# THEATRES OF MEMORY

INDUSTRIAL HERITAGE OF 20<sup>TH</sup> CENTURY SINGAPORE

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LOH KAH SENG ALEX TAN TIONG HEE KOH KENG WE TAN TENG PHEE JURIA TORAMAE

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#### **FOREWORD**

Theatres of Memory: Industrial Heritage of 20th Century Singapore is more than just an official account of the process of Singapore's industrialisation or history written by professional historians. It is a book which combines official and unofficial ways of collecting historical materials. For the former, the authors collected materials from the national archives and formal documents, but this book stands out from the others in that the authors collected materials from what they called the 'little people', people who were deeply involved as pivotal participants of Singapore's industrialisation, yet are rarely regarded equally as a part of this remarkable journey. However, the process of collecting materials in this way, such as through interviewing and collecting oral histories, can be extremely daunting. With the help of social media platforms such as Facebook, the authors were able to reduce this difficulty, and the stories that are told are always insightful and touching. As this book includes what the 'little people' have remembered, the book not only offers perspectives from mainstream historians, it provides readers with deeper insights and a fuller picture of Singapore's industrialisation from a diverse group of people who were witnesses of their time.

As a reader, you should think about these questions while reading this book:

- 1. Why did Singapore need industrialisation?
- 2. What led to Singapore's industrial reform?
- 3. Who and what were the driving forces behind industrialisation?
- 4. How did the people of the time adapt to the fast-changing lifestyles?
- 5. How important was the role of vocational institutions during that time?

This book illuminates the context of Singapore during the 'baby boomer' period. As the population surged, the lack of available jobs led to a serious situation where people were living in poverty, and a pessimistic atmosphere was prevailing in society. What made this worse was the growing competition from countries around Singapore. Thus, the only way to tackle this issue was through industrialisation, and this was the starting point of Singapore's industrialisation programme. Of major help was Dutch economist, Albert Winsemius, who gave much pragmatic advice and suggestions that boosted the under-developed economy and facilitated the process of industrialisation, beginning with Jurong.

As heavy industries continued to grow at Jurong, the notion of a 'Garden Industrial Town' also gained shape, followed by the first social amenity at Taman Jurong. Industrialisation brought young women into the light industries. Few historians captured the role of women during this time, and this book shines in its narrative and oral interviews with these women. Singapore's industrialisation influenced the culture of work as well. As industrialisation kept advancing, women struggled between two roles—breadwinners on the one hand, and homemakers on the other, which gave rise to the graveyard shift, a compromise and balance between home and work. This led a path to the success of nuclear families in Singapore society.

This book also highlights 'Made in Singapore' products, which were made through collaborations between foreign and local workers. Among these products, the most famous was the Rollei 35 camera, which became a symbol of Singapore's homemade products, spurring a sense of national identity and pride.

This book digs deep into the necessary role of skills training. It discusses the role of vocational schools and institutions and their relationship to the modern educational system. Additionally, the book highlights how local trainees acquired necessary skills from foreign businesses.

In the last part of this book, the authors do something rare: they track the lives of foreign workers in Singapore between the 1960s and 1980s. The chapter depicts the lives of foreign workers and how they supplemented the shortage of workers in the manufacturing sector.

In sum, this book traces the beginnings of the industrialisation programme in Singapore, the country's early years of independence, and various challenges faced at the time as experienced and told by its inhabitants. The narrative is told not just from the perspectives of Singapore's key leaders at the time, but also from the perspectives of the general public, through the inclusion of their views and the acknowledgement of their participation in society. This is the value-add of this book and makes it stand apart from the rest. It is history at its best, in its recounting of everyday life in Singapore from the 1960s to the end of the twentieth century. The success of the Singapore story is the result of its stakeholders playing their necessary roles, the visionary leaders of the time and the pragmatic advice of key foreign experts. It is also a key reminder that the only constant throughout time is still change.

Professor Euston Quah Albert Winsemius Chair Professor of Economics Professor of Cost-Benefit Analysis and Environment Director, Economic Growth Centre NTU Singapore

Editor, Singapore Economic Review President, Economic Society of Singapore Member, European Academy of Sciences and Arts

#### **ACKNOWLEDGMENTS**

We have to admit enjoying the hard work of researching and writing this book. We spent long hours poring over old documents and maps, but also many a fun- and sweat-filled weekend walking through silent industrial estates and factories across Singapore (and occasionally being chased away by security). We also had deep conversations with those who kindly invited us into the world of an industrial worker in Singapore. Writing this book was an experience shaped by 'many hands'—as Raphael Samuel put it—that helped us unearth buried histories and untold memories.

Theatres of Memory began in early 2017 as a heritage research project supported by the National Heritage Board (NHB). We are indebted to Yeo Kirk Siang, John Teo, Bernadette Yew, Ian Tan, Cai Yinghong and Sim Tng Kwang from Heritage Research and Assessment at the NHB, who helped us gain access to archives, supported our research and built bridges to other agencies. It was Yew who warmly endorsed a history of women factory workers and encouraged us to apply for a project grant to turn the research into a book.

The process of doing so was ably assisted by staff from Education and Community Outreach at the NHB, particularly Wai Yin Pryke, Tay May Ling, Grace Chan, Gowtham Gopal and Hong Xinlei. In the same vein, we wish to thank the Jurong Town Corporation, Economic Development Board, and Ministry of Education for reading the manuscript, and the Prime Minister's Office and National Archives of Singapore for the use of official photographs.

The research project had nearly been a no-go, as it was difficult to find an institution that would support industrial heritage. For this, we are indebted to the Economic Growth Centre of the Nanyang Technological University, its Director Euston Quah and his staff, Kim Youjin, Luke Nursultan and Kelly Zhu. A long-standing scholar of Singapore economics and the Albert Winsemius Chair Professor of Economics, Quah believed in the research and book; in the beginning,

he pointed us to Jurong Hill, which in a way was a starting point for our research as it had been for Singapore's industrialisation.

We wish to thank many friends who gave us ideas, images and contacts: Kevin Tan, K.C. Chew, Tommy Koh, Ang Seow Leng, Charles Ngui, Linda Lim, Lai Ah Eng, Ernest Koh, Kelvin Ang, Lee Soo Ann, Chelva Rajah, Cheng Nien Yuan, Lee Ming Ji, Kelly Chong, Prasakthi Allagoo, Nurhidayah Hassan, Janice Chua, David Chew, Lee Kian Cheong, Hercules Lim, Koh Boon Long, Dan Koh, Ong Tze Boon, Frank Lu, Lam Chun See, Lawrence Chong, H.G. Lim, Lim Hong Hin, Wong Pok Hee, Melody Zaccheus, Tan Teng Teng, Geraldine Soh, Ho Weng Hin, James Tann, Lim Meng Jock, Edmund Arozoo, Janice Lim, Henry Cheong, Kwek Li Yong, Mok Ly Yng, Min Lee, Lee Soo Cheng, Toffa Wahed and Jacqueline Tan.

We are grateful to our excellent and tireless researchers: Jeremy Goh, Show Ying Xin, Benjamin Khoo, Siti Maryam, Claudia Tan, Wan Nur Syafiqa, Lim Xin Hwee, Dafina Kajtazi, Jileen Yong, Joshua Goh, Ng Qi Siang, Crish Cruz, Fathin Nazhirah, Tay Zi Han, Anna Goh and Ly Nguyen (who co-wrote the Rollei chapter).

The final leg of translating the text to print was chiefly to the credit of our friends at Pagesetters: Fong Hoe Fang, Ng Kah Gay and Benjamin Lee. To us, they are more than publishers, sharing with us the belief that heritage belongs to all. Stephanie Chok's copyediting was thorough and rigorous; she picked out many embarrassing errors and typos in the manuscript while imposing a regimen of standardisation over words and letters.

Earlier versions of Chapters 2 and 8 were originally published elsewhere, and we thank the International Institute of Asian Studies and *Berita Newsletter* for allowing us to revise and publish them:

- 'Imaginaries of Jurong Industrial Estate', *International Institute of Asian Studies* Newsletter 81, Autumn 2018, pp. 6-7.
- 'Memories of Rollei Singapore', Berita Newsletter,
  Winter Issue 2018/2019, pp. 6-15.

Lastly, what pleased us most and gave the book its life and character were the numerous people who shared with us about their working lives. They did not simply give us material for the book—words, photos, documents—more crucially, they offered affirmation that a history based on memories of line work, co-workers, factories, and made-in-Singapore manufactures was feasible and compelling.

So, thank you, our interviewees: Normah Dobbs, Lina Koh, Angeline Lee, Lee Soo Ann, Deng Ya Yin, Chong Nam Soy (who had kept his Rollei 35 and technician overalls), Chee Chin Siong, sisters Gan Lian Sze, Gan Lian Bee and Gan Lian Eng (factory work was like 拼 命—a struggle for life!), Marvati Binte Mohamad Ma'arof and Hassan Abdullah (who met at Rollei and married), C.P.S. Nathan (who invited Kah Seng back to his home for Deepavali), Lai Park On, Wong Choo Kee, J.W. William Teo, H.B. Chan, Chua Hang Seng, Foo Chee Lee, Vasanthara Devi, Suppammal Peramal, Yee Mei Lin, Koh Boon Long, Lim Buck Tong, Quek Siow Kai, Goh Hock Wah and Josephine Yau (the aroma from the chocolate factory), Lim Hong Hin (who told so many jokes of Rollei!), Kamarudin Abdul, Tan Kian Cheng, Noorsiah Binte Abdul Rahman (who made Kah Seng smile through the interview even though he did not understand a word of Malay), Tan Bock San, Show Tian Tin, Chua Chew Yong, Horst Beckhaus, Teo Li Yan and Poh Yeong Teow.

> The authors May 2021

#### INTRODUCTION

Surprisingly little has been written about the social history of Singapore's industrialisation, or what is called in this book, 'theatres of memory'. We know the broad strokes of how the tiny city-state underwent a remarkable transformation between the 1960s and 1980s. After Singapore became independent in 1965, its economy made a dramatic shift from entrepôt trade to export manufacturing, and annual gross domestic product (GDP) growth was robust for most of these years. Socially, there was also a major change, as Singaporeans became employed in stable jobs, rather than the casual work of the colonial era. Most people's standards of living rose markedly, and they owned their homes, usually a Housing and Development Board (HDB) flat. These far-reaching changes rested largely upon the island's industrial growth.

Our book is a walk through the social milieu of Singapore's industrial past. It weaves together the memories of a diverse group of people involved with industrialisation one way or another. Government leaders, public officials, foreign experts, industrialists and community leaders appear in the narrative. But we go further to include a wide range of industrial employees, highlighting their working lives, and the experiences of their co-workers and families. Put together, their little-heard voices form 'theatres of memory'—a term coined by historian Raphael Samuel to refer to history based upon people's recollections of the past.<sup>1</sup>

As a book of memory, our story continues a rich tradition of histories of the 'little people' in Singapore, be it rickshaw pullers, prostitutes, lightermen, factory workers or squatters.<sup>2</sup> The Singapore Story of the little island in Southeast Asia becoming a first world economy within a generation, as told by the late former prime minister Lee Kuan Yew, is a major part of the narrative.<sup>3</sup> Equally important is the country's labour history, filled with people's memories that amount to numerous small Singapore stories. Like Lee but in their own ways, people remember vividly the days (and nights) of industrial work, and the products and friends they made. This book brings to light how "History is made by a thousand different hands".<sup>4</sup>

### **History and Memory**

In Singapore, memories are especially valuable because many old industrial buildings and sites no longer exist. Many of the early industries had gone defunct, including the semiconductor and garment factories that were engaged in labour-intensive assembly work. These companies had moved to lower-cost production sites in the region as Singapore restructured the economy towards industries based on capital and technology in the 1980s, which raised wages.

In one case, as Lee Kuan Yew related in his memoirs, Mercedes-Benz closed down its Singapore plant in 1980 after the tariffs protecting the assembly of cars—a labour-intensive form of production—were removed. This was followed by similar decisions by the government for the "assembly of refrigerators, air conditioners, television sets, radios, and other consumer electrical and electronic products".<sup>5</sup>

Excluding flatted factories, there are only a handful of old factories left in Singapore. As of 2018, these were some of the surviving sites:



National Iron and Steel Mills (now NatSteel) at Tanjong Kling Road in Jurong Industrial Estate, 2018. Photograph by Juria Toramae.



Sugar Industry of Singapore (now SIS), Jurong Port Road, 2018. Photograph by Juria Toramae.



Acma, Jurong Port Road, 2018. Photograph by Tan Teng Phee.



Lea Hin, Alexandra Road, 2018. Photograph by Juria Toramae.



Philips, Toa Payoh Lorong 1, 2018. Photograph by Koh Keng We.

But though the buildings may have disappeared, people's memories often have not. Memories are important to history: they are not opposed to each other but interconnected. For Samuel, history written by professional historians is not superior to memories of the past, as documented by heritage enthusiasts, amateur and local historians, community groups, biographers and antiquarians. Memory work may take various forms: as a published memoir with beloved family photographs, as a television documentary on the origins of a unique place, or in the telling of a significant event through oral history. It can be private or public. It can also have different sources, such as a love for old things, a desire to conserve historical monuments, or nostalgia—the anxiety to recall or recreate pasts that have been lost. But whatever its sources and forms, a theatre of memory means that history becomes "a social form of knowledge".

Through theatres of memory, we tell the story of Singapore's industrialisation on a broad social canvas. It is necessary to discuss the industrialisation programme as a government policy to move the economy to a manufacturing base and provide jobs for a growing population. It is

incumbent to examine the policymakers, such as Lee Kuan Yew and his brilliant deputy, Dr Goh Keng Swee, the widely accepted architect of Jurong Industrial Estate. They, and many others, were visionaries who planned and built Jurong, who persuaded big multinational corporations (MNCs) to relocate their production to Singapore. Industrialisation was made possible by different people and institutions—political leaders and officials of state agencies such as the Economic Development Board (EDB) and Jurong Town Corporation (JTC). Strong leadership, good governance, sound economics and capable civil servants—all these factors were undoubtedly crucial. But the policymakers did not succeed by themselves.

This book seeks to include other actors in what was a compelling history of industrialisation. Many of them remain little-studied or unheralded. On one level, industrial reform involved international organisations such as the United Nations and foreign experts like the Dutch economist Albert Winsemius. Should, and can, Singapore industrialise, and leave behind a long history of distributing other countries' produce, to manufacture its own? Could Jurong, built from scratch in a remote part of Singapore, succeed as an industrial estate and new town? Winsemius and other experts advised and convinced the political leaders on these questions, giving Singapore's agencies the ideas and frameworks to translate plans into reality.9 Among international actors, we also count the senior management of MNCs, who helped train the locals, passing on that essential ingredient for sustainable industrialisation: technical expertise. On the ground, there were also foreign managers and technical personnel among the professionals, and numerous migrant workers from Asian countries, helping to fill the shortage of manufacturing expertise and labour.

Most crucially, as the book recounts, it was Singaporeans of the Pioneer and Merdeka Generations who ventured to work in the fledging industries and shipyards of Jurong and the new flatted factories built near HDB estates. <sup>10</sup> These Singaporeans held a diverse range of jobs as managers, engineers, technicians, clerks and regular production workers. All of them were manufacturing pioneers, whose contributions have not been sufficiently studied or recognised. This is especially true of the young women who worked the production lines on many a factory floor. A small but vital group of Singaporeans became risk-taking entrepreneurs, setting up small-medium businesses that provided the services the MNCs

needed. But our industrial history goes beyond economic production or employment, for industrialisation touched the lives of all Singaporeans in that period one way or another. As noted in the book, women worked night shifts in the factories and returned home to their spouses and children during the day. The industrialisation narrative is the story of these extraordinary women, and also the inter-generational story of the emerging Singaporean nuclear family in the 1970s and 1980s.

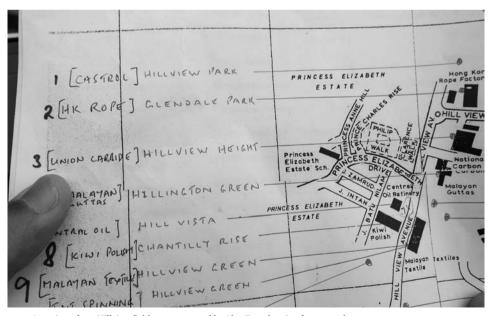
To uncover the theatres of memory, we have made use of the conventional written sources of the historian; state archives, official and commemorative publications, newspapers and student theses. The public archives documented the memory of state agencies and sometimes the workers, though many records remain classified. The old undergraduate theses were especially invaluable for the interviews university students conducted with industrial management and employees.

Thus the book drew upon other sources such as oral history. We spoke to over 30 people while researching this book. Despite the intervening decades, many former technicians and assembly line workers were able to recount how important places, tools and colleagues were to industrial history. For Wong Choo Kee, in his 90s, the theatre of memory was Pulau Bukom, the small offshore island where he grew up, and where his father worked as an employee of Shell. In his recollection, the island was "almost like a utopia" and "almost a complete city by itself", equipped with its own social amenities. He had "so much freedom" and "we could swim like the fish", he added. 11 Wong's oral history tells us how memory bridges industry and childhood.

We found and learned from many photographs of the past. Some were taken during our fieldwork in various industrial estates throughout Singapore—Jurong, Redhill-Alexandra, Tanglin Halt, Hillview-Bukit Timah and Kallang—a mix of heavy and light industrial areas. At these sites, we often found no old industrial plants, but new factories or other building types that had replaced them.



Loh Kah Seng and Alex Tan look over a map in Jurong Industrial Estate, 2018. Photograph by Tan Teng Phee.



A section of our Hillview field map, prepared by Alex Tan, showing former and current sites, 2018. Condominiums have replaced most of the former industries in the area.

(0)



The barely visible words 'Komatsu Asia & Pacific' on a wall at 1 Gul Avenue in Jurong, 2018. A warehouse complex is presently being constructed at the site. Photograph by Juria Toramae.



A disused terrace factory in Kallang Way, 2018. Photograph by Juria Toramae.



Employees of Fairchild enjoy a day at the beach, 1970s. Courtesy of Vasanthara Devi.



A football match between local and German employees of Rollei Singapore, 1978. Courtesy of Kamarudin Abdul.

Other photographs were contributed by our interviewees, or shared on social media. As keepsakes, images are important documents of memory. Pictures with co-workers were a common and insightful theme, highlighting social relations inside the factory. Playing a similar role were photographs of co-workers gathered in places such as beaches and football fields, where company functions were held.

Finally, this book draws upon a unique form of historical evidence that did not exist at the time of Samuel's writing—recollections posted on the popular social media platform, Facebook. For 17 months, we made posts on Singapore's industrial history on several Facebook groups and documented the members' responses. Parief and grammatically incorrect as they might be, these spontaneous responses were usually candid, humorous, poignant and always insightful. Hence, Irene Hoe saw our post on Acma, a Taiwanese maker of refrigerators and other electrical products that arrived in Singapore in 1967, and her post told us much about the importance of household manufactures to the 1970s Singaporean family:

One of the first things I did when I got a job was to buy my family a new Acma fridge. Our trusty Kelvinator was in its last legs and Mum was thrilled to have a new fridge. I paid for it over three months as it cost an entire month's take home pay.<sup>13</sup>

The oral, photographic and social media sources do not merely enliven the book—they do, adding colour and texture to the narrative. But they also tell a fuller and more rounded history of industrialisation from the memories of the different hands involved. As public historians have noted, "Recovering industrial history calls for immersion into the details of everyday life". Memories of lived experiences provide a sense of place—and of the past itself—that underpin our social and cultural identities. 15

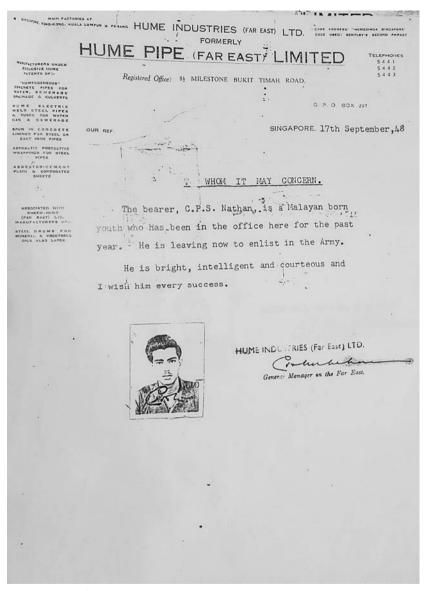
This is a largely positive interpretation of industrialisation. In our research, we found, somewhat to our surprise, much pride, fondness and humour about the years of industrial endeavour. We also heard many people's enthusiasm for this history to be recounted and written, which was gratifying. Certainly, the manufacturing industry of the 1970s and 1980s was not altogether an easy or desirable place to be in—work was often dreary,

akin to "mere existence", as a researcher put it in the 1970s, and wages were low for many production workers, especially women. <sup>16</sup> In other areas, such as shipbuilding and repair, work was difficult or sometimes hazardous. <sup>17</sup> We do not ignore these issues, nor do we romanticise the industrial past. What this book does, instead, is to offer a candid and affective account of industrialisation based on what people have remembered and told us.

Our scope is admittedly a little recent and narrow. We have focused on the manufacturing industry and specifically its promotion and development by the government between the 1960s and 1990s. Many developed countries, including even fellow 'Asian Tigers'<sup>18</sup> that similarly experienced rapid industrial growth in this time, have traced a longer genealogy to things like windmills, railways and shipwrecks, in other words, 'industrial archaeology'.<sup>19</sup> Singapore, too, possessed a long history of industry, if we define the term 'industry' loosely to include any major form of economic production. Railway lines in Singapore have in recent years become memorable 'rail corridors',<sup>20</sup> while coins and pottery from shipwrecks have provided insights into the island's 700-year-long history and role as a regional port settlement.<sup>21</sup>

Prior to Jurong, too, there were already smaller industrial estates in places like Bukit Timah's Princess Elizabeth Estate. Before the Second World War, light industries making rubber goods had developed spontaneously, in spite of the British colonial government's disapproval.<sup>22</sup> To these we may add non-industrial mainstays in Singapore, such as fishing, vegetable-growing and animal husbandry, which were part of the informal economy and which supplemented people's low incomes until quite recent times. In agriculture, we may go further back to the founding of Singapore by the East India Company, when a labour-intensive pepper and gambier industry quickly emerged. It was developed by the first Chinese migrants who opened up the river mouths that we now call Yio Chu Kang or Choa Chu Kang.<sup>23</sup> Even during the manufacturing boom of the 1970s, other economic sectors boomed, such as tourism, hospitality and construction.

The history of Singapore's industries is rich. Our book is by no means the final word on the topic; it leaves scope for explorations of other industrial theatres of memory.



C.P.S. Nathan's testimonial from Hume Industries, 1948. Courtesy of C.P.S. Nathan.

### The Narrative in the Book

As the first chapter begins, most of the people who would later be involved in industrial development were still infants and young children. At the end of World War Two, Singapore was becoming 'a city of children', as many families settled down and had children near the end of the Japanese Occupation and after the war. These children—popularly called the 'baby boomers'—were the intended beneficiaries of the industrialisation programme, which was to create enough jobs for the rapidly growing population.

The next two chapters tell the familiar story of Jurong and its flagship industry, National Iron and Steel Mills, from two rarely-visited angles. Chapter 2 peers beyond Singapore's national boundaries to a rendezvous with foreign experts who advised the government in the early 1960s. Singapore's industrialisation owed much to three groups of experts—two from the United Nations (one of which was led by Winsemius) and one from Japan. The experts gave a strong endorsement to the industrialisation programme and allowed Jurong to be built from scratch as a bold mega-project.

The next chapter tells of Jurong's growth as a 'Garden Industrial Town' in the 1960s and 1970s through the perspectives of its early workers and residents. Their struggles and endeavours slowly gave shape and life to the plans laid out by the government agencies, the HDB, EDB and JTC. The chapter also outlines the itinerary for a proposed Jurong Garden Industrial Town Tour, based on people's memories. The tour passes through the early steel works, shipyards, heavy and light industries, and flats and social amenities of the first neighbourhood, Taman Jurong.

Chapter 4 moves from Jurong, which was designed for heavy industry, to the flatted factories that sprang up in public housing estates all over Singapore. The typology of multi-storey (and multi-storied) factories suitably brought together light industries and the young women living in nearby HDB flats who would work in them. These women became Singapore's pioneer industrial workers, and the chapter highlights their modern desire for socio-economic independence and advancement, and the self-belief that they can accomplish as much as the men. The factories also gave rise to a strong sensory history,

in which people experienced memorable sights and smells related to industry.

The next chapter peels away the surface layer of mundane industrial labour to uncover an extraordinary culture of work on the factory floor. This culture of work was the result of management priorities, national policies, and the social relations between the workers themselves. The shop floor was the site of lively talk, and the strong bonds that emerged between co-workers as a result not only helped make the tedium of routine work manageable, but also became a crucial social resource.

In Chapter 6, the focus turns to the various periods and rotations of work, particularly the night, or graveyard, shift. The night shift was integral to the emergence of the modern Singaporean family in a time of major industrial change and the national productivity movement. Closely tied to their demanding dual roles as breadwinners and homemakers, working at night illustrates how women reconciled their work at home and in the factory, enabling the success of the nuclear family.

The following chapter showcases the numerous 'Made in Singapore' products, made both by multinationals and local entrepreneurs. These include the world famous Rollei 35 camera, Bata shoes (with their memorable jingle, 'First to Bata, then to school'), electrical consumer products from television sets to refrigerators, clothing, and various beloved food products and beverages. Originally often stigmatised as being of poor quality, these manufactures were not merely commodities. They became symbols of a growing sense of national identity and pride in locally produced items, while also marking most people's rising living standards as the economy expanded.

Chapter 8 tells the remarkable story of Rollei Singapore. Although the West German camera-maker eventually went bankrupt, its production work in Singapore in the 1970s helped facilitate the country's transition to a value-added economy in the following decade. Just as crucially, Rollei, though defunct, emerges as a theatre of memory. Its cameras are still fondly remembered by former management, technicians, production workers, and those who bought them. The chapter highlights a discussion panel comprising three ex-Rolleians, who shared their poignant and

often-humorous stories of Rollei at the National Museum of Singapore in April 2018.

Chapter 9 delves into Singapore's pioneering 'Technical Generation': the former industrial students, trainees and apprentices who built a body of technical expertise that underpinned the island's industrialisation. The chapter brings to light the still largely unheralded roles played by technical and vocational schools, training centres, institutes of technology, modern apprenticeship schemes, and the transfer of technical know-how from foreigners to locals.

The final chapter lauds the contributions of Asian foreign workers in the industrialisation programme. They arrived in Singapore to meet the labour crunch after 1970, joining and working with their Singaporean counterparts in factories and shipyards. Through various national concerns and debates over the reliance on low-wage migrant labour, the chapter explores the motivations and experiences of the workers who arrived to work in Singapore and left in great numbers.

#### CHAPTER 1 CITY OF CHILDREN

It was literally the 'little people'—infants, children and youths—who spurred the historic industrialisation programme in Singapore after World War Two. The theatre of memory begins with them: the baby boomers born in the mid-1940s and the next two decades. Growing up, they became a catalyst for change. The population increased year on year, expanding Singapore from a town to a city proper with over a million people in 1951. With the rising numbers of youngsters came the question of jobs for the near future when they would become adults, sometime in the early 1960s.

The jobs, it was decided, would have to come from the manufacturing industry. This went against the grain of much of Singapore's history. As an entrepôt port, the island had long been a service hub, shifting the manufactures and produce of other countries, and doing so with great success. Singapore manufactured little of its own and mostly for domestic use. Historically, it only had a small number of light industries, connected to the trade. In the 1930s, the British colonial government had expressly discouraged manufacturing, for it meant competition for Britain's home industries. But with the arrival of the baby boomers, the government conceded that it had to put aside historical prejudices and organise an industrialisation programme.

# 'Children, Children Everywhere'

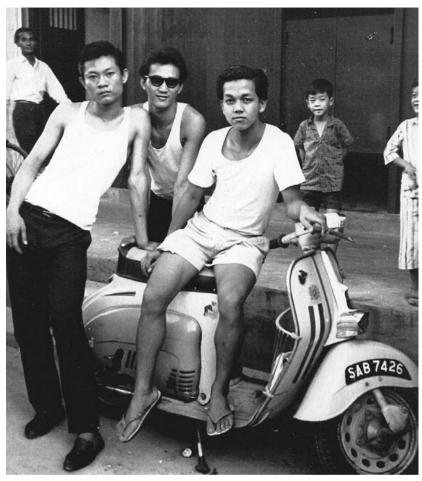
For most of its colonial history, Singapore had been a town of transients. Many of the immigrants who arrived looking for work would return to their home countries after a few years, hopefully with savings. But this began to change in the early 20<sup>th</sup> century, as people of better means such as merchants and shopkeepers began to settle down. They were followed by a small minority of the generally low-income population. Coolies, such as the rickshaw pullers, began to get married and have children, although raising a family was extremely difficult for many of them.<sup>1</sup>

In the 1930s, more families were formed as large numbers of Chinese women (mostly Cantonese) arrived in Singapore due to political instability

in China. Many of them were of peasant background and found work in the light industries. The ratio of women to men among the Chinese doubled from 367 per thousand in 1932 to 732 in 1937, while the number of births jumped fivefold to 18,577 in this period.<sup>2</sup> Just before war broke out in 1941, W.L. Blythe, a colonial labour official, observed "swarms of Chinese children in their teens, mostly local born, and still more who have not yet reached their teens."



The baby boomers of Singapore, 1950s. Courtesy of Wong Pok Hee.



Youth and the search for a modern life in 1950s Singapore. Courtesy of Wong Pok Hee.

After the fall of Singapore in 1942, livelihood difficulties and fear of the Japanese dissuaded families from having children. Around 1944, however, numerous babies were born, a trend that expanded in subsequent years. After the war, women from Malaya, China and India arrived in Singapore to join their husbands or to find one, evening out the sex ratio and bearing children. From 1931, the population grew at an annual rate of 3.2% to reach a million people after the war, giving Singapore formal status as a city. It surged even further ahead between 1947 and 1957, rising at a rate of 4.5% per annum—among the highest in the world.<sup>4</sup>

The population was younger, families grew bigger, and nuclear families became the norm, with three or four children each—larger than what they are today. In 1957, the average size of a nuclear family was 5.4 persons, and was still 5.6 persons in 1970 despite family planning and birth control.<sup>5</sup> A post-war survey of the Chinese population in the town area found that half of the persons sampled had not returned to China or sent home remittances since their arrival; their emotional attachment to China was "only partial and somewhat tenuous".<sup>6</sup>

The story of Lim Soo Hiang and her siblings aptly illustrates what, to the Singapore Improvement Trust, amounted to "a social revolution in connection with the Chinese labouring classes". When Singapore fell to the Japanese, some families hurriedly tried to marry off their daughters to keep them safe. Thus, Lim's father, who had arrived from China with his mother (a widow) in the 1930s, married a young woman of 17 or 18. Besides Lim, who was born in 1953, the young couple had four boys and two girls. Two of the boys and both girls were older than her, with the eldest born around 1943. Lim's large family moved out of Chinatown to a bigger house in Beo Lane, just outside the inner city.8

Immigration policy supported these developments. In 1953, a new Immigration Ordinance was passed "with a view to protecting the standard of living and keeping local residents in employment". It limited migrants from China and India to reunion with family (such as spouses of locals) or on compassionate grounds (elderly parents of locals). Where colonial policy before the war allowed most immigrants to enter, the ordinance further restricted entry to specialists and professionals whose services were in demand, such as engineers, technicians, teachers, accountants and doctors. <sup>10</sup>

The baby boom and the new families were a positive development and a watershed in Singapore history. The post-war years were a time of decolonisation, when the colony began to take its first steps towards nationhood and establish a national identity among the people. Key to this was that locals would view themselves as settlers rather than sojourners, with an interest and stake in the affairs of Singapore and more generally Malaya.

But the demographic trends also fanned Malthusian fears of socioeconomic collapse. "Children, children everywhere", cried a 1957 *Singapore Free Press* article, likening the baby boom to a devastating flood that would break over a dam, if a blueprint for action was not made to provide jobs for them. 11 The baby boomers formed two-thirds of the population, yet would have to be supported by the remaining third. Even if it expanded, the nature of the entrepôt trade was such that it was unlikely to provide enough jobs for the youngsters. 12 There was some breathing space before they grew up, but not much—sometime between 1960 and 1970. In the pre-war years, unemployment was not a major problem as surplus labour could return to the home countries, but this was no longer possible after the war when people were settling down and children were born locally. Previously, people could also eke out a basic livelihood through casual or part-time work, such as hawking, small-scale husbandry and vegetablegrowing. Historically, much of the population was under-employed.

After the war, however, mass unemployment would be a serious problem. A moral panic ensued over the unengaged and unguided "hordes of our children" becoming anti-social. 13 A journalist who visited a congested shophouse in the Central Area in 1947 was horrified that

> For lack of space to play, the kids roam the streets or help sell cigarettes and odd articles in order to bring in a little bit of extra income if they are not caught by the long arms of the law.

> Here they learn to swear, cheat, pick pocket, lie, gamble, smoke, spit and show pride in using abusive language.14

In 1954, the City Council warned that the 3,000-odd children residing in six kampongs in Geylang were living in a "nest of gangsters", idling their time away and lacking productive activity to engage them.<sup>15</sup>

To policymakers, socio-economic issues such as the population growth underpinned the political turmoil and industrial unrest in post-war Singapore. Workers—many with large families and dependents to support were often unionising over low wages and poor working conditions. Likewise, Chinese middle school students were frustrated about their lack of prospects in a colony where the predominant language of government and business was English. In 1959, many school leavers—male and female, and English- and Chinese-stream—were unable to find jobs, while senior students were fearful of facing the same plight when they graduate. 16

In the mid-1950s, then an officer in the colonial civil service, Goh Keng Swee undertook a study of incomes in Singapore city. He found a fifth of the low-income households living in poverty, with a combined monthly income of under \$102.\(^{17}\) When he later became the Minister for Finance in 1959, he felt despondent when he saw pupils leaving their school compounds, knowing that he had to find employment for them soon.\(^{18}\)

The baby boom became the central social issue of post-war Singapore. It precipitated reform in areas as varied as housing, urban planning, healthcare, education, family planning, social welfare and economics. Economically, because of the rapid population growth, many Western observers and businessmen felt that Singapore was "going down the drain". <sup>19</sup> Adding to the pessimism was the growing competition faced by the island, as newly-independent states adopted nationalist economic policies, developing their own ports and industries and bypassing Singapore. By providing full-time salaried employment, an industrial economy would resolve the socio-economic roots of political agitation and help nurture a sense of citizenship in Singapore.

