

# TAIWAN: MELTING POT AND INNOVATION HUB



Collected Essays by the Project Group

**TAP**

*Chen Kuan-fei*

*Chien Hung-yi*

*Thomas Eduard Fliß*

*Amélie Keyser-Verreault*

*Josie-Marie Perkuhn*



Bochum: Research Unit for Taiwanese Culture and Literature,  
Ruhr-Universität Bochum 2022

ISBN 978-3-00-071835-9

With the support of the  
Federal Ministry of Education and Research (BMBF), Germany

GEFÖRDERT VOM



Bundesministerium  
für Bildung  
und Forschung

## Table of Content

Welcome TAP! A Prefatory Note from Bochum, Trier and Tübingen	4
<i>Josie-Marie Perkuhn</i>	
Introduction – Taiwan: Melting Pot and Innovation Hub	7
<i>Chen Kuan-fei</i>	
Modernizing Chiayi: The Development of the Lumber Industry, 1914–1945	15
<i>Chien Hung-yi</i>	
Education as the Engine of Modernity: Pioneers in Schooling	25
<i>Thomas Eduard Fliß</i>	
Taiwanese Minnan Eco-Poetry in the Era of Globalization and the Anthropocene	37
<i>Amélie Keyser-Verreault</i>	
Modernizing Postnatal Care: Taiwan as Pioneer in the Professionalization of the Traditional <i>Yuezi</i>	47
<i>Josie-Marie Perkuhn</i>	
Innovation as Coping Strategy for Facing Global Challenges	55
Author Information	66

## **WELCOME TAP! A PREFATORY NOTE FROM BOCHUM, TRIER AND TÜBINGEN**

It is with pleasure that we see the realization of a project of great impact for Taiwan Studies in Germany: Welcome to “Taiwan als Pionier” at Trier, Bochum, and Tübingen!

The first explorations of scholars who were willing to establish a group to apply for the support of Taiwan Area Studies from the German Ministry of Education and Research in the project line “Kleine Fächer – Zusammen stark” (Small Disciplines – Combined Strength) took place during the online Yearly Meeting of the German Association of German Studies (DVCS) hosted at Zürich in November 2020. Under the restrictions of the Corona crisis, the group could only cooperate digitally. Against all odds, they secured a grant for a four-year research program that includes individual studies as well as joint research projects, the development of a database, and a methodological handbook. They focus on Taiwan’s unique status in East Asia and are developing the paradigm of a “pioneer” in many respects. Since pioneers create innovation, their first joint publication is dedicated to some of the innovative practices that have been realized in Taiwan during the course of the last one hundred years. The group under the leadership of Josie-Marie Perkuhn in Trier consists of Thomas E. Fliß (Trier), Chien Hung-yi (Bochum), and Amélie Keyser-Verreault (Tübingen). The team is supported by the student assistants Alena Imgrund in Trier and Tamina Renner in Bochum. Previously, Beatrice Zani and Chen Kuan-fei had also participated as post-docs, but their careers took them to academic positions at McGill University, Montreal, and the National Taiwan University, respectively, from where they cooperate with TAP to help to extend this network.

This brochure brings together the initial ideas and demonstrates the topics of research in which the post-docs will define Taiwan's pioneering endeavors. It has been edited by Christine Moll-Murata with the help of Chien Hung-yi and Tamina Renner. The layout was made by Harald Krähe. The financial support by the German Ministry of Education and Research is gratefully acknowledged.

May the post-docs of the group thrive and prosper and advance Taiwan Studies in Germany and beyond!

*Christine Moll-Murata*, Ruhr-Universität Bochum, Research Unit for Taiwanese Culture and Literature

*Gunter Schubert*, Eberhard Karls Universität Tübingen, European Research Center on Contemporary Taiwan

*Kristin Shi-Kupfer*, Universität Trier, Chinese Studies

*Christian Soffel*, Universität Trier, Chinese Studies

Taiwan: Melting Pot and Innovation Hub



Map of Taiwan

Cartography: Harald Krähe

## **INTRODUCTION – TAIWAN: MELTING POT AND INNOVATION HUB**

*Josie-Marie Perkuhn*

*As current a crisis may seem,  
the study of history reveals challenging times are here to last.*

For the study of how local innovation interacts with the dynamic of global megatrends in history, presence, and the future to come, Taiwan poses an excellent case. Given the fact of a challenging political trajectory, a unique international status *sui generis* has emerged. Taiwan has been tremendously contested in history and the island has been influenced by others over the course of several centuries; besides neighboring East Asian countries and cultures, Western influences also shaped Taiwan mainly through trade and travel. Among others, the island has been a port of Jesuit boatmen and served as the administrative seat of imperial Chinese traders and Europeans alike. Being located in the South China Sea between the coasts of South and East Asia, the island “Formosa”, as the Dutch (1624–1662) and Spanish (1626–1642) called the island after the Portuguese name “Ilha Formosa”, became Japanese colonial territory from 1895 to 1945 and was ‘repatriated’ as part of the Republic of China in the aftermath of World War II (1939–1945). Owing to its favorable location, this Asian island has repeatedly been on the global political agenda of the great powers striving for influence over the past 150 years. Regardless of such challenges, Taiwan flourished into a vivid melting pot of political, social, and civil influences as well as ethnic groups, which has created a characteristic trait of facing global challenges with participation and innovation. Today, the strength for innovation and social inclusiveness of Taiwan appears as unique as its pioneering status among Asia in general and among Asian democracies in particular.

In brief, that is why the research group views Taiwan as the perfect case study for researching how Taiwan is facing global challenges in the past and in the presence of a new digital interconnected era with local innovation.

Over the last decades of creating an integrated industrial society, Taiwan has revealed its pioneering role. From the 1990s, Taiwan has emerged as a novel actor both in the regional East Asian context and in a globalizing world. When we consider how during the last thirty years, this 'Asian tiger' has been taking a growing role in the Pacific region, we will most likely see more and more evidently how Taiwan is imposing itself as a political, economic, and social pioneer of globalization. From the case of quickly reacting on the novel coronavirus and the successful containment of COVID-19 lung disease in 2020 to the widespread promotion of digital infrastructures and innovation hubs – just to name a few – this island is an Asian pioneer in digitalization and a role model for network societies of the twenty-first century. With the establishment of a digital ministry under Audrey Tang 唐鳳 (b. 1981, in office since 1 October 2016), the government has created new participatory and responsive forms of a delegative democracy; this form is also known as "liquid democracy" (*liudong shi minzu* 流動式民主). Among democracies, Taiwan's government issued one of the most future-oriented personal data protection regulations (*geren ziliao baohu fa* 個人資料保護法) that was revised and amended in late 2015 and is known under the English name "Personal Data Protection Act" or in short PDPA. This allows all Taiwanese citizens, for example, to inquire what personal information the government collects and stores.<sup>1</sup> Under a supportive legal and political framework, Taiwan's industry placed itself in the center of one of the most crucial ICT industries, where Taiwan is a pioneer in the production of semiconductors. As a think-tank study by Jan-Peter Kleinhans and Nurzat Baisakova in October 2020 figured, "simply because of the TSMC's [Taiwan Semiconductor Manufacturing Company] foundry business, the importance of



Taiwan for the semiconductor value chain cannot be overestimated”.<sup>2</sup> They also point out Taiwan’s strong presence in the fabless industry, an industry branch that is aware of the ecological challenges and necessities to adapt in order to secure the well-being of humanity. TSMC, for example, declared as the world’s biggest semiconductor maker, to use 100 percent of its power globally from renewable sources and by doing so “putting pressure on its rivals” as Mike Scott has reported on 27 July 2020 for *Forbes.com*.<sup>3</sup> Given this world-leading IT- & ICT-industry, Taiwan has also created both highly efficient channels for detecting disinformation and election manipulation as well as excellent cyber defenses within the administration. Taiwan is essential for the development of global digital transformation and does, therefore, pose one of the most intriguing case studies regarding the preparedness to encounter the challenges of global megatrends while shaping the development of innovation.

Taiwan presents itself as a forerunner in numerous fields, i.e., regarding the changes of the era of the Anthropocene or in terms of the civilizational condition of compressed modernity. Assumingly, Taiwan’s farsightedness led to many examples in which a political agenda or social trait became institutionalized, such as Amélie Keyser-Verreault claims regarding the *Yuezi Center* (月子中心).<sup>4</sup> With a population of 23.6 million composed of at least four ethnic groups living on 36,000 km<sup>2</sup>, there are also interesting pioneering aspects in the field of linguistic studies. By official counting, 84 percent would be counted as Taiwanese, while 14 percent of Taiwan’s population belong to mainland Chinese, and only two percent are regarded as Formosan or indigenous. Those figures, however, give little insight into the diversity of dialects and their impact on how challenges of the global megatrends are met. Thomas Fliß examines Taiwanese eco-poetry that has emerged since the first half of the twentieth century and analyses how poems in dialects, such as Taiwanese Minnan poems, in particular, interlink with the role of self-identification in times of major global shifts challeng-

ing the ontological foundation of national identity.<sup>5</sup> For the development of the pioneering characteristics of contemporary Taiwan, the study regarding the past is essential: Our Taiwanese authors present unique insights into the contested history. Hung-yi Chien uncovers archival material of the Japanese colonial time concerning “Education as the Engine of Modernity”.<sup>6</sup> In “Modernizing Chiayi: The Development of the Lumber Industry, 1914–1945”, Kuan-fei Chen researches the same period of time as Hung-yi Chien.<sup>7</sup> She examines the influence of the Japanese rule on establishing the lumber industry and urbanization in Taiwan. Quite puzzling from my outsider’s perspective, both contributions exemplify how the Japanese foreigners became a driver for Taiwan’s innovation and identity formation. Doubtless to say, global changes, such as facing megatrends, evoke adaptive strategies. A brief comparison regardless of the regime type describes how innovation functions as a coping strategy. Yet, the political framework for participation developed differently, and so may the outcome vary in its strength concerning sustainability and civil support.<sup>8</sup> In sum, the research interest of the present project centers on recurring dynamics of innovation and global megatrends.

The richness of perspectives and heterogeneous examples bring us as a team composed of different academic backgrounds to call for in-depth studies on Taiwan. Among single perspective research in the fields of history, social science or philosophy, and linguistics to further our academic knowledge, innovative research approaches in terms of interdisciplinarity with a cross-cutting perspective are needed for grasping the truly pioneering role of Taiwan’s current social and political development. Although there is a growing community of researchers interested in Taiwan studies, their interconnectivity could yet be strengthened. As the Taiwan Studies scholar Jens Damm stated in 2017, most of the studies in Germany have largely focused on historical descriptions or selected individual case studies, and rarely on the historical, cultural, or socio-political causes of Taiwan’s pioneering

role and performance.<sup>9</sup> Although single islands of academic research concerning Taiwan's identity, Taiwan's dilemma regarding international relations or contemporary Taiwan have been made public in the last two decades, e.g., the authors Chu Yun-han and Lin Jih-wen's analysis of Taiwan's political development in the twentieth century in regard of state-building, regime transformation and the construction of national identity (2001), Edward Friedman (2006) edited a comprehensive volume on Taiwan's special situation regarding China's rise including the question of participation in international organizations and Taiwan's geostrategic value for the Asia-Pacific region or the internationally renowned *Handbook of Contemporary Taiwan*, an endeavor accomplished by its editor Gunter Schubert (2016). Some might still argue that in Germany since the heyday of Taiwan studies in the 1980s, serious research gaps have emerged that have so far been inadequately addressed due to a lack of integrative and interdisciplinary approaches. Therefore, the project TAP (Taiwan as a pioneer), funded by the Federal Ministry of Education and Research (BMBF) in Germany, aims to provide the necessary complementary individual studies and several joint case studies in an interdisciplinary cross-perspective to close gaps across disciplines. The research group, in addition, aims to uncover insights from different angles and backgrounds to trace the path of becoming a pioneer within the group members' field of expertise and in regard to reaching out to other academic research communities, in which the focus of Taiwan promises to be beneficial. The joint projects prospect to combine perspectives of social science, history, and humanities alike for creating an added value by applying different methodologies of creating genuine knowledge, conducting surveys and interviews as well as presenting and reviewing selected literature and corpora. The spectrum of topics includes political science, sociology, literature, and cultural studies as well as history in order to support the transfer also to related subjects. As a common goal, the research group seeks to accomplish a manual for methods and methodology based on the interdisciplinary individual case stud-

ies for Chinese studies with a Taiwan focus. Such a manual could have a positive impact on the following students' generation and benefit teaching.

Today's academic progress lives on interdisciplinary research approaches. In the long run, the endeavor of the composed research group will hopefully support training a professionally focused and networked generation of sinologists and lead to a sustainable improvement in teaching and research activities. As empirical research and/or field research in small disciplines, such as Sinology, has become increasingly difficult due to the pandemic situation and political conditions of the last years and decades, strengthening our European and international ties is all the more important. Annual workshops in contrast to panel-based conferences shall facilitate in-depth dialogue among the invited researchers to map needs and commonalities. We consider that the research group with its focus on Taiwan studies fills a profile gap that emerged over several decades regarding international comparison. The focus on Taiwan in the research area of sinology also aims to expand the scientific and social knowledge of Asia as a region as well as of intra-Asian cooperation and conflict dynamics. As a matter of fact, the cross-perspective approach will also add a unique perspective and deeply rooted understanding of the People's Republic of China. The targeted findings thus provide up-to-date empirical data and evidence-based background information also for non-university decision-makers. The collaborative network can further develop recommendations and thus support political and economic decision-making. As a team, we hope to engage with the proposed project with Taiwan experts and a scientific community in order to gather and access empirical material and data from libraries, archives, and our fieldwork to enrich research and enable further studies on Taiwan. As a team, we are confident that the results obtained will have a lasting impact on the research activities of the small discipline as a whole and expand social knowledge on Asia in general.

## Notes

- 1 “Di er zhang” 第二章 (Chapter 2), 公務機關對個人資料指搜處理及利用 (“Data Collection, Processing and Use by a Government Agency”) of “Geren ziliao baohufa” 個人資料保護法 (“Personal Data Protection Act”), in: *Quanguo fagui ziliaoku* 全國法規資料庫 The Law & Regulations Database of The Republic of China (Taiwan), <https://law.moj.gov.tw/LawClass/LawAll.aspx?pcode=I0050021> (Chinese), <https://law.moj.gov.tw/ENG/LawClass/LawAll.aspx?pcode=I0050021> (English), issued on 30 December 2015 (104 年 12月30日) [last accessed 12-03-2022].
- 2 Kleinhans / Baisakova (2020).
- 3 Scott (2020). For further information, see also the company’s press release “TSMC Expands Renewable Energy Usage to Cut Carbon Emissions by More than 2 Million tons” (8 July 2020), [https://pr.tsmc.com/system/files/newspdf/attachment/NEWS\\_FILE\\_EN\\_4.pdf](https://pr.tsmc.com/system/files/newspdf/attachment/NEWS_FILE_EN_4.pdf) [last accessed 13-03-2022].
- 4 Keyser-Verreault (2022).
- 5 Fliß (2022).
- 6 Chien (2022).
- 7 Chen (2022).
- 8 Perkuhn (2022).
- 9 Damm (2017), 23–24.

## References

- Chien, Hung-yi (2022). “Education as the Engine of Modernity: Pioneers in Schooling”, [https://www.ruhr-uni-bochum.de/oaw/slc/taiwan/taiwan\\_melting\\_pot\\_and\\_innovation\\_hub.html](https://www.ruhr-uni-bochum.de/oaw/slc/taiwan/taiwan_melting_pot_and_innovation_hub.html) [last accessed 12-03-2022].
- Chen, Kuan-fei (2022). “Modernizing Chiayi: The Development of the Lumber Industry, 1914–1945”, [https://www.ruhr-uni-bochum.de/oaw/slc/taiwan/taiwan\\_melting\\_pot\\_and\\_innovation\\_hub\\_second.html](https://www.ruhr-uni-bochum.de/oaw/slc/taiwan/taiwan_melting_pot_and_innovation_hub_second.html) [last accessed 12-03-2022].
- Chu, Yun-han / Lin, Jih-wen (2001). “Political Development in 20th-Century Taiwan: State-Building, Regime Transformation and the Construction of National Identity”, *The China Quarterly* 165 (March 2001), 102–129.
- Damm, Jens (2017). “Taiwanstudien und -forschung in Deutschland”, *ASIEN* 144 (Juli 2017), 23–35.

**Fliß, Thomas Eduard** (2022). "Taiwanese Minnan Eco-poetry in the Era of Globalization and the Anthropocene", [https://www.ruhr-uni-bochum.de/oaw/slc/taiwan/taiwan\\_melting\\_pot\\_and\\_innovation\\_hub\\_fourth.html](https://www.ruhr-uni-bochum.de/oaw/slc/taiwan/taiwan_melting_pot_and_innovation_hub_fourth.html) [last accessed 12-03-2022].

**Friedman, Edward** (ed.) (2006). *China's Rise, Taiwan's Dilemmas and International Peace*. Politics in Asia Series. London / New York: Routledge.

**Keyser-Verreault, Amélie** (2022). "Modernizing Postnatal Care: Taiwan as Pioneer in the Professionalization of the Traditional yuezi", [https://www.ruhr-uni-bochum.de/oaw/slc/taiwan/taiwan\\_melting\\_pot\\_and\\_innovation\\_hub\\_third.html](https://www.ruhr-uni-bochum.de/oaw/slc/taiwan/taiwan_melting_pot_and_innovation_hub_third.html) [last accessed 12-03-2022].

**Kleinhans, Jan-Peter / Baisakova, Nurzat** (2020). "The Global Semiconductor Value Chain", [https://www.stiftung-nv.de/sites/default/files/the\\_global\\_semiconductor\\_value\\_chain.pdf](https://www.stiftung-nv.de/sites/default/files/the_global_semiconductor_value_chain.pdf) [last accessed 28-02-2022].

**Perkuhn, Josie-Marie** (2022). "Innovation as Coping Strategy for Facing Global Challenges", [https://www.ruhr-uni-bochum.de/oaw/slc/taiwan/taiwan\\_melting\\_pot\\_and\\_innovation\\_hub\\_fifth.html](https://www.ruhr-uni-bochum.de/oaw/slc/taiwan/taiwan_melting_pot_and_innovation_hub_fifth.html) [last accessed 12-03-2022].

**Schubert, Gunter** (ed.) (2016). *Routledge Handbook of Contemporary Taiwan*. London / New York: Routledge, Taylor & Francis Group.

**Scott, Mike** (2020). "Taiwan Commits To 100 % Clean Power, Pressuring Chipmaker Rivals To Follow Suit", *Forbes.com* (27.07.2020), <https://www.forbes.com/sites/mikescott/2020/07/27/tsmc-commits-to-100-clean-power-pressuring-chip-maker-rivals-to-follow-suit/> [last accessed 10-03-2022].

## MODERNIZING CHIAYI: THE DEVELOPMENT OF THE LUMBER INDUSTRY, 1914–1945

*Chen Kuan-fei*

At the turn of the twenty-first century, the conservation movement for old buildings in Chiayi 嘉義 in Central Taiwan reached an unprecedented climax in history. The movement, mainly directed by the local government with support from Chiayi residents, aimed to rediscover Chiayi's heritage against the backdrop of urban renovation. The Chiayi Sawmill 嘉義製材所 was one of the historical buildings under discussion. Established in 1914, it was the first modern sawmill with the latest machines and technologies imported from the United States to Taiwan. During its heyday, it was even praised as "the Greatest in East Asia" with the latest equipment and largest forest farm – Alishan (阿里山). In 1963, when the Nationalist government changed its forest policies from utilization to preservation, the sawmill was shut down. Since then, it has been abandoned, and the memories associated with it have faded away from public memory.

Chiayi was once a walled city and one of the significant centers of rice production in Taiwan. As Japan took over Taiwan after 1895, in the following fifty years, Taiwan underwent a dramatic transformation in every aspect of society, particularly in the economy and the utilization of space. In Chiayi, the opening of the Chiayi Sawmill and the introduction of the modern lumber industry changed the spatial and economic landscape of the city. Its establishment signaled the beginning of the golden age of forestry in Taiwan. However, the dynamics between the city and the new industry have been neglected in current scholarship, which has concentrated on investigating the mountains and the colonial management of the forest resources.<sup>1</sup> When the lumber industry was introduced into Chiayi, it created new economic infrastructures,



"The Wood Manufactory at Mt. Ari" (Alishan Zhicaisuo 阿里山製材所) was established in Chiayi city, 1914. Afterwards, it was called the Chiayi Sawmill.

Source: The National Taiwan Library.

such as processing stations, a transfer station, and auction markets for the processed trees. Chiayi won a reputation as a prosperous "lumber city" at the foot of Alishan. The history of the lumber industry in Chiayi city exemplifies the relationship between the utilization of the forest, the construction of infrastructures, and urban development.

### **Modernity in the Context of Forestry and the Use of Natural Resources**

As a borderland of empires, Taiwan was treated as the laboratory of innovation policies and technologies. Facing Taiwan, whose local customs and culture were different from mainland China or Japan, the authorities often needed to invent or try new ways that they could not





The Lumber Yard in Chiayi city 嘉義貯木場 (ca. 1930s).

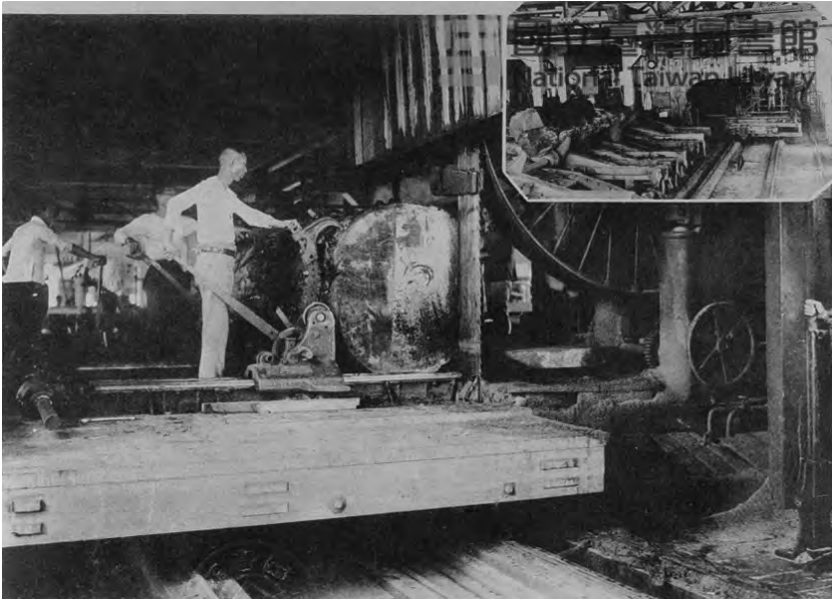
Source: The National Taiwan Library.

implement in the respective metropolises. Taiwanese history with its multiple layers also involved specific experiences of Taiwan's urban history. In the case of Chiayi, the geography and environment of the city and Alishan shaped the urban development and the rise of the lumber industry. For example, the location of the Chiayi Sawmill has resulted from a small tributary of the Niuchou River 牛稠溪 near the sawmill that could be used for the wood storage ponds. Based on the territory that the city possessed at the end of the nineteenth century, it is possible to analyze what factors and ideas affected officials' and residents' activities that then resulted in the transformation and expansion of urban space in the twentieth century.

The lumber industry offered new job opportunities that attracted people to move to this area, organized their new social circles of living

and religion. This sector of the economy reshaped the communities' composition in the cities as well. The loggers and their foremen, workers participating in the process of sawing and transportation, the officials who supervised the lumber industry, the timber merchants, and the families of the workers, employees, and entrepreneurs all lived around the factory. The production process and the formation of economic networks among these people could cause tensions among different ethnic groups who participated in this industrial endeavor – the Japanese, the Chinese, and the indigenous people, most of them were the Tsou.

With respect to the technology of lumber processing, Japanese colonial officials played the role of intermediaries who introduced the latest Western technology into Taiwan and made accommodations to the local environment. This process of integration or acculturation in Taiwan represents a specific linkage of localization and globalization, creating a nexus that involved colonial governance, modern science, and urbanization. This type of technology transfer was also applied in other regions of the lumber industry. It offers comparative perspectives to study the relationship between the lumber industry and space in Taiwan, Japan, and Southeast Asia.<sup>2</sup> The case of the lumber industry also reminds us that besides housing construction, wood was a crucial resource for industries such as underground mining, telecommunications in the form of telegraph poles, and railroad construction, such as crossties. On the one hand, this research can enhance our understanding of interconnections between industrial sectors. On the other hand, for the preservation of industrial heritage, the lumber industry can serve as an example of and stimulate reflection on the previous usage or, as can be argued, abuse of wood resources. It is a case in point of the manner in which societies remember their heritage of exploiting natural supplies for the purposes of industrialization. The counter-initiatives to this larger trend consist in the preservation both of forests and of the industrial sites that were built to exploit those



A Nine-Foot Band Mill in Chiayi Sawmill (1928).

Source: The National Taiwan Library.

resources. In this respect, the Ruhr area, once one of the largest heavy industry regions of Europe, can serve as a model where industrial facilities have been successfully turned into cultural capital.

### **Chiayi's Lumber Sector and Urban History**

Cities are the nodes of dynamic connections. In William Cronon's well-known book, *Nature's metropolis: Chicago and the Great West*, he examines the rise of Chicago and how the city's expansion fueled the westward movement of the American frontier and its influence on the societal types of American cities that evolved as a result. Chicago was one of the cities that was transformed from a settlement to a metropolis in the course of the development of the lumber industry in the late

nineteenth and early twentieth century. The demand for wood during the American western movement had caused Chicago to become a 'lumber city'.<sup>3</sup> William Cronon's critical discussion about Chicago provides a holistic view to think about the similarities and dissimilarities of the development of Chiayi city and the relationship between Chiayi and its surrounding countryside, especially the mountain area.



A Shay Locomotive with a Log Train at Alishan (1928).

Source: The National Taiwan Library.

Government investigation reports and minutes by the Government-General of Taiwan and the Forestry Bureau of the Republic of China (Taiwan) as well as the research papers by scholars in the Agriculture and Forestry College of the Taihoku Imperial University founded in 1928 help us understand the process of policy decisions. In addition, personal accounts recording the private reminiscences, images, and events that occurred in Chiayi, including those in literature and arts produced by the residents and migrants, but also the authorities' propaganda through education and tourism to show the progress of modern industry, form the basis for examining the economic and social activities, but also the feelings and multiple historical memories on modernization and industrialization.

### **Chiayi City, the Countryside, and Colonial Modernity**

To write the history of a city's production and marketing system, it is important not to perceive the urban space in isolation. Throughout the history of the industry, we find that city and countryside were tightly bound in an efficient system where each was equally dependent upon the other. Before the twentieth century, Chiayi had already emerged as part of an interdependent process in which a key feature was the agricultural development of the surrounding rural area. Under Japanese colonial rule, the lumber industry worked as the connection between the plains and the mountains. Thus, the case of Chiayi and its lumber industry will improve the understanding of the role of the city in Taiwan, the urban history of the Japanese Empire, and the world.

Under Japanese rule, Taiwan underwent the two major historical processes of colonization and modernization. The authorities introduced modern institutions, facilities, and technologies into the colony while instituting political domination and economic exploitation. The exploration of Chiayi city will improve our comprehension of the relationship between the development of industry and urban planning. In such

a study, it can be shown how colonial modernity, migrants, and gendered space worked in urban Taiwan. Colonial industrialization was one of the engines to accelerate modernization.

Contemporary Taiwanese society grapples with multiple post-colonial tensions. In the past four centuries, each colonial government, from the Dutch, the Qing, Japan to the KMT-led Republic of China, has created its interpretations about the past to enhance its rule over Taiwan. The results have changed urban layouts through decisions to either demolish or preserve historic buildings and sites. Likewise, remembrance or forgetfulness of cultural and technical transfer of previous historical phases keeps on shaping Taiwan's identity until our present days. In other words, the multiple colonial histories of Taiwan and the varying interpretations of material and immaterial heritage result in a melting pot of cultural, institutional, and technical memories.

## Notes

- 1 Li (2001); Hung (2015).
- 2 Totman (1985).
- 3 Cronon (1991).

## References

**Chen Kuan-fei 陳冠妃** (2019). *Jiayi zhicaisuo diaocha yanjiu ji zailiyong jihua'an diaocha baogao* 嘉義製材所調查研究及再利用計畫案調查報告 (Report of Chiayi Sawmill Research and Reuse Project). Jiayi: Linwuju Alishan linye tielu ji wenhua zichan guanlichu 林務局阿里山林業鐵路及文化資產管理處 (Alishan Forest Railway and Cultural Heritage Office).

**Chen Kuan-fei 陳冠妃** (2020). "Jiayi shi bei de sanjiaodi, cuisheng yi zuo fanrong zhi cheng: Jiayi zhicaisuo de qianshi jinsheng" 嘉義市北的三角地，催生一座繁榮之城：嘉義製材所的前世今生," on StoryStudio website, 15-06-2020, <https://storystudio.tw/article/gushi/chia-yi-the-timber-city/> [last accessed 01-01-2022].

**Cronon, William** (1992). *Nature's Metropolis: Chicago and the Great West*. New York: W.W. Norton.

Hung, Kuang-chi (2015). "When the Green Archipelago Encountered Formosa: The Making of Modern Forestry in Taiwan under Japan's Colonial Rule (1895–1945)", in: *Environment and Society in the Japanese Islands: From Prehistory to the Present*, ed. by Philip C. Brown and Bruce Batten. Corvallis: Oregon State University Press, pp. 174–193.

Li Wen-liang 李文良 (2001). *Diguo de shanlin – Rizhi shiqi Taiwan shanlin zheng-ceshi yanjiu* 帝國的山林 – 日治時期臺灣山林政策史研究 (The Mountain and the Forest of the Empire – A Study on the History of Taiwan's Mountain and Forest Policy under the Japanese Rule). Ph.D. Thesis, Department of History, National University of Taiwan.

Totman, Conrad D. (1985). *The Origins of Japan's Modern Forests: the Case of Akita*. Honolulu: Center for Asian and Pacific Studies, University of Hawaii.

## Photographs

The National Taiwan Library (Guoli Taiwan tushuguan 國立台灣圖書館) (2019). Rizhi shiqi qikan yingxiang xitong 日治時期期刊影像系統. [open access; last accessed 01-01-2022].

The Wood Manufactory at Mt. Ari (Ali) 阿里山製材所, Taiwan shashinjō 臺灣寫真帖, <http://stfj.ntl.edu.tw/cgi-bin/g32/gswweb.cgi?o=dwensan&s=id=%22F070192%22.&searchmode=basic> [open access; last accessed 01-01-2022].

Lumber Yard in Chiayi City 嘉義貯木場, Taiwan shashinjō 臺灣寫真大觀, <http://stfj.ntl.edu.tw/cgi-bin/g32/gswweb.cgi?o=dwensan&s=id=%22F080207%22.&searchmode=basic> [open access; last accessed 01-01-2022].

A Nine-Feet Band Mill in Chiayi Sawmill 九呎帶鋸, Arisan to Shinkōsan shashinjō 阿里山と新高山寫真帳, <http://stfj.ntl.edu.tw/cgi-bin/g32/gswweb.cgi?o=dwensan&s=id=%22F091829%22.&searchmode=basic> [open access; last accessed 01-01-2022].

A Shay Locomotive with a Log Train at Alishan 運材列車通過橋樑, Arisan to Shinkōsan shashinjō 阿里山と新高山寫真帳, <http://stfj.ntl.edu.tw/cgi-bin/g32/gswweb.cgi?o=dwensan&s=id=%22F091840%22.&searchmode=basic> [open access; last accessed 01-01-2022].





## **EDUCATION AS THE ENGINE OF MODERNITY: PIONEERS IN SCHOOLING**

*Chien Hung-yi*

### **Modernity in Taiwan**

Until the sixteenth century, the island of Taiwan was the homeland of Austronesian peoples.<sup>1</sup> The indigenous people of Taiwan do not have a native writing system, and the neighboring civilizations paid little attention to the island. In the critical era when the world had already entered the early modern period, most parts of the globe were linked by an expanding network of communication. The Chinese, the Japanese, and the Europeans on the Asian seas began to write their observations about the isolated island of Taiwan and even colonized it. Taiwan's entry into history is a phenomenon of globalization in the early modern era.

Modernity as such is a complex phenomenon, incorporating different concepts in different eras and places. If the colonization that the Europeans instituted in the Americas is a feature of early modernity, then the Hokkien and the Hakka from China colonized Taiwan. These groups arrived in Taiwan between the seventeenth and the nineteenth century, and their descendants form the majority of the population in contemporary Taiwan. However, if modernity is defined as Western lifestyle, technology, and institutions, this did not fully begin in Taiwan until the Qing Empire ceded Taiwan to Japan in 1895. The modernity introduced by colonialism is called colonial modernity.<sup>2</sup>

## The Normal School at Taihoku (Taipei)

In Taiwan, Western-style education is a phenomenon of colonial modernity. Modern schools and teachers changed Taiwan, altering it from the Qing Empire's island frontier into a modern community that could assert its unique identity in the global society. The story of this century-long transformation begins with the Normal School 國語學校, the first modern school in Taiwan.

To assimilate the Taiwanese into the Japanese Empire by means of the Japanese language, the colonial government established primary schools across Taiwan and instituted the Normal School in Taihoku (today's Taipei).<sup>3</sup> Established in 1896, the Normal School was one of a few secondary schools in the early colonial era. It was a pioneering educational institution in many aspects. It offered Taiwanese students a multidisciplinary education at a modern standard and frequently held extra-curricular activities, such as excursions, exhibitions, and sports.<sup>4</sup> These were all new to Taiwanese students. The Normal School also recruited Japanese teachers to teach Taiwanese children. To orient them toward Taiwan, the Normal School also taught these Japanese teachers essential Taiwanese Hokkien. This marks the first time that Taiwanese Hokkien was taught in a modern curriculum, and it was a crucial starting point in the history of the Taiwanese Hokkien language.<sup>5</sup>

The Taiwanese students at the Normal School were also pioneers. They were the first generation to adopt modern education and to reconcile the traditional and modern education systems in Taiwan. They usually entered *tsu-pang* 書房, or private traditional basic writing schools, to learn to read Chinese characters, to read classical China's elementary texts, and to write correspondences. These were essential skills for carrying on trade in pre-modern Taiwanese society. However, these students were also aware that learning Japanese in a modern school



(藏所課木土府督總) 室教校學語國

A classroom of the Normal School at Taihoku (1908).

Source: Ide (1997 [1937]), front matters.

was the only way to succeed in colonial Taiwan. After acquiring sufficient Chinese skills in *tsu-pang*, they transferred to Japanese-taught primary schools before the age of 15 to continue their education under the modern curriculum. The best-performing students would then enter the Normal School, one of the highest educational institutions available to Taiwanese youths in the early colonial era.<sup>6</sup>

Many graduates of the Normal School went on to become teachers in primary schools and spread modern ideas through their teaching. Some of them advanced into social elites who manifested a strong influence on Taiwanese society and struggled for civil rights in the colonial era. Some even extended their influence into the post-war era.<sup>7</sup> These were the pioneering meritocratic elites in modern Taiwanese society.



A girls' classroom of the Affiliated School of the Normal School (1908).

Source: Ide (1997 [1937]), front matters.

The Normal School was exclusively a boys' school, but its affiliated schools enrolled girls as well. One of these affiliated schools later developed into the most prominent secondary school for girls in colonial Taiwan. Some of its graduates also devoted themselves to work in primary education, thus becoming the pioneering female professionals in Taiwan.<sup>8</sup>

### **The Institutionalization of the Normal Education in Taiwan**

The Normal School was renamed the Taihoku Normal School 臺北師範學校 in 1919. Over the course of the following nine decades, the name of the Taihoku/Taipei Normal (School/College) had a renowned place in Taiwan's education system. Hundreds of teachers were trained there to eventually work in primary schools from the



Students of Taipei Normal observing model teaching in a primary school (ca. 1950s).

Source: National Taipei University of Education.

Japanese colonial era to the post-war era. At the end of World War II, Taiwan changed hands from the Japanese to the Chinese, which also meant a change of language, and Taihoku became Taipei. The students and graduates of Taihoku Normal adapted themselves to the post-war situation by learning Mandarin Chinese. The post-war Taipei Normal was also transformed into a center to promote this new official language.<sup>9</sup>

Despite the change in language, the strict discipline of Taipei Normal did not change much in the post-war era. All students were required to live in the dormitory, which was under militarized control until the late



Test of basic competences: storytelling.

Source: National Taipei University of Education.

1980s. The influence of this discipline on Taiwanese society requires further investigation. Moreover, Taipei Normal contributed to an increase in female teachers in primary schools. The number of female students and graduates increased steadily throughout the post-war era, and this had large effects on the gender distribution of teachers in primary education by the late twentieth century.

Educational reform in the 1990s significantly changed Taipei Normal. Normal institutes were no longer dominant in the training of teachers, and they all struggled to transform into comprehensive universities to maintain their competitiveness in the higher-education market. Thus, National Taipei Normal College 國立臺北師範學院 became a comprehensive institute with emphasis on education and renamed itself National Taipei University of Education 國立臺北教育大學 in 2005.

## A Longitudinal History of Taipei Normal

The flourishing discipline of Taiwan studies has, since the 1980s, produced many scholarships on Taipei Normal, its graduates, and other issues relevant to this institution. However, a longitudinal history of Taipei Normal that incorporates the state-of-the-art of Taiwan studies has not yet appeared. Professor Ho I-lin 何義麟 and I published an illustrated history of Taipei Normal in 2013, but this is far from a complete treatment.<sup>10</sup> Although Patricia Tsurumi introduced the topic of education in Taiwan during the Japanese colonial period, she paid little attention to the importance of individual schools.<sup>11</sup> The international academic community is not yet fully aware of the importance of Taipei Normal in modern Taiwan.

My planned work is to fill this gap. Taking account of the Normal School / Taipei Normal as an apparatus of Taiwan's modernization, I will trace how the development of this educational institution and its graduates established the education system of modern Taiwan, which transformed the island into a meritocratic society in the modern sense. In this new society, the Taiwanese sought to develop an education for promotion in the social hierarchy, for mobility in the modernizing world, and even for the struggle for cultural enlightenment, liberation, and civil rights. Scientific concepts, such as hygiene, modern agriculture, and precise time-keeping, entered ordinary Taiwanese minds through this school.<sup>12</sup> These transformations had led Taiwan to become a society distinct from its Chinese neighbor by 1945.

After World War II, the Nationalist government inherited the existing education system and utilized it to control bodies, languages, and thoughts. Taipei Normal became a model to perform such holistic control. Beyond the militarized dormitory life, the administration of education also included authoritarian agendas, such as developing a national spirit and bringing civil-military integration into the other



The parade of Taipei Normal's students (ca. 1950s).

Source: National Taipei University of Education.

normal schools' disciplinary education.<sup>13</sup> Students at Taipei Normal internalized these disciplinary tactics as habits, and when they became primary school teachers, they passed down this harsh discipline to the next generation. This phenomenon created docile bodies to serve an authoritarian regime. Although militarized discipline is a dark side in the history of Taipei Normal, it is a feature of modernity particular to the Cold War era. An investigation of its legacy in the democratized Taiwan is worth further consideration.

In short, the history of Taipei Normal embodies changes of the Taiwanese society in the course of nation-building after Taiwan's separation from the Qing Empire. Due to its relationship to Taiwan's modern history, a detailed longitudinal history of Taipei Normal will be a gateway to understanding the modernization of the island state.



## Pioneers in Schooling

To the joint project “Taiwan als Pionier,” the history of Taipei Normal will supplement a historical background to each postdoctoral researcher’s topic. With the curricula, graduates were trained to lay down the foundation of Taiwan’s scientific notions, and they contributed to the formation of a modern society during the first half of the twentieth century. Moreover, the experiences of switching twice to new rulers’ languages also left a strong impression on these intellectuals’ minds, and their literary creations represented these impressions. Nevertheless, because language education has always been at the core of Taipei Normal’s curriculum, the transformed National Taipei University of Education is adapting this legacy to fulfill the demands of teaching languages to different target groups in Taiwan. The challenges include instruction in national languages (such as Taiwanese Hokkien, Hakka, and Formosan indigenous languages) and teaching new immigrants’ mother tongues to students. Such transformations echo the agenda to incorporate Taiwan into the developing new order in the Indo-Pacific region. Now is the time to reflect on the history of Taiwan’s modernization, and Taipei Normal is its embodiment.

## Notes

- 1 Bellwood / Fox / Tryon (1995), 1.
- 2 Chang (2014), 133–164.
- 3 Chen (2006), 69–104.
- 4 Hsieh (2007), 175–239.
- 5 Chen (1995), 1–21.
- 6 Chien (2019), 6–15; Chien (2021).
- 7 Wu (1983), 204–225; Wu (2008), 83–139.
- 8 Yu (1992), 1–61.
- 9 Yeh (1993), 75–98.
- 10 Ho / Chien (2013, 2016).
- 11 Tsurumi (1977).
- 12 Lu (1998), 67–81.
- 13 Kuo (2010), 69–87; Hwang (2009), 121–163.

## References

**Bellwood, Peter / Fox, James J. / Tryon, Darrell** (1995). "The Austronesians in history: common origins and diverse transformations", in: Peter Bellwood / James J. Fox / Darrell Tryon (ed.). *The Austronesians: Historical and Comparative Perspectives*. Canberra: Australian National University, 1–16.

**Chang Lung-chih 張隆志** (2014). "Colonialism and modernity in Taiwan: reflections on contemporary Taiwanese historiography", in: Susanne Weigelin-Schwiedrzik (ed.). *Broken Narratives*. Leiden: Brill, 133–164.

**Chen Heng-jia 陳恆嘉** (1995). "Yici zhengshi er wanzheng de Taiwan yuwen jiaoyu jingyan: kan riju shidai de Taiyu jiaoyu jiantan yu Taiwan wenxue de guanxi 一次正式而完整的台灣語文教育經驗：看日據時代的台語教育兼談語台灣文學的關係。" Taiwan Wenxue Yantaohui 台灣文學研討會, Tamsui Institute of Industrial and Business Administration.

**Chen Pei-feng 陳培豐** (2006). *Tonghua De Tongchuang Yimeng: Rizhi Shiqi Taiwan De Yuyan Zhengce, Jindaihua Yu Rentong 同化的同床異夢：日治時期臺灣的語言政策、近代化與認同*. Taipei: Rye Field Publications.

**Chien Hung-yi 簡宏逸** (2019). "Guohong hansheng: shuangyu duxie rencai yaolan de Guoyuxuexiao 國覺漢聲：雙語讀寫人才搖籃的國語學校", in: Chien Hung-yi 簡宏逸 (ed.). *Guohong Hansheng: Taiwan Zongdufu Guoyuxuexiao Hanshiwen Xuan 國覺漢聲：臺灣總督府國語學校漢詩文選*. Taipei: Cite E-Printing Co. Ltd, 6–15.

**Chien Hung-yi 簡宏逸** (2021). "Straddling the fence: how Taiwanese students reconciled traditional Chinese education and modern Japanese education during the early phase of Japanese colonial rule." The 12th International Convention of Asia Scholars (ICAS 12), Kyoto, Japan.

**Ho I-lin 何義麟 / Chien Hung-yi 簡宏逸** (eds.) (2013). *Tushuo Taipei Shifan Xiaoshi 圖說臺北師範校史*. 1st ed., Taipei: Wunan.

**Ho I-lin 何義麟 / Chien Hung-yi 簡宏逸** (eds.) (2016). *Tushuo Taipei Shifan Xiaoshi 圖說臺北師範校史*. 2nd ed. Taipei: Wunan.

**Hsieh Ming-ju 謝明如** (2007). "Rizhi shiqi Taiwan Zongdufu Guoyu Xuexiao zhi yanjiu (1896–1919) 日治時期臺灣總督府國語學校之研究 (1896–1919)." Master thesis, Department of History, National Taiwan Normal University.

Hwang Jinlin 黃金麟 (2009). *Zhazheng, Shenti, Xiandaixing* 戰爭、身體、現代性. Taipei: Linking Publishing Company.

Kuo Peng-chi 郭彭淇 (2010). "Zhanhou Taiwan zhongdeng xuexiao xunyu zhidu zhi tantao: yi shifan xuexiao weili 戰後臺灣中等學校訓育制度之探討：以師範學校為例." Master thesis, Social Science Education Department, National Taipei University of Education.

Ide, Kiwata 井出季和太 (1997 [1937]). *Taiwan Chiseki Shi* 臺灣治績志. Reprint ed. Taipei: SMC.

Lu Shao-li 呂紹理 (1998). *Shuiluo Xiangqi: Rizhi Shiqi Taiwan Shehui De Shenghuo Zuoxi* 水螺響起：日治時期台灣社會的生活作息. Taipei: Yuan-Liou Publishing.

Tsurumi, E. Patricia (1977). *Japanese Colonial Education in Taiwan, 1895–1945*. Cambridge, MA: Harvard University Press.

Wu Wen-Hsing 吳文星 (1983). *Riju Shiqi Taiwan Shifan Jiaoyu Zhi Yanjiu* 日據時期臺灣師範教育之研究. Taipei: Graduate Institute of History, National Taiwan Normal University.

Wu Wen-Hsing 吳文星 (2008). *Rizhi Shiqi Taiwan De Shehui Lingdao Jieceng* 日治時期臺灣的社會領導階層. Taipei: Wunan.

Yeh Lung-yen 葉龍彥 (1993). "Taiwan guangfu chuqi de shifan jiaoyu (1945 zhi 1949) 台灣光復初期的師範教育 (1945至1949)." *Taiwan Wenxian* 臺灣文獻 44(1), 75–98.

Yu Chien-ming 游鑑明 (1992). "Riju shiqi de Taiji nüjiaoshi: yi gongxuexiao weili 日據時期的臺籍女教師：以公學校為例." Riju Shiqi Taiwanshi Guoji Xueshu Yantaohui 日據時期台灣史國際學術研討會, Taipei.



## **TAIWANESE MINNAN ECO-POETRY IN THE ERA OF GLOBALIZATION AND THE ANTHROPOCENE**

*Thomas Eduard Fliß*

### **Introduction**

Concomitant to the era of the Anthropocene, our current world is in the rapid process of globalization. Although the exact beginning of both historical periodizations is hard to determine and sometimes disputed, they have accentuated their speed in the second half of the twentieth century. Both have a great impact on our lives, with globalization increasing global interactions and integration among people, companies, and governments, resulting in a stimulation of international trade and the exchange of ideas, beliefs and culture; the Anthropocene reflects the tremendous effects of human actions upon our earth. Those effects are of geological as well as of biological nature, like biodiversity, biogeography, climate, stratigraphy, etc.

From a geographical perspective, Taiwan is a rather small island and state. Here, the effects and phenomena of both globalization and the Anthropocene are very obvious. In terms of globalization, there are countless international trading transactions as well as capital and investment movements, an increasing migration movement from Southeast Asian countries, and the progressive dissemination of knowledge through public resources and public internet access in an open society. But there are also negative impacts, like the disappearance of local ancestral and indigenous languages and cultures.

In Taiwan, for example, we can observe that the usage of Taiwanese Minnan, to a higher extent Hakka and even more Taiwan's Austronesian languages have diminished over time, particularly in younger age

groups.<sup>1</sup> Reasons for this could be the mass media, social media, and Taiwan's educational system, in which Mandarin is by far the dominating language. The diminution of language usage or even its extinction (i.e., some of the Austronesian languages) goes hand in hand with the disappearance of its corresponding culture. But at the same time as the Taiwanese people are facing these problems, there is also a rising consciousness about the situation, protection, and promulgation of these languages and cultures (although the political conflict with China might be another factor for this). This shows itself in the establishment of native language classes in school (*Xiangtu yuyan jiaoxue kecheng* 鄉土語言教學課程), Chinese classes (*Guowen ke* 國文課) in the university using non-Mandarin literature and other efforts by the Taiwanese government and people to rescue and preserve their ancestral languages and cultures.

In terms of the Anthropocene, the human influence leaves obvious marks in air and water and on land: a serious level of fine particle danger occurs in the vicinity of industrial areas or (coal) power plants like Taichung, Tainan, and Kaohsiung (a part of those hazards is also due to cross-border pollution from China); destruction of biomes due to intensive mass animal farming and industrial waste, e.g., pig farms, fish farms, and industries; soil erosion like mudflows and landslides, e.g., those which happened during the typhoon Morakot: devastating regions of southern Taiwan and even burying an entire town under its mud.

These environmental impacts and changes are not going unnoticed by the Taiwanese population and besides public demonstrations, rallies, and reception in the media, such environmental, cultural, and language-related consciousness naturally reveals itself in Taiwanese literature like poetry, novels, etc. To better understand the situation, poetry written in Taiwanese Minnan is particularly relevant, because besides its rising importance mentioned above, it is also the most uti-

lized language after Mandarin and makes up the mother tongue, especially of the middle-aged and elderly population.

## Emergence and Development of Taiwanese Eco-Poetry

The evolution of Taiwanese eco-poetry can be divided into two phases: first, the origination and second, the blossoming.<sup>2</sup> According to Bai Ling et al., the emergence of Taiwanese eco-poetry can be traced back to the year 1935 when the poet Wu Xinrong 吳新榮 (1907–1967) wrote a poem in Japanese in which he decried the air pollution caused by heavy industry on the one hand, and the intrusion of capitalism and the Japanese colonial government on the other hand.<sup>3</sup>

Beginning in the 1960s, some scattered but important eco-poetry was written in the Taiwanese New Poetry circle.<sup>4</sup> These and other eco-poems written in Mandarin appear sporadically in poetry periodicals until the 1980s.

It was not until the 1980s that the first series of eco-poetry works was published. This series contained thirteen poems which appeared as a special issue in the *Shixue Yuezhi* 詩學月誌 of the year 1981. This issue was titled *Shengtai – Ziran de huhan* 生態·自然的呼喊 “Ecology – the Outcry of Nature”. Its main editor, Li Kwei-hsien (Li Kuixian) 李魁賢 (b. 1937), mentioned in the afterword that poets should strive from their inner heart and show sympathy to all that is material in the world and subsequently pay attention to this variation and mutation, which would then (somehow) open space for the long-run development of national culture. With this afterword, Li opened up a conceptual path for the creation of eco-poetry.<sup>5</sup>

Only three years later in June 1984, the renowned poet and writer Lin Chi-yang (Lin Qiyang) 林淇養 (b. 1955), known by his pen name Hsiang Yang (Xiang Yang) 向陽, gathered 22 poets to create 24 eco-poems for

the column *Shengtai shi – Sheying zhan* 生態詩 · 攝影展 “Eco-poetry – a Photographic Exhibition” in the supplement of the *Zili Wanbao* 自立晚報.<sup>6</sup> Hsieh San-chin (Xie Sanjin) 謝三進 subsumes that there are three main argumentative points in these poems: first, criticism against humanity for polluting the environmental ecology; second, pondering about the possibility of an equilibrium between humans and nature, perceived mainly in a moralistic manner; third, the social aspects and characteristics of poetry.<sup>7</sup> According to these three main points and the research by Hsieh San-chin, the definition of Taiwanese “eco-poetry” consists of five main topics.<sup>8</sup> First, there is reflection about the living quality of human settlements like cities and villages; second, nurture of the natural ecology system and animate beings; third, writing about experiences with nature while close to it; fourth, observation of animated and unanimated beings; and fifth, thinking and imagination about the future life environment of humans and other living beings. According to Hsieh, the publications of 1981 and 1984 mark the emergence of Taiwanese eco-poetry.

In the subsequent years of the 1980s, the lifting of martial law in Taiwan, the development of industrialized and heavily polluted cities, plus the awakening of environmental consciousness led to a surge of poetic works, and over the past thirty years they have accumulated to a considerable fruitful outcome. Among the authors of these poems, there are both older and younger poets. For example, the older ones like Chen Hsiu-hsi (Chen Xiuxi) 陳秀喜 (1921–1991), Yin Di 隱地 (b. 1937), Li Kwei-hsien 李魁賢 (b. 1937) and younger poets such as Chen Ke-hua (Chen Kehua) 陳克華 (b. 1961), Hung Hung (Hong Hong) 鴻鴻 (b. 1964) as well as Wang Tsung-jen (Wang Zongren) 王宗仁 (b. 1970). In their poems, they all show intensive concern for everything that lives and exists on our planet, regardless of whether it is in Taiwan or far away beyond the horizon.



## Taiwanese Minnan Eco-Poetry and Its Forms of Appearance and Characteristics

Besides Mandarin, the second important language in Taiwan is Taiwanese Minnan. Its literature is comprised of several different genres, i.e., oral literature like proverbs and sayings, riddles, (pop) songs, *koa-á* (*Gezai*) 歌仔 and *koa-á-hì* (*Gezaixi*) 歌仔戲, and written literature such as novels and poems. Although the amount of Taiwanese Minnan poetry is by far not as extensive as that written in Mandarin, Taiwanese Minnan (and also the other languages) play a special role with regard to the impact of globalization and the reception of the Anthropocene by writers and the general population because of its role in cultural self-identification. In this way, many Taiwanese Minnan poems not only describe nature or complain about the impact and damage caused by humanity but also preserve the Taiwanese language and its culture. Two poems of Siau Lah-jih (Xiao Pingzhi) 蕭平治 follow as examples.

The first poem<sup>9</sup> *O'-bīn-lā-pue bīn o'-o'* 烏面 *lā-pue* 面烏烏 from the year 2005 is about the black-faced spoonbill:<sup>10</sup>

Characters and Romanization	Romanization only
烏面 <i>lā-pue</i> 面烏烏,	<i>O'-bīn-lā-pue bīn o'-o'</i> ,
Tī七股海邊 <i>á bóng</i> 撈 <i>bóng-ho</i> ,	Tī Chhit-kóhái-pi <sup>n</sup> -á bóng <i>lā bóng ho</i> ,
摸若有, 頭 <i>lê-lê</i> ,	Bong <i>nā ū</i> , <i>thâu lê-lê</i> ,
摸若無, 飛一下去別位 <i>chhoē</i> .	Bong <i>nā bô</i> , <i>poe--chit-ē khi pát-uī chhoē</i> .
免怨嘆海埔地 <i>siu<sup>n</sup> 狹</i>	<i>Bián oàn-thàn-hái-po'-tē siu<sup>n</sup> êh</i> ,
你 <i>kám</i> 知?	<i>Lí kám chai?</i>
咱台灣, 自然 <i>suí ê</i> 所在已經無 <i>chē</i> .	<i>Lán Tâi-oân, chū-jiân suí ê só-chhài í-king bô chē</i> .

### English Translation

The black-faced spoonbill with its black face  
stirs and calls tentatively at the coast of the Chhit-kó region,

When it touches something, its head goes down and plows,  
When it touches nothing, it flies quickly to another place and searches [again].  
No need to complain that the mudflat is too narrow,  
Did you know?  
In Taiwan, places with natural beauty are not many anymore.

This poem mainly depicts the black-faced spoonbill, which is a threatened bird species in eastern Asia, by describing its characteristics while foraging, but the last lines also express dissatisfaction about its disappearing natural habitat. The black-faced spoonbill has a protected wintering site in Taiwan in the Qigu (Chhit-kó) 七股 region of Tainan: the Qigu Black-faced Spoonbill Reserve (*Qigu Heimian Pilu bao-huqu*) 七股黑面琵鷺保護區.<sup>11</sup> Based on the number of birds resting there every year from October till May, it is one of the most important wintering sites for this species in the world.



A black-faced spoonbill photographed at Niigata, Japan.

Source: Cp9asngf.

Although Taiwanese Minnan eco-poetry can complain about environmental issues like the poem above, it can also simply portray the living habitat of an animal, like the poem from *Siau Lah-jih* below from 2005.<sup>12</sup>

Characters and Romanization	Romanization Only
尖頭 á 尖頭 á 頭尖尖,	Chiam-thâu-á chiam-thâu-á thâu chiam-chiam,
頭殼尾頂毛 chhàng-chhàng,	Thâu-khak bóe-téng m̄ chhàng-chhàng,
Ài 食果子, 花蜜, kap 蟲.	Ài chiáh kóe-chí, hoe-bit, kap thâng.
樹 á 尾頂 teh 活動,	Chhiū-á-bóe-téng teh oáh-tāng,
跳, 飛, 倒吊, 倒 kau, bē 翰猴,	Thiàu, poe, tò-tiàu, tò-kau, bē-su kâu,
足愛 招伴 做 siū 生 thòà <sup>n</sup> ,	Chiok ài chio-phōa <sup>n</sup> chò-siū se <sup>n</sup> -thòà <sup>n</sup> ,
互相照顧, 感情相透.	Hō-siong chiàu-kò; kám-chhêng sio-thàu.

#### English Translation

Taiwan yuhina,<sup>13</sup> Taiwan yuhina, has a pointed head,  
 With the feathers on the top of his head disheveled,  
 He likes to eat fruits, nectar, and insects.  
 He is active on the ends of the tree [branches],  
 Jumping, flying as well as hanging and clinging upside down, not less than an ape.  
 He really likes to invite partners to nest and breed,  
 Watching out for each other, [their] feelings are connected together.

In the above poem, the distinctive appearance and habitat of the Taiwan *yuhina*, also known as the Formosan *yuhina*, is described quite vividly. This species is a small songbird endemic to Taiwan, which lives in hill forests at lower and medium elevations of 1,000 to 3,000 m above sea level while moving between lower and higher altitudes depending on the temperature and the season. It is the only bird species in Taiwan that nests, breeds, and feeds together with several other bird couples.

From the poems above, we can see examples of the different appearances and purposes of Taiwanese Minnan eco-poetry. While both de-



A pair of Taiwan *yuhina* photographed at the Dasyueshan National Forest.

Source: Francesco Veronesi.

scribe bird species extant in Taiwan, the first poem also incorporates complaints about Taiwan's environmental situation, thus connecting the descriptive part with an environmentally-related purpose. The second poem does not deliver such a message and just describes the living habitat of a bird species in Taiwan. However, since this species can only be found in Taiwan, it emphasizes the particularity of its wild-life and so raises the consciousness and attention to it. Lastly, both

poems are written in Taiwanese Minnan, so they also preserve and pass on the Taiwanese Minnan names for these birds, which differ very much from the Mandarin.

## Notes

- 1 Huang (2008). Taiwan is a multilingual environment, which is made up mainly of Mandarin, closely followed by the older languages Taiwanese Minnan and Hakka as well as several Austronesian languages.
- 2 Bai Ling / Hsiao Hsiao / Luo Wenling (2012).
- 3 The original Japanese title is *entotsu* 煙突, it is translated to *Yancong* 煙囪 "Chimneys" in Mandarin.
- 4 E.g. the poem *Dushi meiyou chuntian* 都市沒有春天 "There is no Spring in big Cities" by Sha Bai 沙白 (b. 1944) from the year 1960, Lin Fuan-chan (Lin Huanzhang) 林煥彰 (b. 1939) wrote *Yi jiu qi ling nian de Dongtian* 1970 年的冬天 "The Winter of 1970" in 1971, the poems *Meiyou yu de heliu* 沒有魚的河流 "A River without Fishes", *Meiyou niao de tiankong* 沒有鳥的天空 "The Sky without Birds" and *Meiyou cao de caochang* 沒有草的操場 "A Sports Field without Grass" written by Mo Yu 莫渝 (b. 1948) were published in 1973. These and other eco-poems appear sporadically in poetry periodicals until the 1980s.
- 5 Bai Ling / Hsiao Hsiao / Luo Wenling (2012).
- 6 Hsiang Yang was in the position of the main editor for the supplement.
- 7 Hsieh (2012), 17.
- 8 Hsieh (2012), 149.
- 9 Following the poem's original romanization, the Pêh-ōe-jī 白話字 system is used here and in the following part.
- 10 Siau (2005a). Some adjustments regarding the hyphen usage have been made. The fourth verse originally began with "Ho 若無 Hōnā bô", but according to the recording provided on the website has been changed into "摸若無 Bong nā bô", which is also more plausible.
- 11 The Mandarin name for black-faced spoonbill is *Heimian Pilu* 黑面琵鷺.
- 12 Siau (2005b). The fifth verse's spoken version has a different word order than the spoken version, which does not change the meaning of the verse. Instead, the speaker says "飛, 跳, 倒kau, 倒吊, bē 輪猴 Poe, thiàu, tò-kau, tò-tiàu, bē-su kâu". "Hō-siōng" in the last verse has been changed to correct "hō-siōng".
- 13 Taiwan *yuhina* is the English name for this bird species, the Taiwanese Minnan word used here means literally "the point-headed". Its Mandarin correspondent is *Guanyu huamei* 冠羽畫眉.

## References

Bai Ling / Hsiao Hsiao / Luo Wenling 白靈、蕭蕭、羅文玲 (2012). *Taiwan shengtai shi* 台灣生態詩. Taipei: Elite Books.

Hsieh, San-chin 謝三進 (2012). *Taiwan shengtai shi zhi chuqi zuopin yanjiu – yi “Zili Wanbao” fukan yi jiu ba si nian ‘Shengtai shi – sheying zhan’ wei li* 灣生態詩之初期作品研究—以《自立晚報》副刊一九八四年「生態詩·攝影展」為例. National Taiwan Normal University, Department of Taiwan Culture, Languages and Literature, Master’s thesis.

Huang Shuan-Fan 黃宣範 (2008). *Yuyan, shehui yu zuqun yishi – Taiwan yuyan shehui xue de yanjiu* 語言、社會與族羣意識——台灣語言社會學的研究. Taipei: Wenhe.

Siau Lah-jih 蕭平治 (2005a). “O’-bīn-lā-pue bīn o’-o’ 烏面 lā-pue 面烏烏, in: *Tâi-oân chiáu-á koa-si* 台灣鳥 a2 歌詩.” In: Taiyu Xin Wang Ai 台語信望愛 (Tâi-gú Sìn Bōng Ài): <https://taigu.fhl.net/Bird/Bird8.html> [last accessed 15-12-2021].

Siau Lah-jih 蕭平治 (2005b). “Chiam-thâu-á thâu chiam-chiam 尖頭 á 頭尖尖, in: *Tâi-oân chiáu-á koa-si* 台灣鳥 a2 歌詩.” Website: *Taiyu Xin Wang Ai* 台語信望愛 (Tâi-gú Sìn Bōng Ài): <https://taigu.fhl.net/Bird/Bird13.html> [last accessed 02-03-2022].

## Photographs

Veronesi, Francesco (2011). CC BY-SA 2.0. [https://commons.wikimedia.org/wiki/File:Black\\_faced\\_spoonbill\\_at\\_Niigata.JPG#/media/File:Black\\_faced\\_spoonbill\\_at\\_Niigata.jpg](https://commons.wikimedia.org/wiki/File:Black_faced_spoonbill_at_Niigata.JPG#/media/File:Black_faced_spoonbill_at_Niigata.jpg) [last accessed 10-03-2022].

Cp9asngf. CC BY-SA 3.0, [https://commons.wikimedia.org/wiki/File:Taiwan\\_Yuhina\\_-\\_Taiwan\\_S4E8280\\_\(18926478463\).jpg](https://commons.wikimedia.org/wiki/File:Taiwan_Yuhina_-_Taiwan_S4E8280_(18926478463).jpg) [last accessed 10-03-2022].

## **MODERNIZING POSTNATAL CARE: TAIWAN AS PIONEER IN THE PROFESSIONALIZATION OF THE TRADITIONAL YUEZI**

*Amélie Keyser-Verreault*

In Chinese culture, the tradition of *yuezi* (月子) or the practice of postpartum care for the mother is a longtime established practice. In Taiwan's case, this practice underwent and continues to undergo the vicissitudes of social and interpersonal relationship changes. Before the 1970s, the birth rate in Taiwan was very high and the idea of "more children, more grandchildren, more good fortune" (多子多孫多福氣) was widely accepted. The large family size also meant sufficient human resources for the agricultural-related field labor. The practices of *yuezi* were already crucial at that time and mothers in the postpartum period had some privileges like a long rest and special food (particularly meals containing meat like chicken, a precious food at that time). The importance of *yuezi* could be partly explained by the high mortality of mothers and babies during childbirth and there was thus a traditional *Taiyu* proverb saying that "If you survived delivery, you enjoy the smell of chicken in sesame oil and if you did not, you have only four wooden boards [a coffin]." (生得過，雞湯香；生不過，四塊板) The main goal of *yuezi* was the mothers' recuperation of physical force in order to restart the domestic and fieldwork on the one hand, and the restoration of women's reproductive capacity on the other. However, the modernization of the country caused huge changes in social arrangements, including the reduction of family size and the advent of small nuclear families, the influences of Western medicine and social organization based upon individualism, and the drastic drop in fertility rates. Accordingly, the practices of *yuezi* underwent important changes, both in terms of *yuezi*-related behavior and also in the conception of this tradition. The apparition of *yuezi* centers (月子中心) is doubtlessly one of them.

## The Rise of a New Institution

Taiwan is a pioneer in the institutionalization of the *yuezi* practice through *yuezi* centers. Indeed, postnatal care centers first originated in Taiwan at the end of the 1990s, where they combined childbirth with postpartum care and were legalized by public health authorities. After that, the model of the postpartum care center was borrowed by mainland Chinese companies and began to appear in Beijing and Shanghai, developed throughout China and spread even in North America to meet Sinophone global citizens' needs. Thus, the practice of attending a postpartum care center has become common and popular in Taiwan, and about 60 % of Taiwanese mothers (compared to 5 % in China) go to one of those centers after giving birth. More concretely, there are two kinds of postnatal care centers in Taiwan. The "*yuezi* centers" (月子中心) are managed by the Ministry of Economic Affairs and only require business registration. They are a kind of special "pension" where mother and newborn stay and repose for about two to four weeks. There is no medical professional in these centers, but most of the *yuezi* centers employ experienced staff with babysitting or domestic helping qualifications to provide care and service for mothers and babies. Those centers are registered under the name of "*yuezi* centers" or "*yuezi* club." The other institution is the postpartum nursing care home (產後護理之家) in which there is professional nursing staff who provide professional nursing care services, including daily life care and guidance on wound recovery, newborn care, breastfeeding, etc. These institutions must apply for a business license in accordance with the relevant strict regulations of the Ministry of Health and Welfare and must be annually accredited. While, according to related legal regulations, there should be at least one medical professional for every fifteen beds (including beds for mothers and babies), many institutions, under competition pressure, offer one professional caregiver for every five beds. Some institutions even underline their better-than-average ratio of clients/professional helpers (namely one professional for every four babies)



in their advertisements. Another determinant difference between *yuezi* centers and postpartum nursing care institutions is that the latter should be attached and supported by a hospital. As a result, in general, their names are mostly “postpartum care homes” and “postpartum nursing care homes attached to (name of the hospital).”

It is not surprising that the stay in these highly medicalized and specialized institutions is very expensive, particularly in the Greater Taipei area. The price ranges from 7,000 NTD (220 Euros) to 20,000 NTD (620 Euros) every day in central Taipei. Furthermore, the trend of fewer children has not affected the growth of these institutions; on the contrary, postnatal market competition is becoming increasingly fierce. This is because shrinking family sizes have increased the resources available for each child and intensified parents' investments in both sons and daughters.<sup>1</sup> For families having fewer children, offspring become more “precious”<sup>2</sup> because they are rare, but also because of the economic and emotional investment that parents make in them.

It is also worth emphasizing that there is a growing government-involving in this de-privatization of postpartum care. For example, in Kaohsiung, the second-biggest city in Taiwan, in order to encourage childbirth, which is constantly decreasing, the local government is the first in the country to introduce a new series of pregnancy-friendly measures. These include the “postnatal care at home” service, which provides postpartum care by experienced helpers and skilled professionals. For the first child, parents are offered a subsidy of 100 hours of postpartum care; for the second newborn, 160 hours; and for the third and subsequent newborns, 240 hours. If the number of hours exceeds the subsidy, the remainder will be purchased from the trustee at the rate of NTD 250 (about 8 Euros) per hour.<sup>3</sup> This could be seen as a social innovation introduced by both the government and the caregiving industry, deepening the transition of postpartum care from families to health professionals.

## A Case of “Compressed Modernity”

In fact, this hybridity and pluralization of postpartum care is an illustrating example of what sociologists call “compressed modernity”.<sup>4</sup> “Compressed modernity” is a civilizational condition in which economic, political, social and/or cultural changes occur in an extremely condensed manner in respect to both time and space, and in which the heterogeneous coexistence of mutually disparate historical and social elements leads to the construction and reconstruction of a highly complex and fluid social system. For example, in modern Taiwan, Confucianism and the discourse of filial piety are still strong, while at the same time neoliberal individualism and Western feminism penetrate public and private spheres. Thus, behind the reason for “life is precious, and babies are priceless”, there is a strong need to professionalize infant care and child education and a parental wish to invest in their children from the very beginning, with new technologies and new parenting discourse coming from the West. Therefore, perinatal care centers represent an important and pioneer shift in the social practices, moving from the management of the perinatal period by the private sphere (often the husband’s family, involving mothers-in-law and other female family members) to institutions’ taking over, such as perinatal care centers, involving doctors, nutritionists, medical professionals, yoga teachers and other experts of childcare. In this intersection between local traditional ideas and new institutionalization of postpartum care, women and their families’ *yuezi*-related behavior will be adjusted with a personal touch in order to strike a balance between tradition and modernity. For example, the taboo of not reading after childbirth is mostly not followed, while the taboo of not washing hair or taking a bath after childbirth is sometimes chosen to be followed with new products like water-free bathing lotion to achieve a compromise. However, meeting two competing discourses of *yuezi* is never easy, and mothers are often confronted with incompatible demands in their everyday lives. This situation also causes

many intergenerational tensions due to the different interpretations of the meaning of “good” postpartum care.<sup>5</sup> These are some of the inevitable prices of “compressed modernity.”

In this endless interplay between tradition and innovation, typical to “compressed modernity,” there are not only the above-mentioned shifts from the private space to institutionalization but also expanding belief and confidence in expert knowledge. Regarding the choice of these postpartum institutions, mothers and their families hold that “quality of care provided by the medical team” was the most important factor, often followed by the “infant and professional caregiver ratio” as the main concern. Moreover, the purpose of the postpartum care has changed from emphasizing potential changes of mothers’ physical constitution after childbirth (改變體質) to restoring and maintaining the pre-pregnancy state.

Another huge change is that the child-centered emphasis and priority of mother and infants’ health in traditional *yuezi* now coexist with the working mothers’ personal desires and professional needs. The keyword of “sacrifice” for children in the traditionally gendered expectation is replaced by multidimensional considerations and individual concerns since women need to maintain paid work, and divorce is becoming frequent in present-day Taiwan.

Finally, an important difference is the recent promotion of the “yummy mummy” or the “new sexy Mom” by mainstream media slimming advertisements. In fact, previously there was no such thing as “bouncing back” after childbirth for older mothers, while the imperative of “getting your body back” is gaining popularity and fervency in contemporary Taiwan.<sup>6</sup> Under the pressure of intensive mothering, modern women are complex subjects who are influenced by multiple and conflicting norms. Mothers’ concern about their babies often competes tremendously with anxieties about appearance; but caring about their

pregnant and postpartum appearance does not erase women's concerns about the well-being of their babies, and there are multiple social demands on these new mothers.

### **Conclusion: Straddling Tradition and Innovation in Postpartum Care**

Taiwan's pioneering social invention increasingly becomes a global phenomenon. For example, the loosening of the one-child policy and the recent introduction of the second and third child policy in mainland China has triggered a period of growth for postpartum clinics and the postpartum food industry. In the USA, there is already an important penetration of similar postpartum nursing institutions, especially on the West Coast, due to the important numbers of "Chinese people" (華人). Yet, with the increase of Taiwanese and Chinese mothers who chose to give birth abroad in order to give their children the asset of North American citizenship, these institutions begin to flourish everywhere in the USA. It is of interest to pay attention to the various consequences of this de-privatization and professionalization of postpartum care. Although new Taiwanese mothers and their families are provided with expertise and professional care in these institutions, many family ties and interpersonal relationships are also profoundly changed. At these centers, mothers often receive standardized sets of services, and because of the commercialization of *yuezi*, women face a rationalization and alienation of social space and interpersonal relationships during the consumption of professional postpartum care. This system of combined commercialization and medicalization renders postpartum care "impersonal," which implies the loss of the aspect of interfamilial emotions and mutual care. While some celebrate that an isolated space in a public institution helps to keep unwanted visits and some troublesome family members away from the mother-baby cocoon, many women recall the nostalgia of the privileged postpartum period where mothers received many female family

members' devotedness, full of tenderness and mutual trust. In sum, it is relevant to examine manifold contexts and various consequences of this professionalization of postpartum care and how mothers try hard to negotiate and compromise different discourses about "doing the month."

## Notes

- 1 Yu & Su (2006).
- 2 Paltrinieri (2013).
- 3 For more detail see *Gaoxiong shi shehuiqu* (2022).
- 4 Chang (2010).
- 5 Keyser-Verreault (upcoming).
- 6 Keyser-Verreault 2018a, 2018b, 2021.

## References

Chang, Kyung-Sup (2010). *South Korea Under Compressed Modernity: Familial Political Economy in Transition*. London: Routledge.

Gaoxiong shi shehuiju 高雄市社會局 (2022). "Zuo yuezi dao zhai fuwu" 坐月子到宅服務, <https://khchildcare.kcg.gov.tw/cp.aspx?n=93523EF8385CFF39> [last accessed 12-02-2022].

Keyser-Verreault, Amélie (upcoming). "On ne naît pas belle, on le devient: devoir maternel et formation transindividuelle de l'entrepreneure esthétique à Taiwan" (One is not born beautiful, one becomes beautiful: Motherly duty and transindividual transformation of the esthetic entrepreneur in Taiwan), in: *Famille, Enfance, Génération*.

Keyser-Verreault, Amélie (upcoming). "The continuum of getting the body back: Procreative choice and changing maternity under beauty culture in Taiwan", in: *European Journal of Cultural Studies*.

Keyser-Verreault, Amélie (upcoming). "Toward a Non-Individualistic Analysis of Neoliberalism: The Stay-Fit Maternity Trend in Taiwan", in: *Ethnography*.

**Keyser-Verreault, Amélie** (2020). "I want to look as if I am my child's big sister": Self-satisfaction and the Yummy Mummy in Taiwan", in: *Feminism and Psychology*, 31: 4, 483–501.

**Keyser-Verreault, Amélie** (2018a). "Huifu zixin meiti: meixue jingying zhuyi xia de muxing zhuti yu huaiyun shengchan" 「恢復自信美體」：美學經營主義下的母性主體與懷孕生產 (Recovering a self-confident body: Pregnancy and childbirth under aesthetic entrepreneurship), in: *Journal of Women's and Gender Studies* (女學學誌), 43 (2), 37–88.

**Keyser-Verreault, Amélie** (2018b). "Zhuiqiu meimao yu biancheng muqin de liang nan: yi gao wenping de duhui nüxing wei li" 追求美貌與變成母親的兩難:以高文憑的都會女性為例 (Quest for beauty and becoming a mother: A painful paradox for highly educated urban Taiwanese women), in: *Taiwan Journal of Anthropology* (台灣人類學刊), 16 (1), 97–158.

**Paltrinieri, Luca** (2013). "Quantifier la qualité: Le capital humain entre économie, démographie, and éducation", in: *Raisons politiques*, 4 (52), 89–107.

**Yu, We-Hsin / Su, Kuo-Hsien** (2006). "Gender, Sibship Structure, and Educational Inequality in Taiwan: Son Preference Revisited", in: *Journal of Marriage and Family*, 68 (4), 1057–1068.

## **INNOVATION AS COPING STRATEGY FOR FACING GLOBAL CHALLENGES**

*Josie-Marie Perkuhn*

Global challenges affect societies regardless of regime type and welfare status. Their political coping strategies, yet, vary drastically. China's handling of the recent outbreak of Covid-19 lung disease has highlighted political and financial differences. While the People's Republic of China (henceforth PRC) locked families in their homes and militarily sealed off entire provinces after the announcement of the infectiousness new coronavirus (SARS-CoV-2), the Republic of China (henceforth Taiwan) followed its protective protocols to contain epidemic health risks: Screening immediately began at all entry points, such as ports and airports, and the population was informed through the media and urged to help.<sup>1</sup> Both handling strategies were showing initial success, but when the second wave was spreading in the People's Republic discontent with state control measures has increased.

The prescribed use of apps, such as for tracing and tracking civil movements to control the spread of the virus, provided some relief. Although the PRC's application of an innovation-based approach to fight the pandemic outbreak of Covid-19 created some political attraction,<sup>2</sup> the merit of a prescribed zero-Covid strategy is yet to be tested. When the virus variants Delta and Omicron emerged, it put the authoritarian approach to a major test, as Smriti Mallapaty reported in *Nature* on 22 January 2022.<sup>3</sup> In the Republic of China, a successful strategy to control the virus seems to correlate with broad social awareness and societal partaking in common countermeasures. The quick implementation of using the National Health Insurance Card for storing and reading out travel history information was a great benefit in the pan-

demographic prevention. A recent study published in *Nature Communications* suggested that “national identities might play an important role in the fight against global pandemic”.<sup>4</sup> Among the 67 countries and territories that partook in the study, Taiwan ranked among the top fifteen. In the discussion, the authors state that it might be beneficial for leaders to inspire public health behavior to connect the issue to “feelings of national identity”.<sup>5</sup> The nature of that national identity might even be an important determinant in terms of effectiveness, as they continue, “and the potential for international cooperation” alike. Regardless of the framework, whether fuelled by national identification or patriotism, citizen engagement is imperative for containing the spread of the virus. In contrast to one another, both ways of reaching out to the populace were quite different. In both political settings, however, the application of innovative approaches seemed to be a prioritized coping strategy in facing global challenges, such as fighting the Covid-19 pandemic.

A brief comparison elucidates the difference in the so-called “One China with two systems”. While both settings share a common cultural history, the political culture has evolved apart and ultimately has spawned two systems. Those differences indicate the relevance for furthering research on different participatory approaches and the need for a systemic comparison in order to highlight the outcomes regarding their political framework for innovation polity and policy as a strategy to successfully cope with global challenges. The basic idea of this pre-study research is to tackle coping strategies for global challenges between the People’s Republic of China and the Republic of China by contrasting them. While due to the economic rise, the innovation industry and policy of the People’s Republic of China is quite well observed, the relevance of Taiwan’s innovative ability and efficiency is quite underexposed. Especially when it comes to the key capabilities and key industries, such as the production of semi-conductors.<sup>6</sup>



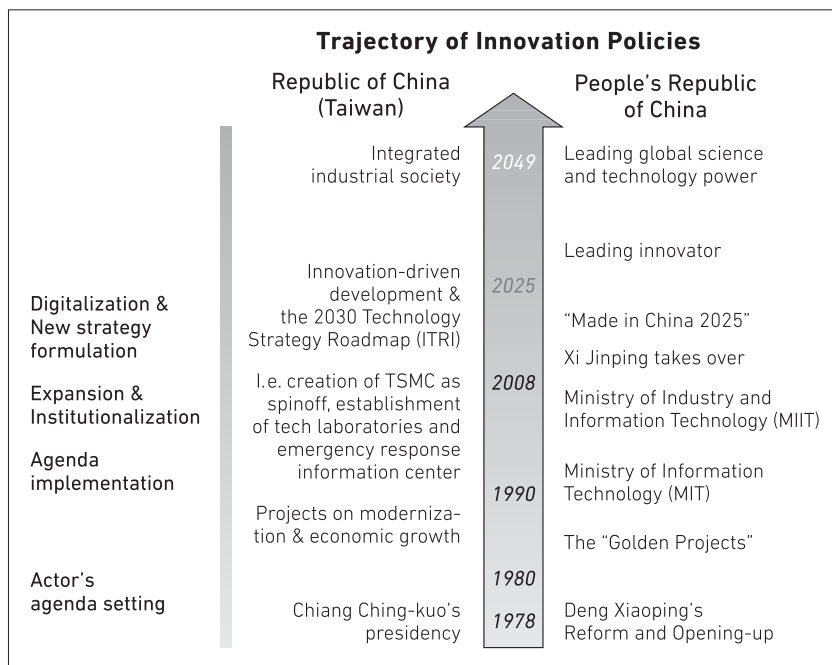
## How to Start this Research Endeavour?

The research agenda starts with a study that compares the development of innovation politics and policies by contrasting the political course set over a period of about 40 years. In this long-term comparison, for the People's Republic of China, the period of analysis begins with Deng Xiaoping's 鄧小平 (1904–1997) Reform and Opening-up policy, and for Taiwan, the period starts with the first election of Chiang Ching-kuo 蔣經國 (1910–1988), which both took place in 1978. The Reform and Opening-up policy created a major shift in the PRC's trajectory. In the course of the 1980s and 1990s policies were launched and institutions established, such as the "Golden Projects" (*jin gongcheng* 金工程), the founding of the Ministry of Information Technology (MIT) respective the succeeding Ministry of Industry and Information Technology (*gongye he xinxihua bu* 工业和信息化部, MIIT) that was later established in 2008. Two years earlier, the Science and Technology Plan was launched to promote domestic innovation and strive for the greatest possible technological independence. Assumingly, to "participate" in the growing private company sector, in 2014, the government founded the "China Integrated Circuit Industry Investment Fund (CICIF)" with a financial investment amount up to approximately 19 billion Euros. Since incorporated on 26 September 2014, the CICIF has made eleven investments and was regarded as China's 'Big Fund' to "catch up in the global semiconductor race" as Li Tao reported online on 10 May 2018 for the *South China Morning Post*.<sup>7</sup> Nevertheless, the CIFIC counts three big exits, including China Mobile, Semiconductor Manufacturing International, and Anlogic. In the following year, the PRC's government strengthened the innovation agenda by launching the Made in China 2025 (*Zhongguo zhizao* 中国制造 2025, MIC 2025) campaign.

The political agenda of President Chiang Ching-kuo launched major projects to accelerate economic modernization and social welfare by addressing foreign attention for investments. The agenda, later known

as the Taiwan Miracle (*Taiwan Qiji* 臺灣奇蹟), focused mainly on modernization and economic growth. At that time, it was politically a very challenging moment for Taiwan regarding foreign affairs. The former US President Jimmy Carter (b. 1924, in office 1977–1981) had just announced for the USA to cease the recognition of its government as the legitimate government of China. However, the rapid industrialization worked well for the Republic of China, which became, along with Singapore, South Korea, and Hong Kong, one of the Four Asian Tigers. Alike in the PRC, information technology became one of the leading sectors of the Republic of China and its core competence. The Industrial and Technology Research Institute (Gongye Jishu Yanjiu Yuan 工業技術研究院, ITRI, headquartered in Hsinchu 新竹) played a major role. It was already founded in 1973 and gave a grave boost to the idea of “innovation-driven” development. Up to today, it is situated in one of the main areas where all the tech parks are situated. In fall 2020, once again, the ITRI propagated to strengthen innovation-driven development in the 2030 Technology Strategy & Roadmap. Dr. Edwin Liu, the President of ITRI, emphasized three core areas to boost ICT: Smart living, Quality of Health, and Sustainable Environment.<sup>8</sup>

Regarding Taiwan and the PRC, both started approximately 40 years ago with a quite similar focus on innovation to boost an “*integrated industrial society*”. Regarding the Republic of China, the authors Yinhan Chu and Jih-wen Lin (2001) claim that the political regimes during the twentieth century experienced a policy of social integration. They argue that “both regimes were also substantially transformed by the very society they governed as the incumbent elite came to encounter a steadily more politicized society and a more resourceful as well as diversified native elite”.<sup>9</sup> In their perspective, they seek to explain “why the two regimes employed a different mixture of ‘political co-optation (versus suppression), social integration (versus segregation) and economic inclusion (versus exclusion) at various stages of their rule in terms of the constraining and enabling structural conditions, the na-



© Josie-Marie Perkuhn

ture and level of threats to their political security, and their state-building and nation-building agenda".<sup>10</sup> Yet, the political framework evolved quite differently with divergent outcomes. Over the last decades, globalization progressed and via digital connectivity as well as awareness for new areas of challenges, networked societies have emerged; creating the social phenomena of a network society, in which information and mostly communication technology facilitate the capability – and maybe even the compulsion – for accessing and creating available information at any time in a shared digital space that enables the formation of networks. The difference in handling and outcome regarding participative innovation supports the assumption of a systemic divide of autocratic and democratic regimes. Comparing both trajectories and the political agenda setting, therefore, seems promising.

Based on a preliminary comparison of the trajectory and institutional framework, this brief outline seeks to shed some light on why comparing the difference from a political science perspective is relevant. At first, the overall research agenda starts with a qualitative study conducted to generate theory-based hypotheses using comparative approaches for the study of innovative policies, such as the studies provided by Buzogány, Frankenberger, and Graf in 2016.<sup>11</sup> The foundation of this qualitative analysis foresees a diachronic comparison of the development of innovation politics and policies, contrasting how they fitted in the political context of the People's Republic of China and the Republic of China. The first step conducts a literature review and allows to continue the research regardless of the current pandemic trajectory. For the purpose of further hypothesis formulation, on-site interviews with experts are planned. The research agenda in that early step foresees mapping fields of selected innovation-driven areas in order to tackle dynamics of new global challenges, such as climate change, in combination with sustainable growth and energy supply. In a second step, the generated hypotheses will be tested and validated in an in-depth comparative study in a mixed-method design across three identified policy areas of global scope: health care/ Global Health, environmental and climate protection, cyber security. In three individual case studies, the relationship between the potential for innovation and societal participation will be tested in a synchronous comparison via statistical survey data on society's perception and participation.

The research focus grounds on the assumption that societal and technological potential for innovation necessarily interlocks with the development of viable and sustainable approaches to cope with global challenges – now and in the future. Assumingly, the more social/ societal actors are involved in the process of governmental agenda setting and action, i.e., via incentives, the higher is the chance of success. Given the circumstances of a digitalized society or – trans-



Source: Author picture.

nationally organized – network society with the possibility of ‘many-to-many’-communication a formerly applied “traditional concept of participation” is shifting or expanding at best. Citizens can be involved quite easily and their opinion can be voiced – yet they also can be controlled, traced and tracked.

In addition, as an Asian democratic pioneer, Taiwan might not only function as a victim with a history of experiencing previous epidemic situations but also as a role model for other democratic settings in handling it. This leads to the question of what we can learn from Taiwan’s different approach to participative innovation politics and policies as a potential role model in its pioneering position.

## **At a First Glance: Contrasting the Current Global Challenge of the Infectious SARS-CoV-2**

Facing the Covid-19 crisis, the following gives a preliminary comparison of the systemic divide and how the approach of participative innovation is promising to generate in-depth insights. Yet it should be noted that the PRC and Taiwan both had have decisive experiences with the predecessor SARS virus in 2002/2003. Compared to the former SARS virus, which spread from southern China mainly via air travel, the current SARS-CoV-2 virus is considered more aggressive due to its ability to replicate in the upper respiratory tract. The disease it causes, COVID-19, is, especially in Taiwan, also named “Wuhan lung disease” (Wuhan Feiyan 武漢肺炎) after the suspected location of its outbreak. The scientific community assumes that initially infected wild animals, such as the Chinese pangolin or bats, served as hosts for Sars-CoV-2 before it spread to humans. In light of the experience with the SARS outbreak almost two decades ago, when the emergence of the novel virus was publicly announced, both governments were on alert.

### *The Case of the Republic of China (Taiwan)*

Seventeen years ago, the SARS crisis had taken a heavy toll on the island’s population, yet, it has also led to major improvements regarding the disease control regulations. These included, for example, the establishment of a central disease control center (Taiwan Center for Disease Control, *weisheng fuli bu jibing guanzhishu* 衛生福利部疾病管制署) and the creation of clear action protocols for both medical professionals and transnational transport workers. People’s education and social acceptance of the widespread use of respirators became an important pillar in the chain of disease control. In combination, it helped tremendously in preventing a rapid spread. Besides the drastic isolation strategy in closing off ports and airports, the pluralistic government also progressed within a few weeks to launch a chip for storing travel data on the national health card.

As early as February 2020, Taiwan expanded the technological use of national health cards. Comparable to the ID card, a personal identification card, every citizen has an electronic health card (National Health Identification, NHI), which is similar to the health insurance card in Germany. After solving some initial technical hurdles, this card is now used to store travel data for comparison with the national epidemic prevention database. Because it is linked to a personalized card, conflicts about the data protection law arose and provoked political criticism. The standardized collection of travel data was already called unconstitutional in 2005. A link with the national identification card was rejected. The renewed outbreak of an easily transmittable disease gave a breath of fresh air to the subject: The NHI card was also quickly used to regulate the distribution of respirators in order to counteract hoarding.

Responsible personnel have attributed the early success to the strict adherence to the infection protection protocol as well as the extensive and quick measures taken. The island relies on isolation. Taiwan's Central Epidemic Command Center (CECC) politically restricts access to foreign nationals. In order to avoid the spread of the virus, trained medical staff was sent and test procedures were implemented quickly to quarantine sick people.

### ***The Case of the People's Republic of China***

Alike Taiwan, the PRC also pursued over the last decades a path of digitalization and the promotion of innovative technologies. The PRC's government has capitalized on this trajectory in combating the recent outbreak of the SARS-CoV-2 virus. Overall, digital use increased over the course of the Corona Crisis (SCMP 2020). In particular, the health-care sector has benefited through platforms such as *Ping An Good Doctor* or *Tencent Trusted Doctors* for telemedicine consultation, specifically in Wuhan. Innovative technologies have been put in action to combat the spread of the virus; for example, QR-Code reading applica-

tions were rapidly available with a small-scaled grid of checkpoints in the affected area. Private, state-owned or government-orchestrated incubators pursued research on Big Data-driven analytics for disease control, diagnosis, and forecasting. The People's Republic of China's innovation-driven approach in fighting Covid-19 followed the path of the previously introduced global agenda of "A Community for Health for All" that was announced by China at the 73<sup>rd</sup> World Health Assembly, 09–14 November 2020, to take over global responsibility.<sup>12</sup> Taking the system rivalry into account, it seems yet to be true that the People's Republic of China applies the described autocratic advantage to expand its global participative influence.

In sum, the aim of this outline was to reason why comparative research of different innovation-driven agendas is needed and to argue that it will provide fruitful insights on different frameworks of participatory innovation policies. In both political settings, an innovation-driven political agenda turns out to be a coping strategy to face the global challenges of today and potentially for the challenges to come.

## Notes

- 1 Perkuhn (2020).
- 2 Perkuhn (2022).
- 3 Mallapaty (2022). The article "China's zero-Covid strategy: what happens next?" was first published online on January 22, 2022 at <https://www.nature.com/articles/d41586-022-00191-7>, and later included in the magazine *Nature*, Vol. 602, 15-16 (3 Feb. 2022), at <https://media.nature.com/original/magazine-assets/d41586-022-00191-7/d41586-022-00191-7.pdf> [last accessed 28-02-2022].
- 4 van Bavel et al. (2022).
- 5 van Bavel et al. (2022), 6.
- 6 Kleinhans / Baisakova (2020).
- 7 Li Tao (2018).
- 8 Liu (2020), [https://itritoday.itri.org/102/content/en/unit\\_01.html](https://itritoday.itri.org/102/content/en/unit_01.html) [last accessed 28-02-2022].



- 9 Chu / Lin (2001), 102.
- 10 Chu / Lin (2001), 103.
- 11 Buzogány / Frankenberger / Graf (2016).
- 12 cf. Perkuhn (2022).

## References

- Buzogány, Aron / Frankenberger, Rolf / Graf, Patricia** (2016). "Policy-Making und Legitimation in Autokratien: Das Beispiel der Innovationspolitik." *Totalitarianism and Democracy* 13(2), 257–279. doi:10.13109/tode.2016.13.2.257.
- Chu, Yun-han / Lin, Jih-wen** (2001). "Political Development in 20th-Century Taiwan: State-Building, Regime Transformation and the Construction of National Identity." *The China Quarterly*, 102–129.
- Kleinhans, Jan-Peter / Baisakova, Nurzat** (2020). "The Global Semiconductor Value Chain." [https://www.stiftung-nv.de/sites/default/files/the\\_global\\_semiconductor\\_value\\_chain.pdf](https://www.stiftung-nv.de/sites/default/files/the_global_semiconductor_value_chain.pdf) [last accessed 28-02-2022].
- Li Tao** (2018). "How China's 'Big Fund' is helping the country catch up in the global semiconductor race", South China Morning Post (SCMP.com), 10 May 2018, <https://www.scmp.com/tech/enterprises/article/2145422/how-chinas-big-fund-helping-country-catch-global-semiconductor-race> [last accessed 28-02-2022].
- Liu, Edward** (2020). "ITRI 2030 and Post-Pandemic Trends", ITRI Today, [https://itritoday.itri.org/102/content/en/unit\\_01.html](https://itritoday.itri.org/102/content/en/unit_01.html) [last accessed 28-02-2022].
- Perkuhn, Josie-Marie** (2020). "How Is Taiwan Facing the Coronavirus?" *Nachrichten. Taiwan Insight*. 3. <https://taiwaninsight.org/2020/03/05/how-is-taiwan-facing-the-coronavirus/> [last accessed 28-02-2022].
- Perkuhn, Josie-Marie** (2022). "China's Innovation-Based Approach in the Fight of Covid-19. An Estimation of China's Impact for Global Health to Come." *Academicus International Scientific Journal* 25 (January), 24–44. doi:10.7336/academicus.2022.25.02.
- Van Bavel, Jay J. / Cichocka, Aleksandra / Capraro, Valerio et al.** (2022). "National Identity Predicts Public Health Support during a Global Pandemic." *Nature Communications* 13(1). doi:10.1038/s41467-021-27668-9.

## AUTHOR INFORMATION

**Chen Kuan-fei 陳冠妃**, Ph.D., is an Assistant Professor in the Department of History at National Taiwan University. She earned her doctorate degree in the Department of History at the Chinese University of Hong Kong in 2018. Her research is about the socio-economic history of Taiwan, especially the transformation of power structure and economic interactions in urban society. She is also interested in the relationship between people and cultural heritage. She participated in the project application phase of TAP and is an associated researcher in the group.

**Chien Hung-yi 簡宏逸**, Ph.D., participates in the joint research project at Ruhr-Universität Bochum since February 2022. In TAP, she studies the modern education system in Taiwan and its contribution to the island nation's modernization. She graduated from National Taiwan Normal University in 2017 and researched in Academia Sinica (Taiwan) and National Taipei University of Education as a postdoctoral researcher.

**Thomas Eduard Fliß**, Ph.D., graduated in Chinese Literature at National Cheng Kung University in 2020. Afterward, he worked as an adjunct assistant professor in the Department of Taiwanese Literature of his alma mater. Now he is a research fellow in the joint research project "Taiwan as Pioneer" (TAP) at Trier University since its beginning in February 2022. In this project, he studies Taiwanese literature and culture in the context of globalization and the Anthropocene.

**Amélie Keyser-Verreault**, Ph.D., is fellow of the Eberhard Karls Universität Tübingen in the joint research project. In TAP, Keyser-Verreault studies the modernization of postnatal care and parenting trends in Taiwan. She graduated from Laval University in 2018 and researched

in Université du Québec à Montréal, Concordia University, and National Taiwan University as a postdoctoral researcher.

Dr. rer. pol. **Josie-Marie Perkuhn** is the head of the joint project in Sinology at Trier University since February 2022. Her research interests include foreign policy and China's role in international relations, as well as Taiwan and innovation research. She studied political science and sinology at the University of Heidelberg, where she received her doctorate in 2018.