colonial industrialisation is now Taiwanese heritage rather than Japanese. Taiwan has made industrial heritage on her own. Although it started out with the influence of colonial industrialisation, it now has transferred from Japanese industries to Taiwanese industrial heritage. And problems with the colonial past seem to be off the table. This transfer also reflects the change of geopolitics in East Asia, such as the decreasing blame on Japan, in response to the result of Taiwan's recent general election.

7.2.2 Industrial Heritage: A Microcosm of Taiwan's Heritage Agenda

The development of Taiwanese heritage is full of vitality from its enthusiasts and relevant policies but is also shallowly and delicately rooted owing to historical and political issues. Heritage affairs as a rising discipline is a particularly difficult challenge but also reflects the severe demands on this young post-colonial country—Taiwan is disconnected from the world. The architecture was the first profession to engage with the unexpected and enormous heritage salvage works after the 921 Earthquake. Based on the principle of pragmatism in most developing countries, the use of heritage for multiple purposes became the popular issue. The fields of art, management, history, tourism, business, communities etc. are included in heritage affairs, whether academic or not. This interdisciplinary participation of

heritage reached its peak when the government announced a plan to establish national cultural and creative industries parks in former industrial sites. Cultural and creative industries, which are defined in at least sixteen business categories by the government, are associated with the conception of industrial heritage. Industrial heritage, as the venue to achieve the hybrid of creativity and heritage, is thus promoted as a distinct character of Taiwan.

With increasing imagination and production on industrial sites, commercialisation, museumification and tourism are the key drivers for industrial heritage-making. Besides traditional manufacturing sectors, the definition of industrial heritage in Taiwan includes a wide range of redundant national properties (Peng, 2015; Yao, 2016; PCC, 2017). Both the urbanisation and gentrification phenomena are forcing these industrial places to make changes. Urbanisation urged administrators, owners and citizens to negotiate the individual opinions of urban heritage agenda, while, on the other hand, certain groups raised their concerns towards the threat to rural heritage of encroaching development. The social changes and shifting attitudes towards Japanese-built industrial heritage also encouraged intensive discussions of colonial heritage. The policies of developing tourism and the creative industries not only encourages the commodification of heritage but also enhances the significant performance of cultural tourism. Instead of the typical form of museums,

quasi-museums, eco-museums, open-air museums and museum parks are adopted in either industrial places or general heritage sites. This ambition for increasing tourism by transforming industrial sites as either theme parks or event venues, to some extent, makes the perception of the industrial landscape more widespread, whether in the city or in the countryside. The development of heritage conservation is enlarged to consider the surrounding environment as well as human settlement. Also, the desire to develop international tourism has highlighted the importance of cultural heritage for Taiwan's global marketing strategy, as demonstrated by the connection to the (industrial) world heritage agenda.

In addition, cultural heritage tourism encompasses art and culture (Timothy, 2011). Heritage property and living culture became key elements for most popular attractions. People do in fact visit heritage places and participate in cultural activities for a variety of reasons, with a wide range of outcomes. Industrial heritage in Taiwan has been rebranded and well-received by audiences through its connection with popular culture and contemporary art. The idea of bringing art and creative elements into heritage sites aimed to stimulate the exchange between the new and old, and ultimately reach the goal of promoting heritage. Hence, the new directions in entrepreneurship linked to tourism, museums (and galleries) and creative industries are adopted in heritage sectors.

Generally speaking, the public and more specifically visitors to heritage sites are too often conceptualised as “empty vessels” or passive consumers of the heritage message (Mason, 2005; Smith, 2006). Smith (2006: 32) stated that a strong critique of heritage has emerged that focused on the development of mass consumption and tourist marketing of heritage attractions—“a focus of this critique was the idea that tourism reduced heritage to simple entertainment, with the derogative motif of *theme park* becoming central to this critique”. Occasionally, the approach of innovation has gone too far by replacing the heritage narrative with trendy fashion instead of bearing the mission of interpretation in mind. This also led to the addressing of spatial functions in dealing with heritage management in Taiwan. Conversely, there is still a robust argument which is rooted in the ‘conserve as found’ ethos that identifies sites as something to be looked upon and passed unchanged on to the future. Consequently, soon after the completion of the conservation, it is common that the restored heritage is questioned for its lack of authenticity and the reuse of heritage is criticised for hollowing out the site as a theme park rather than a meaningful place.

The previous discussion shows the emergent need for a conversation between multiple sectors which engage in heritage affairs. On the one hand, in the top-down dimension, the innovative proposal of new construction is more popular than the typical heritage restoration. In order to enlarge the usability of the estate, the

authorities and their commissioned private companies favour the idea of maximising the use of heritage places as business clusters. Therefore, there is more innovation and creative spending on the use of space rather than telling the narratives. On the other hand, by seeing (industrial) heritage as becoming the by-product of economic development, rising grass-roots and civic engagement has given the grassroots a voice on the heritage agenda. For those people who value heritage, the marginalisation of a comprehensive (industrial) heritage narrative is a concern that it fails to deliver the contextualised understanding but has also lost its connection to Taiwanese identity. A series of campaigns to save industrial heritage, colonial heritage and Taiwanese heritage are also deliberated as the legacy in the values and ideologies of liberal educational purpose (without political interference). It can be understood that not only industrial heritage but also general heritage conservation awareness had spread gradually among society with the threat of demolition from modern infrastructure progress. As Ashworth and Graham (2005: 3) argue, “heritage is a symbolic representation of identity and nationalism”; the debate of heritage reuse and interpretation in Taiwan is not only a sense of belonging but also the progress of modern Taiwan.

The current Taiwanese heritage governance structure is overlapping and crosses multiple departments at both national and local levels. While the practice of

democracy is conducted in this island (having three changes of ruling party within two decades), the political factor is gradually replaced by the grassroots' voices. By learning from the previous experiences, comprehensive and systematic heritage governance is in urgent demand. With the growth of heritage awareness in every field, more work is needed to establish a common vision and goals among stakeholders (Polunin, 2002), whether for industrial heritage or for general monuments. Simultaneously, the importance of the connection between heritage and people is emphasised by the process, which encourages a serious discussion towards the Taiwanese narrative in the global context.

7.3 Taiwanese Industrial Heritage in the Global Context

As one of the earliest industrialised countries in modern Asia, the legacy of industrialisation in Taiwan and its connection to the world is positioned in a vital role in the modern history of this island. Studying industrial heritage can help people to understand values and meanings in relation to the society without of the frame of historical chronology (Dumcke and Gnedovsky, 2013; Albert et al., 2013). This is particularly for Taiwan—a country still hanging on to her identity and neither confirmed nor denied by the majority of the world. The various practices in management and multiple layers of governance structures towards the industrial heritage of Taiwan not only drive the Taiwanese to look after their physical

inheritance seriously but also move the further narrative interpretation and meaningful representation towards the nationalism of Taiwan rather than that of the Republic of China. Seeing the development of Taiwanese industrial heritage as a continuum in the whole picture of Taiwanese heritage agenda feeds into a larger imagination to link the global. Following on from the conception of world heritage, European route of industrial heritage and TICCIH's international agenda, Taiwan's heritage authority conceived an ambition to develop a thematic heritage network in Asia in which industrial heritage is centrally placed. Industrial heritage in Taiwan has thus become a robust vehicle and attractive storyteller for reconnecting Taiwan to the world by default.

7.3.1 Shifting Geopolitical Relation towards National Narrative

Industrial heritage as part of the heritage agenda represents a kind of a sense of place (Ashworth and Graham, 2005). It is, as AlSayyad (2001: 11) stated, “not an entirely local phenomenon, and needs to be reconsidered in the context of contemporary ‘flows’ of people, goods, and information to encompass the reinterpretation of various issues (politic, cultural, economic etc.) of spatial production in a globalised world”. There is no doubt that the professionalisation of Taiwanese heritage is a work in progress, and that advances are largely driven by grass-roots participation. Nonetheless, the national and local agencies continue to dominate the scope of

heritage in stewardship. Heritage management is heavily reliant on public-sector support, for industrial heritage in particular. Moreover, bureaucracy and capitalism are also rooted in the current policy-driven governance. The shifting of ruling powers and geopolitical concerns have influenced the development of Taiwanese heritage in relation to national narrative domestically and internationally.

The difference in the presentation of industrial heritage between the urban and rural areas reflects how their respective geographic location affects the approaches adopted by individual sites. The urban industrial heritage always draws more attention by combining popular culture and fashion, looking for the further reuse of industrial places by deconstruction, and dividing the site into a commercial zone and a heritage zone, for example. By facing the challenges of encroaching development, high land prices and shifts in local population patterns, urban industrial heritage sites also reflect the situation placed by the relevant authorities to encourage the development of cultural and creative industries. On the other hand, the concept of assembling happened in the countryside. The character of rural industrial sites was associated with workers' houses and their associated settlements. Taiwan's museum cluster approach was conducted in order to cover the large scale of the natural and human landscape. Also, there was more industrial machinery preserved in rural places than in cities in Taiwan. Therefore, more traditional museum exhibitions and collection

displays were offered as cultural attractions to visitors. There were more interpretations in relation to the industrial narrative and the colonial past in rural sites as well as pure aesthetic appreciation. In comparison, we can tell that there are more innovative and commercial applications regarding creative industries and contemporary art in urban places.

The above modes of interpretation between conformity and creativity, foreground and background show the individual sites' different strategies towards visitors. To some extent, it also mirrors the geopolitical structures between cities and the countryside. In the regional dimension, the preference of national agencies and the uneven resources of local governments caused an imbalance between the north and the south of the island as well as the dismissive attitude towards eastern Taiwan and the remaining outer islands. Owing to the Cultural Heritage Preservation Act's empowerment of local heritage autonomy, heritage designation is closely related to not only the heritage awareness of local administrators but also the activity of regional heritage enthusiasts. While industrial heritage-making relied on certain policy-driven motivations, such as economic regeneration, it accelerated the establishment of physical entities. However, once the political climate shifted it also created the challenge of sustainable management and interpretation. Simultaneously, the changes can sometimes be observed from the modified (corrected) display texts in some

heritage sites. Specifically, the major policies regarding (industrial) heritage seem to feed into a certain political agenda (by considering the recent elections and political parties' ideology); there is a less logical continuity between strategies and practices. Thus, the power of the grassroots is usually fitted into recontextualising and retouching the connections between industrial remains and relevant narratives.

The rise of industrial heritage discussion has shown its positive impact on enhancing the sense of place belonging and identity (Rautenberg, 2012; Govers, 2014). In the perspective of globalisation, industrial heritage is not only the branding and encouragement of practice in the individual region (Tuan, 1977) but also the reflection and representation towards a meaningful identity and the national image. Although the development of industrialisation is always significant for a modern nation, Taiwan's industrial history was seldom considered in the educational aspect owing to the unsettled identity of the national narrative (there is no mention of Japanese colonial industrialisation in the textbook of Taiwan history until the late 1990s). However, the lack of factual interpretation of Taiwanese industrialisation drove society to explore it instead. Industrial heritage turned into a means of accessing and understanding modern Taiwan according to its exotic, colonial past (as Lowenthal's 'foreign country') and international context. Taiwan, as an international trade country, is a connector between North East and South East Asia as well as a counterpart to China.

From the international geopolitical aspects, there are two strategies revealing the tension and power relations within Asia. On the one hand, the conformity of industrial heritage discourse is closely coordinated with developed countries, Japan especially, in order to keep up with the global agenda. The shifting attitude towards colonial industrial heritage is evidence by which the practitioners aim to extend the network to the Western and South East Asian countries, even to South America. The review of the US-Aid industrial legacy during the 1950s could be the next step. On the other hand, the application of creativity in industrial heritage is mainly promoted towards China (Fan and Dai, 2017) and South Korea (Kim, 2013), which still hold the strong mentality of either patriotism or de-colonialism. Both innovative practices and industrial heritage perception are used to brand and market the relevant Japanese remains in Taiwan. These dimensions, in general, formed the hybrid of the Taiwanese narrative inside and outside the island.

7.3.2 Understanding Industrial Heritage in the Global Context

The current mainstream industrial heritage discourse is largely focused on the legacy of the Industrial Revolution. Studies into the development and significance of the structures and archaeology of historic industries have meant that over time they have become relatively well understood. The industrial heritage of the last ten decades, however, is less easy to evaluate but is also a critical challenge for developed nations

(Palmer, 1991; Stratton and Trinder, 2000; Storm, 2008; Palmer, Nevell and Sissons, 2012; Belford, 2014). Although industrial heritage has become a rising theme of the world heritage campaign, its main framework is certainly based on the Western industrial background (over 60 per cent of industrial world heritage sites are in Europe). As a developing agenda in Asia and the rest of world, most industrial heritage comprises remains which have only existed since the twentieth century or later, reflecting the influence of thinking from the globalisation that has had deep-rooted effects on individual places. For developing countries, there are definitely various issues that need to be dealt with according to their individual characters and perspectives. Meanwhile, concentrating on the current duration of industrialisation gives the opportunity to explore a discourse outside the Western frame.

In the case of Taiwan, more work is left to do. At present, as I argued in this thesis, a comprehensive interpretation and understanding of Taiwan's industrial heritage are not yet clearly revealed in theory or practice. The pending national narrative and identity of Taiwan generated the selective presentation of collective memory upon industrial heritage. At the same time, the idea of innovation and creativity in doing heritage business has emerged to fill the gaps. The political concern and economic purpose created a hybrid image for Taiwan's industrial heritage today. In fact, the dark narrative not only in the past but also in recent decades has been neglected. Many

twentieth-century industries left a legacy of contaminated land; Taiwan is no exception. However, issues of environmental protection are rarely mentioned and discussed in Taiwan's industrial heritage discourse. Maybe the progress of Taiwan's industrial heritage is too quick to put efforts in place for each aspect in time. While a declining old industry is preserved, a couple more recently developed enterprises might be demolished.

In terms of the discussion of colonial industrial heritage, post-colonial countries did—more or less—experience industrialisation, which was dominated by their former colonial powers. Significantly, this is another Western phenomenon. Europe, as the origin of the Industrial Revolution, no doubt embarked on the preservation and conservation of industrial culture earlier than other areas, and many industrial heritage sites are representative of the sense of cultural superiority, sometimes, it seems, to keep industrial heritage within the European realm. On the other hand, 'colonisation' is less mentioned in the global industrial heritage agenda field. However, save for European states, Japan and the USA, the industrial culture was fostered in most other regions more or less through the mechanism of colonialism and imperialism. Thus, these industrial heritage sites comprise not only the remains of industrial culture which are of historical, technological, social, architectural or scientific value internationally but also the mixed ambience of exotic and local (aboriginal) lifestyles.

The stress on the colonial issue of industrial heritage is revealed recently, such as the mAAN's Seoul Declaration on Industrial Heritage in Asia (2011) and the TICCIH Taipei Declaration for Asian Industrial Heritage (2012). Specifically, colonial industrialisation (exploitation) is part of the Western industrialisation distribution and communication but also is its exploitation colonialism over the rest of the world. Instead of being constrained by the ideology of colonialism (within the West's discourse), a post-colonial country like Taiwan ought to recognise the distinction and self-identity in a larger narrative which connects across generations.

In addition, in Taiwan, the lack of industrial archaeological development is limited to the twentieth century. For example, there is rarely discussion regarding proto-industrialisation, such as the sugar cane industry, which can be traced back to the seventeenth century (Yang, 2001; Chen, 2007), along with studies of the relevant local architecture. The importance of the existing industrial archaeological sites is often underestimated. Japanese colonial industrialisation in Taiwan only represents part of the industrial development timeline of this country. Besides the fifty-year period, the industrial narrative since the seventeenth century, Dutch colonists, the US Aid period, the 1980s' major construction projects and even the current IT industry are also part of the industrial legacy of Taiwan. However, owing to historical and political factors, the national industrial narrative was fragmented. It caused a

cross-generational misunderstanding and misunderstanding of industrial heritage interpretation in Taiwan. In comparison to developed countries' industrial pride, Taiwan is still early in the learning curve to generate a comprehensive industrial achievement towards a wider national past. On the other hand, there are more and more educational programmes of industrial heritage promoted by governments, the private sector and higher education institutes. Therefore, the participation of the younger generation is growing and active, nevertheless, the overlapping of professional division in this field is problematic.

In order to develop Taiwan's industrial legacy, we need to explore how to establish a comprehensive mechanism to integrate the relevant sectors, groups and individuals via the current practices of the industrial heritage site is the most serious test here and now. According to this study's interviews, most site managers intend to shape the industrial heritage site as a platform and see themselves as the mediators for community engagement, the promotion of art and creative industries and tourism development domestically and internationally. Simultaneously, the bottom-up voices and nativistic movement also emerge progressively. While expressing the ambition of reconnecting with the world, an interactive and profound conversation among domestic stakeholders is definitely in demand.

7.4 Strengths of the Research and Limitations

By reviewing the progress of building the research framework and the practice of the methodology, a series of introspections are given next to those aspects of this study that worked well and less well. Suggestions are also provided concerning future directions for studying in industrial heritage based on the lessons learnt in this research.

7.4.1 Strengths and Future Directions

This study investigates industrial heritage from both Western discourse and Taiwanese practices. It integrates ideas from several disciplinary fields in order to have a comprehensive understanding of the research theme. The framework developed in this study has been useful in evaluating the continuity and shifts in society and the case study sites. The findings and generated statements contribute to the rigorous research approach to study the governance and practice of industrial heritage development. Also, the contest of pragmatism and the combat of nationalism are highlighted in relation to the production of industrial heritage in Taiwan. Furthermore, the framework offers a particular discussion of the relationships between narrative interpretation and identity exploration. Consequently, it is possible to contextualise the genealogy between industrial heritage and a wider scope of globalised multicultural society. Additionally, the thesis demonstrates that the production and

consumption of industrial heritage are dynamic, complex and interactive. To some extent, the notions of modernity, identity, adaptive reuse and sustainable management are revealed in a sequence of Taiwan's industrial heritage-making.

The key results from this research being able to answer the research question—**How has Taiwan developed its industrial heritage in a post-colonial and post-industrial agenda through an ongoing search for her national identity?**

Firstly, the approach has to be the state protection involved with the preservation groups and communities; in terms of management, it is practical management with lots of state funding. And the interpretation has normally been done not by archaeologists but by architects. Secondly, Taiwanese industrial heritage production is actually directly through cultural and creative development, which shapes the nature that people reimagine. It is always connected to the economy. The policy context is not only purely about heritage preservation but also shapes power relations among stakeholders. Thirdly, the changing policy context is moved from less concern for industrial heritage to the intersection of multiple sectors including museums, tourism, forests and the cultural and creative fields from civic individuals, local and national agencies. Last but not least, what wider function does Taiwanese industrial heritage have in terms of geopolitics, which is related to the globalised agenda of the post-colonial relationship with Japan and tensions with China? Industrial

heritage-making is allowing Taiwan to participate in the world.

Museumification is no doubt one of the formal approaches to dealing with heritage. But, in the case of current Taiwan's industrial heritage, it has been discounted to fulfil certain purposes, such as economic regeneration. Commercialism as an approach is also part of the agenda, which works through industrial heritage to reach economic goals. This could be a kind of sustainable approach in developing either industrial heritage or general heritage themes. Whether the past is colonial or not, is unimportant; people mostly do not care, as shown in Chapter Six. Whatever the origins are based on, now are all Taiwanese heritage. When industrial heritage is in the foreground, people really focus on appreciating its integrity and are keen to preserve it as found. On the other hand, when it looks at trends, industrial heritage is in the background for contemporary consumption.

In addition, changing politics and changing governance are shaping contemporary Taiwan. At present, the new government has been changing the relationship with China; it tends to play down Taiwan's Chinese heritage and close links to Japan. The agenda is continuing and needed to be followed in the future research. How will the post-1949 KMT legacy and heritage be dealt with under the new DPP agenda? How will the elections change my research approach? The change of policy and the

practical landscape of heritage in Taiwan are a changing political development. According to AlSayyad's (2004: 11) view, "many of built environments regarding heritage are often packaged and sold in a global economy of image consumption, but the places remain places where real people live, and where real conflicts may arise". For example, the political storm around the "Trump–Taiwan call" (BBC News, 2016) has had a direct and negative impact on Chinese visitors to Taiwan since the 2016 Taiwanese election. The situation of double politics is continuing around Taiwan, and heritage has to correspond with that as well. This also changes the nature of how people respond to heritage, echoing Chapter Six's discussion on engaging with the past.

Today, almost nobody in Taiwan has a problem with looking at the Japanese period and giving their reinterpretation. This is a new phase of reinterpretation, in which there is an opportunity for studies and the re-evaluation of the Japanese colonial relationship between KMT and DPP governance. Practically, the operation of heritage can attract international tourists from China, South Korea and Japan. In contrast, it is a challenge to sell culture and creative parks to international tourists, especially Western visitors, in comparison with traditional Chinese heritage (such as the Longshan Temple, see Figure 7.1). The fact is that industrial heritage still being produced and has come on board very recently. On the other hand, as a cheap and

easy option, cultural parks and creative clusters are also driven by the domestic tourism market. However, the lack of distinction and the ubiquity of these places is problematic (Huang, 2014; Hung and Wu, 2016).



Figure 7.1 Longshan Temple of Manka, Taipei City (photo by Tourism Bureau, MOI).

In terms of methodology, the adopted research philosophy, strategies, approaches and methods have contributed to the thesis's coherent and systematic pathway. The multiple research approaches are applied to achieve triangulation by enhancing the reliability and validity of the study. The research findings also indicate historical backwards-mapping and deliberate political planning on industrial heritage policy implementation. An inspection of the three dimensions of tourism, museumification and commercialisation offers a comparative examination of the research theme. Overall, the practice of the research framework according to the accumulated discourse and refined methodology has driven the thesis to meet the research aims and

objectives. In particular, it launches a new perspective on promising and provoking agendas in industrial heritage studies.

Although this thesis offers a specific understanding based on the focused interviews and fieldwork in selected sites, which take different approaches to the West, the study was nevertheless driven from the outset by a desire to generate insights which would be of value to industrial heritage practice in settings beyond those in which the study was undertaken. In this ongoing research agenda, people are certainly able to explore further in the future through interdisciplinary conversation. This thesis has offered a creative economic approach to achieve heritage sustainability based on cases in which Japanese industrialisation has transferred into Taiwanese industrial heritage. But this is not the magical or dream approach which can solve all problems. The approach is still problematic. According to the research findings, compromises can be seen during the progression of implication. The integrity of industrial heritage is more or less sacrificed. In a few generations, it could lose its historical value. Simultaneously, there are people who still care about preserving industrial heritage from the archaeology perspective. Overall, industrial heritage is a growing area for a type of Taiwanese to seek a very practical approach to solve problems. It is a clearly different approach from the UK, Japan and most developed countries by creative-park-making in Taiwan's industrial places. Chapter Six goes further—industrial heritage is there

but it is also framing in the past and future. By comparison, in the similar post-colonial and post-industrial modernisation context, in Taiwan industrial heritage is well-appreciated, reinterpreted and reimagined with varied modes instead of being played down (or destroyed), as in South Korea.

It would be valuable, for example, to conduct a visitor study of industrial heritage by either using quantitative research methods with carefully designed questionnaires or using in-depth qualitative interviews to investigate audiences' attitudes and motivations towards industrial heritage. While longitudinal studies present a number of methodological challenges, it would nevertheless be valuable to explore the ways in which audiences continue to utilise the resources they encounter during their visit over time and in different settings. Moreover, studies that explore the influence of visitors' characteristics (age, gender, ethnicity, geographic etc.) on the ways in which they respond to industrial heritage interpretation would also provide additional insight.

It would also be useful to undertake studies that explore potentially interesting issues that my research design does not address. This study, for example, has only captured responses at a particular moment in time alongside the discussion of the Asian industrial heritage climate in recent years, in some study cases in Taiwan, immediately after their opening to the public. A long-term and continuing observation needs to be adopted as well as the engagement of the private sector and the

development of industrial archaeology, whether in the study or in practice. Additionally, as I have argued in this study, a wider range of industrial heritage narratives with different aspects is worth considering, such as aesthetic expression, the gentrification context and the factual history of industrial society in relation to the negative side.

This is a process that reflects what has been happening in Taiwan. The industrialisation of Taiwan is highly compressed in time. And now the post-industrial Taiwan, which industrial heritage is part of, occupies an even shorter period of time. This raises a bigger question about public engagement with the past, Taiwan's geopolitical space and how the public is involved in the emerged forms in Taiwan. It is also a part of the context of (post-) modernity. As I argued in Chapter Six, there are differences in the ways that people engage with industrial heritage in Taiwan. Some of the ways focused on the industrial heritage site itself, and therefore the Japanese context becomes important. But most of the sites and the trend seem to put industrial heritage in the background as a sort of interesting stage set for creativities which people tend to see. Hence, industrial heritage production is demanded by the Ministry of Culture, which urged a series of restorations of industrial sites to make them interesting attractions instead of valuing the integrity of heritage as the interest. The approaches, modes and experiences which are generated by default in developing

Taiwanese industrial heritage could be an exciting example to the rest of Asia, even the world. And thus this theme is certainly worth further study.

With this overarching goal in mind, I have welcomed the many opportunities afforded to me during the research process to discuss emergent findings with practitioners in different kinds of heritage operating in widely differing social, cultural and political contexts. These discussions have been invaluable to me as well as making me strongly aware of the fact that the findings I have presented, and my interpretation of them, are likely to elicit mixed responses from the heritage community, not least because questions concerning the purposes, roles and meanings towards Taiwan's industrial heritage continue to provoke severe contests.

7.4.2 Research Limitations

Although I have achieved much in this study, there are some limitations. The study faced some practical difficulties due in some measure to sensitivity regarding the colonial issue, which is clearly a delicate theme in the Taiwanese sociocultural context. This meant that I felt constrained in asking some direct questions relevant to the principles of political ideology and identity. Sometimes having to deal with either aggressive or depressive responses is inevitable. Also, most of the interviews were conducted less than a year before the 2016 Taiwanese general election, including the

presidential election. Accordingly, some interviewees are now assigned to different sectors, which may be irrelevant to the industrial heritage affairs. On the other hand, new policy and plans in relation to industrial heritage were announced in succession after the third change of ruling party in Taiwan. Although I have updated the latest situations and progresses as best as I can, some reversed developments and phenomena which are not discussed in this thesis might be revealed in the near future.

The interviews of this study are strongly focused on representative interviewees including industrial heritage-related government officials, professionals, communities and academics, without participants from the audiences. Because heritage affairs in Taiwan are highly policy-driven and rely heavily on public-sector investment, it is essential to clarify the current governance structure of Taiwan's industrial heritage and the drivers who produce it. However, as the finding of this study shows the growing importance of the grass-roots movement and entrepreneurship, further visitor studies of industrial heritage are indeed in demand. In regard to the fieldwork, owing to limited time and resources the most important and popular industrial heritage sites were selected based on their activity and representativeness in reuse. The places with little use (access) or geographic limitations are not included. Therefore, the chosen cases are mainly situated in urban and northern Taiwan rather than rural and eastern regions.

Without a doubt, the specific explanation that I put forward is inevitably shaped by many factors, including my own worldview and personal experience as well as the decision I made in constructing both the framework and design of this study. This demonstration is one among a range of possible approaches for viewing the valorisation and interpretation of industrial heritage. My research point is needed for further empirical investigation in a number of different areas.

7.5 Conclusion

I do not attempt to offer definitive statements or guideline for practitioners but rather look to identify those issues which might be usefully investigated in developing the potential of industrial heritage in Taiwan to tackle a further narrative interpretation. To assist me in this mission, I use a number of examples to contextualise the findings from my fieldwork study cases, which provide me with access to explore the uses of industrial heritage in a larger scope of interpretation that combats the convergence between authenticity, commercialisation and nationalism. I began by discussing a set of interlinked issues that are primarily concerned with the detail of industrial heritage content so as to construct an interpretive strategy. These are explored in an attempt to identify and refine the strategies and devices that appear to have been observed and experienced during my interviews and fieldworks. This highlights the hybrid

phenomena and delicate tensions which intersect among Taiwan's heritage governance and interpretation structure. Simultaneously, the growing grassroots are already engaging in demonstrating their nativist voices and entrepreneurship in this field. I then move on to consider a set of broader issues and implications raised by my research which speak to larger and contested questions surrounding the purpose, role and meaning of industrial heritage sites.

This study critically examined the generation by default, the producing by valorisation, the interpreting by preference, and the consumption of a hybrid of industrial heritage agendas in Taiwan in which progress intersects creatively with the notions of modernity, identity and nationalism. The evolution of the research findings refined into the statement of making Taiwan's industrial heritage through a creative approach can be summarised in three dimensions. Firstly, the policy-driven context dominates the majority of Taiwan's industrial heritage climate. Differentiated from Western industrial nations, Taiwan initialised the agenda of industrial heritage by default. By facing the challenge of economic restructuring, survival means everything to the state-owned properties and corporations, which are in decline. They proceeded to experiment with a series of approaches without sufficient exploration of the relevant industrial narrative or colonial past, particularly so given that the majority of Taiwan's industrial heritage was built in the era of Japanese rule. However, cultural tourism,

atypical museumification and creative commodification were fitted into the individual former industrial places for a more authorised reason but with less heritage discourse. It clearly demonstrates that top-down approaches generate the current multifaceted and confusing governance for industrial heritage in Taiwan.

Secondly, the ways of presenting the content of industrial heritage were divided. On the one hand, owing to the lack of principles of industrial archaeology and less experience of dealing with industrial heritage preservation, many industrial heritage sites have only partial remains of former machinery or relevant collections. New elements were thus invented to fill the empty industrial voids, such as creative industries, popular culture and fashion. On the other hand, the places that more or less retained their industrial fabric always attempted to associate with trendy or artistic applications in order to be attractive and diverse. Sometimes, the aesthetic taste linked industrial heritage to both consumptions in modern society and nostalgia towards the colonial past. By contesting the conformity of narrative for inheritance and the innovation of pragmatism for the economy, the interpretation of Taiwan's industrial heritage oscillates between the foreground and the background for its audiences. In fact, the colonial past and industrial narrative of certain industrial heritage sites might be irrelevant to not only the authorities but also visitors. Industrial heritage in Taiwan has become a neutral concept which is a carrier, medium and public sphere to provide

various possibilities for the development of relations among the past, the present and the future to the public, whether industrial items or not.

Thirdly, industrial heritage is an adaptor for Taiwan to reconnect to domestic and global spheres. Through building a democratic society, the nationalism and identity of Taiwan are being gradually established. The concern for Taiwan's industrial heritage reflects the drive to shape cultural identity, advance civilisation and renew and regenerate the economy. It demonstrates the process of a shifting attitude towards heritage materials and industrial narratives in modern Taiwanese society. Meanwhile, in terms of nation-building, it reveals the recognition of the importance of Taiwan's industrial history, in the duration of Japanese rule particularly. For Taiwanese people, Japanese-built industrial heritage not only meets the older generation's nostalgia for the colonial past but also gives the younger generation Japanese exoticism as well as the ambience of the industrial age for those who never experienced it. In terms of the colonial controversy, the subject might, on occasion, be manipulated by certain politicians. But, in general, over the years of the shaping of nationalism and cultural identity in Taiwan, the colonial past is a debatable theme in current society. This shifting value of industrial heritage gives site managers new elements to promote their sites. Despite sound progress in the major sites, the remaining redundant places are still struggling. The interpretation of the colonial past is not only about good

memories but reflects also on the dissonant trauma narrative. Aside from the Japanese connection, by thinking of industrial heritage in an international context, the rising power of the grassroots leads to the next stage of Taiwan's industrial legacy. The shifting meanings of industrial heritage and the relevant colonial context keep highlighting the twin problematic issues of nationalism and cultural identity in Taiwan. On the one hand, industrial heritage is similar to other cultural issues as kind of motivation for the international agenda aimed to reconnect Taiwan to the world. On the other hand, the rise of industrial heritage made a contribution to generating new relationships between modern Taiwan and its colonial past by merging hybridity in every field.

As Lowenthal (1998: 241) argued, “the *heritage crusade* is as a new cultural colonialism which is a Eurocentric orientation towards the non-Western world, and civilised progress also ensured the global sway of western heritage”. Heritage studies have attempted to rid itself of its Eurocentrism over the past decades, as a result of the impact of post-modern and post-colonial discourse. It is essentially involved in ‘deconstructing’ the image of world history since the nineteenth century. In responding to Lowenthal’s discourse, in the perspective of industrial heritage, global agencies lead the way in conserving and celebrating national and local legacies. “Global codes of practice ally ‘heritage-rich’ and ‘heritage-greedy lands’ while major

powers concede the heritage rights of small states and non-sovereign minorities” (Lowenthal, 1998: 247). This is a brand new issue for the field under the conflict between the rise of non-Western forces and post-modern thought. Similarly, considering industrial heritage as the emerged heritage crusade, we—as a member of the post-colonial countries—should clarify seriously the position of individual colonial context in glocalisation’s narrative, constructing instead of acquiring the discourse directed by Western powers as their spoils of conquest through global stewardship.

The heritage of industrialisation is endowed with an emerged position or meaning to the past as well as the future, and this is part of the modernisation process within the context of industrialisation. But the impression of cultural diversity and creative economy through network globalisation leads to the development of the remains of industrial culture towards the next stage. However, the first-generation industrial heritage sites also need to move forwards and reactivate to face competition from mass media, attractions, other cultural / creative institutions and rising heritage places. Simultaneously, through growing public awareness and activities and the ideas of ‘transparency’ and ‘democracy’, the authorities of global industrial heritage are beholden to develop the relationship with the public (visitors) and their stakeholders in the contemporary context.

Industrial heritage that takes up the role will, it seems likely, forge new kinds of relationships among the past, present and future interpretations of identity and in national narratives. While some may be worried over the current fragmented national narrative and shallow heritage identity, the interviewee responses explored in this thesis indicate that industrial heritage in Taiwan may become not only a vehicle heading to global significance but also a compass mapping out the history for this country.

Appendix 1: The List of Interviewees

Section A-1: National Agency

Name	Position (Relevant Site)
1. CHIU, L.W.	Head of Planning Division, Forestry Bureau
2. CHU, Y.Y.	Senior Executive Officer, MOC (Cultural and Creative Park – Brewers and warehouses)
3. HSIAO, T.H.	Chief Secretary, MOC
4. Lee, M.C.	Head of International Exchange Section, BOCH, MOC
5. SHIH, K.L.	Director of BOCH, MOC
6. TSAI, Y.M.	Head of Public Service Section, BOCH, MOC

Section A-2: Local Agency

Name	Position (Relevant Site)
1. CHIU, Y.H.	Subsection Chief of Landscape Management Section, Tourism and Travel Department, New Taipei City Government (Houtong Coal Mine Ecological Park)
2. HUNG, Y.H.	Head of Operation Section, Chiayi Forestry District Office, Forestry Bureau (Chiayi Forestry Cultural Park)
3. LIN, K.P.	Head of Engineering Section, NMMST; former Subsection Chief of Technology Section, Tourism and Travel Department, New Taipei City Government (Shueijinjiou Mining Site)
4. TSAI, T.H.	Director of Gold Museum, New Taipei City (Shueijinjiou Mining Site)
5. WANG, W.J.	Secretary of Siraya National Scenic Area Office; Former Director of Planning Section, Siraya National Scenic Area (Wushantou Reservoir and Chia-nan Irrigation Waterways)

Section B-1: Site Manager (Public Sector)

Name	Position (Relevant Site)
1. CHEN, P.L.	Researcher, National Taiwan Museum
2. CHI, Y.T.	Head of Edutainment Section, Hualien Forestry District Office, Forestry Bureau (Lin-tien-shan Forestry Culture Park)
3. CHOU, L.M.	Executive Director of Songshan Cultural and Creative Park, Taipei Culture Foundation (Songshan Tobacco Factory)
4. SHIH, T.W.	Head of Industry-university Exchange Section, NMMST

Appendix 1 (Cont.)

Section B-2: Site Manager (Private Sector)

Name	Position (Relevant Site)
1. CHIANG, Y.H.	Chief Operating, Officer of Kio-A-Thau Artist Village (Ciaotou Sugar Refinery)
2. HSIEH, S.	President of Ten Drum Cultural Creativity Co. Ltd (Rende Sugar Refinery)
3. HSIEH, C.H.	Director of Chu-hung-keng Culture Preservation and Promotion Association (Chu-hung-keng Oil Field)
4. LIN, C.W.	Director of Art Museum of Mountain Village (Shueijinjiou Mining Site)
5. WANG, J.W.	President of Taiwan Cultural-Creative Development Co. Ltd (Huashan Brewery)

Section C: Professional

Name	Position
1. CHIU, R.H.	Secretary-general, Institute of Historical Resources Management, Taiwan
2. KUO, C.D.	President of Laboratory for Environment & Form Consultants Ltd.
3. LIN, B.Y.	Historian, former engineer of Taiwan Power Company
4. LI, Q.L.	Head of LI CHIENLANG Historical Architecture Studio
5. TSAI, C.C.	Architect of Zhong Yong-nan and Partners Architect

Section D: Scholar

Name	Position
1. FU, C.C	Professor, Dept. of Architecture, National Cheng Kung University
2. HUANG, C.M.	Assoc Professor, Dept. of Architecture, Chung Yuan Christian University
3. YANG, K.C	Assoc Professor, Dept. of Cultural Heritage Conservation, National Yunlin University of Science and Technology
4. YANG, M.C.	Assoc Professor, Dept. of Architecture, Chaoyang University of Technology

*The permission of each interviewee's information has been confirmed by the individual informed consent form signed.

Appendix 2: Summary of Selective Taiwan’s Industrial Heritage Sites

1. Chiayi Cultural and Creative Industries Park

Location	No. 616, Zhongshan Rd., East Dist., Chiayi City, Chiayi County 600 23°28'36.6"N 120°26'24.2"E
Industrial Category	Brewery
Built Year	Built in 1916; Open as Cultural and Creative Industries Park in 2016
Heritage Register	City Designated Historic Building (2003)
Background	The area was originally opened in 1916 as Chiayi Brewery by the Japanese government and operated until 1999. It was then converted into the Chiayi Cultural and Creative Industries Park and was opened in 2003. On 11 January 2016, the park underwent a three-year major renovation by the Ministry of Culture.
Ownership	Ministry of Culture, Taiwan
Stewardship	Xin Chia Cultural & Creative Co., Ltd.
Link	http://www.g9park.com/

2. Chiayi Forestry Cultural Park - Hinoki Village

Location	No. 1, Linsen E. Rd., East Dist., Chiayi City, Chiayi County 600 23°29'10.5"N 120°27'14.4"E
Industrial Category	Forestry
Built Year	The forestry settlement built in 1914; Open as Cultural Park in 2014
Heritage Register	City Designated Historic Building (2005)
Background	Hinoki Village consists of 28 wooden Japanese-style dormitories. There are some shops of creative cultural works like wooden furniture and food like fruit popsicle, as well as some small museums like Kano Story House that has been popular since the movie “Kano” was released. The village was originally the dormitories of the Chiayi Forest division of Forestry Bureau of the Taiwan Governor-General Office during the Japanese rule of Taiwan. The construction of the Hinoki Village took the basis of the existing building in the area by renovating and dismantling the original partition walls of each building as an open space for landscaping or visitors in 2014.
Ownership	Forestry Bureau, Council of Agriculture, Executive Yuan, Taiwan
Stewardship	Chiayi Forestry District Office, Forestry Bureau Hinoki Village Co., Ltd.
Link	https://www.forest.gov.tw/EN/0000224 http://www.hinokivillage.com.tw/en/index.php

Appendix 2 (Cont.)

3. Hualien Cultural and Creative Industries Park

Location	No. 144, Zhonghua Road, Hualien City, Hualien County 970 23°58'37.5"N 121°36'16.5"E
Industrial Category	Brewery
Built Year	Built in 1913; Open as Cultural and Creative Industries Park in 2012
Heritage Register	City Designated Historic Building (2002)
Background	Hualien cultural and creative industries park is located in the centre of Hualien city. The historic settlements build in 100 years ago have 3.3 hectares, including 26 old factory warehouses. It will be opened in three years (2012-2015) successively and apply exhibition, performance, dining, featured products, educational lectures, travel information, etc. Expected shape a cultural and creative vitality and contemporary lifestyle by artistic activities and commercial services.
Ownership	Ministry of Culture, Taiwan
Stewardship	Hualien County Cultural and Creative Industries Association
Link	http://www.a-zone.com.tw/en-us/Home/index

4. Hualien Lin-tien-shan Forestry Cultural Park

Location	No. 20, Linsen Rd., Fenglin Town, Fonglin Township, Hualien County 975 23°43'05.3"N 121°23'56.6"E
Industrial Category	Forestry
Built Year	Built in 1918; Forestry Cultural Park open in 2001
Heritage Register	City Designated Groups of Buildings (2006)
Background	Originally built in 1918 by the Japanese. Previously the largest logging operation in Hualien County and eastern Taiwan, once named “Little Shanghai” due to the mountain town’s thriving timber logging operations. The Lin-tien-shan Forestry Cultural Area is a large park and recreation area with hiking trails and museum exhibitions detailing Taiwan’s forestry traditions.
Ownership	Forestry Bureau, Council of Agriculture, Executive Yuan, Taiwan
Stewardship	Hualien Forestry District Office, Forestry Bureau Hualien County Lin-tien-shan Forestry Culture Association
Link	https://www.forest.gov.tw/EN/0000221

Appendix 2 (Cont.)

5. Kaohsiung Qiaotou Sugar Refinery

Location	No.24, Tangchang Rd., Ciaotou Dist., Kaohsiung City 825 22°45'16.7"N 120°18'52.1"E
Industrial Category	Sugar
Built Year	1901
Heritage Register	City Designated Cultural Landscape / Monument (2008)
Background	It was constructed as a sugar refinery in 1901 but also Taiwan's first sugar factory which incorporated modernised machinery, and is already over 100 years old. During World War II, two factories were damaged during bomb raids, they were then restored. The area was turned into a museum and was opened in 2006; 19 heritage sites have been preserved, including the factory's imitation baroque tropical colonial architecture, along with the red tile water tower and life-sized statues of Guanyin.
Ownership	Taiwan Sugar Corporation
Stewardship	Kaohsiung Operation Branch, Taiwan Sugar Corporation Bywood Art Space Co., Ltd.
Link	http://tsc35.taisugar.com.tw/eng/content/index.aspx?Parser=1,12,97,91 http://www.webdo.cc/bywood99/

6. Kaohsiung Tangrong Brick Kiln

Location	No. 220, Zhonghuaheng Rd, Sanmin District, Kaohsiung City 807 22°38'29.5"N 120°17'11.3"E
Industrial Category	Brick
Built Year	1899
Heritage Register	National Historic Monument (2005)
Background	The building was originally a tile factory established in 1899 during the Japanese period. The brick production in this factory once accounted for around 70% of bricks in Taiwan for years. Later in 1913, six extra kilns were added and the bricks produced here was branded as Taiwan Renga Company. In 1945, Taiwan Renga was sold to a private company Tangrong Ironworks. When the company financial crisis in 1957, the Ministry of Economic Affairs acquired the factory as part of the state-owned enterprises. The factory was closed in 1992.
Ownership	Tang Eng Iron Works
Stewardship	Cultural Affairs Bureau, Kaohsiung City Government
Link	http://heritage.khcc.gov.tw/english/index.aspx

Appendix 2 (Cont.)

7. Keelung National Museum of Marine Science & Technology (a former Fossil-fuel Power Station, Pei-Pu Steam Power Station)

Location	No. 367, Beining Road, Zhongzheng District, Keelung City, 202 25°08'27.4"N 121°47'55.3"E
Industrial Category	Power
Built Year	1937
Heritage Register	City Designated Historic Building (2004)
Background	Pei-Pu Steam Power Station was the first power station constructed on reclaimed land 1937 but also the largest power station in Asia. The Power Station was closed in 1981. In 2001, plans were drawn up to convert Pei-Pu Steam Power Station and its surroundings into the new National Museum of Marine Science & Technology. In 2004 it was designated as a historic landmark by Keelung City, and the site transformed into the present day Museum.
Ownership	Ministry of Education
Stewardship	National Museum of Marine Science & Technology
Link	http://www.nmmst.gov.tw/enhtml/content/338

8. Miaoli Chu-hung-keng Oil Field Park (Taiwan Oil Field Exhibition Museum)

Location	Gongguan Township, Miaoli County 363 24°27'36.5"N 120°51'21.6"E
Industrial Category	Oil
Built Year	1904
Heritage Register	County Designated Cultural Landscape (2008)
Background	Chu-hung-keng oil field was discovered by cable No. 1 well in 1904 and is the largest oil field in Taiwan. The museum was established in 1981 by Chinese Petroleum Corporation in the area where oil was first discovered in Taiwan. The exhibition shows the development of petroleum industry in Taiwan, from literature recording excavation, drilling and natural gas work.
Ownership	Chinese Petroleum Corporation, Taiwan
Stewardship	Exploration and Production Business Division, Chinese Petroleum Corporation
Link	http://chk.cpc.com.tw/

Appendix 2 (Cont.)

9. New Taipei City Houtong Coal Mine Ecological Park

Location	No.42, Chailiao Rd., Ruifang Dist., New Taipei City 224 25°05'13.9"N 121°49'39.6"E
Industrial Category	Coal mine
Built Year	1918
Heritage Register	City Designated Historic Building (2005)
Background	The enterprise of coal mining in Houtong was dated back in 1918. The last mine closed down in 1990 and for two decades the infrastructure rusted in place. The remains are preserved and opened to the public as Houtong Coal-Mine Ecological Park in 2010. In 2008, a group of cat-lovers volunteers started to care about all the abandoned cats in the village and worked at making Houtong a better living place for them. Now, Houtong is thriving again thanks to this cat attraction tourism industry. A bridge has even been built to allow the cats to cross the rail tracks safely.
Ownership	Jui San Co., Ltd.
Stewardship	Tourism and Travel Department, New Taipei City Government
Link	http://tour.ntpc.gov.tw/en-us/Attraction/Detail?wnd_id=85&id=111585

10. New Taipei City Shueijinjiou Mining Site (Gold Museum)

Location	No.8, Jinguang Rd., Ruifang Dist., New Taipei City 224 25°06'27.7"N 121°51'32.9"E
Industrial Category	Coal, Cooper, Gold
Built Year	1890s
Heritage Register	City Designated Cultural Landscape (2008); Historic Buildings (2007, 2015); Monument (2009)
Background	Jinguashi is an industrial settlement that rose and fell because of gold. In 1890, it was the first explicit evidence that there was gold in the Jinguashi area. In 1896, Japanese colonists dug the Benshan pit No. 1. The gold refinery was established in 1900 near pit No. 5. All mines were closed after the corporation ceased its operations in 1987. The Gold Museum was opened in 2004 by the Taipei County Government as an Ecological Museum Park.
Ownership	Taiwan Power Company; Taiwan Sugar Corporation
Stewardship	Tourism and Travel Department, New Taipei City Government; New Taipei City Government Gold Museum
Link	https://twh.boch.gov.tw/taiwan/intro.aspx?id=6&lang=en_us#ad-image-0

Appendix 2 (Cont.)

11. Taichung Cultural and Creative Industries Park

Location	No. 362, Section 3, Fuxing Road, South District, Taichung City 402 24°07'59.4"N 120°40'51.9"E
Industrial Category	Brewery
Built Year	1914
Heritage Register	City Designated Historic Building (2002)
Background	Taichung Cultural and Creative Industries Park was Taishō Brewing Joint-stock Company, which was built in 1914 as the largest brewery in Taiwan during the Japanese Rule; later on, it's changed to Taiwan Provincial Tobacco and Liquor Monopoly Bureau in 1957. In 2011, the name of Taichung Cultural and Creative Industries Park was finalised and the park is one of the fifth Cultural and Creative Industries Parks supervised by the Ministry of Culture.
Ownership	Ministry of Culture
Stewardship	Bureau of Cultural Heritage, Ministry of Culture
Link	http://tccip.boch.gov.tw/

12. Tainan and Chiayi Wushantou Reservoir and Chia-nan Irrigation Waterways

Location	No.68-2, Chia-nan, Guantian Dist., Tainan City 720 23°12'34.4"N 120°21'45.2"E
Industrial Category	Hydraulic
Built Year	1920
Heritage Register	City Designated Cultural Landscape (2009)
Background	Wushantou Reservoir is a reservoir and scenic area located in Tainan, Taiwan. Chia-nan Irrigation was built for promoting the agricultural productions of Chianan Plain of Taiwan. The name "chia-nan" was derived from two place names among its surrounding area called Chiayi and Tainan. The main designer of the waterway and the reservoir which was the largest in Asia at the time of its completion in 1930. is Yoichi Hatta, a civil engineer. The architectural work of canal was launched in 1920 and completed in 1930, during Japanese rule.
Ownership	Taiwan Chia-nan Irrigation Association
Stewardship	Taiwan Chia-nan Irrigation Association
Link	https://twh.boch.gov.tw/taiwan/intro.aspx?id=17&lang=en_us

Appendix 2 (Cont.)

13. Tainan Ten Drum Cultural and Creative Park (Rende Sugar Refinery)

Location	No. 326, Section 2, Wenhua Road, Rende District, Tainan City 717 22°56'21.7"N 120°13'49.1"E
Industrial Category	Sugar
Built Year	1908
Heritage Register	no
Background	The refinery was built in 1908, once a busy sugar mill but had been left disused for years. Permanently closed in 2003, the factory itself remains almost intact, from rusty machinery to molasses storage tanks and pipelines, delivering a nostalgia of years gone by. After being taken over by the local drumming troupe Ten Drum Art Percussion Group as a rehearsal space, this mill continues to live its history and allows visitors to peek into the thriving sugar industry during the Japanese colonial era. In 2005, the percussion group decided to settle in this old-fashioned sugar mill as it sits in the middle of nowhere and therefore serves as a perfect rehearsal and practice space.
Ownership	Taiwan Sugar Corporation
Stewardship	Ten Drum Art Percussion Group
Link	https://tendrum.com.tw/

14. Taipei Chienkuo Brewery

Location	No. 85, Section 2, Bade Rd., Zhongshan Dist., Taipei City, 104 25°02'45.2"N 121°32'08.6"E
Industrial Category	Brewery
Built Year	1919
Heritage Register	City Designated Monument (2006)
Background	The Brewery, part of the Taiwan Tobacco and Liquor Corporation (TTL), was set up in 1919. The original buildings that have survived have been recognised as historic municipal sites. In 2014, the Taiwan Tobacco and Liquor Corporation proposed an urban renewal project to renovate a former industrial area for commercial use. Chien-Kuo Brewery's 5.2 hectares of land would be turned into a Beer Cultural park.
Ownership	National Property Administration, Ministry of Finance
Stewardship	Taiwan Tobacco and Liquor Corporation
Link	http://event.ttl-eshop.com.tw/tp/

Appendix 2 (Cont.)

15. Taipei Huashan 1914 Creative Park

Location	No. 1, Section 1, Bade Road, Zhongzheng District, Taipei City 100 25°02'38.8"N 121°31'45.8"E
Industrial Category	Brewery
Built Year	1914
Heritage Register	City Designated Monument / Historic Buildings (2003)
Background	It was built in 1914 as Taihoku Brewery during Japanese rule. In 1945, the Nationalist Government took ownership over the Brewery and changed the name into Taiwan Province Monopoly Bureau, Taipei Wine Factory. In 1987, due to rapid urbanisation in Taipei, the Brewery moved to Taipei County. In 1997, the Golden Bough Theater Group barged into the Brewery premises and staged a production. In 2003, the Council for Cultural Affairs (CCA) took over its management. In 2007, the CCA signed a contract with Taiwan Cultural-Creative Development Co., Ltd. to run the park.
Ownership	Ministry of Culture
Stewardship	Taiwan Cultural-Creative Development Co., Ltd.
Link	https://www.huashan1914.com/en/

16. Taipei Cinema Theme Park (Former Taiwan Gas Corporation)

Location	No. 19, Kangding Road, Wanhua District, Taipei City 108 25°02'41.0"N 121°30'11.3"E
Industrial Category	Gas
Built Year	1934
Heritage Register	no
Background	The Park was Taiwan Gas Co., Ltd. (founded in 1934 during the Japanese colonial period) and later Taipei Gas Co., Ltd. used to be. After having been left unused for 34 years, the location has now become the largest park in Ximending, after the simple park greening engineering was completed in 2001. The objective of the cinema park was to create a large leisure space filled with art and culture that preserved the old factory building, chimney and coking furnace of the gas company.
Ownership	Taipei City Government
Stewardship	Taipei Culture Foundation
Link	http://www.cinemapark.org.tw/

Appendix 2 (Cont.)

17. Taipei Nanmen Park, National Taiwan Museum (Former Camphor Factory)

Location	No. 1, Section 1, Nanchang Rd., Zhongzheng Dist., Taipei City 100 25°01'59.5"N 121°30'57.4"E
Industrial Category	Camphor
Built Year	1899
Heritage Register	Part of The Monopoly Bureau of the Governor-General's Office Estate; National Monument (1998)
Background	Nanmen Park is set in what had served during Japanese colonisation as the Taipei Nanmen Factory under the Monopoly Bureau of the Taiwan Viceroy's Office. This complex was constructed in 1899. This factory was built to process camphor and opium. After its closure in 1967, the land belonging to the factory was subdivided and sold off, and the majority of factory buildings torn down, notable exceptions being the Goods Storehouse and the Camphor Warehouse, which have since been named National Historic Sites.
Ownership	Ministry of Culture
Stewardship	National Taiwan Museum
Link	http://www2.ntm.gov.tw/en/about_5_1_3.htm

18. Taipei Railway Workshop

Location	No.48, Sec. 5, Civic Blvd., Xinyi Dist, Taipei City 110 25°02'49.4"N 121°33'47.3"E
Industrial Category	Railway
Built Year	1930
Heritage Register	National Monument (2015)
Background	Taipei Railway Workshop, formerly referred to as the Taipei Railway Factory, is operated by Taiwan Railways Administration and was constructed in 1930. From 1959 to 1968, additional plants such as paint & coating, diesel-electric locomotive maintenance, steel production were built consecutively until the operation was transferred to the TRA Fugang Vehicle Depot in 2013. The site is scheduled as the first National Taiwan Railway Museum.
Ownership	Taiwan Railways Administration, Ministry of Transportation and Communications
Stewardship	Bureau of Cultural Heritage, Ministry of Culture
Link	http://view.boch.gov.tw/NationalHistorical/ItemsPage_en.aspx?id=11

Appendix 2 (Cont.)

19. Taipei Songshan Cultural and Creative Park (Former Songshan Tobacco Plant)

Location	No. 133, Guangfu South Road, Xinyi District, Taipei City 110 25°02'37.3"N 121°33'38.3"E
Industrial Category	Tobacco
Built Year	1937
Heritage Register	City Designated Monument (2002) / Historic Buildings (2004)
Background	The park was initially constructed in 1937 as a tobacco factory under the name Matsuyama Tobacco Plant of the Monopoly Bureau of the Taiwan Governor's Office under the Japanese government. In 1945, the Taiwan Provincial Monopoly Bureau took over the factory and renamed it as the Songshan Tobacco Plant of the Taiwan Provincial Monopoly Bureau. The factory ceased to produce cigarettes in 1998 for concern over urban planning, tobacco and liquor marketing regulatory changes and the decline in tobacco demand. In 2001, the Taipei City Government designed the defunct tobacco factory as Taipei's historic site and converted it into a park comprising city-designated historic sites, historical structures and architectural highlights. In 2011 the former factory was turned into a creative park by its current name to provide venues for diverse cultural and creative exhibitions and performances.
Ownership	Taipei City Government
Stewardship	Taipei Culture Foundation
Link	http://www.songshanculturalpark.org/cms/en/index.aspx

20. Taipei Wanhua Sugar Refinery Culture Park

Location	No. 132-10, Dali Street, Wanhua District, Taipei City 108 25°01'59.4"N 121°29'42.0"E
Industrial Category	Sugar
Built Year	1911
Heritage Register	City Designated Historic Building (2003)
Background	The park was constructed in 1911 as a sugar refinery. After the WW II, the refinery was taken over by Taiwan Sugar Corporation for warehousing. The building was declared a historical building in 2003. The cultural centre spans over an area of one hectare. It consists of three warehouses: permanent exhibition, Sugar Refinery Cultural Warehouse and troupe residence.
Ownership	Taipei City Government, Taiwan Sugar Corporation
Stewardship	Taipei Culture Foundation
Link	https://www.travel.taipei/en/attraction/details/565

Appendix 2 (Cont.)

21. Yilan Chung-Hsing Cultural and Creative Park (Former Paper Mill)

Location	No. 6-8, Section 2, Zhongzheng Road, Wujie Township, Yilan County 268 24°41'39.5"N 121°46'11.1"E
Industrial Category	Paper
Built Year	1918
Heritage Register	no
Background	Established in 1935 during the Japanese occupation, today's Chung-Hsing Cultural and Creative Park started out as a paper factory. In 1959 the company became a state-owned enterprise and was renamed Taiwan Chung-Hsing Paper Corporation. In 2001, the paper factory ceased operations and closed its doors. Following a period of disuse, in 2014 the Yilan County Government finally took over. By preserving and revitalising its industrial infrastructure, the former factory became the creative and cultural industries park.
Ownership	Yilan County Government
Stewardship	Cultural Affairs Bureau, Yilan County Government
Link	http://chccp.e-land.gov.tw/about-us-en/

Reference:

1. Tourism Bureau, Ministry of Transportation and Communications, Taiwan (taiwangolf.taiwan.net.tw)
2. Forestry Bureau, Council of Agriculture, Executive Yuan, Taiwan (www.forest.gov.tw/EN)
3. Bureau of Cultural Heritage, Ministry of Culture, Taiwan (en.boch.gov.tw)
4. National Cultural Heritage Database Management System (nchdb.boch.gov.tw/)

Appendix 3: The Schedule of Interview and Fieldwork 2014–2016

Date	Fieldwork/Location	Interview	Time/ hrs
18/10/2014 Sat	Taipei Huashan Cultural and Creative Park	—	2(F)
19/10/2014 Sun	Taipei Songshan Cultural and Creative Park	—	3(F)
20/10/2014 Mon	Taipei Railway Workshop	—	2(F)
22/10/2014 Wed	Taipei Huashan Creative Park	—	2(F)
24/10/2014 Fri	Taipei Huashan Creative Park	—	2(F)
25/10/2014 Sat	New Taipei City Shueijinjiou Mining Site	—	6(F)
26/10/2014 Sun	New Taipei City Houtong Coal Mine Ecological Park	—	6(F)
27/10/2014 Mon	Taipei Huashan Creative Park	—	2(F)
28/10/2014 Tue	New Taipei City's cafe	Director of Gold Museum, New Taipei City	2(F)
03/11/2014 Mon	Taipei Cinema Park; Taipei Sugar Mill Culture Park	—	5(F)
04/11/2014 Tue	Hualien Cultural and Creative Park	—	2.5(F)
05/11/2014 Wed	Lin-tien-shan Forestry Cultural Park, Hualien	—	3(F)
07/11/2014 Fri	Taipei Songshan Cultural and Creative Park	—	3(F)
08/11/2014 Sat	Former Air Force Headquarters Complex, Taipei; Taipei Chienkuo Brewery	—	3(F)
09/11/2014 Sun	Taipei Huashan Creative Park National Taiwan Museum Nanmen Park, Taipei	—	3(F)
11/11/2014 Tue	National Museum of Marine Science & Technology, Keelung	—	2(F)

(I) = Interview; (F) = Fieldwork.

Appendix 3 (Cont.)

Date	Fieldwork/Location	Interview	Time/ hrs
12/11/2014 Wed	National Taiwan Normal University	Historian, former engineer of Taiwan Power Company	2(I)
13/11/2014 Thu	Taipei Songshan Cultural and Creative Park	Executive Director of Songshan Cultural and Creative Park	2(I), 2(F)
14/11/2014 Fri	Taipei Huashan Creative Park	President of Taiwan Cultural-Creative Development Co. Ltd	2
19/11/2014 Wed	Kaohsiung Qiaotou Sugar Refinery	—	3(F)
20/11/2014 Thu	Taichung Cultural and Creative Park	—	3(F)
21/11/2014 Fri	Tainan Ten Drum Cultural and Creative Park	President of Ten Drum Cultural Creativity Co. Ltd.	1.5(I), 1.5(F)
27/11/2014 Thu	Art Museum of Mountain Village, New Taipei City	Mr LIN, Director of Art Museum of Mountain Village	2(I), 3(F)
01/12/2014 Mon	National Museum of Marine Science & Technology, Keelung	Head of Engineering Section, NMMST; Head of Industry-university Exchange Section, NMMST	6(I)
02/12/2014 Tue	New Taipei City Government	Subsection Chief of Landscape Management Section, Tourism and Travel Department, New Taipei City Government	1.5(I)
04/12/2014 Thu	National Taiwan Museum	Researcher of National Taiwan Museum	1.5(I)
05/12/2014 Fri	Forestry Bureau, Council of Agriculture	Head of Planning Division, Forestry Bureau	2(I)

(I) = Interview; (F) = Fieldwork.

Appendix 3 (Cont.)

Date	Fieldwork/Location	Interview	Time/ hrs
08/12/2014 Mon	Institute of Historical Resources Management, Taiwan	Secretary-general of Institute of Historical Resources Management, Taiwan	3(I)
11/12/2014 Thu	National Museum of Taiwan History; Tainan Ten Drum Cultural and Creative Park	President of Ten Drum Cultural Creativity Co. Ltd.	3(I)
19/12/2014 Fri	National Science and Technology Museum	—	3(F)
23/12/2014 Tue	BOCH, MOC	Director of BOCH	1.5(I)
26/12/2014 Fri	Chiayi Forestry Cultural Park	—	3.5(F)
23/01/2015 Fri	Chiayi Forestry Cultural Park Chiayi Cultural and Creative Park	Head of Operation Section, Chiayi Forestry District Office, Forestry Bureau	1.5(I), 2(F)
28/01/2015 Wed	Division of Culture and Creative Development, MOC	Senior Executive Officer, MOC	1.5(I)
05/02/2015 Thu	BOCH, MOC	Director of International Exchange Section, BOCH	1.5(I)
11/02/2015 Wed	Yilan Luodong Forestry Cultural Park; Yilan Chunghsing Cultural and Creative Park	Architect of Zhong Yong-nan and Partners Architect	2(I), 3(F)
12/02/2015 Thu	Miaoli Chu-hung-keng Oil Field Park	—	2(F)
13/02/2015 Fri	BOCH, MOC	Head of Public Service Section, BOCH	3(I)
15/02/2015 Sun	National Museum of Natural Science	—	4(F)

(I) = Interview; (F) = Fieldwork.

Appendix 3 (Cont.)

Date	Fieldwork/Location	Interview	Time/ hrs
21/02/2015 Sat	Hualien Cultural and Creative Park; Hualien Lintainshan Forestry Cultural Park	—	6(F)
25/02/2015 Wed	Siraya National Scenic Area Office; Wushantou Reservoir and Chia-nan Irrigation Waterways – Hatta Yoichi Memorial Park	Secretary of Siraya National Scenic Area Office, Siraya National Scenic Area	1.5(I), 2(F)
26/02/2015 Thu	Kaohsiung (Telephone Interview)	Director of Edutainment Section, Hualien Forestry District Office, Forestry Bureau	2(I)
03/03/2015 Tue	Promoting Chu-hung-keng Culture Preservation Association, Miaoli	Director of Promoting Chu-hung-keng Culture Preservation Association	1.5(I)
05/03/2015 Thu	Taichung Cultural and Creative Park	Assoc. Professor, Dept. of Cultural Heritage Conservation, National Yunlin University of Science and Technology	1.5(I)
06/03/2015 Fri	Taichung (private residence)	Assoc. Professor, Dept. of Architecture, Chaoyang University of Technology	1(I)
11/03/2015 Wed	Chung Yuan Christian University, Taoyuan	Professor Dept. of Architecture, Chung Yuan Christian University	1(I)
12/03/2015 Thu	National Taiwan Museum – Nanmen Factory Park	Chief Secretary, MOC	2(I)
	LI CHIENLANG Historical Architecture Studio	Head of LI CHIENLANG Historical Architecture Studio	2(I)
13/03/2015 Fri	LEF. Laboratory for Environment & Form Office	President of Laboratory for Environment & Form Consultants Ltd.	1.5(I)

(I) = Interview; (F) = Fieldwork

Appendix 3 (Cont.)

Date	Fieldwork/Location	Interview	Time/ hrs
19/03/2015 Thu	National Cheng Kung University, Tainan	Professor, Dept. of Architecture, National Cheng Kung University	1.5(I)
20/03/2015 Fri	Kaohsiung Kio-A-Thau Artist Village	Chief Operating Officer of Kio-A-Thau Artist Village	1.5(I)
30/03/2016 Wed	Kaohsiung Pier-2 Art Centre; Takao Railway Museum	—	2(F)
07/04/2016 Thu	Changhua Railway Round House	—	2(F)
08/04/2016 Fri	Kaohsiung Qiaotou Sugar Refinery; Cishan Sugar Refinery	—	6(F)
05/09/2016 Mon	Kaohsiung Pier-2 Art Centre; Hamasen museum of Taiwan Railway	—	2(F)

(I) = Interview; (F) = Fieldwork.

Appendix 4: Abbreviations

Abbreviation	Full Name
AHD	Authorised heritage discourse
BOCH	The Bureau of Cultural Heritage, MOC
CCA	The Council of Cultural Affairs, Executive Yuan
COCH	The College of Culture Heritage, BOCH, MOC
DoCoMoMo	The International Committee for Documentation and Conservation of Buildings, Sites and Neighbourhoods of the Modern Movement
DPP	The Democratic Progressive Party
ICOMOS	The International Council on Monuments and Sites
IDB	The Industrial Development Bureau, MOEA
KMT	The Kuomintang / the Nationalist Party of China
mAAN	The modern Asian Architecture Network
MOEA	Ministry of Economic Affairs, Executive Yuan, ROC
MOC	Ministry of Culture, Executive Yuan, ROC
MOE	Ministry of Education, Executive Yuan, ROC
MOI	Ministry of the Interior, Executive Yuan, ROC
NCAF	National Culture and Arts Foundation
PCC	The Public Construction Commission, Executive Yuan
PRC	The People's Republic of China
ROC	The Republic of China, Taiwan
TICCIH	The International Committee for the Conservation of the Industrial Heritage
UN	The United Nations
UNESCO	The United Nations Educational, Scientific and Cultural Organization

Bibliography

- Academia Sinica (2006) 'Sinkang Manuscripts and Taiwan History', in *Institute of Taiwan History, Academia Sinica, Our Special Collections*. Available at: http://archives.ith.sinica.edu.tw/collections_list_02.php?no=1. (Accessed: 15 October 2017).
- Adams, R. (2013) 'The V&A, The Destruction of the Country House and the Creation of English Heritage', *Museum and Society*, 11(1), pp. 1–18.
- Aitchison, C., MacLeod, N. and Shaw S. (2000) *Leisure and Tourism Landscapes: Social and Cultural Geographies*. London: Routledge.
- Albert, M. T., Bernecker, R. and Rudolff, B. (eds.) (2013) *Understanding Heritage: Perspectives in Heritage Studies*. Berlin: de Gruyter.
- Alfrey, J. and Putham, T. (1992) *The Industrial Heritage: Managing Resources and Uses*. New York: Routledge.
- AlSayyad, N. (2001) 'Global Norms and Urban Forms in the Age of Tourism: Manufacturing Heritage, Consuming Tradition', in AlSayyad, N. (ed.) *Consuming Tradition, Manufacturing Heritage*. London: Routledge, pp.1–33.
- AlSayyad, N. (2004) 'The End of tradition, or the Tradition of Endings', in AlSayyad, N. (ed.) *The End of Tradition?* London: New York: Routledge, pp.1–28.
- Anderson, B. (1983) *Imagined Communities: Reflections On the Origin and Spread of Nationalism*. London: Verso Press.
- Anderson, K., Domosh, M., Pile, S. and Thrift, N. (2003) *Handbook of Cultural Geography*. London: SAGE.
- Andrade, T. (2005). *How Taiwan Became Chinese: Dutch, Spanish and Han Colonization in the Seventeenth Century*. New York: Columbia University Press.

- Ashcroft, B., Griffiths, G. and Tiffin, H. (2007) *Post-Colonial Studies: The Key Concepts*. 2nd edn. London: Routledge.
- Ashworth, G. (1994). 'From History to Heritage—from Heritage to Identity: In Search of Concepts and Models', in Ashworth, G.J. and Larkham, P.J. (eds.) *Building A New Heritage, Tourism, Culture and Identity in the New Europe*. London: Routledge, pp. 13–30.
- Ashworth, G. J. and Graham, B. J. (eds.) (2005) *Senses of Place: Senses of Time*. Aldershot: Ashgate.
- Ashworth, G. J. and Tunbridge, J. E. (1990). *The Tourist-Historic City*. London: Belhaven.
- Atkinson, D. (2005) 'Heritage', in Atkinson, D., Jackson, P., Sibley D. and Washbourne N. (eds.) *Cultural Geography. A Critical Dictionary of Key Concepts*. London: I.B. Tauris, pp. 141–150.
- Atkinson, D. (2008). 'The Heritage of Mundane Places', in Graham, B. and Howard, P. (eds.) *The Ashgate Research Companion to Heritage and Identity*. London: Routledge.
- Atkinson, R. and Bridge, G. (2005) *Gentrification in a Global Context*. London: Routledge.
- Axinn, W. G. and Pearce, L.D. (2006) *Mixed Method Data Collection Strategies*. New York: Cambridge University Press.
- Azuma, K. (2000). *An Introduction to the History of Taiwan's Economy*. Zhou, X.W. (trans.). Taipei: Pamir.
- Bandyopadhyay, S. (2008) 'Tempering Architecture: Design Thinking in a Globalised Culture', *Abacus*, 3(1), pp. 26–34.
- Barclay, G. W. (1954) *Colonial Development and Population in Taiwan*. Port

- Washington, N.Y., London: Kennikat Press.
- Baumgart, W. (1982). *Imperialism: The Idea and Reality of British and French Colonial Expansion 1880–1914*. Mas, B.V. (trans.). Oxford: Oxford University Press.
- BBC News (2016). *Trump—Taiwan Call: China Lodges Protest*. Available at: <http://www.bbc.co.uk/news/world-asia-china-38194371>. (Accessed: 15 December 2016).
- Belford, P. (2014) ‘Contemporary and Recent Archaeology in Practice’, *Industrial Archaeology Review*, 36(1), pp. 3–14.
- Bell, D. (1976) *The Coming of Post-industrial Society: A Venture in Social Forecasting*. Harmondsworth: Penguin.
- Benton, T. (2010) ‘Introduction’, in Benton, T. (ed.) *Understanding Heritage and Memory*. Manchester: Manchester University Press, pp. 2.
- Bhabha, H. K. (1994). *The Location of Culture*. London: Routledge.
- Bianchini, F. and Parkinson, M. (eds.) (1994) *Cultural Policy and Urban Regeneration: The West European Experience*. Manchester: Manchester University Press.
- Blaikie, N. (2007) *Approaches to Social Enquiry*. 2nd edn. Cambridge: Polity Press.
- Blaikie, N. (2009) *Designing Social Research: The Logic of Anticipation*. 2nd edn. Cambridge: Polity Press.
- Blussé, J. L., Opstall, M. W. Van and Ts'ao Y. H. (eds.) (2002) *De dagregisters van het Kasteel Zeelandia, Taiwan 1629–1662 DEEL II*. Chiang, S.S. (trans.). Tainan: Tainan City Government.
- BOCH, Bureau of Cultural Heritage, MOC (2017) *National Cultural Heritage Database Management System*. Available at: <https://nchdb.boch.gov.tw>.

(Accessed: 3 October 2017).

Borao, J. E. (2007) *An Overview of the Spaniards in Taiwan*. Available at:

<http://homepage.ntu.edu.tw/~borao/2Profesores/Paper%20Macao%20Overview.pdf>. (Downloaded: 10 October 2017).

Bossen, C. (2000) 'Festival Mania, Tourism and Nation Building in Fiji: The Case of the Hibiscus Festival, 1956–1970', *The Contemporary Pacific*, 12(1), pp. 123–154.

Britton, S. G. (1982) 'The Political Economy of Tourism in the Third World', *Annals of Tourism Research*, 9, pp. 331–358.

Brown, M. J. (2004) *Is Taiwan Chinese? The Impact of Culture, Power, and Migration on Changing Identities*. California: University of California Press.

Buchanan, R. A. (2000) 'The origins of Industrial Archaeology', in Cossons, N. (ed.) *Perspectives in Industrial Archaeology*. London, Science Museum, pp. 18–38.

Camargo, B., Lane, K. and Jamal, T. (2007) 'Environmental Justice and Sustainable Tourism: The Missing Cultural Link', *The George Wright Society Forum*, 24(3), pp. 70–80.

Carman, J. and Sørensen, M. L. S. (2009) 'Heritage Studies: An Outline', in Sørensen, M.L.S. and Carman, J. (eds.) *Heritage Studies: Methods and Approaches*. New York: Routledge, pp. 11–28.

CCA, Council of Cultural Affairs, Executive Yuan (2008) *Annual Report of Cultural and Creative Industries Development*. Taipei: CCA.

Chang, L. C. (2003) *From Island Frontier to Imperial Colony: Qing and Japanese Sovereignty Debates and Territorial Projects in Taiwan, 1874–1906*. Harvard University. PhD Dissertation (Unpublished).

Chang, Y. T. (2007) 'The Development of Cultural Policy and Museum in Taiwan',

- Forum on Training and Development*, 73, pp. 28–31.
- Chaudoir, P. (2009) ‘La rue: une fabrique contemporaine de l’imaginaire urbain’, *Culture et Musées*, 12, pp. 51–64.
- Chen, H.C. (2005) ‘Development of Art-Culture Space and Urban Regeneration: Space Re-use in Taipei City’, *Museology Quarterly*, 19(4), pp. 85–99.
- Chen, M. Y. (2007) *Taiwan's Sugar Industry*. Taipei: Yuanzu.
- Chen, S. (1978) *Records of Three Kingdoms*. Taipei: Ting Wen.
- Chen, Y. S. (2006) ‘Kang ri ying xiong de jian gou yu ji yi: Shi yi liu da jiang jun ping wo zhan ji de shi liao yi yi’, *The Taiwan Folkways*, 56(2), pp.167–199.
- Chen, Y. Z. (1999) *An Analysis of ‘Understanding Taiwan’ Textbook*. Taipei: Renjian Public.
- Chiang, M. C. (2010) ‘The Hallway of Memory—A Case Study on the Diversified Interpretation of Cultural Heritage in Taiwan’, in Heylen, A. and Sommers, S. (eds.) *Becoming Taiwan: From Colonialism to Democracy*. Wiesbaden: Harrasowitz Verlag, pp. 117–134.
- Chiu, H. H. (2008) *The Colonial Civilizing Process in Dutch Formosa, 1624–1662*. New York: Brill.
- Chou, W. Y. (1996) ‘Cong bi jiao de guan dian kan tai wan yu han guo de huang min hua yun dong (1937–1945)’, in *Tai wan shi lun wen jing xuan*. Taipei: Taiwan Interminds Publishing.
- Chowdhury, A. and Islam, I. (1993) *The Newly Industrializing Economies of East Asia*. London: Routledge.
- Chu, C. J. (2014) ‘Cultural Policies and Museum Development: A Case Study of Taiwan’, *Museology Quarterly*, 28(1), pp. 5–29.
- CIP, Council of Indigenous Peoples, Executive Yuan (2017) *Statistics, Statistics on*

- Indigenous Populations*. Available at:
<http://www.apc.gov.tw/portal/docList.html?CID=940F9579765AC6A0>.
(Accessed: 4 June 2017).
- Clements, J. (2004) *Pirate King: Coxinga and the Fall of the Ming Dynasty*. London: Muramasa Industries Limited.
- COCH, College of Culture Heritage, BOCH, MOC (2016) *Culture Heritage News, The Cultural Heritage Budget Increases by 1.3 Billion*. Available at:
<http://www.coch.tw/index.php?inter=shareandkind=1andpage=2andid=N2016091410495552034>. (Accessed: 25 August 2017).
- Coffey, A. (1999) *The Ethnographic Self, Fieldwork and the Representation of Identity*. London: SAGE.
- Cole, S. (2007) 'Beyond Authenticity and Commodification', *Annals of Tourism Research*, 34(4), pp. 943–960.
- Cooke, P. (1995) 'Introduction', in P. Cooke (ed.) *The Rise of the Rustbelt*, London: UCL Press, pp. 1–19.
- Cossons, N. 'Perspective' in Cossons, N. (ed.) (2000) *Perspectives on Industrial Archaeology*. London, Science Museum, pp. 9–17.
- Cossons, N. (2012) 'Industrial Heritage: Treasure or Trash?' *Journal of Cultural Heritage Conservation*, 22, pp. 7–26.
- Creswell, J. W. (2013) *Research Design: Qualitative and Quantitative Approaches*. 4th edn. London: SAGE.
- Crick, M. (1998) 'Sun, Sex, Sights, Savings and Servility: Representations of International Tourism in the Social Sciences', *Criticisms, Heresy and Interpretation*, 1, pp. 37–76.
- Daly, P. and Winter, T. (eds.) (2012) *Routledge Handbook of Heritage in Asia*. London:

Routledge.

- Damodaran, V. (2013) 'Natural Heritage and Colonial Legacies: India in the Nineteenth Century', *Studies in History*, 29(1), pp. 1–20.
- Darley, G. (2003) *Factory*. London: Reaktion Books.
- Davis, J. (2001) 'Commentary: Tourism Research and Social Theory: Expanding the Focus', *Tourism Geographies*, 3, pp.125–134.
- Davis, P. (2007) 'Ecomuseums and Sustainability in Italy, Japan and China. Concept Adaptation Through Implementation', in Knell, S., MacLeod, S. and Watson, S. (eds) *Museum Revolutions. How Museums Change and are Changed*. London and New York: Routledge, pp. 198–214.
- Deckha, N. (2004) 'Beyond the Country House: Historic Conservation as Aesthetic Politics', *European Journal of Cultural Studies*, 7(4), pp. 403–423.
- Del Pozo, P. B. and Gonzalez, P. A. (2012) 'Industrial Heritage and Place Identity in Spain: From Monuments to Landscapes', *Geographical Review*, 102(4), pp.446–464.
- Denzin, K. and Lincoln, Y. S. (eds.) (2000) *The SAGE Handbook of Qualitative Research*. London: SAGE.
- Denzin, N. K., and Lincoln, Y. S. (2005) 'Introduction: The Discipline and Practice of Qualitative Research', in Denzin, N.K. and Lincoln, Y. S. (eds.) *The Sage Handbook of Qualitative Research*. 2nd edn. Thousand Oaks, CA: Sage, pp. 1–32.
- Desmond, J. C. (1999) *Staging Tourism: Bodies on Display from Waikiki to Sea World*. Chicago: University of Chicago Press.
- Deutsche, R. (1996) *Evictions: Art and Spatial Politics*. Cambridge Mass., and London: MIT Press.
- Devlin, G. (2010) *A Place to Think: Arts Research and Innovation*. London: CIDA

International.

- Diener, E. and Crandall, R. (1978) *Ethics in Social and Behavioural Research*.
Chicago: University of Chicago Press.
- Dirks, N. B. (1992) 'Introduction: Colonialism and Culture', in Dirks, N. B. (ed.)
Colonialism and Culture. Ann Arbor, MI: University of Michigan Press.
- Douet, J. (ed.) (2012) *Industrial Heritage Re-tooled. The TICCIH guide to Industrial
Heritage Conservation*. Lancaster, Carnegie Publishing.
- Duijn, M., Rouwendal, J. and Boersema, R. (2016) 'Redevelopment of Industrial
Heritage: Insights into External Effects on House Prices', *Regional Science and
Urban Economics*, 57, pp. 91–107.
- Dümcke, C. and Gnedovsky, M. (2013) *The Social and Economic Value of Cultural
Heritage: Literature Review*. Available at:
<http://www.interarts.net/descargas/interarts2557.pdf>. (Accessed: 6 January 2017).
- Edensor, T. (2005a) *Industrial Ruins*. New York: Berg.
- Edensor, T. (2005b) *Spaces of Dereliction: Industrial Ruins in the UK*. Available at:
http://www.sci-eng.mmu.ac.uk/industrial_ruins/default.asp. (Downloaded: 15
June 2014).
- Edgerton, D. (2008) *Shock of the Old: Technology and Global History since 1900*.
London: Profile Books.
- Edwards, J. A. and Llurdés, J. C. (1996) 'Mines and Quarries: Industrial Heritage
Tourism', *Annals of Tourism Research*, 23(2), pp. 341–363.
- Eisenhardt, K. M. (1989) 'Building theories from case study research', *Academy of
Management Review*, 14(4), pp. 532–550.
- Ely, M., Anzul, M., Friedman, T., Garner, D., and Steinmetz, A. M. (1991) *Doing
Qualitative Research: Circles within Circles*. London: Falmer.

- English, P. (1986) *The Great Escape: An Examination of North-South Tourism*.
Ottawa: North-South Institute.
- Erisman, M. (1983) 'Tourism and cultural dependency in the West Indies', *Annals of Tourism Research*, 10, pp. 337–361.
- Everts, N. (2000) 'Jacob Lamay van Taywan: An Indigenous Formosan Who Became an Amsterdam Citizen', in Blundell, D. (ed.) *Austronesian Taiwan*. California: University of California Press.
- Executive Yuan (2013) *Spokesman's Office, News and Announcement*. Available at: http://www.ey.gov.tw/News_Content.aspx?n=F8BAE9491FC830&ands=5E46845B4A8836B8. (Accessed: 3 May 2014).
- Eyles, J. (1986) 'Qualitative Methods: A New Revolution?', in Eyles, J. (ed.) *Qualitative Approaches in Social and Geographical Research*. London: Department of Geography and Earth Science, Queen Mary College, University of London: pp. 1–22.
- Eyles, J. (ed.) (1988) *Research in Human Geography*. Oxford, Basil Blackwell.
- Fan, X. and Dai, S. (2017) 'Spatial-temporal Distribution Characteristics of Industrial Heritage Protection and the Influencing Factors in a Chinese City: a case study of the Tiexi old industrial district in Shenyang', *Journal of Heritage Tourism*, 12(3), pp. 281–295.
- Fan, Y. (1978) *The Book of the Later Han*. Taipei: Ting Wen.
- Feld, S. and Basso, K. H. (1996) *Sense of Place*. Santa Fe: School of American Research.
- Fetisov, O. (2015) 'Adaptive Reuse for New Social and Municipal Functions as an Acceptable Approach for Conservation of Industrial Heritage Architecture in the Czech Republic', *The Civil Engineering Journal*, 1, pp. 1–13.

- Foucault, M. (1979) *Discipline and Punish: The Birth of the Prison*. Sheridan, A. (trans.). London: Peregrine Books.
- Foucault, M. (1981) 'The order of discourse', McLeod, I. (trans.), in Young, R. (ed.) *Untying the Text*. London: Routledge and Kegan Paul.
- Frost-Kumpf, H. A. (1998) *Cultural Districts: The Arts as A Strategy for Revitalizing Our Cities*. Washington, D.C.: Americans for the Arts.
- Fu, C.C. (2010) *Culture, Heritage and Architecture: Essays on Heritage in Taiwan*. Tainan: Taiwan Architecture and Cultural Property Press °
- Garon, S. (1997) *Molding Japanese Minds: The State in Everyday Life*. Cambridge: Harvard University Press.
- Gilmour, T. (2007) *Sustaining Heritage: Giving the Past a Future*. Sydney: University of Sydney Press.
- Giorgi, A. (2009) *The Descriptive Phenomenological Method in Psychology: A Modified Husserlian Approach*. Pittsburgh, PA: Duquesne University Press.
- Glesne, C. (2011) *Becoming Qualitative Researchers: An Introduction*. Boston, Mass., London: Pearson.
- Glendinning, M. (2013) *The Conservation Movement. A History of Architectural Preservation: Antiquity to Modernity*. London, Routledge.
- Goodall, B. (1994) 'Industrial Heritage and Tourism', *Built Environment*, 19, pp. 93–104.
- Gorman, G.E. and Clayton, P. (2005) *Qualitative Research for the Information*. London: Facet.
- Gouthro, M. and Palmer, C. (2010) 'Pilgrimage in Heritage Tourism: Finding meaning and identity in the industrial past', in Conlin, M. and Jolliffe, L. (eds.) *Mining Heritage and Tourism: A Global Synthesis*. London: Routledge, pp.

33-43.

- Govers, R. (2014) 'The Role of Heritage in Place Marketing and Branding', *Heritage Tourism and Hospitality, International Conference 2014*. Available at: <http://heritagetourismhospitality.org/2014/2-conference/88-the-role-of-heritagein-place-marketing-and-branding>. (Accessed: 6 January 2017).
- Graburn, N. (1995) 'Tourism, Modernity, and Nostalgia', in Ahmed, A. and Shore, C. (eds.) *The Future of Anthropology*. London: Athlone, pp. 158–178.
- Graham, B. (2002) 'Heritage as Knowledge: Capital or Culture?', *Urban Studies*, 39, pp. 1003–1017.
- Graham, B., Ashworth, G. and Turnbridge, J. (2000) *A Geography of Heritage: Power, Culture and Economy*. London: Arnold.
- Gray, D. E. (2014) *Doing Research in the Real World*. 3rd edn. London: SAGE.
- Gripsrud, J. (2000) 'Learning from Experience: Cultural Policies and Cultural Democracy in the 20th Century', *European Journal of Cultural Policy*, 7(2), pp. 197–209.
- Gupta, A. and Ferguson, J. (1997) *Anthropological Locations*. California, University of California Press.
- Hammersley, M. and Atkinson, P. (2007) *Ethnography: Principles in practice* (3rd ed.). New York: Routledge.
- Han, P. T. and Liu, X. Y. (2008b) *A Review on the Policy of Deserted Space Reuse, NPF (National Policy Foundation) Research Report*. Available at: <http://www.npf.org.tw/2/4332>. (Accessed: 6 August 2016).
- Han, P. T. (2001) *A Review of the National Cultural Policy, NPF (National Policy Foundation) Research Report*. Available at: <http://old.npf.org.tw/PUBLICATION/EC/090/EC-R-090-005.htm>. (Accessed: 3

- April 2013).
- Han, P. T. (2006) *Han Pao-Teh's Talks on Culture*. Taipei: Artouch.
- Han, P. T. and Liu, X. Y. (2008a) *The Aimlessness of Creative and Cultural Park, NPF (National Policy Foundation) Research Report*. Available at: <http://www.npf.org.tw/2/4292>. (Accessed: 6 August 2016).
- Hannam, K. and Knox, D. (2010) *Understanding Tourism: A Critical Introduction*. London: SAGE.
- Harris, F. (1989) 'From the Industrial Revolution to the Heritage Industry', *Geographical Magazine*, 1, pp. 38–42.
- Harrison, R. and Hughes, L. (2010) 'Heritage, Colonialism and Postcolonialism', in Harrison, R. (ed.) *Understanding the Politics of Heritage*. Manchester, Manchester University Press, pp. 234–269.
- Hartog, F. (2005) 'Time and Heritage', *Museum International*, 227(57,3), pp. 7–18.
- Hartog, F. (2016) *Regimes of Historicity: Presentism and Experiences of Time*. New York: Columbia University Press.
- Hashimoto, A. and Telfer, D. J. (2017) 'Transformation of Gunkanjima (Battleship Island): From a Coalmine Island to a Modern Industrial Heritage Tourism Site in Japan', *Journal of Heritage Tourism*, 12, pp. 107–124.
- Hassink, R. (1993) 'Regional Innovation Policies Compared', *Urban Studies*, 30, pp. 1009–1024.
- Heilbrun, J. and Gray, C. M. (2001) *The Economics of Art and Culture*, 2nd edn. Cambridge: Cambridge University Press.
- Henderson, J. C. (2001) 'Conserving Colonial Heritage: Raffles Hotel in Singapore', *international Journal of Heritage Studies*, 7(1), pp. 7–24.
- Hewison, R. (1987) *The Heritage Business: Britain in a Climate of Decline*. London:

Methuen.

Hitters, E. and Richards, G. (2002) 'Cultural Quarters to Leisure Zones: The Role of Partnership in Developing the Cultural Industries', *Creativity and Innovation Management*, 11, pp. 234–247.

Hobsbawm, E. J. (1999) *Industry and Empire: from 1750 to the Present Day*. 2nd edn. London: Penguin Books.

Hobsbawm, E. J. and Ranger, T. (1983) *The Invention of Tradition*. Cambridge: Cambridge University Press.

Hospers, G. J. (2002) 'Industrial Heritage Tourism and Regional Restructuring in the European Union', *European Planning Studies*, 10(3), pp. 397–404.

Hoyau, P. (1988) 'Heritage and the Conserver Society: The French Case', in Lumley, R. (ed.) *The Museum Time Machine*. London: Routledge, pp. 27–35.

Hsueh, H. Y. (ed.) (2008) *Tai wan mao yi shi*. Taipei: Taiwan External Trade Development Council.

Huang, C. H. (2015) 'Ethnic Diversity, Two-Layered Colonization, and Complex Modern Taiwanese Attitudes toward Japan', in Morris, A. D. (ed.) *Japanese Taiwan: Colonial Rule and Its Contested Legacy*. London: Bloomsbury Academic, pp. 133–154.

Huang, F. (2003) *Tai wan jian shi: Ma que bian feng huang de gu shi*. Taipei: Government Information Office.

Huang, G. N. (1998) *The Development of Museum and the Tendency of Culture and Art in Taiwan*. Available at:
<http://www.taiwanncf.org.tw/seminar/20000429/20000429-3.pdf>. (Downloaded: 10 October 2017).

Huang, H. Y. (2010) 'The Establishment and Abolition of the Bureau of Culture, the

- Ministry of Education of the R.O.C. (1967–1973)', *Taiwan Historica*, 61(4), pp. 259–298.
- Huang, J. L. (2014) 'Policy and Controversy in the Capitalization and Gentrification of Taiwanese Cultural Heritage: The Songshan Cultural and Creative Park Example', *Journal of Cultural Heritage Conservation*, 29, pp. 7–26.
- Huang, K. N. (2007) *The Museum as Enterprise*. Taipei: Artiste.
- Huang, Z. (2009) 'Chiang Kai-shek in East Asia: The Origins of the Policy of Magnanimity toward Japan after World War II', *Bulletin of the Institute of Modern History*, 45, pp. 143–94.
- Hudson, K. (1979) *World Industrial Archaeology*. Cambridge: Cambridge University Press.
- Hummon, D. (1992) 'Community Attachment: Local Sentiment and Sense of Place', in Altman, I. and Setha, L. (eds.) *Place Attachment*. New York: Plenum, pp. 253–278.
- Hung, W. T. and Wu, Y. Y. (2016) 'The Isomorphism and Diversity in a Creative Industry: An Integrated Framework of Institutional Theory and New Media Perspective', *Journal of Chinese Management Development*, 5(2), pp. 1–11.
- ICOMOS, International Council on Monuments and Sites (1994) *The Nara Document on Authenticity*. Available at: <http://www.icomos.org/charters/nara-e.pdf>. (Accessed: 6 December 2016).
- IDB, Industrial Development Bureau, MOEA (2017) *Tourism Factory*. Available at: <http://taiwanplace21.org.tw/Factory.php>. (Accessed: 3 October 2017).
- Jackson, J. B. (1994) *A Sense of Place, A Sense of Time*. New Haven: Yale University Press.
- Jacobs, J. M. (1996) *Edge of Empire: Postcolonialism and the City*. London:

Routledge.

Jamal, T. and Robinson, M. (2009) 'Conclusions: Tourism Studies—Past Omissions, Emergent Challenges', in Jamal, T. and Robinson, M. (eds.) *The SAGE*

Handbook of Tourism Studies. London: Sage, pp. 693–701.

Janes, R. R. (2009) *Museums in a Troubled World: Renewal, irrelevance or collapse*.

London and New York: Routledge.

Janes, R. R. (2011) 'Museums and the End of Materialism', in Marstine, J. (ed.) *The*

Routledge Companion to Museum Ethics. London and New York: Routledge, pp. 54–69.

Johnson, N. (1995) 'Cast in Stone: Monuments, Geography, and Nationalism

Environment and Planning D', *Society and Space*, 13, pp. 51–65.

Jung, F.J. and Fu, C.C. (2008) 'The Impact on the Heritage Management Functions

from the Assigned Outsourcing Mechanism for Cultural Heritage: With

Reference of R.O.T and O.T Cases', *Journal of Architecture*, 66, pp. 167–188.

Kaplan, F. E. S. (1996) 'Museum Anthropology', in Levinson, D. and Ember, M.

(eds.) *Encyclopedia of Cultural Anthropology*, 3, pp. 813–817.

Keith, F. P. (2005) *Introduction to Social Research: Quantitative and Qualitative*

Approaches. London: Sage.

Kift, D. (2011) 'Heritage and history: Germany's Industrial Museums and the (Re-)

Presentation of Labour', *International Journal of Heritage Studies*, 17(4), pp.

380–389.

Kilper, H. and Wood, G. (1995) 'Restructuring policies: The Emscher Park

International Building Exhibition', in Cooke, P. (ed.) *The Rise of the Rustbelt*,

London: UCL Press, pp. 208–230.

Kim, J. H. (2013) *Industrial Heritage and Urban Regeneration*. Paju: Dolbegae

- Publishing Press.
- King, A. D. (1976). *Colonial Urban Development: Culture, Social Power and Environment*. London: Routledge and Kegan Paul.
- King, A. D. (2003) 'Cultures and Spaces of Postcolonial Knowledge', in Anderson, K., Domosh, Pile, M. S. and Thrift, N. (eds.) *Handbook of Cultural Geography*. London: Sage, pp. 381–397.
- Kirshenblat-Gimblett, B. (1998) *Destination Culture: Tourism, Museums, and Heritage*. Berkeley: University of California Press.
- Kirtsoglou, E. and Theodossopoulos, D. (2004) 'They are Taking Our Culture Away: Tourism and Culture Commodification in The Garifuna Community of Roatan', *Critique of Anthropology*, 24(2), pp, 135–157.
- Knapp, W. (1998) 'The Rhine-Ruhr Area in Transformation: Towards a European Metropolitan Region?', *European Planning Studies*, 6, pp. 379–393.
- Koselleck, R. (1990) *Futures Past: On the Semantic of Historical Time*. Tribe, K. (trans.). New York: Columbia University Press.
- Koselleck, R. (2005) *Futures Past: On the Semantics of Historical Time*. New York: Columbia University Press.
- Kusno, A. (2000) *Behind the Postcolonial: Architecture, Urban Space and Political Cultures in Indonesia*. London and New York: Routledge.
- Labadi, S. and Long, C. (eds.) (2010) *Heritage and Globalization*. London: Routledge.
- Laconte, P. (2014) 'European Industrial and Engineering Heritage as an Illustration of Current Challenges in Defining Heritage and Its Uses', *Change Over Time*, 4(2), pp. 308–320.
- Lamley, H. J. (1999) 'Taiwan under Japanese Rule, 1895–1945: The Vicissitudes of

- Colonialism', in Rubinstein, M. A. (ed.) *Taiwan: A New History*. Armonk, New York: M. E. Sharpe, pp. 201–260.
- Landof, C. (2011) 'Book Review, Hope and Rust: Reinterpreting the Industrial Place in the Late 20th Century', *International Journal of Heritage Studies*, 17, pp. 92–93.
- Lardner, H. (2012) 'Conservation Plans', in Douet, J. (ed.) *Industrial Heritage Re-tooled: the TICCIH Guide to Industrial Heritage Conservation*. Lancaster: Carnegie, pp. 129-135.
- Leary, T. E. and Sholes E. C. (2000) 'Authenticity of Place and Voice: Examples of Industrial Heritage Preservation and Interpretation in the U.S. and Europe', *The Public Historian*, 22(3), pp. 49–66.
- Lee, C. L. (1994) *An Investigation of Modern Historical Buildings in Taiwan and Fujian Provinces*. Taipei: MOI.
- Lee, W. C. (2003). *Wai yuan de zheng zhi jing ji fen xi: Zhong gou mei yuan lai hua de li shi tu xiang (1946–1948)*. Taipei: Jingyi.
- Lefebvre, H. (1996) *Writings on Cities*. Oxford, Blackwell.
- Li, D. M. (1968) *A Study on Social Increase of Population in Taiwan*. Taipei: Taiwan Population Studies Center, Taiwan Provincial Department of Health.
- Li, P. J. (2008a) 'The Great Diversity of Formosan Languages', *Language and Linguistics*, 9(3), pp. 523–546.
- Li, F. Y. (2008b) 'The Development and Characteristics of Cultural Heritage Preservation in Taiwan 1984–2007', *Bulletin of The Center for General Education Kainan University*, 13, pp. 57–76.
- Light, D. (2001) 'Facing the Future: Tourism and Identity-building in Post-socialist Romania', *Political Geography*, 20, pp. 1053–1074.

- Lin, A. and Keating, J. (2008) *Island in the Stream*. Taipei: SMC Publishing.
- Lin, C. C. and Chuang, Y. C. (2007) 'The Analysis and Coping Strategy of Taiwan 's Industrial Structure Change', *The Current Economic Issues in Taiwan Conference Proceedings*. Taipei: Taiwan Institute of Economic Research, pp. 1–36.
- Lin, H. C. (2007) 'The Key Historical Facts of the of Cultural Heritage Preservation in Taiwan', *Fountain of Creativity*, 14, pp. 5–11.
- Lin, H. W. (2012a) 'Conservation and Community Consciousness', in Douet, J. (ed.) *Industrial Heritage Re-tooled: the TICCIH Guide to Industrial Heritage Conservation*. Lancaster: Carnegie, pp. 155–160.
- Lin, H. W. (2012b) 'The Practice and Influence of the Promotion of Industrial Cultural Heritage Preservation in Taiwan', *Architectural Institute of Taiwan Magazine*, 76, pp. 33–39.
- Lin, M. H. (2000) *The Industries of Tea, Sugar, and Camphor and Socio-economic Change of Taiwan, 1860–1895*. Taipei: Linking Publishing.
- Lin, S. W. (2003) 'From Soldier to Veteran: Institution-building of State and the Formation of Demographic Categories in Taiwan (1949–1970)', *Taiwan: A Radical Quarterly in Social Studies*, 52, pp.187–254.
- Logan, W. and Reeves, K., (ed.) (2009) *Places of Pain and Shame: Dealing with Difficult Heritage*. Abingdon, Routledge.
- Logan, W.S. (2002) 'Introduction: Globalization, Cultural Identity and Heritage', in Logan, W.S. (ed.) *The Disappearing Asian City: Protecting Asia's Urban Heritage in a Globalizing World*. New York: Oxford University Press, pp. xii–xxi.
- Loomba, A. (2005) *Colonialism / Postcolonialism*. 2nd edn. London: Routledge.

- Lowenthal, D. (1995) *Heritage Crusade and Spoils History*. Cambridge: Cambridge University Press.
- Lowenthal, D. (1996) *Possessed by the Past: The Heritage Crusade*. Cambridge: Cambridge University Press.
- Lowenthal, D. (1998) *The Heritage Crusade and the Spoils of History*. Cambridge: Cambridge University Press.
- Lowenthal, D. (2005). *The Past is a Foreign Country*. Cambridge and New York: Cambridge University Press.
- Lowenthal, D. (2015). *The Past is a Foreign Country—Revisited*. Cambridge: Cambridge University Press.
- Lu, S. L. (1998) *Shui luo xiang qi: Ri zhi shi qi tai wan she hui de sheng huo zuo xi*. Taipei: Yuanliou Publishing.
- Lu, S. L. (2005) *Zhan shi tai wan: Quan li, kong jian yu zhi min tong zhi de xing xiang biao shu*. Taipei: Rye Field Publishing.
- Lu, T. (2009) ‘Heritage Conservation in Post-colonial Hong Kong’, *International Journal of Heritage Studies*, 15(2), pp. 258–272.
- Lune, H., Pumar, E.S. and Koppel, R. (2010) *Perspectives in Social Research Methods and Analysis*. London: SAGE.
- Luoh, M. C. (2003) ‘The Ethnic Bias in Recruitment Examinations for the Civil Service in Taiwan’, *Taiwan Economic Review*, 31(1), pp. 87–106.
- Lynch, M. and Peyrot, M. (2005). ‘Introduction: A Reader's Guide to Ethnomethodology’, *Qualitative Sociology*, 15, pp. 113–122.
- mAAN, modern Asian Architecture Network (2011) *Seoul Declaration 2011 on Industrial Heritage in Asia*. Available at:http://www.m-aan.org/images/uploads/mAAN_Seoul_Declaration_2011_on_I

[Industrial Heritage in Asia.pdf](#). (Accessed: 23 December 2015).

- MacCannell, D. (1992) *Empty Meeting Grounds: The Tourist Papers*. London: Routledge.
- Macdonald, S. (2009) *Difficult Heritage: Negotiating the Nazi past in Nuremberg and beyond*. London: Routledge.
- Mansfield, Y. (1992) 'Industrial Landscapes as Positive Settings for Tourism Development', *GeoJournal*, 28, pp. 457–463.
- Marr, A. (2012) *A History of the World*. London: Pan Books.
- Marschall, S. (2008) 'The Heritage of Post-Colonial Societies', in Graham, B. and Howard, P. (eds.) *The Ashgate Research Companion to Heritage and Identity*. Aldershot: Ashgate, pp. 347–364
- Marshall, C. and Rossman, G.B. (1989) *Designing Qualitative Research*. Newbury Park, CA: Sage.
- Mason, J. (2002) *Qualitative Research*. London: Sage.
- Mason, R. (2000) 'Assessing Values in Conservation Planning: Methodological Issues and Choices', in Torre, M. (ed.) *Assessing the Values of Cultural Heritage*. Los Angeles: The Getty Conservation Institute, pp. 5–30.
- Mason, R. (2005) 'Museum, Galleries and Heritage: Sites of Meaning-making and communication', in Corsane, G. (ed.) *Heritage, Museums and Galleries: An Introductory Reader*. London: Routledge, pp. 200–214.
- Matza, D. (1969) *Becoming Deviant*. N.J.: Prentice-Hall.
- Maxwell, J. A. (1996) *Qualitative Research Design: An Interactive Approach*. London: SAGE.
- May, T. (2011) *Social Research: Issues, Methods and Research*. Maidenhead: Open University Press.

- McDowell, S. (2008) 'Heritage, Memory and Identity', in Graham, B. and Howard, P. (eds.) *The Ashgate Research Companion to Heritage and Identity*. Farnham: Ashgate, pp. 37–53.
- McGuigan, J. (2001) 'Three Discourses of Cultural Policy', in Stevenson, N. (ed.) *Culture and Citizenship*. London: Sage, pp. 124–137.
- McKercher, B. and Du Cors, H. (2002) *Cultural Tourism: The Relationship between Tourism and Cultural Heritage Management*. New York: Haworth.
- McNeill, P (1990) *Research Methods*. London: Routledge.
- Merriam, S. B. (2007) *Qualitative Research and Case Study Applications in Education*. 2nd edn. Wiley: Jossey-Bass.
- Miller, T. and Yudice, G. (2002) *Cultural Policy*. London: Sage.
- MOC, Ministry of Culture (2012) *2012 Huashan Cultural and Creative Park Audience Satisfaction and Consumption Survey*. (Unpublished).
- MOC, Ministry of Culture (2015a). *Cultural Statistics Pointer*. Available at: <http://stat.moc.gov.tw/StatisticsPointer.aspx>. (Accessed: 5 October 2017).
- MOC, Ministry of Culture, (2015b) *The List of Cultural and Creative Cluster*. Available at: <http://www.moc.gov.tw/notice.do?method=findByIdandid=1222766687369>. (Accessed: 05 December 2016).
- MOC, Ministry of Culture (2016a) *Cultural News, Reuse of Taipei Railway Workshop: a preliminary consensus between MOC, MOI and TRA*. Available at: http://www.moc.gov.tw/information_250_50172.html. (Accessed: 12 September 2017).
- MOC, Ministry of Culture (2016b) *The Public Hearing for the Future Development of Cultural and Creative Industries Parks*. Available at:

- <http://reading.udn.com/act/2016creativepark/index.html>. (Accessed: 12 September 2017).
- MOC, Ministry of Culture (2016c) *The List of Cultural and Creative Cluster*. Available at: <https://grants.moc.gov.tw/Web/DownloadPoint.jsp?FId=5768>. (Accessed: 17 September 2017).
- MOC, Ministry of Culture (2017) *Statistics of Cultural Statistics, Culture and Society, Cultural Resources, Cultural Statistics Database Management System*. Available at: http://stat.moc.gov.tw/HS_UserItemResultView.aspx?id=6. (Accessed: 10 October 2017).
- MOI, Ministry of the Interior (2017) *Immigration Statistics, National Immigration Agency*. Available at: <http://www.immigration.gov.tw/lp.asp?ctNode=29699andCtUnit=16434andBaseDSD=7andmp=1>. (Accessed: 4 June 2017).
- Moore, A. S. (2013) *Constructing East Asia: Technology, Ideology, and Empire in Japan's Wartime Era, 1931–1945*. Calif.: Stanford University Press.
- Morgan, N. and Pritchard, A. (1998) *Tourism Promotion and Power: Creating Images, Creating Identities*. Chichester: John Wiley.
- Morris, A. D. (ed.) (2015) *Japanese Taiwan: Colonial Rule and Its Contested Legacy*. London: Bloomsbury Academic.
- Moustakas, C. (1994) *Phenomenological Research Methods*. London: Sage.
- Mowforth, M. and Hunt, I. (1998) *Tourism and Sustainability: New Tourism in the Third World*. London: Routledge.
- Mulcahy, K.V. (1998) 'Cultural Patronage in Comparative Perspective: Public Support for the Arts in France, Germany, Norway, and Canada', *The Journal of Arts Management, Law, and Society*. 27(4), pp. 247–263.

- Myers, H and Peattie, R. (1984) *The Japanese Colonial Empire, 1895–1945*. N.J., Princeton University Press.
- Myerscough, J. (1988) *The Economic Importance of the Arts in Britain*. London: Policy Studies Institute.
- Nakamura, T. and Akira, H. (eds.) (1970) ‘Kokka Sodojin (National mobilization)’, *Gendai-shi Shiryo (Documents on modern history)*, 43. Tokyo: Misuzu Shobo.
- NCAF, National Culture and Arts Foundation (ed.) (2011) *Cultural and Creative On-going: 25 Cultural and Creative Industries Scenes in Taiwan*. Taipei: Yuan-Liou.
- Nora, P. (1989) ‘Between Memory and History: Les Lieux de Mémoire’, *Representations*, 26, pp. 7–24.
- Noritaka, S. (1987) *The History of the Development of Museums in Japan*. Tokyo: Yuzankaku.
- O’Connor, B. (1993) ‘Myths and Mirrors: Tourist Images and National Identity’, in O’Connor, B. and Cronin, M. (eds.) *Tourism in Ireland: A Critical Analysis*. Cork: Cork University Press, pp. 68–85.
- Oosterhoff, J. L. (1985) ‘Zeelandia, a Dutch colonial city on Formosa (1624–1662)’, in Ross, R.J. and Telkamp, G.J. (eds.) *Colonial Cities: Essays on Urbanism in a Colonial Context*. Springer, pp. 51–62.
- Orbaşlı, A. (2000) *Tourists in Historic Towns: Urban Conservation and Heritage Management*. London: Routledge.
- O’Reilly, K. (2005) *Ethnographic Methods*. London: Sage.
- Osterhammel, J. (2014) *The Transformation of the World. A Global History of the Nineteenth Century*. Princeton, N.J.: Princeton University Press.
- Paine, S. C. M. (2003) *The Sino-Japanese War of 1894–1895: Perceptions, Power,*

- and Primacy*. Cambridge: Cambridge University Press.
- Palmer, C. (1999) 'Tourism and the Symbols of Identity', *Tourism Management*, 20, pp. 313–321.
- Palmer, M. (1991) *Industrial Archaeology: Working for the Future*. Ironbridge: Association for Industrial Archaeology.
- Palmer, M. and Orange, H. (2016) 'The Archaeology of Industry: People and Places', *Post-Medieval Archaeology*, 50, pp. 73–91.
- Palmer, M., Nevell, M. and Sissons, M. (2012) *Industrial Archaeology: A Handbook*. York, Council for British Archaeology.
- Parent, Th. (2000) *Das Ruhrgebiet. Vom goldenen Mittelalter zur Industriekultur*. Köln: Dumont.
- Patton, M. Q. (2002) *Qualitative Research and Evaluation Methods*. London: Sage.
- Pawson, R. (1995) 'Methods of Content/Document/Media Analysis', in Haralambos, M. (ed.) *Developments in Sociology*, 11, Ormskirk: Causeway Press, pp. 107–128.
- Pawson, R. and Tilley, N. (1997) *Realistic Evaluation*. London: Sage.
- PCC, Public Construction Commission, Executive Yuan (2017) *Notice and Announcement of Disused Public Constructions*. Available at: http://cmdweb.pcc.gov.tw/pccms/morac/idle_geoeng.pasin. (Assessed: 5 October 2017).
- Peers, L. (2007) *Playing Ourselves: Interpreting Native Histories at Historic Reconstructions*. MD: Alta Mira Press.
- Peleggi, M. (1996) 'National Heritage and Global Tourism in Thailand', *Annals of Tourism Research*, 23, pp. 432–480.
- Peng, X. Z. (2015) '800 Mosquito Halls are full of Taiwan, the Taxpayers' Money

- Earned by Hard Toil is Spoilt', *Global Views Monthly*, 351, pp. 90–97.
- Pinson G. (2009) *Gouverner la ville par projet. Urbanisme et gouvernance des villes européennes*. Paris: Presses de Sciences Po.
- Polunin, I. (2002) 'Destination Branding: Creating the Unique Destination Proposition. 2nd edn. Book Review', *Moonshine Travel Marketing Eclipse*, 7, pp. 1–5.
- Pratt, A. C. and Hutton, T. A. (2013) 'Reconceptualising the Relationship Between the Creative Economy and the City: Learning from the Financial Crisis', *Cities*, 33, pp. 86–95.
- Prentice, R. C., Witt, S. F., and Hamer, C. (1998) 'Tourism as Experience: The Case of Heritage parks', *Annals of Tourism Research*, 25(1), pp. 1–24.
- Pretes, M. (2003) 'Tourism and Nationalism', *Annals of Tourism Research*, 30, pp. 125–142.
- Price, G. N. (2003) 'Economic Growth in a Cross-section of Nonindustrial Countries: Does Colonial Heritage Matter for Africa?', *Review of Development Economics*, 7(3), pp. 478–495.
- Pyke, F. and Sengenberger, W. (eds.) (1992) *Industrial Districts and Local Economic Regeneration*. Geneva: International Labor Organization.
- Rautenberg, M. (2011) 'Industrial Heritage, Regeneration of Cities and Public Policies in the 1990s: Elements of a French/British Comparison', *International Journal of Heritage Studies*, 18(5), pp. 513–525.
- Rautenberg, M. (2012) 'Industrial Heritage, Regeneration of Cities and Public Policies in the 1990s: Elements of A French/British Comparison', *International Journal of Heritage Studies*, 18(5), pp. 513–525.
- Richardson, L. (2000) 'Writing: A Method of Inquiry', in Denzin, N.K. and Lincoln, Y.

- S. (eds.) *The SAGE Handbook of Qualitative Research*. London: SAGE.
- Robinson, M. and Smith, M. (2006) 'Politics, Power and Play: The Shifting Contexts of Cultural Tourism', in Smith, M. and Robinson, M. (eds.) *Cultural Tourism in a Changing World: Politics, Participation and (Re) presentation*. Clevedon: Channel View Publications, pp.1–17.
- Ross, M. (2004) 'Interpreting the New Museology', *Museum and Society*, 2(2), pp. 84–103.
- Said, E. W. (1978) *Orientalism*. London: Routledge and Kegan Paul.
- Said, E. W. (1993) *Culture and Imperialism*. New York: Knopf.
- Samuels, R. J. (1994) *Rich Nation, Strong Army: National Security and the Technological Transformation of Japan*. Ithaca, NY: Cornell University Press.
- Schatzman, L. and Strauss, A. L. (1973) *Field research*. N.J.: Prentice-Hall, Inc.
- Scheyvens, R. (ed.) (2014) *Development Fieldwork: A Practical Guide*. London: SAGE.
- Shackel, P. A. and Palus, M. (2006) 'Remembering an Industrial Landscape', *International Journal of Historical Archaeology*, 10(1), pp. 49–71.
- Shaw, B. J. and Jones, R. (1997) *Contested Heritage: Voices from the Periphery*. Aldershot, Ashgate.
- Shih, C. Y. (2012) 'How Can Museums Make Communities Work? A Case Study of the Jinguashi Area', *Museology Quarterly*, 26(4), pp. 29–39.
- Shurmer-Smith, P. and Hannam, K. (1994) *Worlds of Desire, Realms of Power: A Cultural Geography*. London: Edward Arnold.
- Silverman, D. (2005) *Doing Qualitative Research: A Practical Handbook*. London: SAGE.
- Silverman, D. (2013) *Doing Qualitative Research*. Los Angeles, Calif.: SAGE.

- Smil, V. (2005) *Creating the Twentieth Century: Technical Innovations of 1867–1914 and Their Lasting Impact*. New York: Oxford University Press.
- Smith, L and Waterton, E (2012) ‘Constrained by Common Sense: The Authorized Heritage Discourse in Contemporary Debates’, in Skeates, R., McDavid, C. and Carman, J. (eds.) *The Oxford handbook of public archaeology*. Oxford: Oxford University Press, pp. 153–171.
- Smith, L. (2006) *The Uses of Heritage*. London and New York: Routledge.
- Smith, L. and Waterton, E. (2009) *Heritage, Communities and Archaeology*. London: Duckworth.
- Smith, M. K. (2009) *Issues in Cultural Tourism Studies*. 2nd edn. London and New York: Routledge.
- Smith, M. R. and Martello, R. (2010) ‘Taking Stock of the Industrial Revolution in in America’, in Horn, J. Rosenband, L. N. and Smith, M. R. (eds.) *Reconceptualizing the Industrial Revolution*. Massachusetts: MIT Press, pp. 168–200.
- Southall, A. (1971) ‘The impact of imperialism upon urban development in Africa’, in Turner, V. (ed.) *Colonialism in Africa 1870–1960*, London: Cambridge University Press, pp. 216–235.
- Soyez, D. (1986) ‘Industrietourismus’, *Erdkunde*, 40, pp. 105–111.
- Soyez, D. (2009) ‘Europeanizing Industrial Heritage in Europe: Addressing Its Transboundary and Dark Sides’, *Geographische Zeitschrift*, 97(1), pp. 43–55.
- Spivak, G. (1990) ‘Poststructuralism, Marginality, Postcoloniality and Value’, in Collier, P. and Geyer-Ryan, H. (eds.) *Literary Theory Today*. London: Polity Press, pp. 219–244.
- Stake R. E. (2005) ‘Qualitative Case Studies’, in Denzin, N. K. and Lincoln, Y. S.

- (eds.) *The Sage Handbook of Qualitative Research*. 3rd edn. Thousand Oaks, CA: Sage pp. 443–466.
- Stake, R. (1995) *The Art of Case Study Research*. Thousand Oaks, CA: Sage.
- Stearns, P. N. (2012) *The Industrial Revolution in World History*. 4th edn. Boulder: Westview Press.
- Steele, F. (1981) *The Sense of Place*. Boston: CBI.
- Storm, A. (2008) *Hope and Rust. Reinterpreting the Industrial Place in the Late 20th Century*. Stockholm, Royal Institute of Technology. PhD Dissertation (Unpublished).
- Storm, A. (2014) *Post-industrial Landscape Scars*. New York: Palgrave Macmillan
- Stratton, M. and Trinder, B. (2000) *Twentieth Century Industrial Archaeology*. London: Taylor and Francis.
- Sunstein E. and Chiseri-Strater, M. (2002) *Fieldworking: Reading and Writing Research*. Boston: Bedford.
- Teng, E. J. (2004) *Taiwan's Imagined Geography: Chinese Colonial Travel Writing and Pictures (1683–1895)*. Cambridge: Harvard University Asia Center.
- Thomas, G. (2011) *How to Do Your Case Study: A Guide for Students*. London: Sage.
- Throsby, D. (2010) *The Economics of Cultural Policy*. Cambridge: Cambridge University Press.
- TICCIH, The International Committee for the Conservation of the Industrial Heritage (2003) *The Nizhny Tagil Charter for the Industrial Heritage*. Available at: <http://ticcih.org/about/charter/>. (Accessed: 8 January 2014).
- TICCIH, The International Committee for the Conservation of the Industrial Heritage (2012) *The Taipei Declaration on Asian Industrial Heritage*. Available at: <http://ticcih.org/taipei-declaration-for-asian-industrial-heritage/>. (Accessed: 20

- November 2016).
- Tien, C. C. (2008) 'The Role of Museums Cluster in Cultural Tourism Industry', 2008 *INTERCOM Annual Meeting and Conference Paper*. Available at: www.intercom.museum/conferences/2008/papers/chiehching_tien.doc (Accessed: 4 October 2017).
- Tien, C. C. and Lin, Y. N. (2010) 'The Welfare State and the Development of Local Museum Policy in Taiwan', *Museology Quarterly*, 24(2), pp. 83-97.
- Timothy, D. (2011) *Cultural Heritage and Tourism: An Introduction*. Clevedon: Channel View.
- Timothy, D. and Boyd, S. (2003) *Heritage Tourism*. London and New York: Prentice Hall.
- Tribe, J. (2005) 'Tourism, Knowledge and the Curriculum', in Airey, D. and Tribe, J. (eds.) *An International Handbook of Tourism Education*. Amsterdam, Elsevier, pp.47–60.
- Trinder, B. (2000) 'Industrial Archaeology in the Twentieth-Century Context.' in Cossons, N. (ed.) (2000) *Perspectives on Industrial Archaeology*. London, Science Museum, pp. 39–56.
- Trinder, B. (2012) 'Industrial Archaeology: A Discipline?', in Douet, J. (ed.) *Industrial Heritage Re-tooled: the TICCIH Guide to Industrial Heritage Conservation*. Lancaster: Carnegie, pp. 24–30.
- Tsai, C. T. (1994) *The Religious Policies in Taiwan under the Imperialistic Rule of Japan*. Tokyo: Douseisha.
- Tsai, C. T. (2006) *Taiwan under the War System*. Taipei: Ri Chuang She.
- Tu, C. Y. (2017) *Taiwan Under Japanese Imperialism*. Li, M. C. (trans.). Taipei: Renjian.

- Tuan, Y. F. (1977) *Space and Place: The Perspective of Experience*. Minneapolis: University of Minnesota Press.
- Tunbridge, J. E. (1984) 'Whose Heritage to Conserve? Cross-cultural Reflections on Political Dominance and Urban Heritage Conservation', *Canadian Geographer*, 28(2), pp. 171–180.
- Tunbridge, J. E. and Ashworth, G. J. (1996) *Dissonant Heritage: The Management of the Past as a Resource in Conflict*. Chichester: John Wiley.
- UNESCO, the United Nations Educational, Scientific and Cultural Organization (1999) 'The Economics of Heritage', in *Conference/ Workshop on the Adaptive Reuse of Historic Properties in Asia and the Pacific*, Conference Programme. Available at: <http://unesdoc.unesco.org/images/0012/001218/121851eb.pdf>. (Downloaded: 2 September 2016).
- UNESCO, the United Nations Educational, Scientific and Cultural Organization (2016) 'The World Heritage Convention', in *World Heritage Centre*, About World Heritage. Available at: <http://whc.unesco.org/en/about/>. (Accessed: 3 September 2016).
- Urry, J. (1995) *Consuming Places*. London: Routledge.
- Vargas-Sanchez, A., Porrás-Bueno, N. and Plaza-Mejía, M. (2013) 'Clustering Industrial Heritage Tourists: Motivations for Visiting a Mining Site', in Staiff, R., Bushell, R. and Watson, S. (eds.) *Heritage and Tourism: Place, Encounter, Engagement*. New York: Routledge, pp. 274–296.
- Veal, A. J. (1997) *Research Methods for Leisure and Tourism: A Practical Guide*. 2nd edn. London: Financial Times-Prentice Hall.
- Walsh, K. (1992) *The Representation of the Past: Museums and Heritage in the Post-Modern World*. London: Routledge.

- Wang, Y. F. (2007) 'A Vehicle Conveying Its Own Culture: Mapping a Preservation Strategy for a Rail Industry Heritage', *Rapid Transit Systems and Technology*, 37, pp. 55–64.
- Wang, Z. F. (1997) *References for 'Understanding Taiwan' Textbook*. New Taipei: Taiwan History Research Association.
- Waterton, E. (2010) *Politics, Policy and the Discourses of Heritage in Britain*. Hampshire: Palgrave Macmillan.
- Weng, J. (2002) 'Bei yi wang de tai wan yuan zhu min shi: Quata (da du fan) wang chu kao', *Yi lun tai wan shi*, 42(4), pp. 145–188.
- West, S. (2010) 'Introduction', in West, S. (ed.) *Understanding Heritage in Practice*. Manchester: Manchester University Press, pp. 2.
- West, S. and Ansell, J. (2010) 'Heritage Value', in West, S. (ed.) *Understanding Heritage in Practice*. Manchester: Manchester University Press, pp. 47–87.
- Western, J. (1985) 'Undoing the Colonial City?', *Geographical Review*, 75, pp. 335–357.
- Wills, J. E. Jr. (1999) 'The Seventeenth-Century Transformation: Taiwan Under the Dutch and the Cheng Regime', in Rubinstein, M. (ed.) *Taiwan: A New History*. Armonk N.Y.: M.E. Sharpe, pp. 84–105.
- Wills, J. E. Jr. (ed.) (2006) *China and Maritime Europe, 1500–1800: Trade, Settlement, Diplomacy, and Missions*. Cambridge: Cambridge University Press.
- Wolcott, H. F. (1981) 'Home and Away: Personal Contrasts in Ethnographic Style', in Messerschmidt, D. A. (ed.) *Anthropologists at Home in North America, Methods and Issues in the Study of One's Own Society*. New York: Cambridge University Press, pp. 255–65.
- Wu, S. F. (2013) 'Phenomenon Observation 9: Cultural and Creative Park Sustainable

- Development—ROT’, *Performing Art Review*, 241, pp. 86–89.
- Wu, W. S. (2000) ‘Ri zhi shi qi tai wan de she hui bian qian’, in *Jiang yi hui bian*.
Nantou: Tai Wan Shi Ji Yuan Liu Yan Jiu Hui.
- Wu, Y. P. (2005) *A Political Explanation of Economic Growth: State Survival, Bureaucratic Politics, Private Enterprises in the Making of Taiwan’s Economy, 1950–1985*. Boston, MA: Harvard University Press.
- Xie, J. Q. (2001) ‘Tai wan min zhu guo yu liu yong fu’, *Taiwan Wen Hsien*, 52(2), pp.357–384.
- Xie, P. F. (2015) *Industrial Heritage Tourism*. Bristol: Channel View.
- Xu, X. J. (2015) ‘Alternative Channel for Personnel Selection: Provincial Civil Service Senior Examination (1952–1968)’, *Taiwan Historical Research*, 22(1), pp. 113–152.
- Yanaihara, T. (2002) *Taiwan under Imperialism*. Zhou, X.W. (trans.). Taipei: SGCUL.
- Yang, Y. Q. (2001) *Story of Taiwan Cane Sugar*. Taipei: Owl Publishing House.
- Yao, J. C. (2004) *Roam the Ruins of Taiwan*. Taipei: Garden City.
- Yao, J. C. (2016) *Mirage V: Disused Public Property in Taiwan*. Taipei: Garden City.
- Yeh, Z. Z., (2006) *Liu Mingchuan zhuan*. Nantou City: Taiwan Historica.
- Yeoh, B. S. A. (1996) *Contesting Space: Power Relations and the Urban Built Environment in Colonial Singapore*. Kuala Lumpur: Oxford University Press.
- Yin, R. K. (2012) *Applications of Case Study Research*. Los Angeles, Calif., London: SAGE.